

San Bernardino Valley College

2010-2011
CATALOG



Your
future
starts here.

Our Mission:
San Bernardino Valley
College provides quality
education and services
that support a diverse
community of learners.

(909) 384-4400
701 S. Mt. Vernon Avenue
San Bernardino, CA 92410
www.valleycollege.edu



San Bernardino
Valley College

Your future starts here.



*SBVC Mission:
San Bernardino
Valley College
provides quality
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and services that
support a diverse
community of
learners.*

Welcome to San Bernardino Valley College!

Dear Student,

Welcome to San Bernardino Valley College! You are joining more than 13,000 students who are enrolled in SBVC academic programs this semester. We believe that your pursuit of quality education has led you to our doors.

Your academic success is a measure of our success and we provide many options that can lead you to your goals and dreams. You can prepare to enter a career after completing your degree, certificate or diploma, or you can transfer to a four-year college or university to pursue additional education and training. In order to assist you toward your goals, we have new student orientation, personal and career counseling, tutoring centers, and a variety of student organizations. Financial aid and scholarships are available to most students.

At SBVC we offer more than 88 programs of study that provide the foundation of a quality education leading to professional and personal success. SBVC's innovative programs provide opportunities in the most progressive fields in science, business, the arts, health care, and technical areas to name a few.

No matter how you define your professional and personal success, we are here to help you achieve it. At SBVC your future starts here!

Warm regards,
Dr. Debra S. Daniels
President

Estimado estudiante:

Bienvenido a San Bernardino Valley College! Usted se está agregando a más de 13.000 estudiantes que se han inscrito en programas académicos de SBVC este semestre. Nosotros creemos firmemente que su búsqueda de una educación de calidad los ha traído a nuestras puertas.

Su éxito académico es una medida de nuestro éxito y por eso le proveemos muchas opciones que los pueden llevar a lograr sus metas y sueños. Usted se puede preparar para entrar a una carrera después de completar su título, certificado o diploma, o usted se puede transferir a un colegio/universidad de cuatro años para obtener más educación y entrenamiento. Para asistirle a lograr sus metas, tenemos orientación para nuevos estudiantes, consejería personal y académica, centros de tutoría y una gran variedad de organizaciones estudiantiles. Ayuda financiera y becas están disponibles para la mayoría de los estudiantes.

En SBVC ofrecemos más de 88 programas de estudio que proveen la fundación de una educación de calidad que lleva al éxito profesional y personal. Los programas innovativos de SBVC ofrecen oportunidades en los campos más progresivos de la ciencia, los negocios, las artes, el cuidado médico y las áreas técnicas sólo por nombrar algunas.

No importa cómo defina usted su éxito profesional o personal, estamos aquí para ayudarle a lograrlo. En SBVC, su futuro comienza aquí!

Sinceramente,
Doctora Debra S. Daniels,
Presidenta

SAN BERNARDINO VALLEY COLLEGE 2010-2011

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



**701 South Mount Vernon Avenue • San Bernardino, CA 92410
(909) 384-4400 • www.valleycollege.edu**

SBVC is an equal opportunity institution. Courses and programs are provided for all residents regardless of race, color, religion, sex or physical disabilities.

San Bernardino Valley College provides quality education and services that support a diverse community of learners.

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@valleycollege.edu.

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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 112 locally governed California community colleges, and as such, is regulated by the California Education Code and is subject to the directions 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 principle 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

San Bernardino Valley College provides quality education and services that support a diverse community of learners.

Educational Philosophy

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

We believe:

- *That a well-educated populace is essential to the general welfare of the community.*
- *That a quality education empowers the student to think critically, to communicate clearly, and to grow personally and professionally.*
- *That an enriched learning environment promotes creativity, self-expression, and the development of critical thinking skills.*
- *That our strength as an institution is enhanced by the cultural diversity of our student population and staff.*
- *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 data driven, and based on 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, as part of the collegial process, 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 interactions 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 following an*

educational plan and enrolled in classes that meet their interests and goals 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.

Strategic Initiatives

Adopted by the College Council on May 23, 2007, San Bernardino Valley College's Institutional Guiding Principle: *We are committed to quality and excellence in all of our efforts.* Our Strategic Initiatives are as follows:

- Access
- Campus Culture and Climate
- Institutional Effectiveness and Resource Management
- Partnerships
- Student Success
- Technological Advancement

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 147 full-time and 370 hourly faculty, and student body of 140 has grown to 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 may complete an associate degree in two years. Students attending part-time could take as long as four or five years.

The amount of time it will take to complete a certificate program will depend on whether the student is attending full-time or part-time, the number of units required for the certificate, the rotation of courses over a one- or two-year sequence, and the number of prerequisite courses the student is required to take. A very limited number of certificate programs can be completed in one semester. The majority will take one or two years if the student attends full-time. Consult with a counselor in the Counseling Center (AD/SS Building, Room 103) or call (909) 384-4404 and press zero ("0").

Accreditation

San Bernardino Valley College is fully accredited by the following agencies:

- Accrediting Commission for Community and Junior Colleges of the Western Association of Schools and Colleges
10 Commercial Boulevard, Suite 204
Novato, CA 94949
(415) 506-0234
- California Board of Registered Nursing
1625 North Market Boulevard, Suite N217
Sacramento, CA 95834-1924

P.O. Box 944210
Sacramento, CA 95814
(916) 322-3350
- National League for Nursing Accrediting Commission
61 Broadway – 33rd Floor
New York, NY 10006
(800) 669-1656 ext. 153
FAX: (212) 363-5555

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 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, who has successfully completed the GED, or has been awarded a certificate of completion from a high school.

High School Students

Students who are currently attending high school, and are seeking advanced scholastic or vocational work may apply for admission to San Bernardino Valley College as a specially admitted, concurrently enrolled high school student.

Each student's application and records are reviewed individually, and not all students who apply will be admitted. Admission decisions are made based on a combination of the following factors:

- overall academic grade point average
- performance in prior coursework of a similar nature to which the student is petitioning to take, as indicated by their grades in those courses
- any and all academic tests or examinations recorded

- on the high school transcript
- the recommendation of the high school principal (or designee)

The over-arching concern of the admission review process is that the high school student is adequately prepared to engage in the rigors of college-level work, and has a high probability of success.

High school students wishing to attend SBVC must complete and submit the following items, at least two weeks prior to the beginning of instruction:

- a regular application for admission to SBVC
- a Concurrent Enrollment Petition form
- a Confidential Youth Emergency Card
- an official copy of the high school transcript

The Concurrent Enrollment Petition form will require the signature of the high school principal (or designee), certifying that the student is academically qualified, and recommending the student for an advanced academic or vocational experience. All forms are available online at:

<http://www.valleycollege.edu/Admissions/HighSchool/index.php>

All high school students wishing to enroll in transfer-level courses (courses numbered 100-299) must be in their junior or senior year, with an academic GPA of 3.0, and have high passing grades in courses similar to those they wish to take at SBVC. The courses requested at SBVC must not duplicate courses currently available at the high school.

High school students wishing to enroll in vocational courses may be in grades 9-12, with an academic GPA of 2.0, and have passing grades in courses similar to those they wish to take at SBVC. The courses requested at SBVC must not duplicate courses currently available at the 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 U.S. Citizenship and Immigration Services (USCIS) to admit non-immigrant international students who are taking lower division coursework for transfer to four-year institutions or who are taking coursework leading to an associate degree. San Bernardino Valley College requires international students to submit the full completion of each of the following items to the Counseling Center (Administration/ Student Services Building, Room 103):

- An international student application for admission and a San Bernardino Valley College application accompanied by a non-refundable processing fee of \$25.
- A minimum score of 450 on the paper-based Test of English as a Foreign Language (TOEFL), 133 on the computer-based TOEFL, or 45 on the Internet-based TOEFL.
- Official transcripts of high school and college records, accompanied by a notarized translation if the original is not in English.
- An original bank statement and a notarized verification of funds and affidavit of support, sufficient to cover all expenses while in this country.
- One copy of passport.

The application deadlines are May 1 for the fall semester and October 1 for the spring semester. Information about international application can be obtained at the SBVC website www.valleycollege.edu/International_Students/. 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) or on the SBVC website.

Prior to registering for classes, international students must 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 Student Health Center for a nominal fee). International students are required to

be enrolled in 12 units per semester, per USCIS regulations and purchase International Student Health Insurance prior to the registration period for each semester.

AB 540

San Bernardino Valley College, in compliance with California law, welcomes undocumented, non-immigrant aliens, and will charge them the same fees as California residents, for tuition purposes, if they meet all of the following criteria:

- You have attended a California high school for at least 3 years
- You have a high school diploma (or equivalent)
- You have applied for legal status – or will sign an affidavit stating your intent to do so.

Please visit the Admissions Office for further information.

Veterans

San Bernardino Valley College offers courses approved for Veterans Administration benefits under Title 38, Chapters 30, 31, 32, 33, 35, 1606, and 1607 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 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).
- Student must see a counselor prior to the start of their second semester of attendance to have their program approved and to develop an **education plan***. The program must be listed in the College Catalog.
- To be certified, students must enroll only in the classes listed on an **education plan***.

* See "Matriculation" on page 9 for further details

Grades of W (withdrawal) and NP (no-pass) 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.

ENROLLMENT

Application Procedures

1. **All new and returning students may register online at www.valleycollege.edu**

2. Transcripts of Prior Work

Students must have official transcripts of all college 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 submit an application, the transcript will be destroyed.**

3. Assessment / Orientation / Advisement

When you submit an application for admission, you will be able to make an appointment to take an Assessment test.

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 Take the Assessment?

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 10 for other options.

4. Registration

The schedule of classes provides detailed instructions on the procedures involved in registering for classes. Students may register online in accordance with the dates identified in the *Class Schedule*. **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 issue is resolved. 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 in the *Class Schedule* and *on the website*. All fees are due and payable at the time of registration. In addition to enrollment fees, students will 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 (ASB) discount card. Students who are not residents of California are required to pay non-resident tuition.

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 entrance to the course.

7. Late Registration

Applicants who do not enroll during the registration period may enroll online using a "Web Authorization Sticker" which is received from the professor. 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 will **not** be enrolled into a class if the deadline date for admissions has passed.

8. Change of Program

Registered students may change their programs during a designated period at the beginning of each semester. Once the web registration period has passed, a "Web

Authorization sticker", obtained from the professor, is needed to change a schedule. 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 the time the change is made.

9. Refunds

A. Designated Fees include: 1) Enrollment 2) Non-Resident Tuition 3) Parking 4) Health 5) Accident Insurance 6) ASB Card 7) Student Center 8) SBVC Student Representation.

B. Conditions

1. Refund requests must be initiated and signed by the student utilizing the Parking Fee Refund Request form for parking fees and the District refund form for all other fees.
2. If a refund is requested for the parking or ASB card fees, the parking decal or the ASB card must be attached to the refund request.

C. Military Service Exception

If a student who is a member of an active or reserve military service receives orders compelling a withdrawal from courses, the District shall, upon petition of the affected student, refund the entire enrollment fee unless academic credit is awarded.

D. Refund Schedule

This refund schedule applies to all fees listed in Paragraph A, above:

1. Fees are collected in error – Fees collected in error will be refunded in their entirety.
2. Class cancelled by the college – If a class is cancelled by the college, enrollment and/or non-resident tuition fees will be refunded in their entirety. If that cancellation results in a student's withdrawal from the college, refunds of the appropriate fees listed in Paragraph A will apply.
3. Withdrawal from the College
 - a. Enrollment Fee/Non-Resident Tuition – If a student withdraws during the first two weeks of a full-term class or during the first 10% of a short-term class, enrollment fees and non-resident tuition fees will be refunded;
 - b. Parking fee, Health fee, Accident Insurance fee, Student Services Card fee, Student Center fee, Student Representation fee – In order to be eligible for a refund, a student must withdraw prior to the first day of the term for a full-term class or prior to the first day of instruction for a short-term class.
4. Unit Reduction – If a change of program within the first two weeks of a full-term class or during the first 10% of a short-term class results in a reduction in the number of units taken, the enrollment fee or non-resident fee will be refunded at the per unit cost of the reduction.
5. A student who withdraws from a class or the college after the second week of instruction for a full-term class or the first 10% of a short-term class is not eligible for any refund.

E. Refund Processing Fee – A charge of \$10 will be collected for each refund transaction not to exceed \$10.00 per student per semester, except for cancelled classes or over-payment.

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 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) and 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. (Please note that for financial aid purposes, 12 units is considered full-time during the summer session, as well).

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

Grades & Grade Points

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

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

* Pass (P) grade units are not counted in GPA however, credit is earned.

** No Pass (NP) units are not counted in GPA; NP units are 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.

Pass/No Pass

Students who wish to be graded in any class on a Pass/No Pass basis must complete the appropriate form which is available in the Admissions & Records Office (Administration/Student Services Building, Room 100) or on the college website. The paperwork must be submitted 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 (P) courses may apply toward graduation requirements. Pass/No Pass grading is not permitted in a course within a student's major area of study. This rule may be waived for students who complete courses for credit and who later declare a major in that field of study. Once Pass/No Pass 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 completed by the instructor for each student and submitted to the Admissions & Records office. 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 for 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 drop the course 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 prior to the 30% deadline. 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. W's are used in probation and dismissal procedures as well as in determining satisfactory academic progress for financial aid. 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 Admissions & Records Office in order to have the MW assigned.

Repeated Courses

Course Repetition in a Non-Repeatable Course

Course repetition allows students to repeat classes under the following circumstances: (Title 5, Section 58161)

1. The student is repeating the course to alleviate substandard work which has been recorded on the student's record (D, F, NP, or N/C). Courses in which a substandard evaluative symbol has been assigned may be repeated once. Otherwise, students are limited to four attempts per course counting withdrawals (W's). *No Petition for Course Repetition* is required if a student has only one substandard grade or has not attempted the class four times (including W's).
2. The student's previous grade is, at least in part, the result of extenuating circumstances (verified cases of accidents, illness, or other circumstances beyond the control of the student). A *Petition for Course Repetition* and documentation are required.
3. There has been a lapse of time (at least 5 years) since the student previously took the course. A *Petition for Course Repetition* is required.

4. The course outline of record has been officially changed and demonstrates significant curricular changes. A *Petition for Course Repetition* is required.
5. Repetition of courses where substandard work has not been recorded is permitted when such repetition is necessary for a student to meet a legally mandated training requirement as a condition of continued paid or volunteer employment.
 - a. Repetition of courses shall be permitted only upon petition of the student with the written permission of the program administrator based on a finding that circumstances exist which justify such a repetition.
 - b. Such courses may be repeated for credit any number of times, regardless of whether or not substandard work was previously recorded, and the grade received each time shall be included for purposes of calculating the student's grade point average. Students must file a *Petition for Course Repetition*.

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 as soon as they are submitted by the instructor. To access San Bernardino Valley College's *Campus Central* on the Internet, go to: <http://www.valleycollege.edu>. Note: Transcripts will not be released if a student has holds, an outstanding financial obligation, or other academic or probationary issues.

Requests for transcripts may be made in person at the Admissions Office or online at: www.valleycollege.edu/admissions/transcripts. Requests will be filled within the legally prescribed timeframe, assuming there are no outstanding obligations to the college, or other holds on the students' record. The first two transcripts are provided at no charge. After two, there is a charge for each additional 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 Dean of Counseling at: (909) 384-8630.

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 earned in another community college district will not be counted toward the 30-unit limit. Students enrolled in English as a second-language courses and students identified by the District for learning disabled programs are exempt from this 30-unit limit. Other students may apply for a waiver of the 30-unit limit. Contact a counselor in the Counseling Center (AD/SS Building, Room 103) or call (909) 384-4404 and press zero ("0") 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 Faculty Chair.

An application for credit-by-examination is available from the Records Office (Administration/Student Services Building, Room 100). 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 Admissions & 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 28 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. Three units are allowed toward CSU GE-Breadth in area E. A DD-214 is required. Petition *For Military Service Credit* forms may be obtained in the Admissions & Records Office (Administration/ Student Services Building, Room 100). Students who have completed coursework at other institutions while in the military must submit official transcripts to appropriate division deans for approval of course equivalency.

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 the following page. A grade of pass (P) 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 Admissions & Records Office, AD/SS 100 (909) 384-4401. (See Associate Degree Graduation Requirements on page 28 of this catalog). See table on following page.

ADVANCED PLACEMENT EXAMINATION SCORES

Advanced Placement Exam with Score of 3, 4, or 5	SBVC Units Awarded	SBVC Prerequisite Course	SBVC General Education Graduation Credit	CSU General Education Credit	IGETC Credit
Art: History of Art	3	No equivalent	Category III, 1 course	Area C1 or C2	Area 3A or 3B
Art: Studio 2D Design	3	ART 120	Category III, Applied, 1 course	None	None
Art: Studio 3D Design	3	No equivalent	Category III, Applied, 1 course	None	None
Art: Studio Drawing	3	Art 124x4	Category III, Applied, 1 course	None	None
Biology	4	BIOL 100	Category I, 1 course	Areas B2, B3	Area 5B (lab)
Chinese Language and Culture	3	No equivalent	Category III, 1 course	Area C2	Areas 3B, 6A
Chemistry	4	CHEM 150 or 50H	Category I, 1 course	Areas B1, B3	Area 5A (lab)
Computer Science A	3	(CS 110 + (CS 120 or CS 190)	None	None	None
Computer Science AB	3	CS 190 + CS 265	None	None	None
Economics: Macroeconomics	3	ECON 200 or 200H	Category II, 1 course	Area D2	Area 4B
Economics: Microeconomics	3	ECON 201	Category II, 1 course	Area D2	Area 4B
English: Language & Composition	3	ENGL 101 or 101H	Competency in English	Area A2	Area 1A
English: Literature & Composition	6	(ENGL 101 or 101H) + ENGL 151	Competency in English	Areas A2, C2	Area 1A or 3B
Environmental Science	4	BIOL 104	Category I, 1 course	Area B1, B3	Area 5A (lab)
French Language	6	Score 3, 4 or 5 = FRENCH 102	Category III, 1 course	Area C2	Areas 3B, 6A
French Literature	3	No equivalent	Category III, 1 course	None	Areas 3B, 6A
German Language	6	No equivalent	Category III, 1 course	Area C2	Areas 3B, 6A
Government and Politics: Comparative	3	No equivalent	Category II, 1 course	Area D8	Area 4H
Government and Politics: US	3	No equivalent	Category II, 1 course	Area D8	Area 4H
History: European	3	No equivalent	Category II, 1 course	Area D6	Area 3B or 4F
History: U.S.	3	HIST 100 or 101	Category II, 1 course	Area C2 or D6	Area 3B or 4F
History: World	3	No equivalent	Category II, 1 course	Area C2 or D6	Area 3B or 4F
Human Geography	3	No equivalent	Category II, 1 course	Area D5	Area 4E
Italian Language and Culture	3	No equivalent	Category III, 1 course	Area C2	Areas 3B, 6A
Japanese Culture & Language	3	No equivalent	Category III, 1 course	Area C2	Areas 3B, 6A
Latin: Vergil	3	No equivalent	Category III, 1 course	Area C2	Areas 3B, 6A
Latin: Latin Literature	3	No equivalent	Category III, 1 course	None	Areas 3B, 6A
Mathematics - Calculus AB	3	MATH 250	Category IV, 1 course	Area B4	Area 2A
Mathematics - Calculus BC	3	MATH 251	Category IV, 1 course	Area B4	Area 2A
Music Theory	3	MUS 101 + MUS 101L + MUS 102 + MUS 102L	Category III, 1 course	None	None
Physics B	6	PHYSIC 150A + 150B	Category I, 1 course	Areas B1, B3	Area 5A (lab)
Physics C – (Electricity/ Mechanics Magnetism)	4	PHYSIC 200 + 201	Category I, 1 course	Areas B1, B3	Area 5A (lab)
Psychology	3	PSYCH 100 or 100H	Category II, 1 course	Area D9	Area 4I
Spanish Language	6	Score 3=SPAN 102 Score 4=SPAN 103 or 103H Score 5=SPAN 104	Category III, 1 course	Area C2	Area 3B, 6A
Spanish Literature	3	No equivalent	Category III, 1 course	Area C2	Areas 3B, 6A
Statistics	3	MATH 108	Competency in Math	Area B4	Area 2A

Credit for the College Level Examination (CLEP) Program

The College-Level Examination Program (CLEP) gives college students the opportunity to receive college credit for what you already know by earning qualifying scores on any of 33 examinations. Earn credit for knowledge you've acquired through independent study, prior course work, on-the-job training, professional development, cultural pursuits, or internships. Information can be found at: <http://www.collegeboard.com/student/testing/clep/about.html>.

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 and/or graduation requirements. Students should be aware of the following

1. University of California does not accept CLEP Examinations.
2. Students should be aware that acceptance of CLEP varies at campuses of the CSU.
3. At SBVC, credit for CLEP Examinations is on a pass/no pass basis only; no letter grades are assigned.
4. Some CLEP Examinations may be under review at SBVC. CLEP scores for examinations no longer offered are evaluated on an individual basis.

Please refer to the table below:

CLEP EXAMINATION	SBVC REQUIRED SCORE	SBVC UNITS	SBVC EQUIVALENT COURSE (to clear prerequisite requirements)	SBVC Graduation Requirement	CSU GE-Breadth Area
Business					
Financial Accounting	50	6	ACCT 200 & 201	N/A	No credit
Introductory Business Law	50	3	BUSAD 210	N/A	No credit
Info. Systems & Computer Apps.	50	3	None	N/A	No credit
Principles of Management	50	3	Under Review	N/A	No credit
Principles of Marketing	50	3	BUSAD 013	N/A	No credit
Composition and Literature					
American Literature	50	3	None	Category III	C2
Analyzing & Interpreting Literature	50	3	None	Category III	C2
College Composition	No credit	No credit	Placement into ENGL 101	N/A	No credit
English Literature	50	3	None	Category III	C2
Humanities	50	3	None	Category III	C2
Foreign Languages					
French Language (Levels 1 and 2)	59	3	FRENCH 102	Category III	C2
German Language (Levels 1 and 2)	60	3	None	Category III	C2
Spanish Language (Levels 1 and 2)	63	3	SPAN 102	Category III	C2
History and Social Sciences					
American Government	50	3	None	Category II	D8
Human Growth and Development	50	3	PSYCH 111	Category II	E
Intro. to Educational Psychology	50	3	None	Category II	No credit
Introductory Psychology	50	3	Psych 100	Category II	D9
Introductory Sociology	50	3	SOC 100	Category II	D0
Principles of Macroeconomics	50	3	ECON 200	Category II	D2
Principles of Microeconomics	50	3	ECON 201	Category II	D2
Social Sciences and History	50	3	None	Category II	No credit
History of the United States I: Early Colonization to 1877	50	3	HIST 100	Category II	D6 + US-1
History of the United States II: 1865 to the Present	50	3	HIST 101	Category II	D6 + US-1
Western Civilization I: Ancient Near East to 1648	50	3	None	Category II or III	C2 or D6
Western Civilization II: 1648 to Present	50	3	None	Category II or III	C2 or D6
Science and Mathematics					
Biology	50	3	BIOL 100 (No lab credit)	Category I (No lab credit)	B2
Calculus	50	3	MATH 250	Category IV	B4
Chemistry	50	3	None	Category I (No lab credit)	B1
College Algebra	50	3	MATH 102	Category IV	B4
College Algebra – Trigonometry	50	3	None	Category IV	B4
College Mathematics	No Credit	No Credit	None	No credit	No credit
Natural Sciences	50	3	None	Category I	B1 or B2
Precalculus	50	3	MATH 151	Category IV	B4
Trigonometry	50	3	MATH 103	Category IV	B4

Credit for DSST/DANTES (Defense Activity for Non-Traditional Education Support)

The DSST (previously known as the DANTES Exams) is an extensive series of 37 examinations in undergraduate courses. DANTES funds paper-based DSST testing for eligible Service members and civilian examinees at DANTES Test Centers and at national test centers (colleges and universities) offering the Internet-based (iBT) DSSTs. Information can be found at:

http://www.dantes.doded.mil/dantes_web/examinations/DSST.htm

A student must be enrolled at San Bernardino Valley College to receive course credit for DANTES/DSST Examinations. Credit will not be granted for examinations in which equivalent or more advanced course work has been completed. Students will receive appropriate credit as designated on the following table. Examinations listed on the table have been reviewed by SBVC faculty.

Students should be aware of the following:

1. University of California does not accept DANTES/DSST credit.
2. DANTES/DSST Examinations may not be accepted toward CSU GE-Breadth.
3. Acceptance of DANTES/DSST Examinations varies among transfer universities and other community colleges. Students should be advised that the DANTES/DSST Examinations get re-evaluated.
4. DANTES/DSST Examinations may be under review, therefore the table below may not be inclusive of all examinations.

Any questions may be directed to the Articulation Officer in the Counseling Center, AD/SS 103.

International Baccalaureate

A student must be enrolled at San Bernardino Valley College to receive course credit for the International Baccalaureate (IB) diploma or certificates. Scores below 4 for English A1 (HL) and 5 for Mathematics (HL) will require that students complete assessment at SBVC. Please refer to the table below for IB credit.

Examination	Score	Units	SBVC Equivalent	SBVC Graduation	CSU GE-Breadth	IGETC
Biology (HL)	5	4	BIOL 201 + 202	Category I (lab)	B2 (no lab)	Area 5B (no lab)
Chemistry (HL)	5	4	CHEM 101	Category I (lab)	B1 (no lab)	Area 5A (no lab)
Economics (HL)	5	3	ECON 200	Category II	D2	4B
English A1 (HL)	4	4	Placement into ENGL 101; credit for ENGL 015	No credit	No credit	No credit
French A1 (HL)	5	4	FRENCH 102	Category III	C2	Areas 3B and 6A
Geography (HL)	5	3	No equivalent	Category II	D5	Area 4E
History (any region)(HL)	5	3	No equivalent	Category II	C2 or D6	Area 3B or 4F
Language A1 (all except English) (HL)	5	3	No equivalent	Category III	C2	Areas 3B and 6A
Language A2 (all except English) (HL)	5	3	No equivalent	Category III	C2	Areas 3B and 6A
Language B (HL)	5	4	No equivalent	No credit	No credit	Area 6A
Mathematics (HL)	5	3	MATH 250	Category IV	B4	Area 2A
Physics (HL)	5	4	PHYSIC 101	Category I (lab)	B1 (no lab)	Area 5A (no lab)
Psychology (HL)	5	3	No equivalent	Category II	D9	Area 4I
Spanish A1 (HL)	5	4	SPAN 102	Category III	C2	Areas 3B and 6A
Theatre (HL)	4	3	No equivalent	Category III	C1	Area 3A (requires score of 5)

Credit for Courses Taken at Other Colleges

Academic credits earned at other regionally accredited institutions are evaluated at the time of a student's graduation from SBVC. It is therefore important that the student request official transcripts from all colleges previously attended. These transcripts should be sent to the Admissions & Records Office (Administration/Student Services Building, Room 100). 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, Room 100).

DANTES/DSST Examination	SBVC Required Score	SBVC Units	SBVC Equivalent Course (to clear prerequisite requirements)	SBVC Graduation Requirement	CSU GE-Breadth Area
Ethics in America	46	3.0	None	Category III	No credit
Introduction to World Religions	46	3.0	BUSAD 100	No credit	No credit
Introduction to World Religions	48	3.0	RELIG 101	Category III	No credit
Fundamentals of College Algebra	None	None	None	No credit	No credit
Principles of Statistics	None	None	None	No credit	No credit

Probation & Dismissal

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 NP 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 fifty percent of all the units he/she has taken at the college have been completed with an assigned letter or P grade. In addition, a student may appeal his/her probation status by making an appointment with the Dean of Counseling & Matriculation, AD/SS Room 103 or at (909) 384-4404.

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.

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 NP, I and/or W in 50/fifty 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.

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 dismissed for one year. Students must see a counselor and complete readmissions documents. Counseling can be reached in AD/SS Room 103 or at (909) 384-4404.

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. Students must contact each institution individually to request academic renewal. 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 Admissions & Records (AD/SS Building, Room 100).

Non-Discrimination 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, mental impairments, or sexual orientation. The District's non-discrimination policies are supported by the requirements of Titles VI and VII of the Civil Rights Act of 1964, as amended; Title IX of the education amendments of 1972; the Age Discrimination in Employment Act of 1975; and sections 503 and 504 of the Rehabilitation Act of 1972, as amended, and the Americans with Disabilities Act. San Bernardino Valley College is further committed to overcoming sex discrimination and sex stereotyping in vocational education programs. In addition, the lack of English language skills will not be a barrier to admission and participation in vocational education programs.

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

For information regarding the college's non-discrimination policy or to file a complaint, contact the Vice Chancellor of Human Resources and Employee Relations, District Building, SBCCD, 114 South Del Rosa Drive, San Bernardino, CA 92408. You may also call (909) 382-4041. For information regarding the requirements of Section 503 and 504 of the Rehabilitation Act of 1973 or to file a complaint, contact the Vice President of Student Services, San Bernardino Valley College at AD/SS Building, Room 200, or call (909) 384-8297.

Open Enrollment Policy

The policy of San Bernardino Community College District is that, unless specifically exempted by statute or regulation, every course, or class offered by the college is open to enrollment and participation by a person who has been admitted to the college and who meets the prerequisites approved for a given course.

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 by calling the Vice President of Student Services at (909) 384-4473.

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 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 3430; for the full text of Board Policy 3430, ask at the Library Reference Desk to see the Board Policy Manual.)

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 "Pass/No Pass" 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 Pass/No Pass 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 THE Chemistry Building, Room 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

Admission to the Honors Program is open to all students. Students who complete the Honors Program will receive a special seal on their transcripts and diplomas, a gold tassel and sash 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 community service activities.
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:

- ANTHRO 106H
- ART 285
- BIOL 109H
- CD 105H
- CHEM 150H, 151H, 212H, 213H
- ECON 200H
- ENGL 101H, ENGL 102H
- GEOG 111H
- PHIL 101H
- POLIT 110H
- PSYCH 100H
- RELIG 100H
- SOC 100H
- 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) 384-8612 for additional information.

SERVICES FOR STUDENTS

Academic Advancement Lab & Tutorial Center

The Academic Advancement Lab and Tutorial Center (AALTC) houses the Tutoring Center. It is located in the Liberal Arts Building (Room 206). The AALTC also serves as overflow open computer lab when the computers in the campus Library are all in use. For information on services and hours of operation, call (909) 384-4439.

Art Gallery

The Clara and Allen Gresham Art Gallery showcases the work of national, regional, local and student artists in 10 - 16 exhibits each year. The hosted receptions that open each show enable the public to meet the artists and instructors. During some shows, the artists will show slides and discuss their work. During the fall and spring semesters, the Art Gallery is open Monday-Friday, 10 a.m. – 2 p.m. 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, and soccer. Women's sports include basketball, volleyball, soccer, softball, track, and cross-country. Students interested in competing on an inter-collegiate team should contact the Director of Athletics at (909) 384-8640.

Also under the direction of the Athletic Department is the Cheerleading Program. Tryouts are held annually in the spring and interested persons should contact the Director of Athletics at (909) 384-8640.

Bookstore

The Bookstore, located in the Campus Center, sells textbooks, general books, a wide variety of supplies, sportswear, accessories, snacks, novelty items, and bus passes. Bookstore hours vary throughout the semester. Call (909) 384-4435 or visit our website at www.sbvcbkbookstore.com for additional information.

Campus Child Development Center

The SBVC Child Development Center is a licensed facility designed to meet the developmental needs of children from birth through pre-Kindergarten. Our environment nurtures the child and embraces the family. We have an open door policy and encourage all families to participate in the Center. The Center is open from 7:00 a.m. to 4:00 p.m., Monday-Friday. Fees are assessed on a sliding scale (according to state guidelines), and can range from \$0 to \$34 per day, depending on income of the parent(s). For a tour of the Center and further eligibility and enrollment information, call (909) 384-4440.

Career Employment Services

Career Employment Services offers joint services that include: career exploration, off-campus placement, interviewing and resume preparation; Eureka and SIGI career exploration programs are used. Job Development services are provided that include referrals and job placement. Services are also provided for WorkAbility III clients. Workforce from County, City and EDD referrals are administered in the employment services center office. For more information, contact the Career Center at (909) 384-8670 or the program counselor at (909) 384-8282.

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 Office of Student Life (Campus Center) or call (909) 384-4474. A list of currently registered clubs and club information may be obtained at www.valleycollege.edu/student_life.

Counseling Center

The faculty of the Counseling Center (in the AD/SS 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 university transfer. 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 that include but are not limited to:

- **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.

* During non-registration periods

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, large print, or electronic 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.

Students who need services related to a disability or who desire further information may either contact DSP&S at (909) 384-4443, or 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 all courses which are computer based in their delivery (to include Hybrid courses) and are available to the students of Crafton Hills College in Yucaipa and San Bernardino Valley College in San Bernardino. Online and Hybrid courses require accessibility to a computer system with an internet connection and may have meetings on campus. Fees and academic credits are the same as equivalent traditional classroom courses. The office can be contacted at: (909) 384-4325 or the Internet site at the following address: http://www.valleycollege.edu/online_college or <http://dets.sbccd.org>.

Extended Opportunity Programs and Services (EOP&S) and Cooperative Agencies Resources for Education (CARE)

The Extended Opportunity Programs & Services (EOP&S) program is a state funded student services program designed to provide academic counseling and financial support to students who are from educationally and financially disadvantaged backgrounds. The EOP&S program promotes student success with enrollment assistance, educational planning, transportation and book services. Participation in this program is limited to California residents who are eligible to receive the Board of Governor's Fee Waiver (BOGFW) A or B, are in good academic standing, are enrolled as a full-time student (12 units per semester) and have an educational disadvantage. EOP&S-eligible students who are single, head of household CalWORKs recipients may also be eligible to participate in the Cooperative Agencies Resources for Education (CARE) program.

In addition to the services mentioned above, the CARE program provides child care grants, field trips, meal vouchers and emergency gas cards. *All support services are contingent upon funding.* For additional information about the EOP&S and CARE programs, please visit the EOP&S/CARE office located in Administration/Student Services Building, Room 202 or call (909) 384-4412.

Financial Aid

The Financial Aid Office provides help in obtaining financial assistance from various federal and state programs. The office is located in the AD/SS Building, Room 106. For additional information, please see page 21 or go to www.valleycollege.edu/Financial_Aid. The Financial Aid Office may be reached by calling (909) 384-4403.

Food Service/Snack Bar

During the fall and spring semesters, the Campus Snack Bar, located on the main floor of the Campus Center, is available for food and drink purchases. (See our Class Schedule for open hours.) Food and drink items can also be obtained from the vending machines located throughout the campus.

During the fall and spring semesters, the college has a coffee shop, Info Joe's Café, located in the Library building.

During the fall and spring semesters, the college's award-winning Culinary Arts program operates an on-campus restaurant, The Sun Room. The Sun Room offers a variety of sandwiches, salads and daily specials at a nominal cost. (See our Class Schedule for open hours.)

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://library.valleycollege.edu/>. 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 80 personal computers and 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 enrollment. For information on services and hours of operation, call (909) 384-4448.

Mathematics and Science Student Success Center

The Math and Science Student Success Center (MSSSC) supports students taking mathematics and/or science courses. The MSSSC has tutoring on a drop-in basis for Biology, Chemistry, Mathematics and Physics. There are weekly workshops for transfer level courses in Biology, Chemistry, Mathematics and Physics. In addition, there are regularly scheduled workshops on special Algebra topics. Workshops are constructed, with faculty input and guidance, focused on the concepts and information being presented in class. The facilitators and tutors are trained to help students define their learning styles and to strengthen their study skills. For more information, visit the MSSSC located upstairs in the Chemistry building, room 208, or call (909) 384-8651.

Parking Regulations

A parking permit or a daily permit is required to park in all college streets and lots. All annual, semester, and summer parking permits are purchased directly from the Campus Business Office, located in AD/SS Building, Room 206. Daily permits may be purchased from dispensers located in Student Parking Lots 1, 5, 7, 8, and 9.

Parking permit fees are as follows:

Annual (includes Fall, Spring, and Summer)	\$75.00
One Semester (Spring or Fall)	\$30.00
Summer Session	\$15.00
Daily Permit	\$ 1.00

Individuals with disabilities must display a valid DMV Handicap Permit placard and a valid 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!

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. Those that meet the above criteria and are seeking a parking permit refund must fill out a *Parking Fee Refund Request* form, which is available at the Campus Business Office, located in AD/SS 206. The parking permit must be attached to the refund request. Additional information on parking rules and regulations is available in the Campus Business Office.

Puente

The mission of the Puente Project is to increase the number of educationally underrepresented students 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. English classes are linked with a one-unit class, Student Development 015 in the Fall, and Student Development 102 for 2 units in the Spring. Puente is open to all students. For more information on this program, contact the Puente Office at (909) 384-8255 or (909) 384-4404.

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 (Success Through Achievement and Retention) program is a federal Student Support Services Trio program designed to increase the graduation and transfer rate of students who qualify (based on academic need, citizenship status, first-generation college student status, and/or physical or learning disability). The purpose of STAR is to provide a counseling and learning support community that will empower students to complete their educational degree and/or certificate requirements and obtain an AA, AS, Certificate and/ or transfer. Participants receive academic and personal counseling, academic workshops, transfer advising, tutoring, financial aid counseling, field trips to four-year universities and an opportunity to attend cultural enrichment activities. Call (909) 384-4433 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, assessment and referral. The motto is "For students, By Students." Call (909) 384-8233 or visit us in the Campus Center to inquire about hours.

Student Health Services

The Student Health Center (Student Health Center Building, south of the track and football field) offers first aid, health education, nursing advice, brief mental health counseling and crisis intervention, emergency care, immunizations, and health screening for vision, hearing and blood pressure. Physicians and/or Nurse Practitioners are available for consultation, treatment, and referral. Family nurse practitioner clinic services include pap smear, STD screening, pregnancy tests, birth control, and general medical consultation. There is no charge for office visits, however a nominal fee is charged for medication, lab tests, and immunizations. 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 *Class Schedule*. In addition to the health fee, International Students attending SBVC on a student visa must purchase 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).

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.

Student Life and Associated Student Government (ASG)

The Office of Student Life assumes a leadership role in creating a campus environment that integrates the learning experience which complements the academic curriculum. Programs and services are provided to enhance students' ability to learn and develop the life skills necessary to become productive and caring members of our global society. Student participation in the design and implementation of campus wide programs provides opportunities to develop and enhance characteristics of leadership, interpersonal skills, and personal growth. The office provides structured activities, programs, services, resources and facilities to accomplish this mission. For

more information visit our website at: www.valleycollege.edu/Student_Life or call (909) 384-4474.

The Associated Student Government (ASG) is the official student government organization of San Bernardino Valley College. The ASG represents all SBVC students. The primary responsibility of ASG members is to represent student interests on college, district and statewide committees. In addition they plan and manage various ASG accounts, including the Student Body Center Fee Account, the Student Representation Fee Account and the General Account. Funds from these accounts are used to support various activities, lobbying efforts and Campus Center services and programs. Students can become active in ASG either by running for office during the spring semester or by applying to be appointed to any vacant positions during the fall semester. Appointments are at the discretion of the ASG President with Board of Directors ratification. For more information visit the ASG website at www.valleycollege.edu/Student_Government or call (909) 387-1614.

Both the Office of Student Life and the Associated Student Government are located in Campus Center Building, Room 128.

Transfer and Career Services

The Transfer Center (AD/SS Building, Room 203) is open to students planning to transfer to any four-year college or university and/or seeking career counseling and information. The center provides the following Transfer services: appointments to see a four-year college or university representative; Transfer Counseling; Honors Counseling; workshops on admissions and on-line application process; financial aid information relative to transfer institutions; transfer workshops, HACU Internship workshop; transfer orientation sessions; assistance with major selection; credit evaluations; a monthly calendar of events; a library of college catalogs, and DVD's; articulation agreements. Several times a year transfer/college fairs are held. Stop by the Center to learn more about special programs such as TAP, TAG and Cross Enrollment. Transfer materials can be requested from the Transfer Center. Online transfer counseling is available at: transfercenter@valleycollege.edu.

The Career Services provides career counseling and career exploration tools. The Eureka system is a career assessment and information program that is designed to assist students with finding the best career for them. This program is available on the computer as well as other career testing instruments. In addition, the Center has many resources to assist students with career choices.

A Dual Admission Program (DAP) has been established between San Bernardino Valley College and California State University, San Bernardino. This program is for students who have successfully completed the four general education courses required at CSU and students who qualify as well as well at other universities. Visit the Transfer and Career Center, located in AD/SS 203 or call (909) 384-4410 for additional information.

Tumaini Program

The Tumaini Program is a learning community designed to increase academic and personal success, and promote

transfer to four-year colleges and universities. Tumaini targets students who are interested in learning about African-American history, literature, and culture. Tumaini instructors and counselors use collaborative and other community-building strategies to enhance students' learning potential in and out of the classroom. The Program will combine elements of counseling and other courses (English, Math and African-American History) to assist students with the rigors of college life. The benefits from Tumaini include:

- Fostering high self-confidence and pride in one's cultural heritage.
- Developing critical thinking, reading, and writing skills that are needed for college and future career success.
- Researching occupational interest through various sources.
- Receiving individual and group access to counselors, college workshops, guest speakers, professional mentors, and college tours.

Tumaini is open to all students. For further information on this program, contact (909) 348-8972 or (909) 384-4404.

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. For information on services and hours of operation, call (909) 384-8566.

Veterans Services

Veterans Services (AD/SS Building, Room 100) 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/CalWORKs

CalWORKs is the welfare reform initiative that began in January 1998. SBVC students who are on public assistance must now meet new school attendance and work requirements. Support and guidance is provided through the Workforce Development Office and allows students to be successful 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) 384-4429.

FINANCIAL AID PROGRAMS

If a student needs financial assistance to pay for the costs of attending San Bernardino Valley College, the Financial Aid Office can help. 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 Free Application for Federal Financial Aid (FAFSA) and review the additional required documents. Financial aid awards 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 established by the Financial Aid Office.

The Financial Aid office can be reached by calling (909) 384-4403. The office is located in the AD/SS Building, Room 106.

Eligibility Requirements

In order to receive financial assistance, a student must either possess a high school diploma (or its equivalent) or

pass an Ability to Benefit (ATB) Test or have completed 6 units of degree applicable course work. In addition, a student receiving aid must have a stated qualifying educational objective and maintain satisfactory progress towards that objective. Federal programs require students to be U.S. citizens or eligible non-citizens. In addition, California grant programs require recipients to be residents of the State of California.

Application Procedure

For most student aid programs described in this section, students must complete the *Free Application for Federal Student Aid (FAFSA)*. This application is available online at www.fafsa.ed.gov and the Financial Aid Office recommends that students apply online. Students may use computers in the Financial Aid Office lab if they do not have access to the Internet. Make sure you list San Bernardino Valley College, federal code # 001272 on your application.

Applications for each new academic year are available in January. Financial aid is not continued from one year to the next, therefore students 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 various financial aid programs. Additional information regarding each of the programs is available in the Financial Aid Office where staff is eager to help you. Further information can be found on the following website: www.valleycollege.edu/Financial_Aid.

Board of Governors Fee Waiver (BOG)

This waiver is available to California residents to cover basic enrollment fees. In order for the Financial Aid Office to determine eligibility, the student must submit a *Board of Governors Enrollment Fee Waiver* application or a FAFSA (*Free Application for Federal Student Aid*).

Cal Grant (B and C)

The Cal Grant B helps students from low-income families who meet all Cal Grant eligibility requirements meet costs for academic programs. Cal Grant C helps meet costs for vocational training program for students from low income families. The primary deadline for Cal Grant applications is March 2 and there is also a secondary filing deadline of September 2. The application for Cal Grant is a two-step process: a FAFSA and a GPA verification form must be submitted in order to be considered for the grant.

California Chafee Grant

The California Chafee Grant provides up to \$5000 per year for eligible students who are current or former foster youth to use for career and technical training or college courses.

Federal Pell Grant

The Federal Pell Grant program provides federal grants up to a maximum of \$5,550 per year for students, depending on the ability of the family and/or individual student to contribute to their educational costs as determined by the FAFSA application process.

Federal Supplemental Education Opportunity Grant (FSEOG)

The FSEOG program provides federal grants to supplement the Federal Pell Grant. The average grant for San Bernardino Valley College students is \$750. Students must be eligible for a Pell Grant and have exceptional need.

Academic Competitiveness Grant (ACG)

This grant is for students who graduated high school after December 2005 who completed a rigorous program of study as defined by Federal regulations and confirmed by the student's high school. Students who qualify can receive a grant for two years. The amount for the first year is \$750 and \$1300 for the second year.

Federal Work-Study

Federal Work-Study offers students the opportunity to earn funds to help cover their educational expenses through part-time employment during the school year. The maximum award is \$3000 per year.

Federal Stafford Loan

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 for first-year students is \$3500 and \$4500 for second-year students). Attendance at a loan counseling workshop is required prior to borrowing. For more information, visit the Financial Aid Office.

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 based on the San Bernardino Valley College Satisfactory Academic Polity. Per Federal regulations, this policy must apply to all students whether or not they were recipients of financial aid previously at San Bernardino Valley College or any other college or university. The complete policy 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 begin attendance in any of their 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.



STUDENT RIGHTS AND RESPONSIBILITIES

Academic Records

Student academic records are treated in a confidential and responsible manner as required by the Family Educational Rights and Privacy Act of 1974 (FERPA). Students 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 Associate Dean, Enrollment Management, a written request that identifies the record(s) he/she wishes to inspect. The Associate 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 Admissions & Records Office, the Associate 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 Associate Dean 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
400 Maryland Avenue, SW
Washington, DC 20202

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.

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 will 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.

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” and “seizure” 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 Faculty Chair, 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.

Speech: Time, Place, and Manner

In accordance with Education Code Section 76120, the use of Free Speech Areas is subject to the following:

- Persons using the Free Speech Area(s) and/or distributing material in the Free Speech Area(s) shall not impede the progress of passersby, nor shall they force passersby to take material.
- No person using the Free Speech Area(s) shall touch, strike or impede the progress of passersby, except for incidental or accidental contact, or contact initiated by a passerby.
- Persons using a Free Speech Area shall not use any means of amplification that creates a noise or diversion that disturbs or tends to disturb the orderly conduct of the campus or classes taking place at that time.
- No persons using the Free Speech Area(s) shall solicit donations of money, through direct requests for funds, sales of tickets or otherwise, except where he or she is using the Free Speech Area(s) on behalf of

and collecting funds for an organization that is registered with the Secretary of State as a nonprofit corporation or is an approved Associated Students Organization or club.

- All persons using the Free Speech Area(s) of the college shall be allowed to distribute petitions, circulars, leaflets, newspapers, and other printed matter. Such distribution shall take place only within the Free Speech Area(s). Material distributed in the Free Speech Area(s) that is discarded or dropped in or around the Free Speech Area(s) other than in an appropriate receptacle must be retrieved and removed or properly discarded by those persons distributing the material prior to their departure from the Free Speech Area(s) that day.

Posting:

Students shall be provided with bulletin boards for use in posting student materials at campus locations convenient for student use. Materials displayed shall be removed after the passage of specified days.

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 use, sale or possession of illegal drugs or substance or any poison classified as such in § 4160, Schedule D of the Business and Professions Code, or the presence on campus of anyone under the influence of such drug substances.
 - Forgery, alteration or misuse of college documents, records or identification.
 - Violation of college regulations governing student organizations, the use of college facilities or the time, place and manner of public expression or distribution of materials.
 - Unauthorized entry to facilities or unauthorized use of college supplies, equipment, and telephones.
 - Possession or use of any firearm, explosive device, dangerous chemical or other deadly weapons while on college property or at college-sponsored activities.
 - Driving of motorcycles and other off-road vehicles on college property other than the regular roads and parking lots.
 - Persistent, serious misconduct where other means of correction have failed to bring about proper conduct.
 - Obstruction of pedestrian and/or vehicular traffic while on college property or at college-sponsored activities.

See Board Policy 5500 for additional information about student conduct.

Types of Disciplinary Action

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

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

Student Grievance and Due 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.

I. Cause and Filing

Student grievance proceedings may be initiated against a District employee or another student for any of the following reasons:

1. Any act or threat of intimidation
2. Any act or threat of physical aggression
3. Any arbitrary action or imposition of sanctions without a proper regard to due process as specified in college procedures.

NOTICE:

1. Grades are not grievable (see NOTATION at end of policy).
2. Sexual Harassment complaints are filed in accordance with Board Regulation 3430 and are not covered under Student Grievances.
3. Discrimination complaints are filed in accordance with Board Regulation 3430 and are not covered under Student Grievances.

Who to File a Grievance With?

A student may submit a grievance to any manager or employee in any area for delivery to the Vice President of Student Services who will assess which manager or vice president is to oversee the grievance process.

A student grievance is to be handled in the area where the alleged grievance occurred. Examples are:

- Classroom or teacher-related issues would go to the vice president or manager in Instruction.
- Student service or counselor-related issues would go to the vice president or manager in Student Services.
- Building, grounds, cashiering, or police-related issues would go to the vice president or manager in Administrative Services.

II. Time for Filing a Grievance Notice

The appropriate vice president, district manager, or designee will accept a formal written student grievance when submitted within 180 calendar days of the event's occurrence and under the provisions specified. A grievance may be denied if the events occurred more than 180 calendar days prior to the date in which the grievance was filed in writing.

III. Student Status for Filing a Grievance

Only registered students may file a student grievance. Non-student grievances may be considered by the designated vice president or manager if the grievance is a result of a dispute arising out of the registration or enrollment process and the grievance is filed within thirty (30) calendar days of the alleged incident.

IV. Group Grievance

If more than one student files a grievance against an individual on the same issue or situation, members of the

group shall select one person to serve as spokesperson/representative for the entire group.

V. Informal Student Complaint Resolution Process (Non-written)

Step 1. Every effort shall be made to resolve a student complaint at the lowest level possible. A student must first attempt to resolve the issue directly. If this is not practical or possible, or due to the nature of the problem, or failing a resolution the grievance progresses to Step 2.

Step 2. A student who is not satisfied with the Step 1 outcome may next attempt to resolve the alleged problem by conferring with the immediate supervisor of the employee with whom the initial conference was held. If the grievance is alleged against another student, Step 2 would be taken to the Disciplinary Officer. Upon such a request, the administrator shall inform and confer with any employee or student named by the student. In turn, the administrator shall schedule a meeting with the grievant and if requested, all involved parties, not more than ten (10) school days from the date of the initial request.

VI. Formal Procedures

If the alleged problem is not resolved at the Informal Level, the student may request a formal hearing in writing with the appropriate vice president or designee. This written notice shall state the conditions, practice, alleged act, or injustice that is being grieved, the date(s) of the alleged occurrence and should, if possible, include a proposed remedy or resolution to the problem.

Step 1: Within three (3) working days of receipt of the written student grievance notice, the appropriate Vice President or designee, shall determine if the allegations were filed in a timely manner and meet the criteria outlined. If the student grievance notice fails to meet the above criterion, the Vice President shall notify the student of this determination and the grievance shall be terminated. If the student grievance notice is not terminated, the Vice President shall appoint a Student Grievance Hearing Committee within five (5) working days.

Step 2: Any employee who has conferred with a student who requests a hearing shall prepare a written account of the discussion which shall be forwarded to the appropriate Vice President or designee.

Step 3: The student and any college personnel or student involved in the allegations shall be notified of a hearing and 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).

Step 4: The Hearing Committee shall consist of either a maximum of two faculty or two classified staff members, based on the nature of the classification of staff involved, two students, and one administrator to hear the grievance. The administrator where the issue relates shall serve as chairperson of the hearing committee.

VII. Hearing Procedures

a. The hearing shall convene within ten (10) working days of the receipt of the student grievance notice unless mutually agreed upon for a delay.

b. The hearing shall be closed unless the District employee or student against whom the grievance is brought requests that it be open.

c. The following persons should be present:

- (1) The Hearing Committee
- (2) The student grievant and non-legal representative/advocate if any;
- (3) The college employee or student against whom the grievance is brought and a representative of the appropriate bargaining unit, if any;
- (4) Witnesses, while presenting testimony.

d. Both parties shall notify the appropriate Vice President or designee, in writing within three (3) working days of the hearing if he/she will be accompanied by a representative/advocate. Such notification shall include the name and title of the representative. The Committee Chairperson shall be obligated to immediately notify the parties directly involved.

e. Although minutes will be taken at the hearing to provide a written record, if all parties agree the hearing may also be tape recorded.

f. All participants in a hearing shall be advised by the Committee Chairperson that the proceedings are confidential.

g. Witnesses shall not be required to testify under oath; however, witnesses shall be advised that false testimony will constitute grounds for college disciplinary action.

h. The proceedings will not be bound by formal rules of evidence nor trial-like procedures. Rather, the procedures will be those upon which reasonable persons would rely in the conduct of serious affairs. The Committee Chairperson shall rule on all procedural issues. If substantive or procedural issues arise during the hearing that require external assistance for resolution, the Hearing Committee Chairperson should recess the hearing and submit the issue to the college president for resolution.

i. Evidence and/or testimony which may be irrelevant or unduly repetitious may be so noted by the Committee Chairperson.

j. The burden of proof to sustain a grievance rests with the student.

k. If the grievant fails to appear at the time and place scheduled for the hearing, and fails to notify the committee of the circumstances the grievance will be considered to have been withdrawn and procedures will be terminated. Depending on the nature of the circumstances, the committee shall determine if the hearing should be rescheduled within a reasonable period of time. It is recommended that the defendant participate in the hearing.

l. Upon conclusion of the hearing, within five (5) working days, the Committee Chairperson shall submit to the Vice President a written report. The report shall include:

- (1) A brief summary of evidence submitted;
- (2) A finding of facts, supported by a preponderance of the evidence;
- (3) A recommendation that the grievance be sustained or denied; and
- (4) In the event the recommendation is to sustain the grievance, a recommendation of appropriate corrective action.

m. Upon review of the Hearing Committee's report, the Vice President or designee shall make a final determination.

VIII. Notification

Within five (5) working days following receipt of the report of the Hearing Committee chairperson, the Vice President or designee shall provide a written notification to the student/s and to the employee/s directly involved in the issues as to the final determination.

IX. Appeal to President

If either the complainant or accused is not satisfied with the final college-level disposition of the grievance, the party may, within ten (10) working days, appeal the decision to the College President. The basis of appeals are: All parties shall be notified by the President of the appeal. The President shall provide written notification to the student and to other parties directly involved in the issues as to his/her recommendation within five (5) working days.

X. Appeal to the Chancellor

If either party is not satisfied with the final college-level disposition of the grievance, he/she may, within ten (10) working days, appeal (state the basis of the appeal again) the decision to the Board of Trustees through the District Chancellor. All parties shall be notified by the Chancellor of the appeal. The Chancellor shall report the grievance in closed session to the Board of Trustees for final determination. The Chancellor shall provide written notification to the student and to other parties directly involved in the issues as to his/her recommendation within five (5) working days. The determination of the Board of Trustees is final.

General Provisions

1. The time limits specified in this procedure may be shortened or extended if there is mutual written concurrence between the parties.
2. At any step of the grievance procedure, the college President may designate a substitute for the designated college officials.
3. Failure of the student grievant to appeal a grievance determination at any step to another step within the specified time limits shall be deemed as acceptance of the last determination rendered.
4. It is the intent of this policy that the confidentiality of the discussions, including any documents or written records, be maintained by the participants.
5. It will not be mandatory for any staff member to attend the student grievance meetings nor will the student grievance procedure supersede staff member's contractual rights.

Grade Appeal Process

According to code (California Education Code Section 7622 [a], California Code of Regulation Section 55760 [a] and Section 55758), if mistake, fraud, bad faith, or incompetency is the reason for a grade dispute, the burden of proof lies with the student to produce facts that support this allegation. If such evidence exists the student is to initiate an informal discussion with the specific faculty member and/or the Faculty Chair. If the matter is not resolved through this informal discussion, the student may obtain a Grade Appeal Form from the Office of Admissions and Records and meet with the Division Dean.

CAMPUS SAFETY

District Police

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, the District maintains a Police Department 24 hours a day, 7 days a week. The officers are sworn and duly Commissioned Police Officers of the State of California as defined in section 830.32 of the Penal Code and 72330 of the California Education Code and authority extends to anywhere within the state.

- **FOR NON-EMERGENCIES:** Contact the San Bernardino Community College District Police Department Office at **(909) 384-8667**. Our office is located in the Campus Center, Room 100, on the SBVC campus. This number would be the number to call in order to locate or turn in lost articles or to relay concerns for personal safety or parking rules and regulations.
- **TO REPORT ANY CRIMINAL ACTION OR A LIFE-THREATENING EMERGENCY:** Contact the San Bernardino Community College District Police Department at **(909) 384-4491**. Be aware that when the office is closed and on nights and weekends, the San Bernardino County Sheriff will dispatch for the District Police Department.

The San Bernardino Community College District is required by the United States Department of Education to post and/or publish crime statistics. Crime statistics are available in the District Police Department, Campus Center, Room 100, and on the San Bernardino Valley College website. Click on "District Police."

Referral Resources on Campus:

STUDENT HEALTH CENTER

Student Health Center • (909) 384-4495
Monday and Thursday, 8:00 a.m. – 7:00 p.m.,
Tuesday and Wednesday, 8:00 a.m. – 6:00 p.m., and
Friday, 8:00 a.m. – 12:00 noon.

STUDENT ASSISTANCE PROGRAM

Campus Center 213 • (909) 384-8233
Monday -Thursday, 9 a.m. – 5 p.m.
Friday 9 a.m. – 2 p.m.

COUNSELING

(909) 384-4404

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*** to meet educational goals in a time-effective manner.

* See "Matriculation" on page 9 for details

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-Breadth). Refer to page 33 of the catalog for the CSU GE-Breadth 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 Mathematics/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 35 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, it is suggested to follow the Liberal Arts major described on page 134 of this catalog.
5. Demonstrate competency in English, mathematics and reading by satisfying the following criteria:
 - a. Competency in English as demonstrated by completion of ENGL 101 or ENGL 101H with a grade of C or higher.
 - b. Competency in mathematics as demonstrated by:
 - (1) Completion of MATH 095, 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 095 with the equivalent to a grade of C or higher.
 - 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, 106H
ASTRON 120, 125
BIOL 100, 104, 109, 109H, 123, 155, 201, 202, 204, 250, 251, 260, 261, 270
CHEM 101, 104, 110, 150, 150H
FCS 162
GEOG 110, 111, 111H, 114, 285
GEOL 101, 111, 112, 122, 250, 251
OCEAN 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, 109
CD 105, 105H, 126
ECON 100, 200, 200H, 201
GEOG 102, 106, 120
HIST 100, 101, 107, 110, 137, 138, 139, 140, 150
PS 112
POLIT 100, 110, 110H, 204
PSYCH 100, 100H, 102, 110, 111, 112, 118
RELIG 135
RTVF 100
SOC 100, 100H, 110, 130, 141, 145, 150
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
ARAB 101, 102
ARCH 145, 146
ART 100, 102, 103, 105, 107, 108, 109, 110, 111, 285
ASL 109, 110, 111, 112
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 100, 101, 107, 110, 137, 138, 140, 150, 170, 171
MUS 100, 101, 102, 104, 105, 106, 107, 121, 122, 201, 202
PHIL 101, 101H, 105, 112, 180
RELIG 100, 100H, 101, 110, 135, 150, 175, 176, 180
RTVF 101
SPAN 101, 102, 103, 103H, 104, 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, 130, 131, 133, 134, 136,

141X4, 150X4, 152X4, 154X4, 156X4, 158X4, 201L, 202L
RTVF 132, 134
THART 114X4, 120, 121, 132, 135, 136, 139, 147, 160X4, 165, 166

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

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

ECON 208
ENGL 102, 102H
MATH 102 and above
PHIL 102, 103
PSYCH 105 (completed Fall 2009 and later)
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, 103X2, 105X2, 106X4, 107X2, 114x4
FCS 162
HEALTH 101, 103
PE 236
PE-I (all courses)
PE-T (all courses)
PE-V (all courses)

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 35 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 in any one of the following ways:

1. Catalog Rights at the time the student begins at SBVC without interruption, or
2. The student who drops out for two or more consecutive semesters is subject to the requirements in the catalog at the time of reentry, 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, 102). 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 mathematics, reading and writing in order to complete their coursework and to succeed in the occupations they select. Students must also complete all requirements for a certificate with a grade of C or higher. Refer to page 35 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:

Fall	October 1
Spring	March 1
Summer	July 1

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

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

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. Although courses may be indicated in the catalog as transferable to UC and/or CSU, they may or may not meet general education or major preparation. Students who plan to transfer to UC or CSU should consult with a counselor and the following websites:

www.csumentor.edu

uctransfer.universityofcalifornia.edu

www.assist.org

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 following 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 (2.0) 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. They can be found at AD/SS 203 or call (909) 384-4410

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. Call (909) 384-8612 for additional information.

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 on page 20 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 on page 20 for details.

Catalogs for each of the UC campuses are available in the Transfer Center. Also in the Transfer Center (AD/SS 203 or call (909) 384-4410) there is further information available that provide a summary of the unique requirements of each University of California campus: *Introducing the University and Answers for Transfers*.

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 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. Students with Advanced Placement (AP) Examinations, will receive credit for the appropriate IGETC area as documented in the "IGETC standards, policies, and procedures" available at icas-ca.org/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

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

Group B: Critical Thinking - English Composition

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

Group C: Oral Communication (CSU only)

One course, 3 semester units / 4-5 quarter units. Select from: SPEECH 100, 100H, 111, 130, 140

AREA 2 - Mathematical Concepts and Quantitative Reasoning

One course, 3 semester units / 4-5 quarter units. Select from: ECON 208
MATH 102**, 108, 115, 151, 250, 251, 252, 265, 266
PSYCH 105

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:

Arts:

ANTHRO 109*
ARCH 145, 146
ART 100, 102, 103**, 105, 107, 108, 110, 111, 285
DANCE 200
MUS 100, 101, 102, 104, 105, 106, 107, 121, 122
RTVF 101
THART 100

Humanities:

ANTHRO 107*, 110* (same as RELIG 110)
ASL 111, 112
ENGL 151, 153, 155, 161, 163, 165, 175 (same as RELIG 175), 260, 261, 270, 271, 275, 280, 281
HIST 100, 101, 107, 110, 137, 138, 139, 140, 150, 170, 171
PHIL 101**, 101H**, 105, 112
RELIG 100**, 100H**, 101, 110* (same as ANTHRO 110), 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, 106H, 107*, 109*, 110* (same as RELIG 110)
CD 105**, 105H**, 126
ECON 100**, 200**, 200H**, 201
GEOG 102, 106, 120
HIST 100, 101, 107, 110, 137, 138, 139, 170, 171
POLIT 100, 110**, 110H**, 204
PS 112
PSYCH 100**, 100H**, 102, 110, 111**, 112**, 118
RELIG 110* (same as ANTHRO 110)
RTVF 100
SOC 100**, 100H**, 110, 130, 141, 145, 150
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, 125
CHEM 101**, 104**, 110**, 150**, 150H**, 151**, 151H**, 212**, 212H**, 213*, 213H**
GEOG 110**, 111**, 111H**, 114,
GEOL 101, 111, 112, 122, 250
OCEAN 101, 111
PHYSIC 101**, 150A**, 150B**, 200**, 201**
PS 101**

Biological Science:

ANTHRO 106, 106H
BIOL 100**, 104, 109, 109H, 201, 202, 204, 250**, 251**, 260**, 261**, 270

Language Other Than English (UC Requirement Only)

Proficiency equivalent to two (2) years of high school study in the same language or one of the following:

ARAB 101
ASL 109
FRENCH 101
SPAN 101, 157

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

(Not a part of IGETC; may be completed prior to transfer)
Six (6) units, one (1) course from Group 1 and one (1) course from Group 2.

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 usually 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 2010 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 California State University

The California State University system consists of 23 campuses, ranging in location from San Diego to Arcata. 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. Although courses may be indicated in the catalog as transferable to UC and/or CSU, they may or may not meet general education or major preparation. Students who plan to transfer to UC or CSU should consult with a counselor and the following websites:

www.valleycollege.edu/Counseling
www.csumentor.edu
uctransfer.universityofcalifornia.edu
www.assist.org

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.

Lower-Division Transfer Patterns (LDTP)

The Lower-Division Transfer Patterns (LDTP) project is one of several ways that California Community College (CCC) students may use to prepare for study at the

California State University (CSU). CCC students who know the major they wish to pursue and at which CSU campus, traditional major preparation articulation and transfer admission agreements are valuable. However, for transfer students who are uncertain about which CSU campus they will attend, the LDTP provides a measure of flexibility and options for preparation. LDTP may provide articulation for students whose community college does not have existing CSU articulation.

Each LDTP major discipline has a statewide and campus-specific component. The statewide component of the LDTP is appropriate for any CSU campus offering the major and is comprised of general education coursework and courses within the discipline. The campus-specific component identifies discipline related coursework relevant to the major at the specific CSU campus. These components for an LDTP discipline will total at least sixty units, the number needed to transfer to CSU as an upper-division student.

Students who completes any portion of the statewide component of an LDTP benefit because CSU campuses offering the discipline will honor the preparation for the major and the progress towards the CSU degree. Just as CSU GE-Breadth is a statewide alternative to each CSU campuses' unique general education program, the LDTP is a statewide alternative to each CSU campuses' lower-division major preparation. Please visit the following websites to access more information:

www.valleycollege.edu/Counseling
www.csumentor.edu
www.calstate.edu/acadaff/ldtp
www.assist.org

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 1033. (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: English Language Communication 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, 102H

PHIL 102, 103

READ 102

SPEECH 125

Area B: Scientific Inquiry and Quantitative Reasoning

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

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

GEOG 110, 114

GEOL 101, 112, 122, 250, 251

OCEAN 101

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

PS 101

B2 Life Science

ANTHRO 106, 106H

BIOL 100, 104, 109, 109H, 155, 123, 201, 202, 204, 250, 251, 260, 261, 270

B3 Laboratory Activity

ASTRON 123, 125

BIOL 100, 109, 109H, 201, 202, 204, 250, 251, 260, 261, 270

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

GEOG 111, 111H

GEOL 100, 111

OCEAN 100, 111

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

B4 Mathematics/Quantitative Reasoning

A minimum grade of C is required.

ECON 208

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

PSYCH 105

Area C: Arts and Humanities

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

C1 Arts (Art, Cinema, Dance, Music, Theater)

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
RTVF 101
THART 100

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

C2 Humanities (Literature and Language Other than English)

ANTHRO 110 (same as RELIG 110)
ARAB 101, 102
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, 110, 137, 138, 139, 140, 150, 170, 171
PHIL 101, 101H, 105, 112, 180 (same as RELIG 180)
RELIG 100, 100H, 101, 110 (same as ANTHRO 110), 135, 150, 175, 176, 180 (same as PHIL 180)
SPAN 101, 102, 103, 103H, 104, 157, 158

Area D: Social Sciences

Minimum of 9 semester units / 12 quarter units. Select from a minimum of two disciplines:

D1 Anthropology and Archaeology

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

D2 Economics

ECON 100, 200, 200H, 201

D3 Ethnic Studies

ANTHRO 107; HIST 107, 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, 110, 137, 138, 139, 140, 150, 170, 171; PS 112; RELIG 135

D7 Interdisciplinary Social or Behavioral Science

CD 105, 105H, 126; RTVF 100; SPEECH 135, 174

D8 Political Science, Government, and Legal Institutions

POLIT 100, 110, 110H, 204

D9 Psychology

PSYCH 100, 100H, 102, 110, 111, 112, 118

D0 Sociology and Criminology

SOC 100, 100H, 110, 130, 141, 145, 150

Area E: Lifelong Learning and Self-Development

Minimum of 3 semester units / 4 quarter units. Three units of credit is allowed for former military personnel with a DD-214. Select from:

BIOL 140
CD 101, 105, 105H, 126
FCS 162
GEOG 106
HEALTH 101, 103
PE 236

PSYCH 100, 100H, 102, 111, 118

SDEV 102, 103

SOC 130

Activity Courses (only 1 semester unit / 1.5 quarter units allowed toward Area E)

DANCE 101x2, 102x4, 103x2, 105x2, 106x4, 107x2, 114x4, 206x4
PE-I 103x4, 105x4, 108x4, 127x4, 132x4, 138x4, 148x4, 164x4, 168x4, 173x4, 184x4, 186x4, 188x4, 189x4, 190x4, 192x4
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 general education 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 2009 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. Additional information is available in the Transfer Center.

PROGRAMS, DEGREES AND CERTIFICATES INDEX

PROGRAM	DEGREE	CERT	PG	PROGRAM	DEGREE	CERT	PG
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Bookkeeping		•	40	Computer Engineering Technology	AS	•	105
Administration of Justice	AA	•	41	Electric Power Technology	AS	•	105
Aeronautics				Electronics Technology	AS	•	104
Airframe Maintenance Technician		•	44	General Electrician	AS	•	105
Aviation Maintenance Technician	AS	•	43	Environmental Science	AS		116
Avionics Technology	AS	•	45	Family & Consumer Science			
Flight Operations & Management	AS	•	44	Dietetic Aide		•	117
Powerplant Maintenance Technician		•	44	Dietetic Service Supervisor		•	117
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Computer-Aided Drafting Technician		•	51	General Warehousing		•	196
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Graphic Design	AA	•	53	Geography	AS		121
Web and Multimedia Design		•	53	Geology	AS		122
Astronomy	AS		163	Human Services	AA	•	126
Automotive Technology	AS		57	Alcohol/Drug Studies		•	126
Advanced Automotive Collision Repair and Refinishing	AS	•	57	Career Specialist		•	127
Automotive Technician	AS	•	59	Case Management in the Public Sector		•	127
Automatic and Manual Transmission	AS	•	58	Eating Disorders Studies		•	127
Basic Auto Collision Repair & Refinishing	AS	•	57	Inspection Technology	AS	•	132
Engine Performance	AS	•	58	Liberal Arts	AA		134
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Biology	AS		64	Library Technology		•	136
Biotechnology	AS	•	65	Machinist Technology	AS	•	137
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Retail Management		•	69	Basic Operations Computer Numerical Control (CNC)		•	139
Chemistry	AS		72	Computer Numerical Control: CAD/CAM		•	138
Biochemistry	AS		72	Machinist Standard		•	138
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Computer Information Technology (CIT)	AA		84	Radio, Television & Film	AS	•	175
Cisco Certified Network Associate		•	85	Digital Film Production		•	177
Management Information Systems		•	85	Film	AA	•	175
Office Technology	AA		85	Radio	AA	•	175
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Computer Science	AS	•	90	Refrigeration & Air Conditioning	AS	•	185
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Dining Room Service		•	97	Consolidated Welding	AS	•	202
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PART III – CORE COMPETENCIES

The seven competencies (and their subsets) listed below describe the core competencies a student should be able to demonstrate after completing the requirements for an associate degree at San Bernardino Valley College. These core competencies 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 competencies 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, weakness, 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 Awareness

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

7. Quantative Reasoning

PART IV – COURSE DESCRIPTIONS

Each course entry in this catalog includes the course number, title, prerequisite, a brief description, the number of semester units, and the number of hours the course meets based on the 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 and University of California systems.

- Courses numbered from 600 through 699 are non-credit and do not receive any type of college credit.
- Courses numbered from 001 through 099 are generally applicable to certificate and associate degree programs.
- Courses numbered from 100 through 299 are generally applicable for associate degrees and baccalaureate degrees conferred by universities.
 - Courses that are designated CSU transfer to CSU campuses system wide.
 - Courses designated UC are approved by the UC Office of the President as comparable to courses offered at UC. Courses with *UC notation indicate that some credit limitation applies. UC limits credit on courses that are similar in nature or taken after a higher level course(s). To access information on SBVC courses that transfer to UC, go to www.assist.org.
 - Although courses may be indicated in the catalog as transferable to UC and/or CSU, they may or may not meet general education or major preparation. Students who plan to transfer to UC or CSU should consult with a counselor and research the following websites:
www.csumentor.edu
uctransfer.universityofcalifornia.edu
www.assist.org
- Courses numbered from 900-999 are not applicable to associate degrees and generally do not transfer to four-year institutions.
- Certain course entries include a symbol x and a number following the symbol, such as MUS 141x4. This symbol (x) indicates that this is a skill-based course and 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: Library and Learning Support Services
DIVISION DEAN: Marie Mestas, M.L.S.
FACULTY CHAIR: Patricia Wall, M.L.I.S.
Library 131
(909) 384-8577
OFFICE ASSISTANT: Vacant
(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 Faculty 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.

COURSES OFFERED BY THE DEPARTMENT OF ACADEMIC ADVANCEMENT:

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

LECTURE: 1 contact 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 010
TUTOR TRAINING 1 UNIT
PREREQUISITE: None.

DEPARTMENTAL ADVISORY: Completion of any college-level course to be tutored with a grade of B or better is required.

LECTURE: .50 contact hour per week and
LABORATORY: 1.50 contact hours per week.

This course presents techniques and strategies for effective academic peer tutoring in a community college setting. Emphasis is on tutoring, study skill techniques and practical skills to use in a variety of tutoring situations. Graded on pass/no pass basis only. (Formerly ACAD 110)

Associate Degree Applicable

Course credit transfers to CSU for elective credit only.

ACAD 600Ax4
**SUPERVISED TUTORING – APPLIED TECHNOLOGY,
TRANSPORTATION AND CULINARY ARTS**

Non-Credit

PREREQUISITE: None.

LECTURE: Contact hours will vary according to student need.

Students enrolling in this noncredit 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.

Not Applicable to Associate Degree

ACAD 600Bx4
SUPERVISED TUTORING – CRIMINAL JUSTICE

Non-Credit

PREREQUISITE: None.

LECTURE: Contact hours will vary according to student need.

Students enrolling in this noncredit 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.

Not Applicable to Associate Degree

ACAD 600Cx4
SUPERVISED TUTORING – GENERAL STUDIES

Non-Credit

PREREQUISITE: None.

LECTURE: Contact hours will vary according to student need.

Students enrolling in this noncredit 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.

Not Applicable to Associate Degree

ACAD 600Dx4
SUPERVISED TUTORING – ARTS & HUMANITIES

Non-Credit

PREREQUISITE: None.

LECTURE: Contact hours will vary according to student need.

Students enrolling in this noncredit 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.

Not Applicable to Associate Degree

**ACAD 600Ex4
SUPERVISED TUTORING – LIBRARY AND
LEARNING SUPPORT SERVICES**

Non-Credit

PREREQUISITE: None.

LECTURE: Contact hours will vary according to student need.

Students enrolling in this noncredit 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.

Not Applicable to Associate Degree

**ACAD 600Fx4
SUPERVISED TUTORING – MATHEMATICS,
BUSINESS & COMPUTER TECHNOLOGY**

Non-Credit

PREREQUISITE: None.

LECTURE: Contact hours will vary according to student need.

Students enrolling in this noncredit 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.

Not Applicable to Associate Degree

**ACAD 600Gx4
SUPERVISED TUTORING – SCIENCE &
HEALTH SCIENCE**

Non-Credit

PREREQUISITE: None.

LECTURE: Contact hours will vary according to student need.

Students enrolling in this noncredit 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.

Not Applicable to Associate Degree

**ACAD 600Hx4
SUPERVISED TUTORING – SOCIAL SCIENCE, HUMAN
DEVELOPMENT & PHYSICAL EDUCATION**

Non-Credit

PREREQUISITE: None.

LECTURE: Contact hours will vary according to student need.

Students enrolling in this noncredit 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.

Not Applicable to Associate Degree

**ACAD 900
EMPLOYABILITY SKILLS**

1 UNIT

PREREQUISITE: None.

LECTURE: 1 contact 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 Pass/No Pass basis only.

Not Applicable to Associate Degree

**ACAD 910x4
VOCATIONAL BASIC SKILLS ENHANCEMENT**

3 UNITS

PREREQUISITE: None.

LECTURE: 3 contact 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 Pass/No Pass basis only.

Not Applicable to Associate Degree

ACCOUNTING

DIVISION:	Mathematics, Business and Computer Technology
DIVISION DEAN:	Haragewen Kinde, Ed.D.
FACULTY CHAIR:	Michael Assumma, M.B.A. Business 100G (909) 384-8923
OTHER FACULTY:	Janet Courts, M.A.
ADMINISTRATIVE SECRETARY:	Vivian Marquez
DIVISION OFFICE:	Business 100 (909) 384-8520/8908
LIAISON COUNSELORS:	Patty Jones, 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.

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).

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.

REQUIRED COURSES:	UNITS
ACCT 200 Principles of Accounting I (or ACCT 100 & 101)	4
ACCT 201 Principles of Accounting II	4
ACCT 204 Computer Accounting: Spreadsheets	1
ACCT 207 Integrated Accounting Software	2
BUSAD 100 Introduction to Business	3
BUSAD 210 Business Law	3
BUSCAL 208 Business and Economics Statistics	4
ECON 200 Introduction to Macroeconomics	3
ECON 201 Principles of Microeconomics	3
MATH 095 Intermediate Algebra	4
BUSCAL 091 Beginning Algebra for Business	4
or	
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
or	
MATH 102 Introduction to College Algebra	4
CIT 101 Introduction to Computer Literacy	3
REALST 100 Real Estate Principles	3

BOOKKEEPING CERTIFICATE

This certificate is designed to prepare students for entry-level work in payroll, and/or assist in some aspect of the record keeping process.

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

COURSES OFFERED BY THE DEPARTMENT OF ACCOUNTING:

ACCT 010 BOOKKEEPING 3 UNITS
PREREQUISITE: None.

LECTURE: 3 contact 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 contact hours per week.

This is a comprehensive course of study and practical application of basic federal and state income taxes. Topics include history and objectives of taxes, research and analysis of current tax issues, along with the tax treatment of various types of entities and types of income, deductions and credits. Emphasis is on the individual as a taxpayer. Actual tax forms are studied and returns prepared.
Associate Degree Applicable

ACCT 047 COMPUTERIZED ACCOUNTING 3 UNITS
PREREQUISITE: None.

LECTURE: 3 contact 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

ACCT 090 PAYROLL ACCOUNTING 3 UNITS
PREREQUISITE: None.
DEPARTMENTAL ADVISORY: ACCT 101 or ACCT 200.

LECTURE: 3 contact 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 200 PRINCIPLES OF ACCOUNTING I 4 UNITS
PREREQUISITE: None.
DEPARTMENTAL ADVISORY: BUSCAL 050 or ACCT 010.

LECTURE: 4 contact hours per week.

Development of the basic principles and practices applicable to the general accounting process, primarily in a sole proprietorship including transaction analysis, statement preparation and analysis, internal control, payroll, revenue recognition, and user analysis of accounting information and systems.
Associate Degree Applicable
*Course credit transfers to CSU and *UC.*

ACCT 201
PRINCIPLES OF ACCOUNTING II **4 UNITS**
PREREQUISITES: ACCT 200 or ACCT 100 and
ACCT 101.

LECTURE: 4 contact hours per week.

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

Associate Degree Applicable

Course credit transfers to CSU and UC.

ACCT 222
SPECIAL PROBLEMS IN ACCOUNTING I **1 UNIT**
PREREQUISITE: ACCT 200.

INDEPENDENT STUDY: 3 contact 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 contact 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.

ADMINISTRATION OF JUSTICE

DIVISION: Criminal Justice
 ADMINISTRATIVE DEAN: Gloria M. Fisher, J.D.
 FACULTY CHAIR: Patrick Buckley, B.S.
 ADMINISTRATIVE SECRETARY: Laura Cross
 DIVISION OFFICE: NH 139
 (909) 384-4431
 LIAISON COUNSELOR: Frank Dunn, M.A.
 (909) 384-4404

The Administration of Justice Department strives to provide our students with the legal, ethical and educational background necessary to pursue a career in a criminal justice-related field and to successfully transition into a 4-year academic program.

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 class schedule offerings.

ANY FELONY OR DOMESTIC VIOLENCE CONVICTION, OR ANY SIGNIFICANT PRIOR OR CURRENT DRUG USE WILL DISQUALIFY MOST PEOPLE SEEKING JOBS IN LAW ENFORCEMENT, CORRECTIONS, PROBATION/PAROLE, OR FORENSICS.

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).

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:

		UNITS
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 103	Gangs and Corrections	3
CORREC 104	Control and Supervision in Corrections	3
CORREC 105	Legal Aspects of Corrections	3
CORREC 106	Probation and Parole	3
TOTAL UNITS:		21

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: **UNITS**

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 103	Gangs and Corrections	3
CORREC 104	Control and Supervision in Corrections	3
CORREC 105	Legal Aspects of Corrections	3
CORREC 106	Probation and Parole	3
TOTAL UNITS:		21

COURSES OFFERED BY THE DEPARTMENT OF ADMINISTRATION OF JUSTICE:

**ADJUS 101
INTRODUCTION TO ADMINISTRATION OF JUSTICE
3 UNITS**

PREREQUISITE: None.

LECTURE: 3 contact hours per week.

This course is an introduction to the philosophy and history of the criminal justice system including the roles, function of the local, state, and federal jurisdictions. Additional discussion topics will include the roles, functions and interrelationships among law enforcement agencies, courts and corrections as well as crime causation, correctional theory, analysis, and the social impact of crime.

Associate Degree Applicable

Course credit transfers to CSU and UC.

**ADJUS 102
PRINCIPLES AND PROCEDURES OF THE JUSTICE SYSTEM
3 UNITS**

PREREQUISITE: None.

LECTURE: 3 contact hours per week.

This is a study of the role and responsibilities of each segment within the administration of justice system, law enforcement, judicial, and corrections. It includes a past and present 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 contact hours per week.

This course is an introduction to common law, legal concepts, codes, and their history, and the philosophy and development of U.S. criminal law.

Associate Degree Applicable

Course credit transfers to CSU and UC.

**ADJUS 104
LEGAL ASPECTS OF EVIDENCE
3 UNITS**

PREREQUISITE: None.

LECTURE: 3 contact hours per week.

This course is about the origin, development, philosophy, and constitutional basis of the use of evidence. It also incorporates constitutional and procedural considerations affecting arrest, search and seizure, types of evidence, and rules governing admissibility, judicial decisions, and interpretation of individual rights. Case studies will also be covered in this class.

Associate Degree Applicable

Course credit transfers to CSU.

**ADJUS 105
COMMUNITY RELATIONS
3 UNITS**

PREREQUISITE: None.

LECTURE: 3 contact hours per week.

This course examines the 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 contact hours per week.

This course covers the principles of various types of investigations utilized in the criminal justice system; including concepts of investigation, and the analysis, evaluation, preservation and documentation of evidence. The course will also include 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 contact hours per week.

This course examines theories, philosophies, and concepts related to the role expectations of the line enforcement officer. The emphasis is focused 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 contact hours per week.

This course examines the organization, function and jurisdiction of juvenile agencies, the processing and detention of juvenile offenders, and court procedures concerning their status.

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 contact 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 and Culinary Arts
DIVISION DEAN, INTERIM:	Kay Ragan, Ed.D.
FACULTY CHAIR:	Kevin Kammer, M.S. Technical 108 (909) 384-8503
ADMINISTRATIVE SECRETARY:	Cecile Smith
DIVISION OFFICE:	Technical 108 (909) 384-8902
LIAISON COUNSELOR:	Frank Dunn, M.A. (909) 384-4404

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

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

AERONAUTICS**ASSOCIATE OF SCIENCE DEGREE**

The Aeronautics Department offers these area of specialization for the Associate of Science Degree: Aviation Maintenance Technician, Flight Operations and Management. To graduate with a specialization in these areas, students must complete all requirements plus the general breadth requirements exceeding the usual 60 units required for the Associate Degree.

AVIATION MAINTENANCE TECHNICIAN

REQUIRED COURSES:	UNITS
AERO 100.1 Airframe and Powerplant General Curriculum-Calculations	2.5
AERO 100.2 Airframe and Powerplant General Curriculum-Publications	2.5
AERO 101.1 Airframe and Powerplant General Curriculum-Materials	2.5
AERO 101.2 Airframe and Powerplant General Curriculum-Servicing	2.5
AERO 102 Airframe Maintenance Lecture-Structures	6

AERO 103	Airframe Maintenance Lecture-Systems and Components	6
AERO 104	Powerplant Maintenance Lecture-Reciprocating Engine Overhaul	6
AERO 105	Powerplant Maintenance Lecture Accessory Overhaul	6
AERO 106.1	Airframe and Powerplant General Laboratory-Calculations	1
AERO106.2	Airframe and Powerplant General Laboratory-Publications	1
AERO 107.1	Airframe and Powerplant General Laboratory-Materials	1
AERO 107.2	Airframe and Powerplant General Laboratory-Servicing	1
AERO 108	Airframe Maintenance Laboratory-Structures	5
AERO 109	Airframe Maintenance Laboratory-Systems and Components	5
AERO 110	Powerplant Maintenance Laboratory-Reciprocating Engine Overhaul	5
AERO 111	Powerplant Maintenance Laboratory-Accessory Overhaul	5

TOTAL UNITS: 58

FLIGHT OPERATIONS AND MANAGEMENT

The college offers a two year program in Flight Operations Management for students who are interested in a career as a Commercial pilot either in general aviation or the airlines, or in the area of aviation management. This certificate prepares students for immediate employment or for transfer to other colleges, and includes Federal Aviation Administration approved curricula in Private Pilot Ground School and Instrument Ground School.

REQUIRED COURSES:	UNITS
AERO 121 Aviation Fundamentals	3
*AERO 122D FAA 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
AERO140D Instrument Ground School and Flight Simulators	4
AERO 144 Aviation Weather	3
BUSAD 100 Introduction to Business	3
PHYSIC 101 Basic Physics	4

TOTAL UNITS: 34

**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 CERTIFICATE

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 hours 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 1,900 hours of lecture and laboratory.

REQUIRED COURSES:		UNITS
AERO 100.1	Airframe and Powerplant General Curriculum-Calculations	2.5
AERO 100.2	Airframe and Powerplant General Curriculum-Publications	2.5
AERO 101.1	Airframe and Powerplant General Curriculum-Materials	2.5
AERO 101.2	Airframe and Powerplant General Curriculum-Servicing	2.5
AERO 102	Airframe Maintenance Lecture-Structures	6
AERO 103	Airframe Maintenance Lecture-Systems and Components	6
AERO 104	Powerplant Maintenance Lecture-Reciprocating Engine Overhaul	6
AERO 105	Powerplant Maintenance Lecture Accessory Overhaul	6
AERO 106.1	Airframe and Powerplant General Laboratory-Calculations	1
AERO106.2	Airframe and Powerplant General Laboratory-Publications	1
AERO 107.1	Airframe and Powerplant General Laboratory-Materials	1
AERO 107.2	Airframe and Powerplant General Laboratory-Servicing	1
AERO 108	Airframe Maintenance Laboratory-Structures	5
AERO 109	Airframe Maintenance Laboratory-Systems and Components	5
AERO 110	Powerplant Maintenance Laboratory-Reciprocating Engine Overhaul	5
AERO 111	Powerplant Maintenance Laboratory-Accessory Overhaul	5
TOTAL UNITS:		58

2. FLIGHT OPERATIONS AND MANAGEMENT CERTIFICATE

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 San Bernardino Valley College Flying Club, students have the opportunity to gain additional flight experience at a nominal cost as they prepare for the private pilot, commercial pilot, or instrument pilot ratings.

REQUIRED COURSES:		UNITS
AERO 121	Aviation Fundamentals	3
*AERO 122D	FAA 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
AERO140D	Instrument Ground School and Flight Simulators	4
AERO 144	Aviation Weather	3
BUSAD 100	Introduction to Business	3
PHYSIC 101	Basic Physics	4
TOTAL UNITS:		34

*Will be waived if students have taken equivalent course.

3. POWERPLANT MAINTENANCE TECHNICIAN CERTIFICATE

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 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.

REQUIRED COURSES:		UNITS
AERO 100.1	Airframe and Powerplant General Curriculum-Calculations	2.5
AERO 100.2	Airframe and Powerplant General Curriculum-Publications	2.5
AERO 101.1	Airframe and Powerplant General Curriculum-Materials	2.5
AERO 101.2	Airframe and Powerplant General Curriculum-Servicing	2.5
AERO 104	Powerplant Maintenance Lecture-Reciprocating Engine Overhaul	6
AERO 105	Powerplant Maintenance Lecture Accessory Overhaul	6
AERO 106.1	Airframe and Powerplant General Laboratory-Calculations	1
AERO106.2	Airframe and Powerplant General Laboratory-Publications	1
AERO 107.1	Airframe and Powerplant General Laboratory-Materials	1
AERO 107.2	Airframe and Powerplant General Laboratory-Servicing	1
AERO 110	Powerplant Maintenance Laboratory-Reciprocating Engine Overhaul	5
AERO 111	Powerplant Maintenance Laboratory-Accessory Overhaul	5
TOTAL UNITS:		36

4. AIRFRAME MAINTENANCE TECHNICIAN CERTIFICATE

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-hour 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.

REQUIRED COURSES:		UNITS
AERO 100.1	Airframe and Powerplant General Curriculum-Calculations	2.5
AERO 100.2	Airframe and Powerplant General Curriculum-Publications	2.5
AERO 101.1	Airframe and Powerplant General Curriculum-Materials	2.5
AERO 101.2	Airframe and Powerplant General Curriculum-Servicing	2.5
AERO 102	Airframe Maintenance Lecture-Structures	6
AERO 103	Airframe Maintenance Lecture-Systems and Components	6

AERO 106.1	Airframe and Powerplant General Laboratory-Calculations	1
AERO106.2	Airframe and Powerplant General Laboratory-Publications	1
AERO 107.1	Airframe and Powerplant General Laboratory-Materials	1
AERO 107.2	Airframe and Powerplant General Laboratory-Servicing	1
AERO 108	Airframe Maintenance Laboratory-Structures	5
AERO 109	Airframe Maintenance Laboratory-Systems and Components	5
TOTAL UNITS:		36

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

REQUIRED COURSES:	UNITS
AERO 121* Aviation Fundamentals	3
AERO 140C* Instrument Ground School & Flight Simulator	4
ELECTR 220A FCC Rules and Regulations	3
ELECTR 250A Radio Transmitters, Receivers, & Antennas	4
ELECTR 257A Navigation & Communication Systems	4
TOTAL UNITS:	52

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

COURSES OFFERED BY THE DEPARTMENT OF AERONAUTICS:

AERO 015
BASIC FUNDAMENTALS OF AIRCRAFT COMPOSITE STRUCTURES 2 UNITS
PREREQUISITE: None.

LECTURE: 2 contact hours per week.

This course is an introduction to aircraft composite structures including the manufacturing, uniqueness, strength and repair methods.

Associate Degree Applicable

AERO 098
AERONAUTICS WORK EXPERIENCE 1-4 UNITS
PREREQUISITE: None.

Supervised training, in the form of on the job employment that will enhance the student's knowledge in the selected field of study. 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 098 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. (Formerly AERO 198)

Associate Degree Applicable

AERO 100.1
AIRFRAME AND POWERPLANT GENERAL CALCULATIONS 2.5 UNITS

PREREQUISITE: None.

COREQUISITES: AERO 106.1 and either AERO 102 and AERO 108 or AERO 104 and AERO 110.

LECTURE: 2.5 contact hours per week.

This Federal Aviation Administration approved curriculum provides training for the general requirements in aviation maintenance. The areas covered will be familiarization with basic hand tool, applications of mathematics, basic physics and Federal Aviation Regulations.

Associate Degree Applicable
Course credit transfers to CSU.

AERO 100.2
AIRFRAME AND POWERPLANT GENERAL PUBLICATIONS 2.5 UNITS

PREREQUISITE: None.

COREQUISITES: AERO 106.2 and either AERO 102 and AERO 108 or AERO 104 and AERO 110.

LECTURE: 2.5 contact hours per week.

This Federal Aviation Administration (FAA) approved curriculum provides training for the general requirements in aviation maintenance. The areas covered will be familiarization with aircraft forms and records, FAA Publications, basic electricity including application of Ohm's law, use of a volt/ohm meter, read and interpret electrical circuit diagrams, service and inspection of batteries.

Associate Degree Applicable
Course credit transfers to CSU.

AERO 101.1
AIRFRAME AND POWER PLANT GENERAL - MATERIALS 2.5 UNITS

PREREQUISITE: None.

COREQUISITES: AERO 107.1, AERO 103, and AERO 109 or AERO 105 and AERO 111.

LECTURE: 2.5 contact hours per week.

This Federal Aviation Administration (FAA) approved curriculum provides training for the general requirements in maintenance mandated by the FAA. Focus will be on aircraft weight and balance control, basic drafting, and aircraft fluid lines and fittings.

Associate Degree Applicable
Course credit transfers to CSU.

AERO 101.2
AIRFRAME AND POWER PLANT GENERAL - SERVICING 2.5 UNITS

PREREQUISITE: None.

COREQUISITES: AERO 107.2, AERO 103, and AERO 109 or AERO 105 and AERO 111.

LECTURE: 2.5 contact hours per week.

This Federal Aviation Administration (FAA) approved curriculum provides training for the general requirements in maintenance mandated by the FAA. Focus will be on aircraft hardware, materials, non-destructive testing processes, corrosion control, aircraft cleaning and ground operations and handling.

Associate Degree Applicable
Course credit transfers to CSU.

AERO 102
AIRFRAME MAINTENANCE LECTURE –
STRUCTURES 6 UNITS
PREREQUISITES/COREQUISITES: AERO 100.1,
AERO 100.2, AERO 106.1 and AERO 106.2
COREQUISITE: AERO 108.
LECTURE: 6 contact hours per week.

This Federal Aviation Administration approved curriculum provides training in airframe structures and airframe systems and components. Satisfactory completion qualifies students to take the FAA examination for airframe certification. Topics include shop safety; aircraft covering; aircraft finishing; theory of flight; assembly and rigging; structural repair; aircraft inspection; and aircraft fuel systems.

Associate Degree Applicable
Course credit transfers to CSU.

AERO 103
AIRFRAME MAINTENANCE LECTURE - SYSTEMS
AND COMPONENTS 6 UNITS
PREREQUISITES/COREQUISITES: AERO 101.1,
AERO 101.2, AERO 107.1 and AERO 107.2.
COREQUISITE: AERO 109.
LECTURE: 6 contact hours per week.

This Federal Aviation Administration approved curriculum provides training in airframe structures and airframe systems and components. Satisfactory completion qualifies students to take the FAA examination for airframe certification. Topics include 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 100.1,
AERO 100.2, AERO 106.1 and AERO 106.2.
COREQUISITE: AERO 110.
LECTURE: 6 contact hours per week.

This Federal Aviation Administration approved curriculum provides training in powerplant engines and components. Satisfactory completion qualifies students to take the FAA examination for the powerplant certificate. Topics include reciprocating engine, engine inspections, engine lubrication systems, engine instruments, engine fire protection systems, and engine fuel systems.

Associate Degree Applicable
Course credit transfers to CSU.

AERO 105
POWER PLANT MAINTENANCE LECTURE –
ACCESSORY OVERHAUL 6 UNITS
PREREQUISITES/COREQUISITES: AERO 101.1,
AERO 101.2, AERO 107.1 and AERO 107.2.
COREQUISITE: AERO 111.
LECTURE: 6 contact hours per week.

This Federal Aviation Administration approved curriculum provides training in powerplant system and components. Satisfactory completion qualifies students to take the FAA examination for the powerplant certificate. Topics include basic systems for electricity, ignition, and fuel and fuel metering, induction, cooling, exhaust, propellers, turbine engines and auxiliary power units.

Associate Degree Applicable
Course credit transfers to CSU.

AERO 106.1
AIRFRAME AND POWER PLANT GENERAL
LABORATORY – CALCULATIONS 1 UNIT
PREREQUISITE: None.
COREQUISITES: AERO 100.1 and either AERO 102
and AERO 108 or AERO 104 and AERO 110.
LABORATORY: 3 contact hours per week.

This Federal Aviation Administration (FAA) approved curriculum provides training for the general requirements in maintenance mandated by the FAA. Focus will be on aircraft weight and balance control, basic drafting, and aircraft fluid lines and fittings.

Associate Degree Applicable
Course credit transfers to CSU.

AERO 106.2
AIRFRAME AND POWER PLANT GENERAL
LABORATORY – PUBLICATIONS 1 UNIT
PREREQUISITE: None.
COREQUISITES: AERO 100.2 and either AERO 102
and AERO 108 or AERO 104 and AERO 110.
LABORATORY: 3 contact hours per week.

This Federal Aviation Administration (FAA) approved curriculum provides training for the general requirements in aviation maintenance. The areas covered will be familiarization with aircraft forms and records, FAA Publications, basic electricity including application of Ohm's law, use of a volt/ohm meter, read and interpret electrical circuit diagrams, service and inspection of batteries.

Associate Degree Applicable
Course credit transfers to CSU.

AERO 107.1
AIRFRAME AND POWER PLANT GENERAL
LABORATORY - MATERIALS 1 UNIT
PREREQUISITE: None.
COREQUISITES: AERO 101.1, AERO 103, and AERO
109 or AERO 105 and AERO 111.
LABORATORY: 3 contact hours per week.

This Federal Aviation Administration (FAA) approved curriculum provides training for the general requirements in maintenance mandated by the FAA. Focus will be on aircraft weight and balance control, basic drafting, aircraft fluid lines and fittings.

Associate Degree Applicable
Course credit transfers to CSU.

AERO 107.2
AIRFRAME AND POWER PLANT GENERAL
LABORATORY - SERVICING 1 UNIT
PREREQUISITE: None.
COREQUISITES: AERO 101.2, AERO 103, and AERO
109 or AERO 105 and AERO 111.
LABORATORY: 3 contact hours per week.

This Federal Aviation Administration (FAA) approved curriculum provides training for the general requirements in maintenance mandated by the FAA. Focus will be on aircraft hardware, materials, non-destructive testing processes, corrosion control, aircraft cleaning, and ground operations and handling.

Associate Degree Applicable
Course credit transfers to CSU.

AERO 108
AIRFRAME MAINTENANCE LABORATORY -
STRUCTURES 5 UNITS
PREREQUISITES/COREQUISITES: AERO 100.1 AERO
100.2, AERO 106.1, and AERO 106.2.
COREQUISITE: AERO 102.
LABORATORY: 15 contact hours per week.
This Federal Aviation Administration approved curriculum provides training in airframe structures and airframe systems and components. Satisfactory completion qualifies students to take the FAA examination for airframe certification. Topics include 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 101.1, AERO
101.2, AERO 107.1, and AERO 107.2
COREQUISITE: AERO 103.
LABORATORY: 15 contact hours per week.
This Federal Aviation Administration approved curriculum provides training in airframe structures and airframe systems and components. Satisfactory completion qualifies students to take the FAA examination for airframe certification. Topics include aircraft welding; electrical circuits; and basic aircraft systems for hydraulics, landing gear, brakes, warning, instruments, autopilot, 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 100.1, AERO
100.2, AERO 106.1 and AERO 106.2.
COREQUISITE: AERO 104.
LABORATORY: 15 contact hours per week.
This Federal Aviation Administration approved curriculum provides training in powerplant engines and components. Satisfactory completion qualifies students to take the FAA examination for the powerplant certificate. Topics include reciprocating engine, engine inspections, engine lubrication systems, engine instruments, engine fire protection systems, and engine fuel systems.
Associate Degree Applicable
Course credit transfers to CSU.

AERO 111
POWER PLANT MAINTENANCE LABORATORY -
ACCESSORY OVERHAUL 5 UNITS
PREREQUISITES/COREQUISITES: AERO 101.1, AERO
102.2, AERO 107.1 and AERO 107.2.
COREQUISITE: AERO 105.
LABORATORY: 15 contact hours per week.
This Federal Aviation Administration approved curriculum provides training in powerplant system and components. Satisfactory completion qualifies students to take the FAA examination for the powerplant certificate. Topics include basic systems for electricity, ignition, fuel and fuel metering, induction, cooling, exhaust, propellers, turbine engines and auxiliary power units.
Associate Degree Applicable
Course credit transfers to CSU.

AERO 121
AVIATION FUNDAMENTALS 3 UNITS
PREREQUISITE: None.
LECTURE: 3 contact hours per week.
This course is an introduction to the basic principles of aeronautics, aircraft structure and operations. It provides an orientation to the aviation industry 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 122D
F.A.A. PRIVATE PILOT GROUND SCHOOL 6 UNITS
PREREQUISITE: None.
LECTURE: 6 contact 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 contact hours per week.
Familiarizes the aviator or prospective pilot with the operating principles and construction highlights of both reciprocating and jet aircraft engines.
Associate Degree Applicable
Course credit transfers to CSU.

AERO 125
FLIGHT SAFETY 2 UNITS
PREREQUISITE: None.
LECTURE: 2 contact 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 contact hours per week.
This course covers the fundamentals of aircraft design and construction including the types of construction; reasons for variances in construction from aircraft to aircraft; manufacturing processes and the basic working principles of major aircraft systems.
Associate Degree Applicable
Course credit transfers to CSU.

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

**AERO 140D
INSTRUMENT GROUND SCHOOL AND FLIGHT
SIMULATORS 4 UNITS**

PREREQUISITE: None.

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

Aviation weather includes basic and hazardous weather and interpretation of weather reports, forecasts, and charts as they relate to aircraft operation and flight safety.

*Associate Degree Applicable
Course credit transfers to CSU.*

ALCOHOL/DRUG STUDIES
See courses within the
HUMAN SERVICES DEPARTMENT

AMERICAN SIGN LANGUAGE

DIVISION:	Arts and Humanities
DIVISION DEAN:	Kathryn Weiss, Ed.D.
FACULTY CHAIR:	Lydia Barajas-Zapata, M.A. NH 331 (909) 384-8237
OTHER FACULTY:	Bert Reins, B.A.
ADMINISTRATIVE SECRETARY:	Linda Tymchek, M.A. NH 223 (909) 384-8633
DIVISION OFFICE:	
LIAISON COUNSELOR:	Laura Gomez, M.A. (909) 384-4404

American Sign Language is a visually perceived, gesture-based language. It is a language that is expressed through the hands and face and is perceived through the eyes. It is based on a naturally evolved system of articulated hand gestures and their placement relative to the body, along with non-manual markers such as facial expressions, head movements, shoulder raises, mouth morphemes, and movements of the body.

ASL is a language used primarily by 500,000 members of the North American Deaf community.

The primary objective of the Modern Languages Department is communication at an acceptably correct level with an understanding of the Deaf culture. ASL classes include finger spelling as well as the incorporation of alphabetic letters from English words into ASL signs to distinguish related meanings of what would otherwise be covered by a single sign in ASL.

ASL study may assist individuals seeking employment as translators for hearing impaired persons and may be in demand by agencies, institutions and other organization required to meet the American Disabilities Act.

**COURSES OFFERED BY THE DEPARTMENT OF
AMERICAN SIGN LANGUAGE:**

**ASL 109
AMERICAN SIGN LANGUAGE I 4 UNITS**

PREREQUISITE: None.

LECTURE: 4 contact hours per week.

Students develop communication skills in American Sign Language including the alphabet, basic vocabulary and grammar of ASL. Both receptive and expressive abilities are emphasized. Students review the characteristics of the deaf community and culture.

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

**ASL 110
AMERICAN SIGN LANGUAGE II 4 UNITS**

PREREQUISITE: ASL 109.

LECTURE: 4 contact 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 contact hours per week.

Students continue to develop conversational skills in American Sign Language and expand their vocabulary and grammar of ASL. Students review primary issues in deaf culture and strengthen their understanding of deaf awareness. 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 contact hours per week.

This course is designed to help students acquire communicative competency in American Sign Language, both comprehension and production skills within the contexts of literature and storytelling. 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 Sciences, Human Development and Physical Education
DIVISION DEAN:	Corene Schwartz, Ed.D.
FACULTY CHAIR:	Romana Pires, M.A., M.S. NH 324 (909) 384-8602
ADMINISTRATIVE SECRETARY:	Karen Deck
DIVISION OFFICE:	NH 345 (909) 384-8603
LIAISON COUNSELOR:	André Wooten, M.S. (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.

COURSES OFFERED BY THE DEPARTMENT OF ANTHROPOLOGY:

ANTHRO 100 INTRODUCTION TO ARCHAEOLOGY 3 UNITS PREREQUISITE: None.

LECTURE: 3 contact hours per week.

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

Associate Degree Applicable

Course credit transfers to CSU and UC.

ANTHRO 102 CULTURAL ANTHROPOLOGY 3 UNITS PREREQUISITE: None.

LECTURE: 3 contact 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.

ANTHRO 106 PHYSICAL ANTHROPOLOGY 3 UNITS PREREQUISITE: None.

LECTURE: 3 contact 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.

ANTHRO 106H PHYSICAL ANTHROPOLOGY – HONORS 3 UNITS PREREQUISITE: None.

LECTURE: 3 contact 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. **Enrollment is limited to students eligible for the Honors Program.**

Associate Degree Applicable

*Course credit transfers to CSU and *UC.*

ANTHRO 107 THE NORTH AMERICAN INDIANS 3 UNITS PREREQUISITE: None.

LECTURE: 3 contact hours per week.

A systematic survey of North American Indian groups, from their prehistoric roots to the present. Includes their place in American history, U.S. Government policies and regulation, and future prospects for North American Indians.

Associate Degree Applicable

Course credit transfers to CSU and UC.

ANTHRO 109 TRIBAL AND ETHNIC ART 3 UNITS PREREQUISITE: None.

LECTURE: 3 contact 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 contact 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

PREREQUISITE: ANTHRO 100 or ANTHRO 102 or ANTHRO 106.

INDEPENDENT STUDY: 3-9 contact 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 contact 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.

ARABIC

DIVISION: Arts and Humanities
DIVISION DEAN: Kathryn Weiss, Ed.D.
FACULTY CHAIR: Lydia Barajas-Zapata, M.A.
NH 331
(909) 384-8237
ADMINISTRATIVE SECRETARY: Linda Tymchek
DIVISION OFFICE: NH 223
(909) 384-8633
LIAISON COUNSELOR: Laura Gomez, M.A.
(909) 384-4404

The ever-increasing role that the United States takes in global affairs, international trade, and the growing number of immigrants from the Arab world dictate the need for knowledge of Arabic. Arabic language is the key to understanding the culture and history of more than 22 nations and over 300 million speakers. Arabic is one of the six official languages of the United Nations.

The primary objective of the Modern Languages Department is communication at an acceptably correct level with an understanding of culture. It also allows students to develop an appreciation of the Arab and Islamic world.

Arabic study is ideal for students considering careers in diplomacy, journalism, consulting, business, foreign services, translation and academia. Students planning to transfer to a four-year institution should consult with a counselor regarding the transfer process and lower division requirements.

ARABIC COURSES OFFERED BY THE DEPARTMENT OF MODERN LANGUAGES:

ARABIC 101
COLLEGE ARABIC I
4 UNITS
PREREQUISITE: None.

LECTURE: 4 contact hours per week.

This course includes the study of essentials of pronunciation including the Arabic alphabet, symbols and sounds, vocabulary, idioms, and grammatical structures along with an introduction to the key social issues and culture of Arabic-speaking people. This course corresponds to two years of high school study.

Associate Degree Applicable

Course credit transfers to CSU and UC.

ARABIC 102
COLLEGE ARABIC II
4 UNITS
PREREQUISITE: None.

LECTURE: 4 contact hours per week.

In this course students continue to develop the ability to converse, read and write in Arabic. The course includes the study of essentials of pronunciation, vocabulary, idioms, and grammatical structures along with an introduction to the key social issues and culture of Arabic speaking people.

Associate Degree Applicable

Course credit transfers to CSU and UC.

ARCHITECTURE and ENVIRONMENTAL DESIGN

DIVISION: Science
DIVISION DEAN: Susan Bangasser, Ph.D.
FACULTY CHAIR: John Stankas, Ph.D.
Chemistry 114
(909) 384-8268
OTHER FACULTY: Judy Jorgensen, B.S.
ADMINISTRATIVE SECRETARY: Rose Garcia
DIVISION OFFICE: Chemistry 121
(909) 384-8645
DIVISION OFFICE: Health and Life Science 101
(909) 384-8550
LIAISON COUNSELOR: Denise McCrary, Ed.D.
(909) 384-4404

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.

ARCHITECTURAL 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
<i>Students are encouraged to take these courses as part of their General Education program:</i>	
CS 110 Fundamentals of Computer Science	3
ART 120 Two-Dimensional Design	3
ART 145 Graphic Design	3
MATH 093 Plane Geometry	3
MATH 103 Trigonometry	4



ARCHITECTURE CERTIFICATES

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

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 Fundamentals of Computer Science	3
INSPEC 010A Funds. of Construction Inspection I	3
INSPEC 011A Funds. of Construction Inspection II	3
INSPEC 012A Funds. of Construction Inspection III	3

COURSES OFFERED BY THE DEPARTMENT OF ARCHITECTURE and ENVIRONMENTAL DESIGN:

ARCH 100 ENVIRONMENTAL DESIGN I 3 UNITS

PREREQUISITE: None.

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

This course provides an introduction to the design process, 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 contact hours per week and LABORATORY: 3 contact 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 contact hours per week and LABORATORY: 6 contact 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 contact 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 contact 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, Sullivan-esque, Arts and Crafts, International Style, Art Nouveau, Art Deco, Art Moderne, German Expressionism, Neo-Expressionism, Late Modernism, and Postmodernism.

Associate Degree Applicable

Course credit transfers to CSU and UC.

ARCH 200
ARCHITECTURAL DESIGN I **4 UNITS**

PREREQUISITE: ARCH 101.

LECTURE: 3 contact hours per week and

LABORATORY: 3 contact 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 and *UC.*

ARCH 201
ARCHITECTURAL DESIGN II **4 UNITS**

PREREQUISITE: ARCH 200.

LECTURE: 1 contact hour per week and

LABORATORY: 8 contact 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 and *UC.*

ARCH 220
ARCHITECTURAL COMPUTER AIDED DRAFTING I **4 UNITS**

PREREQUISITE: ARCH 120.

LECTURE: 2 contact hours per week and

LABORATORY: 6 contact 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.

Associate Degree Applicable

Course credit transfers to CSU.

ARCH 221
ARCHITECTURAL COMPUTER AIDED DRAFTING II **4 UNITS**

PREREQUISITES: ARCH 220.

LECTURE: 2 contact hours per week and

LABORATORY: 6 contact hours per week.

A continuation of ARCH 220 and continues to familiarize students with the preparation of preliminary studies, construction drawings, detail drawing and building code applications. This includes complete construction drawings of light wood frame and heavy timber construction and utilizes computer aided design drafting (CAD).

Associate Degree Applicable

Course credit transfers to CSU.

ARCH 250
MATERIALS AND CONSTRUCTION **4 UNITS**

PREREQUISITE: ARCH 146.

LECTURE: 3 contact hours per week and

LABORATORY: 3 contact 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 for elective credit only.

ARCH 270
PORTFOLIO DESIGN **1 UNIT**

PREREQUISITE: ARCH 200.

LABORATORY: 3 contact 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 San Bernardino Valley College before enrolling in this course.

Associate Degree Applicable

Course credit transfers to CSU.

ART

DIVISION: Arts and Humanities
DIVISION DEAN: Kathryn Weiss, Ed.D.
FACULTY CHAIR: Mandi Batalo, M.A.
DEPARTMENT OFFICE: Art Gallery
(909) 384-8937
OTHER FACULTY: David Rosales, M.F.A.
James Stewart, M.F.A.
ADMINISTRATIVE SECRETARY: Linda Tymchek, M.A.
DIVISION OFFICE: NH 223
(909) 384-8633
DEPARTMENT ASS'T: Emily McNichols
(909) 384-8939
LIAISON COUNSELOR: Laura Gomez, M.A.
(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 and 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 and 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.

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

ART 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. GRAPHIC DESIGN CERTIFICATE

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.

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)
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

2. 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.

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)
ART 120 Two-Dimensional Design	3
ART 148 Beginning Computer Graphics	3
ART 161 Digital Photography	3
ART 180 Beginning Computer Animation	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 098
ART WORK EXPERIENCE 1-4 UNITS
PREREQUISITE: None.**

Supervised training, in the form of on the job employment that will enhance the student's knowledge in the selected field of study. 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 098 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. (Formerly ART 198)
Associate Degree Applicable

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

LECTURE: 3 contact 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.*

ART 102
ART HISTORY: THE RENAISSANCE TO PRESENT 3 UNITS

PREREQUISITE: None.

LECTURE: 3 contact 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.

ART 103
ART APPRECIATION 3 UNITS

PREREQUISITE: None.

LECTURE: 3 contact 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 and *UC.*

ART 105
HISTORY OF MODERN ART 3 UNITS

PREREQUISITE: None.

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

ART 132x4
LIFE DRAWING 3 UNITS

PREREQUISITE: None.

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

ART 145
GRAPHIC DESIGN **3 UNITS**
LECTURE: 2 contact hours per week and
LABORATORY: 3 contact 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 contact hours per week and
LABORATORY: 3 contact 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.

ART 149
INTERMEDIATE COMPUTER GRAPHICS **3 UNITS**
PREREQUISITE: ART 148.
LECTURE: 2 contact hours per week and
LABORATORY: 3 contact 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 contact hours per week and
LABORATORY: 3 contact 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 contact hours per week and
LABORATORY: 3 contact hours per week.
A basic course in photography designed for both art majors and non-art majors, including photographic terminology such as composition, tonality, color relationships and elements of balance; hands-on experience with cameras and studio equipment; analyses of great photographs; the development of visual literacy; and the development of an understanding of photography's relationship to the world of visual imagery. This course may be taken four times.
Associate Degree Applicable
Course credit transfers to CSU and UC.

ART 161
DIGITAL PHOTOGRAPHY **3 UNITS**
PREREQUISITE: None.
LECTURE: 2 contact hours per week and
LABORATORY: 3 contact 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 contact hours per week and
LABORATORY: 1.5 - 3 contact 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 contact hours per week and
LABORATORY: 3 contact 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.

ART 180
BEGINNING COMPUTER ANIMATION **3 UNITS**
PREREQUISITE: None.
DEPARTMENTAL ADVISORY: ART 148.
LECTURE: 2 contact hours per week and
LABORATORY: 3 contact 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 contact hours per week and
LABORATORY: 3 contact 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 contact hours per week and
LABORATORY: 3 contact hours per week.
Focuses on rendering animated movies. Instruction emphasizes combining and integrating animations with still images and created footage. Students will work with video editing and special effects software to create QuickTime movies.
Associate Degree Applicable
Course credit transfers to CSU.

ART 183
INTERMEDIATE DIGITAL VIDEO EDITING 3 UNITS
PREREQUISITE: ART 182.
LECTURE: 2 contact hours per week and
LABORATORY: 3 contact 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 contact hours per week and
LABORATORY: 3 contact 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 for elective credit only.

ART 186
INTERMEDIATE WEB AND MULTIMEDIA DESIGN: FLASH 3 UNITS
PREREQUISITE: None.
DEPARTMENTAL ADVISORY: ART 185.
LECTURE: 2 contact hours per week and
LABORATORY: 3 contact 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 contact hours per week and
LABORATORY: 3 contact 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 contact hours per week and
LABORATORY: 3 contact hours per week.
Focus is on multimedia project planning and design production. This course emphasizes planning, research and client communications skills as preparation for designing and executing a multimedia project.
Associate Degree Applicable
Course credit transfers to CSU.

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

ART 240x4
GLASSBLOWING 3 UNITS
PREREQUISITE: None.
LECTURE: 2 contact hours per week and
LABORATORY: 3 contact 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 contact hours per week and
LABORATORY: 3 contact 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 contact 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 and Culinary Arts
DIVISION DEAN, INTERIM:	Kay Ragan, Ed.D.
FACULTY CHAIR:	Richard Jaramillo, A.A. (909) 384-8505
OTHER FACULTY:	Guy M. Hinrichs, Sr., B.S. Manuel Loera, A.S. Mark Williams, A.S. Donald Wilson
ADMINISTRATIVE SECRETARY:	Cecile Smith
DIVISION OFFICE:	Technical 108 (909) 384-8902
LIAISON COUNSELOR:	Denise McCrary, Ed.D. (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 TECHNICIAN
ASSOCIATE OF SCIENCE DEGREE**

To graduate with a specialization in Automotive Technician, students must complete all requirements for the certificate with a grade of C or better plus the general breadth requirements for the Associate of Science Degree (minimum total = 60 units).

REQUIRED COURSES:	UNITS
AUTO 050 Automotive Brakes	4
AUTO 052 Automotive Suspension and Steering	4
AUTO 056 Automotive Heating and Air Conditioning	4
AUTO 063 Emission Systems	4
AUTO 064 Automotive Electrical: Battery, Starting & Charging Systems	5
AUTO 065 Electrical Accessory Diagnostic	5
AUTO 068 Engine Performance - Ignition Systems	5

AUTO 069 Engine Performance - Fuel and Exhaust Systems	5
AUTO 075X3 Automatic Transmissions Rear Wheel Drive or	4 - 6
AUTO 076X3 Automatic Transaxles Front Wheel Drive	4 - 6
AUTO 077 Manual Transmissions and Transaxles	4
AUTO 084 General Automotive Technology	4
AUTO 090X3 Engine Repair	6
TOTAL UNITS:	54 - 56

**ADVANCED AUTOMOTIVE COLLISION REPAIR
AND REFINISHING ASSOCIATE OF SCIENCE DEGREE**

To graduate with a specialization in Advanced Automotive Collision Repair and Refinishing, students must complete all requirements for the certificate with a grade of C or better plus the general breadth requirements for the Associate of Science Degree (minimum total = 60 units).

REQUIRED COURSES:	UNITS
AUTO 020 Non-structural Body Repair	6
AUTO 022 Non-Structural Collision Repair	6
AUTO 024 Structural Analysis and Damage Repair	6
AUTO 026 Auto Collision Refinishing	6
AUTO 050 Automotive Brakes or	4
AUTO 052 Automotive Suspension and Steering	4
AUTO 084 General Automotive Technology	4
RECOMMENDED COURSES:	UNITS
AUTO 056 Automotive Heating and Air Conditioning	4

TOTAL UNITS: 32
Auto 020 may be waived through the Articulation 2+2 program with prior agreement with the Auto Collision and Refinishing instructor.

**BASIC AUTOMOTIVE COLLISION REPAIR AND
REFINISHING ASSOCIATE OF SCIENCE DEGREE**

To graduate with a specialization in Basic Automotive Collision Repair and Refinishing, students must complete all requirements for the certificate with a grade of C or better plus the general breadth requirements for the Associate of Science Degree (minimum total = 60 units).

REQUIRED COURSES:	UNITS
AUTO 020 Non-structural Body Repair	6
AUTO 022 Non-Structural Collision Repair	6
AUTO 024 Structural Analysis and Damage Repair	6
AUTO 026 Auto Collision Refinishing	6
TOTAL UNITS:	24

Auto 020 may be waived through the Articulation 2+2 program with prior agreement with the Auto Collision and Refinishing instructor.

**AUTOMATIC AND MANUAL TRANSMISSION
ASSOCIATE OF SCIENCE DEGREE**

To graduate with a specialization in Automatic Transmission, students must complete all requirements for the certificate with a grade of C or better plus the general breadth requirements for the Associate of Science Degree (minimum total = 60 units).

REQUIRED COURSES:		UNITS
AUTO 064	Automotive Electrical: Battery, Starting & Charging Systems or	5
AUTO 065	Electrical Accessory Diagnostic	5
AUTO 075X3	Automatic Transmissions Rear Wheel Drive	4 - 6
AUTO 076X3	Automatic Transaxles Front Wheel Drive	4 - 6
AUTO 077	Manual Transmissions and Transaxles	4
AUTO 084	General Automotive Technology	4
AUTO 090X3	Engine Repair	6
TOTAL UNITS:		27 - 31

**ENGINE PERFORMANCE
ASSOCIATE OF SCIENCE DEGREE**

To graduate with a specialization in Engine Performance, 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).

REQUIRED COURSES:		UNITS
AUTO 063	Emission Systems	4
AUTO 064	Automotive Electrical: Battery, Starting & Charging Systems	5
AUTO 065	Electrical Accessory Diagnostic	5
AUTO 066	ASE Alternative A-6, A-8, L-1 Prep or Certificate	4
AUTO 067	Basic and Advanced Clean Air Car Course	4
AUTO 068	Engine Performance - Ignition Systems	5
AUTO 069	Engine Performance - Fuel and Exhaust Systems	5
AUTO 084	General Automotive Technology	4
AUTO 090X3	Engine Repair	6
TOTAL UNITS:		42

**WHEEL ALIGNMENT AND BRAKES
ASSOCIATE OF SCIENCE DEGREE**

To graduate with a specialization in Wheel Alignment and Brakes, students must complete all requirements for the certificate with a grade of C or better plus the general breadth requirements for the Associate of Science Degree (minimum total = 60 units).

REQUIRED COURSES:		UNITS
AUTO 050	Automotive Brakes	4
AUTO 051	Advanced Automotive Brakes	4
AUTO 052	Automotive Suspension and Steering	4
AUTO 053	Advanced Automotive Suspension and Steering	4
AUTO 064	Automotive Electrical: Battery, Starting & Charging Systems	5
AUTO 084	General Automotive Technology	4
TECALC 087	Technical Calculations or	4
MATH 942	Arithmetic or	3
Eligibility for Math 952 as determined by the SBVC assessment process		
TOTAL UNITS:		28 - 29

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 AND MANUAL TRANSMISSION
CERTIFICATE**

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

REQUIRED COURSES:		UNITS
AUTO 064	Automotive Electrical: Battery, Starting & Charging Systems or	5
AUTO 065	Electrical Accessory Diagnostic	5
AUTO 075X3	Automatic Transmissions Rear Wheel Drive	4 - 6
AUTO 076X3	Automatic Transaxles Front Wheel Drive	4 - 6
AUTO 077	Manual Transmissions and Transaxles	4
AUTO 084	General Automotive Technology	4
AUTO 090X3	Engine Repair	6
TECALC 087	Technical Calculations or	4
MATH 942	Arithmetic or	3
Eligibility for MATH 952 as determined by the SBVC assessment process		
TOTAL UNITS:		27 - 35

3. BASIC AUTOMOTIVE COLLISION REPAIR AND REFINISHING 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 as an auto collision repair and painter apprentice, or in related areas of an automotive dealership or shop, such as chassis, front end, brake, or frame repair, and parts counter clerk.

REQUIRED COURSES:		UNITS
AUTO 020	Non-structural Body Repair	6
AUTO 022	Non-Structural Collision Repair	6
AUTO 024	Structural Analysis Damage and Repair	6
AUTO 026	Auto Collision Refinishing	6
		24

TOTAL UNITS:

Auto 020 may be waived through the Articulation 2+2 program with prior agreement with the Auto Collision and Refinishing instructor.

3. ADVANCED AUTOMOTIVE COLLISION REPAIR AND REFINISHING 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 as an auto collision repair and painter apprentice beyond the Basic Automotive Collision Repair and Refinishing Certificate and to prepare students for the Automotive Service Excellence (ASE) certification test.

REQUIRED COURSES:		UNITS
AUTO 020	Non-structural Body Repair	6
AUTO 022	Non-Structural Collision Repair	6
AUTO 024	Structural Analysis and Damage Repair	6
AUTO 026	Auto Collision Refinishing	6
AUTO 050	Automotive Brakes or	4
AUTO 052	Automotive Suspension and Steering	4
AUTO 084	General Automotive Technology	4

RECOMMENDED COURSES:		UNITS
AUTO 056	Automotive Heating and Air Conditioning	4

TOTAL UNITS: 32

Auto 020 may be waived through the Articulation 2+2 program with prior agreement with the Auto Collision and Refinishing instructor.

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.

REQUIRED COURSES:		UNITS
AUTO 050	Automotive Brakes	4
AUTO 052	Automotive Suspension and Steering	4
AUTO 056	Automotive Heating and Air Conditioning	4
AUTO 063	Emission Systems	4
AUTO 064	Automotive Electrical: Battery, Starting & Charging Systems	5
AUTO 065	Electrical Accessory Diagnostic	5
AUTO 068	Engine Performance - Ignition Systems	5
AUTO 069	Engine Performance - Fuel and Exhaust Systems	5
AUTO 075X3	Automatic Transmissions Rear Wheel Drive or	4 - 6
AUTO 076X3	Automatic Transaxles Front Wheel Drive	4 - 6
AUTO 077	Manual Transmissions and Transaxles	4
AUTO 084	General Automotive Technology	4
AUTO 090X3	Engine Repair	6
TECALC 087	Technical Calculations or	4
MATH 942	Arithmetic or	3
Eligibility for MATH 952 as determined by the SBVC assessment process		0 - 4

TOTAL UNITS: 54 - 60

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.

REQUIRED COURSES:		UNITS
AUTO 063	Emission Systems	4
AUTO 064	Automotive Electrical: Battery, Starting & Charging Systems	5
AUTO 065	Electrical Accessory Diagnostic	5
AUTO 066	ASE Alternative A-6, A-8, L-1 Prep or Certificate	4
AUTO 067	Basic and Advanced Clean Air Car Course	4
AUTO 068	Engine Performance - Ignition Systems	5
AUTO 069	Engine Performance - Fuel and Exhaust Systems	5
AUTO 084	General Automotive Technology	4
AUTO 090X3	Engine Repair	6
TECALC 087	Technical Calculations	or 4
MATH 942	Arithmetic	or 3
Eligibility for MATH 952 as determined by the SBVC assessment process		0 - 4
TOTAL UNITS:		42 - 46

6. WHEEL ALIGNMENT AND BRAKES CERTIFICATE

This certificate is designed to prepare students for entry-level work as an automotive technician working in the area of wheel alignment and brake repair.

REQUIRED COURSES:		UNITS
AUTO 050	Automotive Brakes	4
AUTO 051	Advanced Automotive Brakes	4
AUTO 052	Automotive Suspension and Steering	4
AUTO 053	Advanced Automotive Suspension and Steering	4
AUTO 064	Automotive Electrical: Battery, Starting & Charging Systems	5
AUTO 084	General Automotive Technology	4
TECALC 087	Technical Calculations	or 4
MATH 942	Arithmetic	or 3
Eligibility for Math 952 as determined by the SBVC assessment process		0 - 4
TOTAL UNITS:		28 - 29

COURSES OFFERED BY THE DEPARTMENT OF AUTOMOTIVE TECHNOLOGY:

**AUTO 020
NON-STRUCTURAL BODY REPAIR 6 UNITS**
PREREQUISITE: None.

**LECTURE: 5 contact hours per week and
LABORATORY: 3 contact hours per week.**

This course covers theory and practical experience in automotive collision damage repair and shop safety with a focus on automotive construction, regulations, oxyacetylene and Metal Inert Gas (MIG) welding, surface preparation, basic spray painting, and detailing. This course may be used in preparation for the Automotive Service Excellence (ASE) National Test B-3. (Formerly AUTO 044x3)
Associate Degree Applicable

**AUTO 022
NON-STRUCTURAL COLLISION REPAIR 6 UNITS**
PREREQUISITE: None.

**LECTURE: 5 contact hour per week and
LABORATORY: 3 contact hours per week.**

This course covers theory and practical experience in automotive collision damage repair and shop safety with a focus on laws and regulations, refinishing techniques, Metal Inert Gas (MIG) welding, and carbon fiber and fiberglass repair. This course may be used in preparation for the Automotive Service Excellence (ASE) National B3 Test. (Formerly AUTO 055)
Associate Degree Applicable

**AUTO 024
STRUCTURAL ANALYSIS AND DAMAGE REPAIR 6 UNITS**
PREREQUISITE: None.

DEPARTMENTAL ADVISORIES: AUTO 020 and AUTO 022.

**LECTURE: 5 contact hours per week and
LABORATORY: 3 contact hours per week.**

This course covers theory and practical experience in auto collision repair and shop safety, with a focus on Metal Inert Gas (MIG) welding, panel replacement, theory and practical experience in minor uni-body frame measuring and repair, painting equipment and refinishing materials. The Environmental Protection Agency (EPA) and South Coast Air Quality Management District (SCAQMD) requirements are also studied. This course may be used in preparation for the Automotive Service Excellence (ASE) National B4 Test. (Formerly AUTO 039x3)
Associate Degree Applicable

AUTO 026
AUTO COLLISION REFINISHING 6 UNITS
PREREQUISITE: None.
DEPARTMENTAL ADVISORIES: AUTO 020 and AUTO 022.

LECTURE: 5 contact hours per week and
LABORATORY: 3 contact hours per week.

This course covers theory and practical experience in automotive collision repair and refinishing, shop safety practices, personal safety, and health protection as outlined by Environmental Protection Agency (EPA) and South Coast Air Quality Management District (SCAQMD). Topics include Metal Inert Gas (MIG) welding/aluminum; major frame repair; measuring and analyzing collision damage; operating electronic measuring systems; Sheet Molded Compound (SMC) panel replacement; heat reshaping plastic parts; electrical and electronic systems; single-, two-, and three-stage refinishing systems; spot repairing/blending; polishing; detailing; estimating; and custom painting. This course may be used in preparation for the Automotive Service Excellence (ASE) National Test B2. (Formerly AUTO 048x3)
Associate Degree Applicable

AUTO 049
SHOP MANAGEMENT AND ESTIMATING 4 UNITS
PREREQUISITE: AUTO 038x3 or equivalent experience.

LECTURE: 2 contact hours per week and
LABORATORY: 6 contact 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 contact hours per week and
LABORATORY: 3 contact 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 contact hours per week and
LABORATORY: 3 contact 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 recondition brake systems.
Associate Degree Applicable

AUTO 052
AUTOMOTIVE SUSPENSION AND STEERING 4 UNITS

PREREQUISITE: None.

LECTURE: 3 contact hours per week and
LABORATORY: 3 contact 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 types, basic geometry, alignment angles, two-wheel alignment and four-wheel alignment using both computerized and mechanical methods. 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-4).
Associate Degree Applicable

AUTO 053
ADVANCED AUTOMOTIVE SUSPENSION AND STEERING 4 UNITS

PREREQUISITE: AUTO 052.

LECTURE: 3 contact hours per week and
LABORATORY: 3 contact 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 056
AUTOMOTIVE HEATING AND AIR CONDITIONING 4 UNITS

PREREQUISITE: None.

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

This course is an in-depth study of the design and operation of contemporary, domestic and import air conditioning/heating systems. Air conditioning and heating related parts will be disassembled, inspected and a determination made of the serviceability of existing parts. Emphasis is placed on problem diagnosis of and repair procedures for these systems. This course also offers an introduction to Automatic A/C and Comfort Control Systems, and recovery and recycling of refrigerants.
Associate Degree Applicable

AUTO 063
EMISSION SYSTEMS 4 UNITS
PREREQUISITE: None

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

This course covers design and operation of domestic and import emission control on automobiles and light trucks. Subject areas include emission control systems, computerized engine controls, emissions testing, and engine related services. Emphasis is placed on the correct diagnosis of and repair procedures for those systems. The use of current diagnostic test equipment used in today's industry and strategies necessary to determine needed repairs are covered.
Associate Degree Applicable

AUTO 064
AUTOMOTIVE ELECTRICAL: BATTERY, STARTING & CHARGING SYSTEMS 5 UNITS

PREREQUISITE: None.

LECTURE: 4 contact hours per week and
LABORATORY: 3 contact hours per week.

This course covers the theory of electricity, use of meters, test equipment, wiring diagrams, diagnosis and repair/replacement of major electrical components of automobiles and light trucks. Major areas of study include batteries, starting and charging systems. Emphasis is placed on problem diagnosis of and repair procedures for these systems..

Associate Degree Applicable

AUTO 065
ELECTRICAL ACCESSORY DIAGNOSTIC 5 UNITS

PREREQUISITE: None.

LECTURE: 4 contact hours per week and
LABORATORY: 3 contact hours per week.

This course provides students with the knowledge necessary to diagnose and repair automotive electrical malfunctions. Topics include lighting systems, electrical instruments and accessories, electrical door components, air bags, wiring diagrams, and alarm systems. Emphasis is placed on problem diagnosis of and repair procedures for these systems.

Associate Degree Applicable

AUTO 066
ASE ALTERNATIVE A-6, A-8, L-1 PREP OR CERTIFICATE 4 UNITS

PREREQUISITE: None.

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

Automotive Service Excellence (ASE) alternative course is designed for students wishing to meet the Bureau of Automotive Repair (BAR) requirements to become a Smog Technician in lieu of ASE certificates or as a preparation for ASE testing. Subject areas include reviewing of A-6 Electrical and Electronics, A-8 Engine Performance, and L-1 Advanced Engine Performance. Students wishing alternative certificate will be asked to pay for testing services for each test; State certificate expires at the end of five years.

Associate Degree Applicable

AUTO 067
BASIC AND ADVANCED CLEAN AIR CAR COURSE 4 UNITS

PREREQUISITE: None.

DEPARTMENTAL ADVISORY: AUTO 066 completion or current ASE Certification or passing test scores in the area of A6, A8 or L1.

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

This Bureau of Automotive Repair (BAR) course provides students with the knowledge necessary to perform a smog inspection in the basic and advanced inspection areas according to BAR guidelines. Course includes the Basic Clean Air Car Course (BCACC), Advanced Clean Air car Course (ACACC) and the current BAR update requirements. Students will receive State certificate for each section of this course. Certificates for BCACC and ACACC are good for one year from the date of completion; students must complete their smog technician license or retake the class. The update course certificate has to be renewed every two years.

Associate Degree Applicable

AUTO 068
ENGINE PERFORMANCE – IGNITION SYSTEMS 5 UNITS

PREREQUISITE: None.

LECTURE: 4 contact hours per week and
LABORATORY: 3 contact hours per week.

This course provides an in-depth study of the design and operation of domestic and import ignition systems. Major areas of study include point type, electronic, and computer control ignition systems. Emphasis is placed on the correct diagnosis of and repair procedures for these systems. The use of current diagnostic test equipment used in today's industry and strategies necessary to determine needed repairs are covered.

Associate Degree Applicable

AUTO 069
ENGINE PERFORMANCE – FUEL AND EXHAUST SYSTEMS 5 UNITS

PREREQUISITE: None.

LECTURE: 4 contact hours per week and
LABORATORY: 3 contact hours per week.

This course is an in-depth study of the design and operation of fuel management systems including domestic and import feedback carburetor, fuel injection and computer control fuel management systems. This course covers the diagnosis and repair/replacement of major components: all sensors, injectors, fuel pumps, and interpretation of computer related malfunctions. The use of current diagnostic test equipment used in today's industry and strategies necessary to determine needed repairs are covered.

Associate Degree Applicable

AUTO 075x3
AUTOMATIC TRANSMISSIONS REAR WHEEL DRIVE 4-6 UNITS

PREREQUISITE: None.

LECTURE: 3 contact hours per week and
LABORATORY: 3-9 contact hours per week.

This course covers theory and practical work on rear wheel drive automatic transmissions in automobile and light truck applications. Course offers training to prepare 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 4-6 UNITS

PREREQUISITE: None.

LECTURE: 3 contact hours per week and
LABORATORY: 3-9 contact hours per week.

This course covers theory and practical work on front wheel drive automatic transaxles in automobile applications. Course offers training to prepare 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 contact hours per week and
LABORATORY: 3 contact hours per week.

This course covers 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 contact hours per week and
LABORATORY: 3 contact hours per week.

This course covers 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 090x3
ENGINE REPAIR 6 UNITS
PREREQUISITE: None.

LECTURE: 3 contact hours per week
LABORATORY: 9 contact 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 098
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 knowledge in the selected field of study. 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 098 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. (Formerly AUTO 198)

Associate Degree Applicable

AUTOIN 010
BASIC CUSTOM AUTO INTERIORS 4 UNITS
PREREQUISITE: None.

LECTURE: 3 contact hours per week and
LABORATORY: 3 contact 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 contact 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 contact hours per week and
LABORATORY: 3 contact 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 contact 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 contact hours per week and
LABORATORY: 3 contact 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 contact 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 contact hours per week and

LABORATORY: 3 contact 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 contact 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
DIVISION DEAN: Susan Bangasser, Ph.D.
FACULTY CHAIR: David Bastedo, M.S.
Health & Life Science 210
(909) 384-8564

OTHER FACULTY: Algie Au, M.S.
Joan Backey, M.S.
Lorrie Burnham, M.S.
Glenn Drewes, M.A.
Mark Ikeda, M.S.
Roger Sadler, M.S.
Tatiana Vasquez, M.S.

ADMINISTRATIVE SECRETARY: Rose Garcia
DIVISION OFFICE: Chemistry 121
(909) 384-8645
DIVISION OFFICE: Health and Life Science 101
(909) 384-8550

LIAISON COUNSELOR: Denise McCrary, Ed.D.
(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.

BIOLOGY 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
BIOL 202 Organismal Biology and Ecology	4
CHEM 150 or 150H General Chemistry I	5
CHEM 151 or 151H General Chemistry II	5
Twelve Units from the RECOMMENDED COURSES:	12
TOTAL UNITS:	30

RECOMMENDED COURSES:	UNITS
MATH 250 Calculus I	4
MATH 251 Calculus II	4
CHEM 212 or 212H Organic Chemistry	4
CHEM 213 or 213H Organic Chemistry	4
PHYSIC 150A General Physics I	5
and	
PHYSIC 150B General Physics II	5
or	
PHYSIC 200 General Physics I	6
and	
PHYSIC 201 General Physics II	6

**BIOTECHNOLOGY
ASSOCIATE OF SCIENCE DEGREE**

This degree has been designed to meet the increasing need for entry-level laboratory technicians in biotechnology. Technicians in this field must be proficient in the application of scientific methodology to solve problems. They must learn/implement laboratory procedures and use specialized laboratory equipment. Much of the technician's work involves repetitive routines that must be done precisely, quickly and safely. Upon completion of this degree students will be eligible for positions such as lab assistant, and laboratory support worker. In addition, competency in organizational, computational and communications skills is essential. Students must complete the following required courses plus the general breadth requirements for the Associate Degree for a total of 60 units. NOTE: BIOL 270 has a prerequisite of a Biology course (BIOL 250 or BIOL 260 or BIOL 261 or BIOL 201) and CHEM 101. MATH 102 and 108 have a prerequisite of MATH 095 or eligibility for MATH 102 as determined through the SBVC assessment process.

REQUIRED COURSES:		UNITS
BIOL 201	Cell and Molecular Biology	4
BIOL 270	Microbiology	5
BIOL 290	Biotechnology I	5
BIOL 291	Biotechnology II	5
CHEM 150	General Chemistry I or	5
CHEM 150H	General Chemistry I - Honors	5
CHEM 151	General Chemistry II or	5
CHEM 151H	General Chemistry II - Honors	5
CHEM 212	Organic Chemistry I or	4
CHEM 212H	Organic Chemistry I - Honors	4
CHEM 213	Organic Chemistry II or	4
CHEM 213H	Organic Chemistry II - Honors	4
CIT 101	Introduction to Computer Literacy	3
MATH 102	College Algebra	4
MATH 108	Introduction to Probability and Statistics	4
PHIL 105	Introduction to Ethics	3
TOTAL UNITS:		51

BIOTECHNOLOGY CERTIFICATE

The certificate has been designed to meet the increasing need for entry-level laboratory technicians in biotechnology. Technicians in this field must be proficient in the application of scientific methodology. They must implement laboratory procedures and use specialized laboratory equipment. Much of the technician's work involves repetitive routines that must be done precisely, quickly and safely. Upon completion of this certificate students will be eligible for positions such as lab assistant, and laboratory support worker. Competency in organizational, computational and communication skills are essential. NOTE: BIOL 270 has a prerequisite of a Biology course (BIOL 250 or BIOL 260 or BIOL 261 or BIOL 201) and CHEM 101

REQUIRED COURSES:		UNITS
BIOL 270	Microbiology	5
BIOL 290	Biotechnology I	5
BIOL 291	Biotechnology II	5
CHEM 104	Introduction to Organic and Biochemistry	4
CIT 101	Introduction to Computer Literacy	3
ENGL 101	Freshman Composition or	4
ENGL 101H	Freshman Composition-Honors	4
PHIL 105	Introduction to Ethics	3
TOTAL UNITS:		29

COURSES OFFERED BY THE DEPARTMENT OF BIOLOGY:

**BIOL 010
FOUNDATIONAL SKILLS FOR BIOLOGY MAJORS
.25 UNIT**

PREREQUISITE: None.
COREQUISITE: BIOL 201, 202, 203, 251, 261, or 270.
LECTURE: None.
LABORATORY: 13.5 contact hours per semester.
This course enables students to develop and strengthen foundational science skills during enrollment in major's-level science coursework. Workshops emphasize skill-building in the analytical and communication skills necessary for success in major's-level science classes and professional-level science careers. Topics include applied math, word problems, data manipulation, graphing, scientific writing, critical thinking, scientific method, and the use of technology. Graded on Pass/No Pass basis only.
Associate Degree Applicable

**BIOL 100
GENERAL BIOLOGY
4 UNITS**

PREREQUISITE: None.
LECTURE: 3 contact hours per week and
LABORATORY: 3 contact hours per week.
This is an introductory course for non-majors emphasizing scientific method in investigating the origins, physiology, ecological roles, and comparative characteristics of living organisms.
Associate Degree Applicable
*Course credit transfers to CSU and *UC.*

**BIOL 104
HUMAN ECOLOGY
3 UNITS**

PREREQUISITE: None.
LECTURE: 3 contact hours per week.
This course presents 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 109 **4 UNITS**
HISTORY OF LIFE
PREREQUISITE: None.
DEPARTMENTAL ADVISORIES: ENGL 015 and MATH 942.
LECTURE: 3 contact hours per week and
LABORATORY: 3 contact hours per week.
This is 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 and UC.

BIOL 109H **4 UNITS**
HISTORY OF LIFE - HONORS
PREREQUISITE: None.
DEPARTMENTAL ADVISORIES: ENGL 015 and MATH 942.
LECTURE: 3 contact hours per week and
LABORATORY: 3 contact hours per week.
This is 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. **This course is intended for students in the Honors Program but is open to all students who desire more challenging coursework.**
Associate Degree Applicable
Course credit transfers to CSU and UC.

BIOL 123 **3 UNITS**
ECOLOGY AND ENVIRONMENT
PREREQUISITE: None.
LECTURE: 3 contact 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 **2 UNITS**
BIOLOGY OF SEXUALLY TRANSMITTED DISEASES
PREREQUISITE: None.
LECTURE: 2 contact 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 155 **4 UNITS**
INTRODUCTORY ANATOMY AND PHYSIOLOGY
PREREQUISITE: None.
DEPARTMENTAL ADVISORIES: ENGL 914 and MATH 942
LECTURE: 3 contact hours per week and
LABORATORY: 3 contact hours per week.
This course is an introduction to human anatomy and physiology. The course is intended to meet the prerequisite for students entering the Psychiatric Technician program or other professional programs that accept a lecture/lab course in human anatomy and physiology.
Associate Degree Applicable
Course credit transfers to CSU and UC.

BIOL 201 **4 UNITS**
CELL AND MOLECULAR BIOLOGY
PREREQUISITE/COREQUISITE: CHEM 150 or CHEM 150H.
LECTURE: 3 contact hours per week and
LABORATORY: 3 contact hours per week.
This course is an introduction to cellular and molecular aspects of biology emphasizing principles of prokaryotic and eukaryotic cell structure and function, classic and modern genetics, and concepts that integrate cellular with organismal activities. Experimental design concepts and application are emphasized in the laboratory. It is the first semester of a two-semester sequence in introductory biology for the pre-professional, biology major, or others interested in an in-depth study of biology.
Associate Degree Applicable
Course credit transfers to CSU, and UC.

BIOL 202 **4 UNITS**
ORGANISMAL BIOLOGY AND ECOLOGY
PREREQUISITE: BIOL 201.
LECTURE: 3 contact hours per week and
LABORATORY: 3 contact hours per week.
This course is an introduction to ecological and organismal aspects of biology intended for the pre-professional or biology major or others interested in an in-depth study of biology. The course requires participation in and completion of a field project and participation in several weekend field trips. It is the second semester of a two-semester sequence in introductory biology.
Associate Degree Applicable
Course credit transfers to CSU and UC.

BIOL 204 **4 UNITS**
GENERAL BOTANY
PREREQUISITE: BIOL 100 or BIOL 201.
LECTURE: 3 contact hours per week and
LABORATORY: 3 contact hours per week.
Introduction to the development and comparative morphology, function, heredity, physiology, and evolution of algae, bryophytes and vascular plants.
Associate Degree Applicable
Course credit transfers to CSU and UC.

BIOL 222
INDEPENDENT STUDY IN BIOLOGY 1-3 UNITS

PREREQUISITE: None.

INDEPENDENT STUDY: 3-9 contact hours per week.

Students with previous course work in biology may do assigned projects involving research and analysis of selected topics. This independent study is for students who are interested in furthering their knowledge of Biology. 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 250
HUMAN ANATOMY AND PHYSIOLOGY I 4 UNITS

PREREQUISITE: None.

DEPARTMENTAL ADVISORY: None.

LECTURE: 3 contact hours per week and

LABORATORY: 3 contact hours per week.

This is the first semester of a two-semester presentation of human anatomy and physiology for pre-professional majors or others interested in an in-depth study of human biology. This course offers an introduction to cytology, histology, and basic inorganic and organic chemistry. It also presents the structure, function, and homeostatic interrelationships of the integumentary, skeletal, cardiovascular, lymphatic, and respiratory organ systems.

Associate Degree Applicable

*Course credit transfers to CSU and *UC.*

BIOL 251
HUMAN ANATOMY AND PHYSIOLOGY II 4 UNITS

PREREQUISITE: BIOL 250.

LECTURE: 3 contact hours per week and

LABORATORY: 3 contact hours per week.

This course is the second semester of a two-semester presentation of anatomy and physiology. Topics include the urinary system; fluid, electrolyte and acid-base balance; nervous and muscular systems; endocrine regulation; digestion; metabolism; and reproduction. Emphasis is placed upon body homeostasis, human musculature and gross anatomy, using the cat as a dissection model. The class is intended for students planning to enter the Allied Health professions.

Associate Degree Applicable

*Course credit transfers to CSU and *UC.*

BIOL 252
INDEPENDENT STUDY IN ANATOMY AND PHYSIOLOGY 1-3 UNITS

PREREQUISITE: BIOL 250 or BIOL 260.

INDEPENDENT STUDY: 3-9 contact 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 contact 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 contact 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 contact 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 contact hours per week and

LABORATORY: 3 contact hours per week.

This is a comprehensive lecture/laboratory course in human anatomy. It is organized to explore the body both regionally and systemically. The course is primarily gross anatomy with an extensive dissection of the cat and other significant organs. Histological and cellular anatomy are included as they apply to various structures and systems.

Associate Degree Applicable

*Course credit transfers to CSU and *UC.*

BIOL 261
HUMAN PHYSIOLOGY 4 UNITS

PREREQUISITES: BIOL 260 and CHEM 101.

LECTURE: 3 contact hours per week and

LABORATORY: 3 contact hours per week.

This course is the second semester of a two-semester sequence. It builds on an understanding of structure to explain the dynamic functions of the human body to a cellular level. Topics include physiology of the following systems: muscular, skeletal, nervous, endocrine, cardiovascular, respiratory, digestive, urinary, and reproductive. Homeostatic mechanisms and the interrelationships of body organ systems are emphasized and enhanced with clinical illustrations.

Associate Degree Applicable

*Course credit transfers to CSU and *UC.*

BIOL 270
MICROBIOLOGY 5 UNITS

PREREQUISITES: BIOL 250 or BIOL 260 or BIOL 261 or BIOL 201 and CHEM 101.

DEPARTMENTAL ADVISORY: ENGL 101 or ENGL 101H.

LECTURE: 3 contact hours per week and

LABORATORY: 6 contact hours per week.

This course is a formal introduction to the fundamental principles of microbiology and immunology. Attention is given to the morphology, control, metabolism and genetics of microorganisms. Emphasis is placed on the pathogenesis of and immunity to infectious diseases.

Associate Degree Applicable

Course credit transfers to CSU and UC.

BIOL 272
INDEPENDENT STUDY IN MICROBIOLOGY
1-3 UNITS

PREREQUISITE: BIOL 270.

INDEPENDENT STUDY: 3-9 contact 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 contact 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.

INDEPENDENT STUDY: 6 contact 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 contact 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 290
BIOTECHNOLOGY I
5 UNITS

PREREQUISITE: BIOL 201 or BIOL 270.

COREQUISITE: CHEM 104 or CHEM 212 or CHEM 212H.

LECTURE: 4 contact hours per week and

LABORATORY: 3 contact hours per week.

This course will focus on basic principles of cellular and molecular biology and laboratory methods utilized in the biotechnology industry. Students will learn the foundations of lab safety and documentation, skills in the maintenance and calibration of basic lab equipment, calculation and preparation of laboratory solutions and principles of separation of cellular components and macromolecules.

Associate Degree Applicable

Course credit transfers to CSU and UC.

BIOL 291
BIOTECHNOLOGY II
5 UNITS

PREREQUISITE: BIOL 290.

LECTURE: 3 contact hours per week and

LABORATORY: 6 contact hours per week.

This course will expand on the principles of cellular and molecular biology as applied in the biotechnology laboratory. Laboratory work will include DNA & RNA isolations, DNA amplification and sequencing, recombinant techniques, restriction analysis of DNA and protein purification and analysis.

Associate Degree Applicable

Course credit transfers to CSU for elective credit only.

**BUILDING INSPECTION
 TECHNOLOGY**

See the Department of INSPECTION TECHNOLOGY

BUSINESS ADMINISTRATION

DIVISION: Mathematics, Business and Computer Technology
 DIVISION DEAN: Haragewen Kinde, Ed.D.
 FACULTY CHAIR: Michael Assumma, M.B.A.
 Business, 100G
 (909) 384-8923
 ADMINISTRATIVE SECRETARY: Vivian Marquez
 DIVISION OFFICE: Business 100
 (909) 384-8520/8908
 LIAISON COUNSELOR: Patty Jones, 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.

**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	Financial Accounting	4
ACCT 201	Managerial Accounting	4
BUSAD 013	Marketing Principles	3
ECON 208	Business and Economics or Statistics	4
MATH 108	Introduction to Probability and Statistics	4
BUSAD 100	Introduction to Business	3
BUSAD 210	Business Law or	3
BUSAD 211	The Legal Environment of Business	3
CIT 101	Introduction to Computer Literacy	3
ECON 200	Introduction to Macroeconomics or	3
ECON 200H	Introduction to Macroeconomics - Honors	3
ECON 201	Principles of Microeconomics	3

TOTAL UNITS: 30

BUSINESS ADMINISTRATION CERTIFICATE

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

REQUIRED COURSES:		UNITS
ACCT 010	Bookkeeping or	4
BUSAD 108	Personal Finance and Investments	3
BUSAD 013	Marketing Principles	3
BUSAD 027	Business Communication	3
BUSAD 100	Introduction to Business	3
BUSCAL 050	Quantitative Methods Bus	3
CIT 101	Introduction to Computer Literacy	3

SPEECH 100	Elements of Public Speaking	or	3
SPEECH 100H	Elements of Public Speaking – Honors		3

ELECTIVES - Choose from the list of RECOMMENDED COURSES: 6

RECOMMENDED COURSES:		UNITS
BUSAD 011	Human Resource Management	3
BUSAD 015	Small Business Management/Entrepreneurship	3
BUSAD 016	Principles of Selling	3
BUSAD 020	Business Management	3
BUSAD 052	Introduction to Supervision	3
BUSAD 198	Business Administration Work Experience	1 - 4

TOTAL UNITS: 27 - 29

RETAIL MANAGEMENT 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 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 intermediate course offerings cover specific business and management content. Lastly, the advanced course offerings include the retail specific courses and human relations topics.

FOUNDATIONAL COURSES:		UNITS
BUSAD 027	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	or	3
SPEECH 100H	Elements of Public Speaking-Honors		3
SPEECH 111	Interpersonal Communication		(3)
SPEECH 140	Small Group Communication		(3)

INTERMEDIATE COURSES:

BUSAD 013	Marketing Principles	3
BUSAD 020	Business Management	3

Choose one of the following:

ACCT 010	Bookkeeping	3
ACCT 200	Financial Accounting	(4)

ADVANCED COURSES:

BUSAD 011	Human Resource Management	3
BUSAD 012	Principles of Retailing	3
BUSAD 051	Human Relations	3

TOTAL UNITS: 30-31

COURSES OFFERED BY THE DEPARTMENT OF BUSINESS ADMINISTRATION:

BUSAD 011
HUMAN RESOURCE MANAGEMENT 3 UNITS
PREREQUISITE: None.

LECTURE: 3 contact hours per week.

This course is 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. (Formerly BUSAD 110)

Associate Degree Applicable

Course credit transfers to CSU for elective credit only.

BUSAD 012
PRINCIPLES OF RETAILING 3 UNITS
PREREQUISITE: None.

LECTURE: 3 contact hours per week.

This course will cover the role of retailing in serving the needs of the community. The topics will include 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. (Formerly BUSAD 112)

Associate Degree Applicable

Course credit transfers to CSU for elective credit only.

BUSAD 013
MARKETING PRINCIPLES 3 UNITS
PREREQUISITE: None.

LECTURE: 3 contact hours per week.

This course will cover the basic principles and methods of marketing as practiced by all successfully managed business firms. This course is management-oriented, covering demand analysis, forecasting, product development, price determination, distribution channels, material handling, advertising and personal selling. (Formerly BUSAD 103)

Associate Degree Applicable

Course credit transfers to CSU for elective credit only.

BUSAD 015
SMALL BUSINESS MANAGEMENT / ENTREPRENEURSHIP 3 UNITS
PREREQUISITE: None.

LECTURE: 3 contact hours per week.

This course is designed for business majors and non-business majors who desire a greater knowledge of the fundamentals specifically related to the opening and operation of a small business. The course is designed to provide a working knowledge of the pitfalls associated with small business operations and how to recognize, prevent and solve problems. (Formerly BUSAD 105)

Associate Degree Applicable

Course credit transfers to CSU for elective credit only.

BUSAD 016
PRINCIPLES OF SELLING 3 UNITS
PREREQUISITE: None.

LECTURE: 3 contact hours per week.

This course covers the problems of analyzing the sales talk, making an adequate approach, meeting objectives, excuses and techniques of closing the sale, and the psychology involved in selling services, goods, ideas and one's own personality. (Formerly BUSAD 106)

Associate Degree Applicable

Course credit transfers to CSU for elective credit only.

BUSAD 020
BUSINESS MANAGEMENT 3 UNITS
PREREQUISITE: None.

LECTURE: 3 contact hours per week.

This course is designed for business majors and examines the primary dimensions of the management process including planning, organizing, decision-making and controlling organizational activity. (Formerly BUSAD 200)
Associate Degree Applicable
Course credit transfers to CSU for elective credit only.

BUSAD 027
BUSINESS COMMUNICATION 3 UNITS
PREREQUISITE: ENGL 914 or eligibility for ENGL 015 as determined by the SBVC assessment process.
DEPARTMENTAL ADVISORY: None.

LECTURE: 3 contact hours per week.

This course is a study of the principles and role of business communication and the need for communication skills in a global marketplace. Emphasis is placed on written communications, including business letters, proposals, resumes and other business documents. A considerable amount of time is devoted to planning, organizing, outlining and grammar and writing style. (Formerly BUSAD 207)
Associate Degree Applicable
Course credit transfers to CSU for elective credit only.

BUSAD 039
STRATEGIES FOR SUCCESSFUL EMPLOYMENT 3 UNITS

PREREQUISITE: None.

DEPARTMENTAL ADVISORY: CIT 008 or CIT 009 or CIT 010.

LECTURE: 3 contact 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 051
HUMAN RELATIONS 3 UNITS
PREREQUISITE: None.

LECTURE: 3 contact 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. (Formerly BUSAD 151)
Associate Degree Applicable
Course credit transfers to CSU for elective credit only.

BUSAD 052
INTRODUCTION TO SUPERVISION 3 UNITS
PREREQUISITE: None.

LECTURE: 3 contact hours per week.

This course introduces the major responsibilities of supervisory personnel with an emphasis on the importance of understanding employee needs and motivations. (Formerly BUSAD 153)
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 contact 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 100
INTRODUCTION TO BUSINESS 3 UNITS
PREREQUISITE: None.

LECTURE: 3 contact hours per week.

This course will introduce the student to the fundamental concepts of business in a changing world. It 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 108
PERSONAL FINANCE AND INVESTMENTS 3 UNITS
PREREQUISITE: None.

LECTURE: 3 contact hours per week.

This course is an integrated approach to personal finance focusing on practical financial decision making as well as the social, psychological, and physiological contexts in which those decisions are made. The student will examine the preparation for managing one's personal finances, including budgeting, borrowing, insurance, retirement investments, long-term health care and home ownership.
Associate Degree Applicable
Course credit transfers to CSU.

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 contact 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 and *UC.

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 contact 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 and *UC.*

BUSAD 222
INDEPENDENT STUDY IN BUSINESS ADMINISTRATION 1-3 UNITS

PREREQUISITE: None.
INDEPENDENT STUDY: 3-9 contact 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 contact 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.

BUSINESS CALCULATIONS

DIVISION:	Mathematics, Business and Computer Technology
DIVISION DEAN:	Haragewen Kinde, Ed.D.
FACULTY CHAIR:	Michael Assumma, M.B.A. Business, 100G (909) 384-8923
ADMINISTRATIVE SECRETARY:	Vivian Marquez
DIVISION OFFICE:	Business 100 (909) 384-8520/8908
LIAISON COUNSELOR:	Patty Jones, M.A. (909) 384-4404

Courses in Business Calculations are designed to present the fundamentals of mathematics within the context of the field of business. These courses are an important complement to courses in accounting, economics and business.

COURSES OFFERED BY THE DEPARTMENT OF BUSINESS CALCULATIONS:

BUSCAL 050
QUANTITATIVE METHODS IN BUSINESS 3 UNITS

PREREQUISITE: None.
DEPARTMENTAL ADVISORY: MATH 952.
LECTURE: 3 contact hours per week.

This course covers fundamental mathematical calculations and their application to business problems. Topics include payroll, pricing, interest and discount, commission, taxes, and other pertinent uses of mathematics in the field of business.

Associate Degree Applicable

BUSCAL 091
BEGINNING ALGEBRA FOR BUSINESS 4 UNITS

PREREQUISITE: MATH 952 or BUSCAL 050.
LECTURE: 4 contact hours per week.

This course covers the beginning algebra for business review of operations of integers and properties of real numbers. Topics include solving linear equations and inequalities, ratio, proportion and percent, and applications in business.

Associate Degree Applicable



CHEMISTRY

DIVISION: Science
 DIVISION DEAN: Susan Bangasser, Ph.D.
 FACULTY CHAIR: John Stanskas, Ph.D.

Chemistry 114
 (909) 384-8268

OTHER FACULTY: Amy Avelar, Ph.D.
 Denise Bailey, Ph.D.
 Sheri Lillard, Ph.D.
 Michael Torrez, M.S.

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

DIVISION OFFICE: Health and Life Science 101
 (909) 384-8550

LIAISON COUNSELOR: Denise McCrary, Ed.D.
 (909) 384-4404

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.

CHEMISTRY ASSOCIATE OF SCIENCE DEGREE

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 because additional courses may be required at some institutions.

To graduate with a specialization in Chemistry, students must complete the following required courses plus the general breadth requirements for the Associate's Degree. The A.S. in Chemistry is designed to prepare students who wish to pursue a Bachelor's Degree from a four-year institution. At the four-year institution, students may choose to specialize in one particular aspect of chemistry, such as Environmental Chemistry, Organic Chemistry, Atmospheric Chemistry, or Physical Chemistry.

REQUIRED COURSES:			UNITS
CHEM 150	General Chemistry I	or	5
CHEM 150H	General Chemistry I - Honors		5
CHEM 151	General Chemistry II	or	5
CHEM 151H	General Chemistry II - Honors		5
CHEM 212	Organic Chemistry I	or	4
CHEM 212H	Organic Chemistry I - Honors		4
CHEM 213	Organic Chemistry	or	4
CHEM 213H	Organic Chemistry II - Honors		4
MATH 250	Single Variable Calculus I		4
MATH 251	Single Variable Calculus II		4

*RECOMMENDED COURSES:			UNITS
PHYSIC 200	Physics I	or	6
PHYSIC 150A	General Physics for the Life Sciences I		5
PHYSIC 201	Physics II	or	6

PHYSIC 150B General Physics for the Life Sciences II 5

CHEM 205 Quantitative Chemical Analysis 5

**These courses are typically prerequisites for third year chemistry majors. Students are encouraged to complete the recommended courses to prevent the postponement of continued coursework in this major.*

TOTAL UNITS: 26

BIOCHEMISTRY ASSOCIATE OF SCIENCE DEGREE

Students planning to transfer to a four-year institution and major in chemistry or biochemistry should consult with a counselor regarding the transfer process and lower division requirements because additional courses may be required by some institutions.

To graduate with a specialization in Biochemistry, students must complete the following required courses plus the general breadth requirements for the Associate's Degree. The A.S. in Biochemistry is designed to prepare students who wish to pursue a Bachelor's Degree in Biochemistry from a four-year institution and specialize in the chemical interactions that pertain to biological systems.

REQUIRED COURSES:			UNITS
CHEM 150	General Chemistry I	or	5
CHEM 150H	General Chemistry I - Honors		5
CHEM 151	General Chemistry II	or	5
CHEM 151H	General Chemistry II - Honors		5
CHEM 212	Organic Chemistry I	or	4
CHEM 212H	Organic Chemistry I - Honors		4
CHEM 213	Organic Chemistry	or	4
CHEM 213H	Organic Chemistry II - Honors		4
BIOL 201	Cell and Molecular Biology		4
BIOL 202	Organismal Biology and Ecology		4
MATH 250	Single Variable Calculus I		4
MATH 251	Single Variable Calculus II		4

*RECOMMENDED COURSES:			UNITS
PHYSIC 200	Physics I	or	6
PHYSIC 150A	General Physics for the Life Sciences I		5
PHYSIC 201	Physics II	or	6
PHYSIC 150B	General Physics for the Life Sciences II		5
CHEM 205	Quantitative Chemical Analysis		5

**These courses are typically prerequisites for third year biochemistry majors. Students are encouraged to complete the recommended courses to prevent the postponement of continued coursework in this major.*

TOTAL UNITS: 34

COURSES OFFERED BY THE DEPARTMENT OF CHEMISTRY:

**CHEM 010
FOUNDATIONAL SKILLS FOR CHEMISTRY MAJORS
.25 UNIT**

PREREQUISITE: None.

COREQUISITE: CHEM 150, 151, 212, or 213.

LECTURE: None.

LABORATORY: 13.5 contact hours per semester.

This course enables students to develop and strengthen foundational science skills during enrollment in major's-level science coursework. Workshops emphasize skill-building in the analytical and communication skills necessary for success in major's-level science classes and professional-level science careers. Topics include applied math, word problems, data manipulation, graphing, scientific writing, critical thinking, scientific method, and the use of technology. Graded on Pass/No Pass basis only.

Associate Degree Applicable

**CHEM 085
ALGEBRA REVIEW WORKSHOP FOR CHEMISTRY
.50 UNIT**

PREREQUISITE: MATH 090.

COREQUISITE: CHEM 101.

LECTURE: .50 contact 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 Pass/No Pass basis only.

Associate Degree Applicable

**CHEM 101
INTRODUCTORY CHEMISTRY
4 UNITS
PREREQUISITE: MATH 090 or SBVC assessment into MATH 095 or higher.**

LECTURE: 3 contact hours per week and

LABORATORY: 3 contact hours per week.

This comprehensive course provides a foundation for the concepts of chemistry. Some of the areas studied include the physical and chemical properties of common elements and compounds, the metric system, measurements and conversions, atomic structure, the periodic table, chemical equations and calculations, gases, solutions, ionization, and an introduction to organic and biochemistry.

Associate Degree Applicable

*Course credit transfers to CSU and *UC.*

**CHEM 104
INTRODUCTION TO ORGANIC CHEMISTRY
AND BIOCHEMISTRY
4 UNITS
PREREQUISITE: CHEM 101.**

LECTURE: 3 contact hours per week and

LABORATORY: 3 contact 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 and *UC.*

**CHEM 110
ENVIRONMENTAL AND CONSUMER CHEMISTRY
3 UNITS**

PREREQUISITE: None.

LECTURE: 3 contact hours per week.

This course fulfills a general education requirement and explores the role of chemistry in society. The topics included are: physical and chemical properties of common elements and compounds (including household substances); gases; reactions; atomic structure; energy; simple organic and biochemical compounds; and air and water pollution.

Associate Degree Applicable

*Course credit transfers to CSU and *UC.*

**CHEM 150
GENERAL CHEMISTRY I
5 UNITS**

PREREQUISITES: CHEM 101 and MATH 095 or SBVC assessment into MATH 102 or higher.

LECTURE: 3 contact hours per week and

LABORATORY: 6 contact hours per week.

General Chemistry I is an introduction to college level chemistry with an emphasis on the mole concept, thermochemistry, atomic and molecular structure, the relationships of intramolecular and intermolecular forces to chemical and physical properties, the periodic chart, organic chemistry, and solids, liquids and gases.

Associate Degree Applicable

*Course credit transfers to CSU and *UC.*

**CHEM 150H
GENERAL CHEMISTRY I – HONORS
5 UNITS
PREREQUISITES: CHEM 101 and MATH 095 or SBVC assessment into MATH 102 or higher.**

LECTURE: 3 contact hours per week and

LABORATORY: 6 contact hours per week.

General Chemistry I - Honors is an introduction to college level chemistry with an emphasis on the mole concept, thermochemistry, atomic and molecular structure, the relationships of intramolecular and intermolecular forces to chemical and physical properties, the periodic chart, organic chemistry, and solids, liquids and gases.

Enrollment is limited to students eligible for the Honors Program.

Associate Degree Applicable

*Course credit transfers to CSU and *UC.*

**CHEM 151
GENERAL CHEMISTRY II
5 UNITS
PREREQUISITE: CHEM 150 or CHEM 150H, and MATH 102 or SBVC assessment higher than MATH 102.**

LECTURE: 3 contact hours per week and

LABORATORY: 6 contact hours per week.

General Chemistry II is the second half of a two-part sequence in chemistry with an emphasis on thermodynamics, chemical equilibrium, chemical kinetics, nuclear and electrochemistry. This course prepares students for future courses and careers in chemistry, physics, biology, health, and the earth sciences.

Associate Degree Applicable

*Course credit transfers to CSU and *UC.*

CHEM 151H
GENERAL CHEMISTRY II – HONORS 5 UNITS

PREREQUISITE: CHEM 150 or CHEM 150H, and MATH 102 or SBVC assessment higher than MATH 102.
LECTURE: 3 contact hours per week and
LABORATORY: 6 contact hours per week.

General Chemistry II-Honors is the second half of a two-part sequence in chemistry with an emphasis on thermodynamics, chemical equilibrium, chemical kinetics, nuclear and electrochemistry. This course prepares students for future courses and careers in chemistry, physics, biology, health, and the earth sciences. **Enrollment is limited to students eligible for the Honors Program.**

Associate Degree Applicable

*Course credit transfers to CSU and *UC.*

CHEM 205
QUANTITATIVE CHEMICAL ANALYSIS 5 UNITS

PREREQUISITE: CHEM 151 or CHEM 151H.
LECTURE: 3 contact hours per week and
LABORATORY: 6 contact hours per week.

This course explores the principles, calculations, and applications of volumetric, gravimetric, and instrumental analysis as well as practical experience in standardizing reagents and determining the composition of various mixtures pertaining to the chemical laboratory setting. It is designed for second year Chemistry and Biology majors and students pursuing professional careers.

Associate Degree Applicable

Course credit transfers to CSU and UC.

CHEM 212
ORGANIC CHEMISTRY I 4 UNITS

PREREQUISITE: CHEM 150 or CHEM 150H.
LECTURE: 3 contact hours per week and
LABORATORY: 3 contact hours per week.

The first semester of organic chemistry examines 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.

Associate Degree Applicable

*Course credit transfers to CSU and *UC.*

CHEM 212H
ORGANIC CHEMISTRY I – HONORS 4 UNITS

PREREQUISITES: CHEM 150 or CHEM 150H.
LECTURE: 3 contact hours per week and
LABORATORY: 3 contact hours per week.

The first semester of organic chemistry examines 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 and *UC.*

CHEM 213
ORGANIC CHEMISTRY II 4 UNITS

PREREQUISITE: CHEM 212 or CHEM 212H.
LECTURE: 3 contact hours per week and
LABORATORY: 3 contact hours per week.

Second semester of organic chemistry, continuing the study of carbon compounds including aliphatic, aromatic and heterocyclic series, and modern theoretical concepts. Includes modern instrumentation, mechanisms, synthesis and functional groups. Laboratory includes preparation, study of the properties, and extensive identification of organic compounds.

Associate Degree Applicable

*Course credit transfers to CSU and *UC.*

CHEM 213H
ORGANIC CHEMISTRY II – HONORS 4 UNITS

PREREQUISITE: CHEM 212 or CHEM 212H.
LECTURE: 3 contact hours per week and
LABORATORY: 3 contact hours per week.

Second semester of organic chemistry. A 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 and study of properties, and extensive identification of organic compounds. **Enrollment is limited to students eligible for the Honors Program.**

Associate Degree Applicable

*Course credit transfers to CSU and *UC.*

CHEM 222
INDEPENDENT STUDY IN CHEMISTRY 1-3 UNITS

PREREQUISITE/COREQUISITE: CHEM 151 or CHEM 151H.

INDEPENDENT STUDY: 3-9 contact hours per week.

Students with previous work in Chemistry may complete assigned projects involving research and analysis of selected topics. This independent study is for students who are interested in furthering their knowledge of Physical, Analytical, Environmental, Nuclear or Inorganic Chemistry. Prior to registration, a written contract must be prepared. See the instructor for details.

Associate Degree Applicable

Course credit transfers to CSU.

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

CHEM 223
INDEPENDENT STUDY IN ORGANIC OR BIOCHEMISTRY 1-3 UNITS

PREREQUISITE: CHEM 212 or CHEM 212H or CHEM 104.

COREQUISITE: CHEM 212 or CHEM 212H.

INDEPENDENT STUDY: 3-9 contact hours per week.

Students with previous course work in Organic or Biochemistry may do assigned projects involving research and analysis of selected topics. This independent study is for students who are interested in furthering their knowledge of Organic or Biochemistry. Prior to registration, a written contract must be prepared. See the instructor for details.

Associate Degree Applicable

Course credit transfers to CSU.

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

CHILD DEVELOPMENT

DIVISION: Social Sciences, Human Development and Physical Education
 DIVISION DEAN: Corene Schwartz, Ed.D.
 FACULTY CHAIRS: Kathryn Adams, M.S.
 NH 328
 (909) 384-8549
 Denise Knight, B.A.
 NH 316
 (909) 384-8547
 OTHER FACULTY: Kellie Barnett, M.S.
 ADMINISTRATIVE SECRETARY: Karen Deck
 DIVISION OFFICE: NH 345
 (909) 384-8603
 LIAISON COUNSELOR: Denise McCrary, Ed.D.
 (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 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.

GENERAL EDUCATION COURSES AND ELECTIVES:

The Child Development Department advises scheduling an appointment with a counselor to create an education plan to include the general breadth requirements and elective units. Please note that CD205, Child Growth and Development Laboratory, is articulated with CSUSB.

CHILD DEVELOPMENT ASSOCIATE OF ARTS DEGREE

To graduate with a specialization in Child Development students must complete the required child development courses (28 units) plus the general breadth course requirements for an Associate of Arts Degree.

REQUIRED COURSES (State Alignment Project Courses): UNITS

CD 105	Child Growth and Development	or	3
CD 105H	Child Growth and Development - Honors		3
CD 111	Observation and Assessment in Child Development		3
CD 113	Principles and Practices of Teaching Children		3
CD 114	Introduction to Curriculum		3
CD 115	Health, Safety and Nutrition for Young Children		3
CD 126	Child, Family, and the Community		3
CD 138	Teaching in a Diverse Society		3

ONE COURSE FROM THE FOLLOWING: UNITS

Specialized Curriculum Classes:

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 Experiences for Children	3
CD 168	Early Literacy for Young Children	or 3

Electives Articulated with CSUSB:

CD 127	Guidance of Children	3
CD 185	Infant/Toddler Growth and Development	3
CD 186	Infant and Toddler Curriculum	or 3

Other Elective:

CD 244	Children with Special Needs	3
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EXPERIENCE WORKING WITH CHILDREN (State Alignment Project Course): UNITS

CD 198	Child Development Work Experience	or 4
CD 205	Child Development Practicum / Field Experience	4

Units

GENERAL EDUCATION COURSES: 32

TOTAL UNITS: 60

CHILD DEVELOPMENT-EARLY INTERVENTION AND INCLUSION ASSOCIATE OF ARTS DEGREE

To graduate with a specialization in Child Development-Early Childhood Intervention and Inclusion students must complete the required child development courses (32 units) plus the general breadth course requirements for an Associate of Arts Degree. This degree prepares individuals to work as early childhood paraprofessionals with expertise in special education and early intervention. The Child Development courses meet the State's new competencies for early childhood intervention/early childhood special education paraprofessionals.

The Child Development-Early Intervention and Inclusion A.A. Degree meets California Title 5 requirements for the Child Development Teacher Permit. Upon completion of all the courses contact the Child Development Department Chair for an application for the Teacher Permit.

REQUIRED COURSES: UNITS

CD 105	Child Growth and Development	or 3
CD 105H	Child Growth and Development - Honors	3
CD 111	Observation and Assessment in Child Development	3
CD 126	Child, Family, and the Community	3
CD 127	Guidance of Children	3
CD 185	Infant/Toddler Growth and Development	3
CD 186	Infant and Toddler Curriculum	3
CD 244	Children with Special Needs	3
CD 245	Early Intervention and Inclusion	3

EXPERIENCE WORKING WITH CHILDREN UNITS

(REQUIRED):

CD 215	Early Intervention and Inclusion Internship	4
CD 198	Child Development Work Experience	4
CD 205	Child Development Practicum / Field Experience	4
CD 210	Infant and Toddler Growth and Development Laboratory	4

GENERAL EDUCATION COURSES:	UNITS
	28
TOTAL UNITS:	60

CHILD DEVELOPMENT-SITE SUPERVISOR ASSOCIATE OF ARTS DEGREE

To graduate with a specialization in Child Development-Site Supervisor, students must complete the required child development courses (43 units) plus the general breadth course requirements for an Associate of Arts Degree.

REQUIRED COURSES:	UNITS	
CD 105	Child Growth and Development	3
CD 105H	Child Growth and Development-Honors	3
CD 111	Observation and Assessment in Child Development	3
CD 113	Principles and Practices of Teaching Children	3
CD 114	Introduction to Curriculum	3
CD 115	Health, Safety and Nutrition for Young Children	3
CD 126	Child, Family, and the Community	3
CD 127	Guidance of Children	3
CD 270	The Mentor Teacher / Adult Supervision	3
CD 271	Administration of Early Childhood Education Programs	3
CD 272	Advanced Administration of Early Childhood Education Programs	3

TWO COURSES FROM THE FOLLOWING LIST: UNITS

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 Experiences for Children	3

ONE COURSE FROM THE FOLLOWING LIST: UNITS

CD 138	Teaching in a Diverse Society	3
CD 160	Understanding School-Age Children	3
CD 161	Activities for School-Age Children	3
CD 168	Early Literacy for Young Children	3
CD 185	Infant/Toddler Growth and Development	3
CD 186	Infant and Toddler Curriculum	3
CD 244	Children with Special Needs	3

EXPERIENCE WORKING WITH CHILDREN: UNITS

CD 198	Child Development Work Experience	or	4
CD 205	Child Development Practicum / Field Experience	or	4
CD 210	Infant and Toddler Growth and Development Laboratory		4

GENERAL EDUCATION COURSES: UNITS

	24 - 26
TOTAL UNITS:	67 - 69

CHILD DEVELOPMENT - ASSOCIATE TEACHER CERTIFICATE**REQUIRED COURSES: UNITS**

CD 101	Parent-Child Interaction	3	
CD 105	Child Growth and Development	or	3
CD 105H	Child Growth and Development-Honors	3	
CD 113	Principles and Practices of Teaching Children	3	
CD 114	Introduction to Curriculum	3	
CD 126	Child, Family, and the Community	3	

EXPERIENCE WORKING WITH CHILDREN: UNITS

CD 205	Child Development Practicum / Field Experience	or	4
CD 198	Child Development Work Experience		4

TOTAL UNITS: 19**ADDITIONAL RECOMMENDED COURSE:**

CD 116 Pediatric CPR, First Aid & Safety
**Pending approval from the California Community College Chancellor's Office*

CHILD DEVELOPMENT - TEACHER CERTIFICATE

The Teacher Certificate is designed for individuals working with children in a preschool or child care setting. The certificate focuses on developing age appropriate lesson plans for the classroom and observation/assessment of children. The Teacher Certificate requires 31 CD units which includes 4 units of laboratory or work experience with young children plus 16 general education units.

REQUIRED COURSES: UNITS

CD 105	Child Growth and Development	or	3
CD 105H	Child Growth and Development-Honors	3	
CD 111	Observation and Assessment in Child Development	3	
CD 113	Principles and Practices of Teaching Children	3	
CD 114	Introduction to Curriculum	3	
CD 126	Child, Family, and the Community	3	

TWO CURRICULUM COURSES FROM THE FOLLOWING LIST:		UNITS
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 Experiences for Children	3
CD 168	Early Literacy for Young Children	3

TWO COURSES FROM THE FOLLOWING LIST:		UNITS
CD 115	Health, Safety and Nutrition for Young Children	3
CD 127	Guidance of Children	3
CD 138	Teaching in a Diverse Society	3
CD 185	Infant/Toddler Growth and Development	3

EXPERIENCE WORKING WITH CHILDREN (REQUIRED):		UNITS
CD 198	Child Development Work Experience or	4
CD 205	Child Development Practicum / Field Experience	4

TOTAL UNITS:	34
GENERAL EDUCATION COURSES:	UNITS
	16
TOTAL UNITS:	60

CHILD DEVELOPMENT - MASTER TEACHER CERTIFICATE

The Master Teacher Certificate is designed to prepare students to supervise, mentor and assist other teachers and aides in a preschool or child care setting. The Master Teacher Certificate requires 37 CD units which includes six specialization units and 4 units of laboratory or work experience with children preschool-12 years of age plus a minimum of 16 general education units.

REQUIRED COURSES:		UNITS
CD 105	Child Growth and Development or	3
CD 105H	Child Growth and Development-Honors	3
CD 111	Observation and Assessment in Child Development	3
CD 113	Principles and Practices of Teaching Children	3
CD 114	Introduction to Curriculum	3
CD 115	Health, Safety and Nutrition for Young Children	3
CD 126	Child, Family, and the Community	3
CD 127	Guidance of Children	3
CD 270	The Mentor Teacher / Adult Supervision	3

CHILD DEVELOPMENT SPECIALIZATION:		UNITS
CREATIVE CURRICULUM SPECIALIZATION		
CD 130	Creative Music and Movement for Children and	3
CD 136	Creative Art Experiences for Children or	3
LITERACY SPECIALIZATION		
CD 134	Language, Listening and Literature for Children and	3
CD 168	Early Literacy for Young Children or	3
SCHOOL-AGE SPECIALIZATION		
CD 160	Understanding School-Age Children and	3
CD 161	Activities for School-Age Children or	3
INFANT/TODDLER SPECIALIZATION		
CD 185	Infant/Toddler Growth and Development and	3
CD 186	Infant and Toddler Curriculum or	3
SPECIAL NEEDS SPECIALIZATION		
CD 244	Children with Special Needs and	3
CD 245	Early Intervention and Inclusion	3

ONE COURSE FROM THE FOLLOWING LIST:		UNITS
COURSE MUST BE DIFFERENT FROM YOUR CHOSEN SPECIALIZATION		
CD 040	Spanish for Early Childhood Settings	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 Experiences for Children	3
CD 138	Teaching in a Diverse Society	3
CD 160	Understanding School-Age Children	3
CD 161	Activities for School-Age Children	3
CD 168	Early Literacy for Young Children	3
CD 185	Infant/Toddler Growth and Development	3
CD 186	Infant and Toddler Curriculum	3
CD 244	Children with Special Needs	3

EXPERIENCE WORKING WITH CHILDREN:		UNITS
CD 198	Child Development Work Experience or	4
CD 205	Child Development Practicum / Field Experience	4
TOTAL UNITS:		40

CHILD DEVELOPMENT - SITE SUPERVISOR CERTIFICATE

The Site Supervisor Certificate is designed to prepare students with the necessary knowledge and skills to be qualified as a preschool or child care center site supervisor. The Site Supervisor Certificate requires 60 units or an Associate of Arts Degree both of which includes 43 child development (CD) units. (30 CD units, six CD Administration units, three CD Adult Supervision units and four units of laboratory or work experience with young children).

REQUIRED COURSES:		UNITS
CD 105	Child Growth and Development or	3
CD 105H	Child Growth and Development-Honors	3
CD 111	Observation and Assessment in Child Development	3
CD 113	Principles and Practices of Teaching Children	3
CD 114	Introduction to Curriculum	3
CD 115	Health, Safety and Nutrition for Young Children	3
CD 126	Child, Family, and the Community	3
CD 127	Guidance of Children	3
CD 270	The Mentor Teacher / Adult Supervision	3
CD 271	Administration of Early Childhood Education Programs	3
CD 272	Advanced Administration of Early Childhood Education Programs	3
TWO COURSES FROM THE FOLLOWING LIST:		UNITS
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 Experiences for Children	3
ONE COURSE FROM THE FOLLOWING LIST:		UNITS
CD 138	Teaching in a Diverse Society	3
CD 160	Understanding School-Age Children	3
CD 161	Activities for School-Age Children	3
CD 168	Early Literacy for Young Children	3
CD 185	Infant/Toddler Growth and Development	3
CD 186	Infant and Toddler Curriculum	3
CD 244	Children with Special Needs	3
EXPERIENCE WORKING WITH CHILDREN:		UNITS
CD 198	Child Development Work Experience or	4
CD 205	Child Development Practicum / Field Experience or	4
CD 210	Infant and Toddler Growth and Development Laboratory	4
TOTAL UNITS:		46

CHILD DEVELOPMENT - INFANT DEVELOPMENT CERTIFICATE

The Infant Development Certificate is designed to be the first step toward obtaining entry-level employment specializing in infant care. Students will be prepared to work with infants (0-36 months) enabling the student to assist a teacher in a child care or infant care setting. The Infant Development Certificate requires 28 CD units which includes four units of laboratory or work experience with infants.

REQUIRED COURSES:		UNITS
CD 105	Child Growth and Development or	3
CD 105H	Child Growth and Development-Honors	3
CD 126	Child, Family, and the Community	3
CD 127	Guidance of Children	3
CD 185	Infant/Toddler Growth and Development	3
CD 186	Infant and Toddler Curriculum	3
THREE COURSES FROM THE FOLLOWING LIST:		UNITS
CD 111	Observation and Assessment in Child Development	3
CD 115	Health, Safety and Nutrition for Young Children	3
CD 168	Early Literacy for Young Children	3
CD 244	Children with Special Needs	3
EXPERIENCE WORKING WITH CHILDREN Ages Birth-24 Months:		UNITS
CD 198	Child Development Work Experience or	4
CD 210	Infant and Toddler Growth and Development Laboratory	4
TOTAL UNITS:		28

CHILD DEVELOPMENT - SCHOOL-AGE CERTIFICATE

The School-Age Certificate is designed to be the first step toward entry level employment specializing in the care of children from 6-12 years. It prepares students for working in after-school programs or child care facilities that serve older children. The School-Age Certificate requires 31 CD units which includes four units of work experience with school-age children.

This Certificate meets California Title 5 requirements for the Child Development Associate Teacher Permit with a School-Age Emphasis and the Child Development Associate Teacher Permit. Upon completion of all the courses contact the Child Development Department Chair for an application for the Associate Teacher Permit.

REQUIRED COURSES:		UNITS
CD 105	Child Growth and Development or	3
CD 105H	Child Growth and Development-Honors	3
CD 113	Principles and Practices of Teaching Children	3
CD 114	Introduction to Curriculum	3
CD 126	Child, Family, and the Community	3
CD 127	Guidance of Children	3
CD 160	Understanding School-Age Children	3
CD 161	Activities for School-Age Children	3

TWO COURSES FROM THE FOLLOWING LIST:		UNITS
CD 111	Observation and Assessment in Child Development	3
CD 115	Health, Safety and Nutrition for Young 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 Experiences for Children	3
CD 138	Teaching in a Diverse Society	3

EXPERIENCE WORKING WITH CHILDREN Age 6-12 years: **UNITS**

CD 205	Child Development Practicum / Field Experience	4
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TOTAL UNITS: 31

CHILD DEVELOPMENT - FAMILY CHILD CARE PROVIDER CERTIFICATE

The Family Child Care Provider Certificate specializes in the care of children in a family child care setting and prepares students for working in family child care or home day care programs and facilities. The Family Child Care Certificate requires 24 CD units which includes work experience in a licensed family child care setting.

REQUIRED COURSES: **UNITS**

CD 072	Family Child Care	1
CD 073	Family Child Care Business Practices	1
CD 074	Family Child Care Children's Programs	1
CD 101	Parent-Child Interaction	3
CD 105	Child Growth and Development or	3
CD 105H	Child Growth and Development-Honors	3

CD 115	Health, Safety and Nutrition for Young Children	3
CD 116	Pediatric CPR, First Aid and Safety	2
CD 126	Child, Family, and the Community	3

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

CD 161	Activities for School-Age Children or	3
CD 186	Infant and Toddler Activities	3

EXPERIENCE WORKING WITH CHILDREN in a licensed, family child care setting: **UNITS**

CD 198	Child Development Work Experience	4
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ADDITIONAL RECOMMENDED COURSES:

BUSAD 105 Small Business Management (3 units)

TOTAL UNITS: 24

CHILD DEVELOPMENT-EARLY INTERVENTION AND INCLUSION CERTIFICATE

The Early Intervention and Inclusion Certificate prepares individuals to work as early childhood paraprofessionals with expertise in special education and early intervention. The program's perspective is culturally sensitive and family-focused which emphasizes the value of individual differences in young children. This certificate meets the State's new competencies for early childhood intervention/early childhood special education paraprofessionals.

This Certificate meets California Title 5 requirements for the Child Development Associate Teacher Permit. Upon completion of all the courses contact the Child Development Department Chair for an application for the Associate Teacher Permit.

REQUIRED COURSES: **UNITS**

CD 105	Child Growth and Development or	3
CD 105H	Child Growth and Development-Honors	3
CD 111	Observation and Assessment in Child Development	3
CD 126	Child, Family, and the Community	3
CD 127	Guidance of Children	3
CD 185	Infant/Toddler Growth and Development	3
CD 186	Infant and Toddler Curriculum	3
CD 244	Children with Special Needs	3
CD 245	Early Intervention and Inclusion	3

EXPERIENCE WORKING WITH CHILDREN (REQUIRED): **UNITS**

CD 215	Early Intervention and Inclusion Internship	4
CD 198	Child Development Work Experience or	4
CD 205	Child Development Practicum / Field Experience or	4
CD 210	Infant and Toddler Growth and Development Laboratory	4

TOTAL UNITS: 32

COURSES OFFERED BY THE DEPARTMENT OF CHILD DEVELOPMENT:

CD 040 SPANISH FOR EARLY CHILDHOOD SETTINGS 3 UNITS

PREREQUISITE: None.

LECTURE: 3 contact hours per week.

This course focuses on language and listening experiences in Spanish with an emphasis on the acquisition of basic communication skills appropriate for students teaching or planning to teach in early childhood bilingual-bicultural learning environments. Children's activities in Spanish music, literature, movement and dramatic play will be highlighted.

Associate Degree Applicable

**CD 050 A-Z
SPECIAL TOPICS ON PARENTING**

2 UNITS

PREREQUISITE: None.

**LECTURE: 1 contact hour per week and
LABORATORY: 3 contact hours per week.**

These courses cover relevant and current parenting issues such as children's developmental milestones; health needs; self-esteem; communication techniques; guidance protocol; and educational issues that emerge while working with children at the Child Development Center. Enrollment of the student's child(ren) at the Child Development Center is required.

Associate Degree Applicable

**CD 072
FAMILY CHILD CARE**

1 UNIT

PREREQUISITE: None.

LECTURE: 1 contact hour per week.

This course is an introduction to family child care businesses and licensing practices and a general overview of the growth and development of children.

Associate Degree Applicable

**CD 073
FAMILY CHILD CARE BUSINESS PRACTICES**

1 UNIT

PREREQUISITE: None.

LECTURE: 1 contact hour per week.

This course contains information needed by small child care businesses to make sound business decisions and raise the level of professionalism in the family child care field. Providers learn to design effective forms, policies and contracts; keep essential records and market their business.

Associate Degree Applicable

**CD 074
FAMILY CHILD CARE CHILDREN'S PROGRAMS**

1 UNIT

PREREQUISITE: None.

DEPARTMENTAL ADVISORY: CD 072.

LECTURE: 1 contact hour per week.

This course covers strategies for planning a child's day and organizing the environment in family day care settings. It includes safety and health issues, creating indoor and outdoor environments, guiding cognitive and physical development, and promoting social and communication skills.

Associate Degree Applicable

**CD 098
CHILD DEVELOPMENT WORK EXPERIENCE**

1-4 UNITS

PREREQUISITE: None.

Supervised training, in the form of on the job employment that will enhance the student's knowledge in the selected field of study. 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 098 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. (Formerly CD 198)

Associate Degree Applicable

**CD 100
INTRODUCTION TO CHILD DEVELOPMENT**

3 UNITS

PREREQUISITE: None.

LECTURE: 3 contact hours per week.

Introduction to the field of children's studies designed to familiarize students with the broad aspects of the profession, philosophy and principles of caring for children in a variety of settings.

Associate Degree Applicable

Course credit transfers to CSU.

**CD 101
PARENT-CHILD INTERACTION**

3 UNITS

PREREQUISITE: None.

LECTURE: 3 contact hours per week.

Course covers general concepts, goals and strategies of parenting through the life span in varying life circumstances and diverse family types. Emphasis is placed on establishing and maintaining close emotional relationships through bonding, attachment, and effective communication techniques with children at all developmental stages. The importance of effective guidance skills, shaping and modifying children's behavior is also explored.

Associate Degree Applicable

Course credit transfers to CSU.

**CD 105
CHILD GROWTH AND DEVELOPMENT**

3 UNITS

PREREQUISITE: None.

DEPARTMENTAL ADVISORY: ENGL 015

LECTURE: 3 contact hours per week.

This course is a study of the growth and development of children from the prenatal period through adolescence with an emphasis on the physical, cognitive, social and emotional needs of children. Students will gain practical experience observing and recording children's behavior.

Associate Degree Applicable

*Course credit transfers to CSU and *UC.*

**CD 105H
CHILD GROWTH AND DEVELOPMENT – HONORS**

3 UNITS

DEPARTMENTAL ADVISORY: ENGL 015

PREREQUISITE: None.

LECTURE: 3 contact hours per week.

This course is a study of the growth and development of children from the prenatal period through adolescence with an emphasis on the physical, cognitive, social and emotional needs of children. Students will gain practical experience observing and recording children's behavior. **This course is intended for students in the Honors Program but is open to all students who desire more challenging course work.**

Associate Degree Applicable

*Course credit transfers to CSU and *UC.*

CD 111 **3 UNITS**
OBSERVATION AND ASSESSMENT IN CHILD DEVELOPMENT
PREREQUISITE/COREQUISITE: CD 105 or CD 105H.
LECTURE: 2 contact hours per week and LABORATORY: 3 contact hours per week.
This course focuses on the appropriate use of assessment and observation strategies to document development, growth, play and learning to join with families and professionals in promoting children's success. Recording strategies, rating systems, portfolios, and multiple assessment tools are explored.
Associate Degree Applicable
Course credit transfers to CSU.

CD 113 **3 UNITS**
PRINCIPLES AND PRACTICES OF TEACHING CHILDREN
PREREQUISITE: None
LECTURE: 3 contact hours per week.
This course is an examination of underlying theoretical principles of developmentally appropriate practices applied to programs, environments, emphasizing the key role of relationships, constructive adult-child interactions, and teaching strategies in supporting physical, social, creative and intellectual development of all children. This course includes a review of historical roots of early childhood programs and the evolution of the professional practices promoting advocacy, ethics and professional identity.
Applicable to Associate Degree
Course credit transfers to CSU.

CD 114 **3 UNITS**
INTRODUCTION TO CURRICULUM
PREREQUISITE: None
LECTURE: 3 contact hours per week.
This course presents an overview of knowledge and skills related to providing appropriate curriculum and environments for young children from birth to age six. Students will examine a teacher's role in supporting development and fostering the joy of learning for all young children using observation and assessment strategies emphasizing the essential role of play. An overview of content areas will include but not be limited to: Language and literacy, social and emotional learning, sensory learning, art and creativity, math and science.
Applicable to Associate Degree
Course credit transfers to CSU.

CD 115 **3 UNITS**
HEALTH, SAFETY AND NUTRITION FOR YOUNG CHILDREN
PREREQUISITE: None
LECTURE: 3 contact hours per week.
This course concentrates on the essential aspects of the health, safety and nutritional concerns for children in early education programs. It examines preventive health care policies and basic care procedures; safety measures for secure, high quality environments and educational experiences; and it underscores children's nutritional needs for optimal physical and cognitive development.
Applicable to Associate Degree
Course credit transfers to CSU.

CD 116 **1 UNIT**
PEDIATRIC CPR, FIRST AID AND SAFETY
PREREQUISITE: None.
LECTURE: 1.5 contact hours per week and LABORATORY: 1.5 contact hours per week.
Course includes 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.)
Applicable to Associate Degree
Course credit transfers to CSU for elective credit only.

CD 126 **3 UNITS**
CHILD, FAMILY AND THE COMMUNITY
PREREQUISITE: None.
DEPARTMENTAL ADVISORY: CD 105 or CD 105H.
LECTURE: 3 contact hours per week.
This course examines the effects of the family and the community on a child's development. Topics include the interactions among children, family, school, peers, media and community with an emphasis on ethnic diversity, cultural diversity, social class, disabilities, gender roles and their relationship to family behavior, values, morals and attitudes. Research and reviewing community resources relating to education, health and welfare are also highlighted.
Associate Degree Applicable
Course credit transfers to CSU and UC.

CD 127 **3 UNITS**
GUIDANCE OF CHILDREN
PREREQUISITE: None
LECTURE: 3 contact hours per week.
This course presents a developmental approach to the guidance and discipline of children. Effective guidance theories and methods are presented for teachers and professionals working with children, including children with special needs. Effective communication methods for early childhood educators working with children and their parents will be emphasized.
Associate Degree Applicable
Course credit transfers to CSU.

CD 130 **3 UNITS**
CREATIVE MUSIC AND MOVEMENT FOR CHILDREN
PREREQUISITE: None.
LECTURE: 3 contact hours per week.
This course will explore the importance of music and movement in the development of the children ages two through eight. Because children's physical and motor maturation influence all other aspects of development this course focuses on planning for motor skill progression through creative and teacher-guided movement. There is equal emphasis on developmentally appropriate musical activities, as well as rhythmic experiences with musical instruments and creative props.
Applicable to Associate Degree
Course credit transfers to CSU.

CD 133
CREATIVE SCIENCE AND MATH ACTIVITIES FOR CHILDREN 3 UNITS

PREREQUISITE: None.

LECTURE: 3 contact hours per week.

This course focuses on planning and implementing creative and developmentally appropriate science and math activities for young children. Content includes life science, physical science, and Earth science, creation of scientific environment in the classroom, scientific concepts and the science process skills (observing, comparing, measuring, classifying and predicting), as well as, the basic math concepts (classifying, ordering, seriation, patterning, number sense and counting) and how to create a math environment.

Associate Degree Applicable

Course credit transfers to CSU for elective credit only.

CD 134
LANGUAGE, LISTENING AND LITERATURE FOR CHILDREN 3 UNITS

PREREQUISITE: CD 105 or CD 105H.

LECTURE: 3 contact hours per week.

This course emphasizes the process of language acquisition in children and techniques and experiences which promote language development and listening skills. It includes the examination of children's literature; teaching strategies for reading picture books to children; presenting poetry; flannel board activities; puppetry and storytelling in the classroom for children ages two through eight.

Associate Degree Applicable

Course credit transfers to CSU for elective credit only.

CD 136
CREATIVE ART EXPERIENCES FOR CHILDREN 3 UNITS

PREREQUISITE: None.

LECTURE: 3 contact hours per week.

This course focuses on establishing an environment for young children that cultivates and nourishes creativity and their aesthetic sense. It includes the principles of creative development; instructional strategies; materials, tools and equipment in an art program; and developmentally appropriate activities and experiences which underscore the emotional, social, physical, and cognitive needs of children from two through eight years of age.

Applicable to Associate Degree

Course credit transfers to CSU for elective credit only.

CD 138
TEACHING IN A DIVERSE SOCIETY 3 UNITS

PREREQUISITE: None.

LECTURE: 3 contact hours per week.

This course is an examination of the development of social identities in diverse societies including theoretical and practical implications of oppression and privilege as they apply to young children, families, programs, classrooms and teaching. Various classroom strategies will be explored emphasizing culturally and linguistically appropriate anti-bias approaches supporting all children in becoming competent members of a diverse society. The course includes self-examination and reflection on issues related to social identity, stereotypes and bias, social and educational access, media and schooling.

Associate Degree Applicable

Course credit transfers to CSU for elective credit only.

CD 160
UNDERSTANDING SCHOOL-AGE CHILDREN 3 UNITS

PREREQUISITE: None.

LECTURE: 3 contact 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 for elective credit only.

CD 161
ACTIVITIES FOR SCHOOL-AGE CHILDREN 3 UNITS

PREREQUISITE: None.

LECTURE: 3 contact 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 for elective credit only.

CD 168
EARLY LITERACY FOR YOUNG CHILDREN 3 UNITS

PREREQUISITE: CD 105 or CD 105H.

LECTURE: 3 contact hours per week.

The study of the principles and developmentally appropriate practices for providing children early literacy skills necessary for a strong foundation for conventional reading and writing. The course will address how to create an environment and curriculum to promote and encourage early literacy beginning at birth through age five.

Associate Degree Applicable

Course credit transfers to CSU for elective credit only.

CD 185
INFANT/TODDLER GROWTH AND DEVELOPMENT 3 UNITS

PREREQUISITE: None.

LECTURE: 3 contact hours per week.

This course explores the sensory, cognitive and emotional development of children from birth to age three. It fulfills the California licensing requirements for Infant Center personnel and includes infant/toddler curriculum, record keeping, communication with parents, and daily activity plans.

Associate Degree Applicable

Course credit transfers to CSU.

CD 186
INFANT AND TODDLER CURRICULUM 3 UNITS

PREREQUISITE: None.

LECTURE: 3 contact hours per week.

A survey of program and activity planning for infants and toddlers child care programs, emphasizing curriculum and good practice specific to infants, toddlers and two-year-old children.

Applicable to Associate Degree

Course credit transfers to CSU for elective credit only.

CD 205
**CHILD DEVELOPMENT PRACTICUM/
FIELD EXPERIENCE** 4 UNITS
PREREQUISITE: CD 105 or CD 105H.
DEPARTMENTAL ADVISORY: CD 114.
LECTURE: 1 contact hour per week and
LABORATORY: 9 contact hours per week.

This course is a demonstration of developmentally appropriate early childhood teaching competencies under guided supervision. Students will utilize practical classroom experiences to make connections between theory and practice, develop professional behaviors, and build a comprehensive understanding of children and families. Child centered, play-oriented approaches to teaching, learning and assessment; and knowledge of curriculum content areas will be emphasized as student teachers design, implement and evaluate experiences that promote positive development and learning for all young children.

Associate Degree Applicable
Course credit transfers to CSU.

CD 210
**INFANT AND TODDLER GROWTH AND
DEVELOPMENT LABORATORY** 4 UNITS
PREREQUISITE: CD 185.
DEPARTMENTAL ADVISORY: CD 105 or CD 105H.
LECTURE: 1 contact hour per week and
LABORATORY: 9 contact hours per week.

This supervised field experience course guides students to put learned theory into classroom practice and promotes the development of teaching competencies with infants and toddlers at the SBVC Child Development Infant Center or with an approved mentor teacher. The emphasis is on developing appropriate individual programs for infants and toddlers, professional ethics and cooperative relationships with staff, parents and children. (Formerly CD 210x2)

Associate Degree Applicable
Course credit transfers to CSU.

CD 215
EARLY INTERVENTION AND INCLUSION INTERNSHIP 4 UNITS

PREREQUISITE: CD 244.
COREQUISITE: CD 245.
LECTURE: 2 contact hours per week and
LABORATORY: 6 contact hours per week.

This course provides a supervised internship as an assistant in an early intervention or inclusion setting with children from birth through eight years. It explores the unique development and guidance of infants, toddlers and young children with disabilities and other special needs. Adaptation of curriculum, natural environments, identification and assessment are discussed.

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

CD 222
INDEPENDENT STUDY IN CHILD DEVELOPMENT 1-3 UNITS

PREREQUISITE: None.
DEPARTMENTAL ADVISORY: CD 105 or CD 105H.
INDEPENDENT STUDY: 3-9 contact hours per week.

Students with previous course work in Child Development may do assigned projects involving research and analysis of selected topics. This independent study is for students who are interested in furthering their knowledge of Child Development. Prior to registration, a written contract must be prepared. See instructor for details.

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

CD 244
CHILDREN WITH SPECIAL NEEDS 3 UNITS
PREREQUISITE: CD 105 or CD 105H.
LECTURE: 3 contact hours per week.

This course introduces the physical, social, emotional and intellectual characteristics of children with disabilities and other special needs. It covers teaching strategies that are sensitive to children with special needs and their families, as well as the legal requirements of educating children with disabilities or other special needs.

Associate Degree Applicable
Course credit transfers to CSU.

CD 245
EARLY INTERVENTION AND INCLUSION 3 UNITS

PREREQUISITE: CD 244.
COREQUISITE: CD 215.
LECTURE: 3 contact hours per week.

This course focuses on theories, research and practical teaching strategies in early intervention and early childhood special education. Students learn intervention techniques and strategies to work with children with disabilities and other special needs.

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

CD 270
THE MENTOR TEACHER/ADULT SUPERVISION 3 UNITS

PREREQUISITE: CD 105 or CD 105H.
DEPARTMENTAL ADVISORY: None.
LECTURE: 3 contact hours per week.

This course presents 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 for elective credit only.

CD 271

ADMINISTRATION OF EARLY CHILDHOOD EDUCATION PROGRAMS 3 UNITS

PREREQUISITES: CD 105 or CD 105H and CD 126.

LECTURE: 3 contact hours per week.

This course covers the basic principles for organizing and administering an early childhood education program. Specific topics include determining community need, site development, staffing, budget and fiscal management, licensing laws and regulations, nutrition, health and safety issues, marketing, curriculum development and program philosophy. This class meets state requirements for supervision of Title 22 preschool programs and the Child Development Matrix for Master Teacher, Site Supervisor and Program Director.

Associate Degree Applicable

Course credit transfers to CSU for elective credit only.

CD 272

ADVANCED ADMINISTRATION OF EARLY CHILDHOOD EDUCATION PROGRAMS 3 UNITS

PREREQUISITE: CD 105 or CD 105H and CD 126.

DEPARTMENTAL ADVISORY: CD 271.

LECTURE: 3 contact hours per week.

This course addresses advanced administrative skills, knowledge and techniques needed to organize and operate a child development facility. Emphasis will be on principle-centered leadership, staffing and staff development opportunities, personnel policies, problem solving techniques, regulatory laws, funding opportunities, budget and fiscal management, and working with a board, parents, volunteers and the community. This class meets state requirements for supervision of Title 22 preschool programs and the Child Development Matrix for Master Teachers.

Associate Degree Applicable

Course credit transfers to CSU for elective credit only.

CD 293

ELEMENTARY LABORATORY: INTRODUCTION TO EARLY FIELD EXPERIENCE 3 UNITS

PREREQUISITE: EDU 290.

LECTURE: 2 contact hours per week and

LABORATORY: 2 contact 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 295A-Z

SPECIAL TOPICS IN CHILD DEVELOPMENT .5-3 UNITS

PREREQUISITE: None.

LECTURE: 8-54 contact hours per semester or

LABORATORY: 27-162 contact hours per semester.

Special Topics in Child Development covers selected subject matters that are current and relevant in the field of child development. Possible topics include Emergent Curriculum, Ethics, Early Literacy, Children and Conflict, Nutrition, Childhood Obesity, Early Intervention, Dramatic Play, Child Abuse, Brain Development and Importance of Play.

Associate Degree Applicable

Course credit transfers to CSU for elective credit only.

COMPUTER INFORMATION TECHNOLOGY

DIVISION: Mathematics, Business and Computer Technology
DIVISION DEAN: Haragewen Kinde, Ed.D.
FACULTY CHAIR: Roger Powell, M.S.
Business 200E
(909) 384-8910
OTHER FACULTY: Maha Al-Husseini, M.A.
Mona Jackson, M.A.
Reginald Metu, Ed.D.
Mary Lou Vasquez, B.A.
ADMINISTRATIVE SECRETARY: Vivian Marquez
DIVISION OFFICE: Business 100
(909) 384-8520/8908
LIAISON COUNSELOR: Patty Jones, 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.

CIT – COMPUTER INFORMATION TECHNOLOGY ASSOCIATE OF ARTS DEGREE

To graduate with a degree in Computer Information Technology, students must complete the following required courses plus the general breadth requirements for the Associate Degree.

REQUIRED COURSES:		UNITS
CIT 101	Introduction to Computer Literacy	3
CIT 102	Advanced Computer Literacy	3
CIT 114	Spreadsheets: Excel	3
CIT 116	Database Management: Access	3
CIT 120	Internet	2
CIT 150	Office Applications Development	3
CIT 215	Database Management Systems	3
CIT 232	Data Communication and Networks	3
GENERAL EDUCATION:		37
TOTAL UNITS:		60

CIT 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.

CISCO CERTIFIED NETWORK ASSOCIATE CERTIFICATE

This certificate is designed to prepare students to take the Cisco Certified Network Associate certification examination. This course of study prepares students for entry level employment in the computer networking field. The certificate is part of the Cisco Networking Academy program and all instruction is provided by Cisco Certified Academy Instructors using Cisco certified curriculum. This is the first level of Cisco certification. This course of study is open to all students.

REQUIRED COURSES:	UNITS
CIT 091 Networking Fundamentals, Semester One (Cisco Networking Academy)	3
CIT 092 Basic Routing, Semester Two (Cisco Networking Academy)	3
CIT 093 Fundamentals of LANS, Local Area Networks, Semester Three (Cisco Networking Academy)	3
CIT 094 Fundamentals of WANS, Wide Area Networks, Semester Four (Cisco Networking Academy)	3

TOTAL UNITS: 12

CIT – MANAGEMENT INFORMATION SYSTEMS CERTIFICATE

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 020 Word Processing: Microsoft Word	3
CIT 222 Independent Study in CIT	1-3

CIT – OFFICE TECHNOLOGY ASSOCIATE OF ARTS DEGREE

To graduate with a degree in Office Technology, 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 016 Advanced Keyboarding	3
CIT 020 Word Processing: MS Word	3
CIT 060 General Office Procedures	2
CIT 101 Introduction to Computer Literacy	3
CIT 105 Windows	2
CIT 114 Spreadsheets: Excel	3
TOTAL UNITS:	19

CIT - OFFICE INFORMATION SYSTEMS CERTIFICATES

There are two Office Information Systems Certificates: Office/Clerical and Administrative Assistant.

1. OFFICE/CLERICAL CERTIFICATE

REQUIRED COURSES:	UNITS
BUSAD 039 Strategies for Successful Employment	3
CIT 013 Intermediate Keyboarding	3
CIT 020 Word Processing: Microsoft Word	3
CIT 025 Microsoft Office Outlook	2
CIT 031 Business English	3
CIT 033 Machine Calculations	3
CIT 060 General Office Procedures	3
CIT 100 Introduction to Personal Computers	3
CIT 114 Spreadsheets: Excel	3
CIT 118 Microsoft Powerpoint	3
CIT 120 Internet	2
CIT 198 CIT Work Experience	1-4
TOTAL UNITS:	32-35

2. ADMINISTRATIVE ASSISTANT CERTIFICATE Completion of Office/Clerical Certificate (31-34 units) plus the following:

REQUIRED COURSES:	UNITS
Office/Clerical Certificate courses	31-34
CIT 016 Advanced Keyboarding	3
CIT 021 Word Processing: Adv Microsoft Word	3
CIT 116 Database Management: Access	3
Total Units required for the Administrative Assistant Certificate	40-43

3. COMPUTER SPECIALIST CERTIFICATE

The Computer Specialist Certificate is designed to provide students with skills in advanced computer technology pertaining to a wide variety of industry specific and government agency career paths. Students are required to have a basic knowledge of reading and writing as well as have completed Math 095 or assessed at a higher level.

Career Outlook: The rapid spread of computers and information technology has generated a need for highly trained workers proficient in various job functions. These jobs are categorized under the heading of Computer Specialist in the EDD Labor Market Information Occupational Projection Report. The Computer Specialist designation constitutes 97 percent of the Computer and Mathematical Occupations category. There are many career paths available mainly because employers' needs are so varied.

REQUIRED COURSES:	UNITS
CIT 101 Introduction to Computer Literacy	3
CIT 102 Advanced Computer Literacy	3
CIT 114 Spreadsheets: Excel	3
CIT 116 Database Management: Access	3
CIT 150 Office Applications Development	3
CIT 215 Database Management Systems	3
CIT 232 Data Communications and Networks	3
MATH 095 Intermediate Algebra	4
Select two courses from the following:	UNITS
CIT 080 Inside the Personal Computer	3
CIT 091 Networking Fundamentals Semester I (Cisco Networking Academy)	3
CS 110 Fundamentals of Computer Science	3
CS 120 Introduction to Visual Basic.NET	4
CS 190 Programming in C++	4
CS 220 Advanced Visual Basic.NET Programming	4
TOTAL UNITS:	31 - 33

(Math 095 is required unless student is assessed at a higher level.)

COURSES OFFERED BY THE DEPARTMENT OF COMPUTER INFORMATION TECHNOLOGY:

CIT 008
BEGINNING KEYBOARDING, PART I 1.5 UNITS
PREREQUISITE: None.
LECTURE: 1 contact hour per week and
LABORATORY: 1.5 contact hours per week.
 This course provides keyboard mastery and proper techniques leading to maximum skill in typing. Use of speed and accuracy drills designed to develop a keyboarding speed of at least 18 NWPM (Net 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 contact hour per week and
LABORATORY: 1.5 contact hours per week.
 Instruction and practice in keyboarding various styles of reports, letters, and memos. 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 contact hours per week and
LABORATORY: 3 contact 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 contact hours per week and
LABORATORY: 3 contact 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 contact hours per week and
LABORATORY: 3 contact hours per week.
 This is a comprehensive course in the development and maintenance of a database. It provides a working knowledge of designing a database that includes: 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. The course emphasis is on developing a practical ability to use a database in a Windows environment with full graphical user interface functionality.
Associate Degree Applicable

CIT 020
WORD PROCESSING: MICROSOFT WORD 3 UNITS
PREREQUISITE: None.
DEPARTMENTAL ADVISORY: CIT 010 or CIT 009.
LECTURE: 3 contact hours per week.
 This course is an introduction to word processing and the creation of professional quality documents using Microsoft Word software.
Associate Degree Applicable

CIT 021
WORD PROCESSING: ADVANCED MICROSOFT WORD 3 UNITS

PREREQUISITE: CIT 020.

LECTURE: 3 contact hours per week.

This course focuses on the production of professional quality documents using Microsoft Word advanced features: mail merge, sorting, numbering, bullets, symbols, headers and footers, group activities, quick parts, themes and styles, references, tables, forms, and prepares students for Microsoft Certified Application Specialist exam.

Associate Degree Applicable

CIT 025
MICROSOFT OFFICE OUTLOOK 2 UNITS

PREREQUISITE: None.

LECTURE: 2 contact hours per week.

This course is an introduction to a personal information management program that helps organize a busy schedule. Students will learn how to track schedules, organize meetings, create e-mail messages, share information and data within workgroups, and maintain contact lists.

Associate Degree Applicable

CIT 030
RECORDS AND DATABASE MANAGEMENT 3 UNITS

PREREQUISITE: None.

LECTURE: 3 contact 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 contact 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 contact hours per week and
LABORATORY: 3 contact 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 contact hours per week and
LABORATORY: 3 contact 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 contact 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 045
MEDICAL INSURANCE FORMS 3 UNITS

PREREQUISITE: None.

DEPARTMENTAL ADVISORIES: CIT 010 and CIT 044.

LECTURE: 3 contact 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 contact 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 060
GENERAL OFFICE PROCEDURES 2 UNITS

PREREQUISITES: CIT 013, CIT 020, CIT 031 and CIT 100.

DEPARTMENTAL ADVISORY: ENGL 914.

LECTURE: 1 contact hour per week and
LABORATORY: 3 contact hours per week.

This course offers training in essential skills necessary for general office employment and on-the-job performance. Students participate in office simulations that integrate software techniques, written and verbal communication skills, email, time management, and human relations skills with typical workplace activities, responsibilities, and general office routines.

Associate Degree Applicable

CIT 080
INSIDE THE PERSONAL COMPUTER 3 UNITS

PREREQUISITE: None.

LECTURE: 3 contact 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 081
INTRODUCTION TO OPERATING SYSTEMS – A+
3 UNITS

PREREQUISITES: None.

DEPARTMENTAL ADVISORIES: CIT 080 and CIT 105.

LECTURE: 2 contact hours per week and

LABORATORY: 3 contact hours per week.

Basic, hands-on instruction and practice with computer Operating Systems. Prepares the student to use, install, configure, upgrade, manage and troubleshoot Windows type Operating Systems. Topics include the function of major components of the Operating System Desktop; installation, configuration, and upgrade of Operating Systems in both a stand-alone and networked environment; and diagnosis and troubleshooting of Operating System errors. Prepares the student to take the CompTIA A+ Operating System Technologies certification exam. Recommended for students interested in pursuing a career as a computer technician or being able to resolve their own Windows technical problems.

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 contact hours per week and

LABORATORY: 3 contact 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
BASIC ROUTING SEMESTER TWO (CISCO
NETWORKING ACADEMY)
3 UNITS

PREREQUISITE: CIT 091.

LECTURE: 2 contact hours per week and

LABORATORY: 3 contact hours per week.

This course is the second course in a four course sequence preparing students to take the Cisco Certified Network Associate certification examination. The course gives students theoretical and hands-on practical experience with TCP/IP based internetwork routing including appropriate configurations of routers. Network design and operation for operational efficiency, scalability, robustness, security, and reliability are emphasized. Critical analysis of requirements and analytical troubleshooting skills are taught and practiced.

Associate Degree Applicable

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

PREREQUISITE: CIT 091.

LECTURE: 2 contact hours per week and

LABORATORY: 3 contact hours per week.

This course is designed to provide students with classroom and laboratory experience in configuring routers, switches, and Wireless Access Points for various industry standard protocols. Includes LAN design fundamentals, Virtual LANs and Virtual Trunking Protocol. Equipment is configured to handle standard security issues as well as additional security concerns that are inherent with wireless access.

Associate Degree Applicable

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

PREREQUISITE: CIT 091.

LECTURE: 2 contact hours per week and

LABORATORY: 3 contact hours per week.

The fourth semester of the Cisco Academy program provides students with classroom and laboratory experience with Wide Area Networks (WANs) and network security. WAN design, configuration, installation and management topics are included. Security issue relating to WAN access including user access control, packet and protocol filtering, and security policies are also covered.

Associate Degree Applicable

CIT 100
INTRODUCTION TO PERSONAL COMPUTERS
3 UNITS

PREREQUISITE: None.

LECTURE: 3 contact hours per week.

A survey course for the use of software tools such as word processing, spreadsheets, graphics, presentation and database using Microsoft Office.

Associate Degree Applicable

Course credit transfers to CSU.

CIT 101
INTRODUCTION TO COMPUTER LITERACY
3 UNITS

PREREQUISITE: None.

DEPARTMENTAL ADVISORY: CIT 008 or CIT 009 or CIT 010.

LECTURE: 3 contact hours per week.

This course is an introduction to fundamental computer concepts. It provides the skills to create beginning word processing, spreadsheet, database, presentation, and personal information management documents.

Associate Degree Applicable

*Course credit transfers to CSU and *UC.*

CIT 102
ADVANCED COMPUTER LITERACY
3 UNITS

PREREQUISITE: CIT 101.

LECTURE: 3 contact hours per week.

This course utilizes the complex fundamentals of hardware computer concepts and software applications. It provides the skills to create advanced word processing documents, spreadsheets, databases, and presentations.

Associate Degree Applicable

Course credit transfers to CSU for elective credit only.

CIT 105
INTRODUCTION TO WINDOWS 2 UNITS
PREREQUISITE: None.
LECTURE: 1 contact hour per week and
LABORATORY: 3 contact hours per week.
This course is an introduction to the computer operating system that simplifies the process of working with documents and applications. It will provide the necessary background to understand the graphical user interface of the most widely used operating system.
Associate Degree Applicable
Course credit transfers to CSU for elective credit only.

CIT 114
SPREADSHEETS: EXCEL 3 UNITS
PREREQUISITE: None.
DEPARTMENTAL ADVISORY: CIT 100 or CIT 101.
LECTURE: 3 contact 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 contact 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 contact hours per week.
This course provides an introduction to a presentation graphics program for those who plan to make effective and compelling presentations. Instructions include 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 contact hour per week and
LABORATORY: 3 contact hours per week.
This course provides the basics of the Internet using current technology browser software. The course includes the effective use of web search portals, online collaboration software, and implications of security, privacy and ethical usage.
Associate Degree Applicable
Course credit transfers to CSU.

CIT 122
WEB PUBLISHING 3 UNITS
PREREQUISITE: None.
DEPARTMENTAL ADVISORY: CIT 101.
LECTURE: 3 contact hours per week.
An introduction to Web Page design using hypertext markup language (HTML) and web design software.
Associate Degree Applicable
Course credit transfers to CSU.

CIT 126
COMPUTER GRAPHICS 3 UNITS
PREREQUISITE: CIT 101.
LECTURE: 3 contact 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 for elective credit only.

CIT 144
MEDICAL TERMINOLOGY 3 UNITS
PREREQUISITE: None.
DEPARTMENTAL ADVISORY: ENGL 015
LECTURE: 3 contact hours per week.
The course covers the origin, usage, spelling, pronunciation, and meaning of terminology used to describe the structures of the human body, as well as therapeutic and diagnostic procedures. It is a course for students who are interested in pursuing health occupations such as medical office occupations, nursing, radiological technology, and respiratory care. (Formerly CIT 044)
Associate Degree Applicable
Course credit transfers to CSU.

CIT 150
OFFICE APPLICATIONS DEVELOPMENT 3 UNITS
PREREQUISITE: CIT 100 or CIT 101.
DEPARTMENTAL ADVISORY: CIT 102.
LECTURE: 2 contact hours per week and
LABORATORY: 3 contact hours per week.
This course is an introduction to Visual Basic for Applications, Microsoft's built-in application programming language for Microsoft Office applications. Topics include: programming basics, automated formatting of Office documents, and design and construction of customized event-driven screens for Microsoft Office applications.
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 contact 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 215
DATABASE MANAGEMENT SYSTEMS 3 UNITS**

PREREQUISITE: CIT 101.

LECTURE: 3 contact 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.

INDEPENDENT STUDY: 3-9 contact 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 contact 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 contact 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: Mathematics, Business and
Computer Technology
DIVISION DEAN: Haragewen Kinde, Ed.D.
FACULTY CHAIR: Roger Powell, M.S.
Business 200E
(909) 384-8910
ADMINISTRATIVE SECRETARY: Vivian Marquez
DIVISION OFFICE: Business 100
(909) 384-8520/8908
LIAISON COUNSELOR: Denise McCrary, Ed.D.
(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.

**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 25-26 units listed below in addition to general education requirements.

REQUIRED COURSES:		UNITS
CS 110	Fundamentals of Computer Science	3
CS 190	Programming in C++	4
CS 265	Data Structures	3
PHYSIC 200	General Physics I	6
PHYSIC 201	General Physics II	6

SELECT ONE OF THE FOLLOWING COURSES:		3-4
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:		UNITS
CS 110	Fundamentals of Computer Science	3
CIT 100	Introduction to Personal Computers	3
CS 120	Introduction to Visual Basic.NET	4
CS 220	Visual Basic.NET Programming II	3
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 098
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 knowledge in the selected field of study. 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 098 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. (Formerly CS 198)

Associate Degree Applicable

**CS 110
FUNDAMENTALS OF COMPUTER SCIENCE 3 UNITS
PREREQUISITE: MATH 095.**

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

**CS 120
INTRODUCTION TO VISUAL BASIC.NET 4 UNITS
PREREQUISITE: None.**

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

**CS 130
APPLIED COMPUTER LOGIC 3 UNITS
PREREQUISITE: CS 110.**

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

**CS 190
PROGRAMMING IN C++ 4 UNITS
PREREQUISITE: CS 110.**

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

This course is an introduction to the object-oriented language, C++. Topics include object-oriented design, program logic structures, problem 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.

**CS 215
PROGRAMMING WITH JAVA 4 UNITS
PREREQUISITE: CS 110.**

**LECTURE: 3 contact hours per week and
LABORATORY: 3 contact 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 220
ADVANCED VISUAL BASIC.NET PROGRAMMING 4 UNITS**

PREREQUISITE: CS 120.

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

**CS 222
SPECIAL PROBLEMS IN COMPUTER SCIENCE I 1 UNIT**

PREREQUISITE: CS 110.

INDEPENDENT STUDY: 3 contact 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 contact 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 contact hours per week and
LABORATORY: 3 contact 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.

Associate Degree Applicable

Course credit transfers to CSU and UC.

**COOPERATIVE
WORK EXPERIENCE**
See WORK EXPERIENCE (General)

CORRECTIONS

DIVISION: Criminal Justice
 ADMINISTRATIVE DEAN: Gloria M. Fisher, J.D.
 FACULTY CHAIR: Patrick Buckley, B.S.
 ADMINISTRATIVE SECRETARY: Laura Cross
 DIVISION OFFICE: NH 139
 (909) 384-4431
 SECRETARY: Amanda Moody
 (909) 384-4431
 LIAISON COUNSELOR: Frank Dunn, M.A.
 (909) 384-4404

The Corrections Department strives to provide our students with the legal, ethical and educational background necessary to pursue a career in a corrections-related field.

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

CORRECTIONS CERTIFICATE

This certificate is designed for persons considering a career as a Correctional Officer, Youth Correctional Counselor, Jailer, or those already employed seeking advancement in their career. The corrections systems specialize in the punishment and incarceration process as well as rehabilitation of the offender. This certificate is designed to provide students with the fundamentals of the corrections systems, the legal aspects of corrections, control and supervision in corrections, correctional interviewing and counseling, and the probation and parole concepts in corrections.

ANY FELONY OR DOMESTIC VIOLENCE CONVICTION, OR ANY SIGNIFICANT PRIOR OR CURRENT DRUG USE WILL DISQUALIFY MOST PEOPLE SEEKING JOBS IN LAW ENFORCEMENT, CORRECTIONS, PROBATION/PAROLE, OR FORENSICS.

REQUIRED COURSES:	UNITS
CORREC 101 Introduction to Corrections	3
CORREC 102 Correctional Interviewing and Counseling	3
CORREC 103 Gangs and Corrections	3
CORREC 104 Control and Supervision in Corrections	3
CORREC 105 Legal Aspects of Corrections	3
CORREC 106 Probation and Parole	3
TOTAL UNITS:	18

COURSES OFFERED BY THE DEPARTMENT OF CORRECTIONS:

Corrections courses are not offered every semester. Please refer to the college class schedule for class offerings.

**CORREC 101
INTRODUCTION TO CORRECTIONS 3 UNITS**

PREREQUISITE: None.
LECTURE: 3 contact 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 contact hours per week.
 This course of study is an overview of the techniques in counseling and interviewing available to practitioners in corrections; Which includes the use of appropriate techniques and theories in confidence building which the correctional employee may use in client interviews and counseling.
Associate Degree Applicable
Course credit transfers to CSU.

**CORREC 103
GANGS AND CORRECTIONS 3 UNITS**

PREREQUISITE: None.
LECTURE: 3 contact hours per week.
 This course is designed to provide students with a base of knowledge as it relates to the impact of gangs in both correctional and community settings. It includes a review of the types of gangs, history, and criminal activities associated with gangs.
Associate Degree Applicable
Course credit transfers to CSU.

**CORREC 104
CONTROL AND SUPERVISION IN CORRECTIONS 3 UNITS**

PREREQUISITE: None.
LECTURE: 3 contact hours per week.
 This course will emphasize local, state, and federal institutions in 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 correctional officers 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 contact hours per week.
 The historical framework, concepts, and precedents that guide correctional practice. Course material will present a broader perspective of the correctional environment such as the civil rights of prisoners, responsibilities and liabilities of correctional officials, the courts, and police.
Associate Degree Applicable
Course credit transfers to CSU.

**CORREC 106
PROBATION AND PAROLE 3 UNITS**

PREREQUISITE: None.

LECTURE: 3 contact hours per week.

This course is a study of the historical and contemporary view of the application of probation and parole procedures in the criminal justice system. Community corrections as applied to probation and parole, probation as an entity of the courts and parole as an entity of corrections compose the main focus of this course. This course material will broaden the student's concept of community corrections and the rights and liabilities of a person on probation or parole.

*Associate Degree Applicable
Course credit transfers to CSU.*

CRIMINAL JUSTICE

(see also POLICE SCIENCE)

DIVISION: Criminal Justice
 ADMINISTRATIVE DEAN: Gloria Fisher, J.D.
 ADMINISTRATIVE SECRETARY: Laura Cross
 CAMPUS OFFICE: NH 139
 (909) 384-8538
 SECRETARY: Amanda Moody
 (909) 384-4431
 GLEN HELEN OFFICE: Sheriff's Training Center
 (909) 473-2695
 LIAISON COUNSELOR: Frank Dunn, M.A.
 (909) 384-4404

The Criminal Justice Department courses are designed to meet the needs and interests of 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).

CRIMINAL JUSTICE 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.

CRIME SCENE INVESTIGATION CERTIFICATE

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

REQUIRED COURES:	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:**

*Criminal Justice courses are not offered every semester.
Please refer to the college class schedule for class offerings.*

**CRMJUS 009
TACTICAL COMMUNICATION .25 UNIT**

PREREQUISITE: None.

LABORATORY: 8 contact hours per semester.

This course provides a thorough overview in diffusing conflict when encountering hostile, uncooperative, or emotionally upset people and is designed to modify contacts into positive experiences and reduce the potential for complaints or the escalation into higher levels of force.

Associate Degree Applicable

**CRMJUS 015
CAMPUS SECURITY 1.50 UNITS**

PREREQUISITE: None.

LECTURE: 24 contact hours per semester.

This course is directed toward the training needs 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. This is a standardized curriculum from the California Department of Consumer Affairs, Bureau of Security and Investigative Services (BSIS) satisfying Senate Bill 1626 mandate.

Associate Degree Applicable

**CRMJUS 016
SCHOOL POLICE OFFICER 2 UNITS**

PREREQUISITES: POLICE 002, POLICE 100, POLICE 101, POLICE102 and POLICE 103.

LECTURE: 32 contact hours per semester.

This course is directed towards the training needs of the peace officers employed in elementary schools, secondary schools and community colleges and is a school police course which meets the requirements of SB1627 and Commission on 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, and disasters/emergencies.

Associate Degree Applicable

**CRMJUS 018
COMMUNITY ORIENTED POLICING 1.50 UNITS**

PREREQUISITE: None.

LECTURE: 24 contact 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 contact hours per semester and
LABORATORY: 2 contact 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 031
PUBLIC SAFETY INTERNSHIP ACADEMY MODULE 4A
4.75 UNITS

PREREQUISITE: CRMJUS 030.

LECTURE: 62 contact hours per semester and
LABORATORY: 36 contact 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 036
BASIC INVESTIGATIVE TRACKING .50 UNIT
PREREQUISITE: None.

LECTURE: 8 contact hours per semester and
LABORATORY: 8 contact 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 058
PENAL CODE 832 3.50 UNITS
PREREQUISITE: None.

LECTURE: 50 contact hours per semester and
LABORATORY: 26 contact hours per semester.

This course will familiarize students with training in various Law Enforcement functions. These functions include but are not limited to the history, professionalism, and ethics of Law Enforcement, the criminal justice system, criminal law, laws of arrest, search and seizure, use of force, firearms, and crimes against the justice system. **LIMITATIONS ON ENROLLMENT: REGISTRATION IS LIMITED TO STUDENTS WHO HAVE SUCCESSFULLY COMPLETED THE FOLLOWING STATE SCREENING REQUIREMENTS: POSSESSION OF A VALID CALIFORNIA DRIVER'S LICENSE WITHOUT RESTRICTIONS OTHER THAN REQUIRED EYEGLASSES OR CONTACT LENSES AND POSSESSION OF A CURRENT LETTER OF CLEARANCE ISSUED BY THE CALIFORNIA DEPARTMENT OF JUSTICE THAT CERTIFIES THE RIGHT TO BE IN POSSESSION OF A FIREARM.**

Associate Degree Applicable

CRMJUS 059
BASIC LAW ENFORCEMENT ACADEMY-LEVEL I OF
THE MODULAR FORMAT 18.50 UNITS
PREREQUISITE: CRMJUS 060.

LECTURE: 225 contact hours per semester and
LABORATORY: 215 contact 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 061.

LECTURE: 203 contact hours per semester and
LABORATORY: 73 contact hours per semester.

This course satisfies Peace Officer Standards and Training (POST) requirements for Level II reserve peace officer certification. This course covers but is not limited to: victimology, crimes against persons, property and the justice system, laws of arrest, evidence and search and seizure, use of force, defensive tactics, patrol procedures, firearms and chemical agents, weapons violations, crimes in progress, and cultural diversity. **THIS COURSE IS LIMITED TO STUDENTS WHO HAVE SUCCESSFULLY COMPLETED THE FOLLOWING STATE SCREENING REQUIREMENTS: POSSESSION OF A VALID CALIFORNIA DRIVER'S LICENSE WITHOUT RESTRICTIONS, OTHER THAN REQUIRED EYEGLASSES OR CONTACT LENSES, AND POSSESSION OF A CURRENT LETTER OF CLEARANCE ISSUED BY THE CALIFORNIA DEPARTMENT OF JUSTICE THAT CERTIFIES THE RIGHT TO BE IN POSSESSION OF A FIREARM.**

Associate Degree Applicable

CRMJUS 061
RESERVE LEVEL III OFFICER 7.5 UNITS
PREREQUISITE: None.

LECTURE: 81 contact hours per semester and
LABORATORY: 118 contact hours per semester.

This course satisfies Peace Officer Standards and Training (POST) requirements for Level III reserve peace officer certification. The PC 832 course is merged in this Level III course. Curriculum covers ethics and professionalism, history of law enforcement, the criminal justice system, defensive tactics, information systems, criminal law, crimes against persons and property, laws of arrest, firearms, driver awareness, first aid and CPR, custody, crimes in progress and report writing. **THIS COURSE IS LIMITED TO STUDENTS WHO HAVE SUCCESSFULLY MET STATE SCREENING REQUIREMENTS: POSSESSION OF A CALIFORNIA DRIVER'S LICENSE WITHOUT RESTRICTIONS, OTHER THAN REQUIRED EYEGLASSES OR CONTACT LENSES AND POSSESSION OF A CURRENT LETTER OF CLEARANCE ISSUED BY THE CALIFORNIA DEPARTMENT OF JUSTICE THAT CERTIFIES THE RIGHT TO BE IN POSSESSION OF A FIREARM.**

Associate Degree Applicable

CRMJUS 065
SIGN LANGUAGE FOR EMERGENCY PERSONNEL 1 UNIT

PREREQUISITE: CRMJUS 058.

LECTURE: 12 contact hours per semester and
LABORATORY: 12 contact 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 contact hours per semester and
LABORATORY: 16 contact 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 068
LAW ENFORCEMENT RESPONSE TO THE MENTALLY ILL .25 UNIT

PREREQUISITE: CRMJUS 061.

LECTURE: 4 contact hours per semester and
LABORATORY: 4 contact hours per semester.

Students will acquire skills to facilitate communication with mentally ill and developmentally disabled members of the community. Students will be taught methods to de-escalate and control situations that have the potential for violence.

Associate Degree Applicable

CRMJUS 069
LIFETIME FITNESS AND COPING WITH STRESS .50 UNIT

PREREQUISITE: CRMJUS 058.

LECTURE: 8 contact 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 contact hours per semester and
LABORATORY: 30 contact 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 072x20
CIVIL UPDATE FOR DISPATCHERS .50 UNIT
PREREQUISITE: CRMJUS 070.

LECTURE: 6 contact hours per semester and
LABORATORY: 2 contact 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 075
CRITICAL INCIDENT FOR DISPATCHERS .25 UNIT
PREREQUISITE: CRMJUS 070.

LECTURE: 5 contact hours per semester and
LABORATORY: 3 contact 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 086
INTRODUCTION TO CRIME SCENE INVESTIGATION 2 UNITS

PREREQUISITE: None.

LECTURE: 24 contact hours per semester and
LABORATORY: 30 contact 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 contact hours per semester and
LABORATORY: 24 contact 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 contact hours per semester and
LABORATORY: 30 contact 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 contact hours per semester and
LABORATORY: 30 contact 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 contact hours per semester and
LABORATORY: 30 contact 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.

Associate Degree Applicable

CULINARY ARTS

DIVISION: Applied Technology,
 Transportation and Culinary Arts
 DIVISION DEAN, INTERIM: Kay Ragan, Ed.D.
 FACULTY CHAIR: Chef Stacy Meyer, M.A.
 Business 100B
 (909) 384-8913
 ADMINISTRATIVE SECRETARY: Cecile Smith
 DIVISION OFFICE: Technical 108
 (909) 384-8902
 LIAISON COUNSELOR: André Wooten, M.S.
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The Culinary Arts curriculum prepares students for careers in culinary arts, 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 planning to transfer to a four-year institution and major in Culinary Arts should consult with a counselor regarding the transfer process and lower division requirements.

CULINARY ARTS PROGRAM
ASSOCIATE OF ARTS DEGREE

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

REQUIRED COURSES:		UNITS
CULART 010X4	Culinary Arts Internship	8 - 22
CULART 101	Introduction to Culinary Arts	3
CULART 160	Introduction to Foods	3
CULART 161	Quantity Food Preparation	3
CULART 201	Culinary and Hospitality Management	3
CULART 225	Sanitation and Safety	3
CULART 235	Menu Planning Principles	3
CULART 240	Procurement, Purchasing and Selection	3
CULART 250	Food, Wine and Beverage Service Concepts	3
CULART 275	Food, Beverage and Labor Cost Control	3
FCS 162	Nutrition	3
BUSAD 100	Introduction to Business	3

Students must take CULART 010x4 for a minimum of 8 units.

RECOMMENDED COURSES:		UNITS
ACCT 100	Introduction to Accounting I	2
BUSCAL 050	Quantitative Methods in Business	3

TOTAL UNITS: 41 - 55

CULINARY ARTS 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.

CULINARY ARTS CERTIFICATE

The Culinary Arts Certificate is designed for students who are interested in entering middle-management positions within the Restaurant/Hospitality industry.

REQUIRED COURSES:		UNITS
CULART 101	Introduction to Culinary Arts	3
CULART 010X4	Culinary Arts Internship	8 - 22
CULART 160	Introduction to Foods	3
CULART 161	Quantity Food Preparation	3
CULART 201	Culinary and Hospitality Management	3
CULART 225	Sanitation and Safety	3
CULART 235	Menu Planning Principles	3
CULART 240	Procurement, Purchasing and Selection	3
CULART 250	Food, Wine and Beverage Service Concepts	3
CULART 275	Food, Beverage and Labor Cost Control	3
BUSAD 100	Introduction to Business	3
FCS 162	Nutrition	3

RECOMMENDED COURSES:		UNITS
ACCT 100	Introduction to Accounting I	2
BUSCAL 050	Quantitative Methods in Business	3

TOTAL UNITS: 41 - 55

Students are required to take CULART 010x4 for a minimum of 8 units.

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.

REQUIRED COURSES:		UNITS
CULART 010X4	Culinary Arts Internship	8 - 22
CULART 101	Introduction to Culinary Arts	3
CULART 161	Quantity Food Preparation	3
CULART 225	Sanitation and Safety	3
CULART 250	Food, Wine and Beverage Service Concepts	3
CULART 275	Food, Beverage and Labor Cost Control	3

TOTAL UNITS: 23 - 37

Students are required to take CULART 010x4 for a minimum of 8 units.

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
CULART 010X4	Culinary Arts Internship	5.5 - 6
CULART 020	Catering and Banquets I	5
CULART 030X2	Catering and Banquets II	2 - 5.5
CULART 040	Introduction to Baking	3.5
CULART 101	Introduction to Culinary Arts	3
CULART 160	Introduction to Foods	3
CULART 161	Quantity Food Preparation	3
CULART 225	Sanitation and Safety	3
CULART 240	Procurement, Purchasing and Selection	3

TOTAL UNITS: 31 - 35

Students must take CULART 010x4 for a minimum of 5.5 credits.

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
BUSAD 100	Introduction to Business	3
CULART 101	Introduction to Culinary Arts	3
CULART 160	Introduction to Foods	3
CULART 161	Quantity Food Preparation	3
CULART 201	Culinary and Hospitality Management	3
CULART 225	Sanitation and Safety	3
CULART 235	Menu Planning Principles	3
CULART 240	Procurement, Purchasing and Selection	3
CULART 250	Food, Wine and Beverage Service Concepts	3
CULART 275	Food, Beverage and Labor Cost Control	3

TOTAL UNITS: 30

**COURSES OFFERED BY THE DEPARTMENT OF
CULINARY ARTS:**

**CULART 010x4
CULINARY ARTS INTERNSHIP 2- 5.5 UNITS**

PREREQUISITE: None.
LABORATORY: 6-16.50 contact hours per week.

This course provides a supervised internship in the Culinary Arts Program's operational restaurant. The concentration will be on building basic preparation techniques, recipe standardization, time management and preparing meals for customers. This course can be taken four times. (Formerly RM 110x3)
Associate Degree Applicable.

**CULART 020
CATERING AND BANQUETS I 5 UNITS**

PREREQUISITE: None.
LECTURE: 2 contact hours per week and
LABORATORY: 9 contact hours per week.

This course covers catering and banquet techniques for serving 25 to 100 people. It includes developing a catering business that will work with clients to develop an event, including customizing a menu and calculating staffing needs for preparation, cooking, transporting, setting up, serving and cleaning up.
Associate Degree Applicable

**CULART 030x2
CATERING AND BANQUETS II 2-6 UNITS**

PREREQUISITE: CULART 020.
LABORATORY: 6 - 18 contact hours per week.

This course is classified as an intermediate course in catering and banquets. This course will include the management aspect of catering and banquet services, such as ordering, receiving, purchasing, staffing events, customer service, food presentation and catering set ups for 100 to 500 people. This course may be taken two times.
Associate Degree Applicable

**CULART 040
INTRODUCTION TO BAKING 3.5 UNITS**

PREREQUISITE: None.
LECTURE: 2 contact hours per week and
LABORATORY: 4.5 contact hours per week.

This basic baking course highlights baking techniques found in commercial kitchens with a focus on quick breads, cookies, cakes, pies and artisan breads.
Associate Degree Applicable

**CULART 098
CULINARY ARTS WORK EXPERIENCE 1-4 UNITS**

PREREQUISITE: None.
Supervised training, in the form of on the job employment that will enhance the student's knowledge in the selected field of study. 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 098 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. (Formerly RM 198)
Associate Degree Applicable

**CULART 101
INTRODUCTION TO CULINARY ARTS 3 UNITS**

PREREQUISITE: None.
LECTURE: 3 contact hours per week.

An overview of the food service and hospitality industries with an emphasis on career opportunities, customer service, and personal success strategies. Brief history, description and interrelationships of key industry segments emphasizing the application of technology, ethics, leadership, teams, critical thinking, and service standards for the restaurant and hotel-related business. (Formerly RM/FS 101)
Associate Degree Applicable
Course credit transfers to CSU.

**CULART 160
INTRODUCTION TO FOODS 3 UNITS**

PREREQUISITE: None.
LECTURE: 2 contact hours per week and
LABORATORY: 3 contact hours per week.

This course introduces food science principles and food preparation procedures and practices. The emphasis is on food safety and sanitation, ingredient functions and interactions, techniques and food presentation. This course is also offered as FCS 160. (Formerly RM 160)

**CULART 161
QUANTITY FOOD PREPARATION 3 UNITS**

PREREQUISITE: None.
LECTURE: 3 contact 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 FCS 161. (Formerly RM/FS 161)
Associate Degree Applicable
Course credit transfers to CSU.

**CULART 201
CULINARY AND HOSPITALITY MANAGEMENT 3 UNITS**

PREREQUISITE: None.
LECTURE: 3 contact hours per week.

This course highlights the effective management techniques of human resources as it applies to hotels, restaurants and other hospitality workplaces. It emphasizes personnel planning, recruitment, selection, training, performance management, coaching, counseling and discipline, delegation and decision making. (Formerly RM/FS 201)
Associate Degree Applicable
Course credit transfers to CSU.

**CULART 225
SANITATION AND SAFETY 3 UNITS**

PREREQUISITE: None.
DEPARTMENTAL ADVISORIES: CULART 160 or FCS 160.
LECTURE: 3 contact hours per week.

This course focuses on the sanitation and safety issues involved with handling food through the foodservice process. Topics include the prevention of foodborne illnesses; responsibilities of the foodservice manager and employees; the characteristics of a food-safe facility; food safety guidelines; and Hazard Analysis and Critical Control Point system (HACCP) and Serve Safe. This course is also offered as FCS 225. (Formerly RM/FS 225)
Associate Degree Applicable
Course credit transfers to CSU.

CULART 235**MENU PLANNING PRINCIPLES****3 UNITS****PREREQUISITE: None.****DEPARTMENTAL ADVISORY: CULART 101 or CULART 160.****LECTURE: 3 contact hours per week.**

This course presents the menu as the central influence on all foodservice functions. It focuses on the development of menus with an emphasis on the practical details of costing, planning, analyzing, purchasing and production, promotion and service. This course is also offered as FCS 235. (Formerly RM 235)

*Associate Degree Applicable**Course credit transfers to CSU as elective credit only.***CULART 240****PROCUREMENT, PURCHASING AND SELECTION****3 UNITS****PREREQUISITE: None.****DEPARTMENTAL ADVISORIES: CULART 160 or FCS 160 and CULART 235 or FCS 235.****LECTURE: 3 contact hours per week.**

This course covers purchasing policies, specifications, procedures and controls and their implementation in the procurement of quantity foods, merchandise and supplies. (Formerly RM/FS 240)

*Associate Degree Applicable**Course credit transfers to CSU as elective credit only.***CULART 250****FOOD, WINE AND BEVERAGE SERVICE CONCEPTS****3 UNITS****PREREQUISITE: None.****LECTURE: 3 contact hours per week.**

This course covers the psychology of service, dining room organization, serving styles, wine and beverage service, staffing and management; a thorough study of major wine grape varieties and world wide appellations where they are grown. (Formerly RM 250)

*Associate Degree Applicable**Course credit transfers to CSU.***CULART 275****FOOD, BEVERAGE AND LABOR COST CONTROL****3 UNITS****PREREQUISITE: CULART 235.****LECTURE: 3 contact hours per week.**

This course includes the analysis of food, beverage and labor cost controls. Areas covered include cost, volume, profit relationships, food cost determination, standard costs, forecasting, sales control, menu pricing, beverage and labor control, and break-even analysis. (Formerly RM 275)

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

DIVISION:

Arts and Humanities

DIVISION DEAN:

Kathryn Weiss, Ed.D.

FACULTY CHAIR:

Matie Scully, M.M.

NH 134

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ADMINISTRATIVE SECRETARY:

Linda Tymchek, M.A.

DIVISION OFFICE:

NH 223

(909) 384-8633

LIAISON COUNSELOR:

Laura Gomez, M.A.

(909) 384-4404

COURSES OFFERED BY THE DEPARTMENT OF DANCE:**DANCE 101x2****BEGINNING MODERN DANCE****2 UNITS****PREREQUISITE: None.****LABORATORY: 6 contact 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 contact 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 contact 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 contact 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 contact 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
BEGINNING TAP DANCE 2 UNITS
PREREQUISITE: None.

LECTURE: 1 contact hour per week and

LABORATORY: 3 contact hours per week.

This is a basic course of instruction in the art of tap dancing to include physical strengthening, rhythmic awareness, execution of basic tap dancing steps, floor exercises, vocabulary theatrical presentation of tap choreography, and an awareness of the audience requiring the element of acting.

Associate Degree Applicable

Course credit transfers to CSU and UC.

DANCE 114x4
DANCE REHEARSAL AND PERFORMANCE 4 UNITS

PREREQUISITE: None.

LECTURE: 2 contact hours per week and

LABORATORY: 6 contact 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 contact 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 contact hours per week and

LABORATORY: 2 contact 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 contact hours per week and

LABORATORY: 6 contact 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

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Transportation and Culinary Arts
 DIVISION DEAN, INTERIM: Kay Ragan, Ed.D.
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 OTHER FACULTY: Daniel Hook, A.S.
 DEPARTMENT OFFICE: 264 S. Leland Norton Way
 Suite A120, San Bernardino
 LIAISON COUNSELOR: Frank Dunn, M.A.
 (909) 384-4404

The Truck and Bus Technology (Diesel) program offers students high technology training and skills that may be utilized for immediate employment after certificate completion. Students will receive training in various subjects including brake and suspension, computer controlled engines, emphasis in electrical and heavy-duty 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.

TRUCK AND BUS TECHNOLOGY 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 019 Truck and Bus Heavy-Duty Electrical Systems	4
DIESEL 021 Diesel Engines - Heavy Duty	4
DIESEL 022 Heavy-Duty Truck Brakes	2
DIESEL 023 Heavy-Duty Truck Suspension and Steering	2
DIESEL 024X3 Advanced Heavy-Duty Diesel Engines	4
DIESEL 026X3 Computer Controlled Diesel Engines	4
DIESEL 028 Heavy-Duty Truck Preventive Maintenance Service	4
DIESEL 030 Advanced Heavy-Duty Truck Systems	4
MATH 942 Arithmetic or	3
Eligibility for Math 952 as determined by the SBVC assessment process	0 - 4
WELD023 Oxy-Acetylene Welding	3
WELD077X4 Continuous Wire Welding	1
TOTAL UNITS:	35 - 39

COURSES OFFERED BY THE DEPARTMENT OF DIESEL:

**DIESEL 019
TRUCK AND BUS HEAVY-DUTY
ELECTRICAL SYSTEMS** **4 UNITS**
PREREQUISITE: None.

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

This course covers basic principles of truck and bus heavy-duty electricity and electronics systems. Detail topics include batteries, charging, starting systems, and the use of a digital multi-meter for analysis and diagnosis of series, parallel, and series-parallel circuits.
Associate Degree Applicable

**DIESEL 020
DIESEL ENGINES – LIGHT DUTY** **4 UNITS**
PREREQUISITE: None.

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

This course covers theory and practical shop work in the repair, operation, and maintenance of light-duty diesel engines and fuel injection systems. Topic includes general troubleshooting and diagnostic testing.
Associate Degree Applicable

**DIESEL 021
DIESEL ENGINES-HEAVY DUTY** **4 UNITS**
PREREQUISITE: None.

**LECTURE: 3 contact hours per week and
LABORATORY: 3 contact 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 troubleshooting 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 contact hours per week and
LABORATORY: 1.5 contact hours per week.**

Theory and practical shop work in the construction, operation, 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 busses.
Associate Degree Applicable

**DIESEL 023
HEAVY-DUTY TRUCK SUSPENSION AND STEERING** **2 UNITS**

**PREREQUISITE: None.
LECTURE: 1.5 contact hours per week and
LABORATORY: 1.5 contact 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 024x3
ADVANCED HEAVY-DUTY DIESEL ENGINES 4 UNITS

PREREQUISITE: DIESEL 021.

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

This course covers theory and practical shop work in the repair, operation, and maintenance of various heavy-duty diesel engines. Topics include general troubleshooting and diagnostic testing of engine components and systems found in most engines from a variety of engine manufacturers. This course is an advanced engine rebuild class. This course may be taken three times. (Formerly DIESEL 024)

Associate Degree Applicable

DIESEL 026x3
COMPUTER CONTROLLED DIESEL ENGINES 4 UNITS

PREREQUISITE: DIESEL 019.

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

This course covers theory and practical shop work in the repair, operation, and maintenance of computer controlled diesel engines. Topics include general troubleshooting and diagnostics using assorted electronic and computerized test equipment on operable computer controlled diesel engines. This course may be taken three times. (Formerly DIESEL 026)

Associate Degree Applicable

DIESEL 028
HEAVY-DUTY TRUCK PREVENTIVE MAINTENANCE SERVICE 4 UNITS

PREREQUISITE: None.

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

Theory and practical shop work in maintenance and preventive maintenance service of heavy-duty truck and bus systems. Fundamentals of truck components and systems are explained as students perform routine tasks. 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 contact hours per week and
LABORATORY: 3 contact hours per week.

Advanced level theory and practical shop work in maintenance, air conditioning, ABS, computers, and operations of the heavy-duty truck and bus systems. Course is designed to provide students the needed skills and knowledge to perform advanced level labor tasks in the heavy-duty truck and bus service industry.

Associate Degree Applicable

DIESEL 034
INTRODUCTION TO HEAVY-DUTY COMPRESSED NATURAL GAS VEHICLE SYSTEMS 2 UNITS

PREREQUISITE: DIESEL 026.

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

This course provides theory and hands-on experience in the operation, service, inspection, and maintenance of compressed natural gas (CNG) vehicle systems. This course prepares students for the ASE Alternate Fuels Test (F-1).

Associate Degree Applicable

DIESEL 035
HEAVY-DUTY VEHICLE AUTOMATIC TRANSMISSIONS 2 UNITS

PREREQUISITE: None

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

This course provides theory and hands on experience with heavy and medium-duty automatic transmission operation, construction, service and overhaul procedures. The purpose of the class is to prepare the students to successfully troubleshoot and repair heavy and medium-duty transmissions.

Associate Degree Applicable

DRAFTING

See the Department of
ARCHITECTURE and ENVIRONMENTAL DESIGN

ECONOMICS

DIVISION: Social Sciences, Human Development and Physical Education
DIVISION DEAN: Corene Schwartz, Ed.D.
FACULTY CHAIR: Walt Chatfield, Ph.D.
NH 321
(909) 384-8652
OTHER FACULTY: James Dulgeroff, Ph.D.
ADMINISTRATIVE SECRETARY: Karen Deck
DIVISION OFFICE: NH 345
(909) 384-8603
LIAISON COUNSELOR: Patty Jones, 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 careers.

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.

COURSES OFFERED BY THE DEPARTMENT OF ECONOMICS:

ECON 100 INTRODUCTION TO ECONOMICS 3 UNITS

PREREQUISITE: None.

LECTURE: 3 contact 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 contact 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.*

ECON 200H INTRODUCTION TO MACROECONOMICS – HONORS 3 UNITS

PREREQUISITE: None.

LECTURE: 3 contact 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.*

ECON 201 PRINCIPLES OF MICROECONOMICS 3 UNITS

PREREQUISITE: None.

LECTURE: 3 contact 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.

ECON 208 BUSINESS AND ECONOMICS STATISTICS 4 UNITS

PREREQUISITE: MATH 095 or eligibility for MATH 102 as determined through the SBVC assessment process.

LECTURE: 4 contact hours per week.

This course is a study 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.

Associate Degree Applicable

*Course credit transfers to CSU and *UC.*

ECON 222 INDEPENDENT STUDY IN ECONOMICS

1-3 UNITS

PREREQUISITES: ECON 200 and ECON 201.

INDEPENDENT STUDY: 3-9 contact 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 contact 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.

EDUCATION

DIVISION: Social Sciences, Human Development and Physical Education

DIVISION DEAN: Corene Schwartz, Ed.D.

FACULTY CHAIRS: Kathryn Adams, M.S.

NH 328

(909) 384-8549

Denise Knight, B.A.

NH 316

(909) 384-8547

OTHER FACULTY: Kellie Barnett, M.S.

ADMINISTRATIVE SECRETARY: Karen Deck

DIVISION OFFICE: NH 345

(909) 384-8603

LIAISON COUNSELOR: Denise McCrary, Ed.D.

(909) 384-4404

COURSES OFFERED BY THE DEPARTMENT OF EDUCATION:

EDU 290 INTRODUCTION TO EDUCATION 3 UNITS

PREREQUISITE: CD 105.

LECTURE: 3 contact hours per week.

Introduction to the field of education, designed to familiarize students with philosophies of education, history of education in America, social, political and legal foundations of education, and contemporary issues in education. The course transfers to CSUSB for students, majoring in Liberal Studies/Education.

Associate Degree Applicable

Course credit transfers to CSU.

ELECTRICITY/ELECTRONICS/ TECHNICAL CALCULATIONS

DIVISION: Applied Technology,
Transportation and Culinary Arts
 DIVISION DEAN, INTERIM: Kay Ragan, Ed.D.
 FACULTY CHAIRS: Edward Szumski, M.A.
 (909) 384-8501
 ADMINISTRATIVE SECRETARY: Cecile Smith
 DIVISION OFFICE: Technical 108
 (909) 384-8902
 LIAISON COUNSELOR: Frank Dunn, M.A.
 (909) 384-4404

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.

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.

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

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. These certificates are designed to provide students with the fundamentals of electronics technology by offering courses common to electricity, communications and computers. This 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 should have normal color vision, hand/eye coordination and the ability to lift over 50 pounds.

1. ELECTRONICS TECHNOLOGY CERTIFICATE

This certificate is designed to provide students with the fundamentals of electronics technology. It also prepares students for entry-level positions in electronics maintenance, installation, field service, networking, and apprenticeship in the field of electronics technology.

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 Laboratory	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	4
TOTAL UNITS:	34

2. COMMUNICATION ENGINEERING TECHNOLOGY CERTIFICATE

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

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 Laboratory	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 with Assembly Language	4
ELECTR 270 Linear Integrated Circuit Analysis	4
ELECTR 220C FCC Rules and Regulations	3
ELECTR 250C Radio Transmitters, Receivers and Antennas	4
ELECTR 255C Telephone and Data Networking	4
TOTAL UNITS:	45

3. COMPUTER ENGINEERING TECHNOLOGY CERTIFICATE

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.

Complete the REQUIRED COURSES for Electronics Technology plus -

REQUIRED COURSES:	UNITS
ELEC 217C Industrial Electricity	4
ELECTR 280C Computer Operations and Maintenance	4
TOTAL UNITS:	42

4. ELECTRIC POWER TECHNOLOGY CERTIFICATE

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 electric power technology.

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 Laboratory	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 with Assembly Language	4
ELECTR 270 Linear Integrated Circuit Analysis	4
ELEC 216C Introduction to Industrial Electricity	4
ELEC 217C Industrial Electricity	4
ELEC 218C Controlling Industrial Electricity	4
TOTAL UNITS:	46

5. AVIONICS TECHNOLOGY CERTIFICATE

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.

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 with Assembly Language	4
ELECTR 270 Linear Integrated Circuit Analysis	4
AERO 121 * Aviation Fundamentals	3
AERO 140D * Instrument Ground School and Flight Simulators	4
ELECTR 220C FCC Rules and Regulations	3
ELECTR 250C Radio Transmitters, Receivers and Antennas	4
ELECTR 257C Navigation and Communication Systems	4
TOTAL UNITS:	52

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

6. GENERAL ELECTRICIAN 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 will allow an "Electrician Trainee" to sit for the California State General Electrician Certification examination. These courses also satisfy the continuing education requirement every three years for certified electricians.

REQUIRED COURSES:	UNITS
ELEC 090 OSHA 30-Hour Safety Standards: Construction and Industry	2
ELEC 216C Introduction to Industrial Electricity	4
ELEC 217C Industrial Electricity	4
ELEC 218C Controlling Industrial Electricity	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 Laboratory	1
ELECTR 230 Semiconductor Devices	3
ELECTR 235 Solid State Circuit Analysis	4
ELECTR 265 Digital Logic Design	4
INSPEC 014D Advanced Construction Inspection: National Electrical Code (NEC)	3
INSPEC 024D Community Relations for Civil Service Employees	3
PE 231 First Aid and CPR	3
TECALC 087 Technical Calculations	4
TOTAL UNITS:	46

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

ELEC 012
UTILITY POLE CLIMBING: OSPCTP 3.25 UNITS
PREREQUISITE: None.

LECTURE: 2 contact hours per week and
LABORATORY: 4 contact 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.**

Associate Degree Applicable

ELEC 090
OSHA 30-HOUR SAFETY STANDARDS:
CONSTRUCTION AND INDUSTRY 2 UNITS
PREREQUISITES: None.

LECTURE: 2 contact hours per week.

This course covers 30 hours of training required by Occupational Safety and Health Act (OSHA) that apply toward the 30-hour Construction Safety and Health course completion card. The course is comprised of 25 sections, each one or two hours in length, and covers topics pertaining to regulations in Standard 29 Code of Federal Regulations (CFR) 1926.

Associate Degree Applicable
Course credit transfers to CSU.

ELEC 091
FUNDAMENTALS OF SOLAR ENERGY 3 UNITS
PREREQUISITES: ELECTR 230.

LECTURE: 3 contact hours per week.

This course is designed for students interested in a career in the solar industry. The fundamental principles and functions of photovoltaic industry will be introduced along with the planning, installation and maintenance of all necessary components for a photovoltaic system. The transmission and distribution of electric power will be reviewed and basic concepts of electricity, identification, functions and operations of components will be surveyed.

Associate Degree Applicable
Course credit transfers to CSU.

ELEC 216C
INTRODUCTION TO INDUSTRIAL ELECTRICITY 4 UNITS

PREREQUISITES: ELECTR 110 and ELECTR 111.

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

This course covers the study of electrical power transmission, the National Electrical Code, electrical blueprints, residential and commercial wiring.

Associate Degree Applicable
Course credit transfers to CSU.

ELEC 217C
INDUSTRIAL ELECTRICITY 4 UNITS
PREREQUISITES: ELECTR 115 and ELECTR 116.

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

This course covers the study of DC motors, single and polyphase AC motors, and the necessary controls and measuring equipment used for industrial circuit protection and switching equipment.

Associate Degree Applicable
Course credit transfers to CSU.

ELEC 218C
CONTROLLING INDUSTRIAL ELECTRICITY 4 UNITS
PREREQUISITES: ELECTR 115 and ELECTR 116.

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

This course covers the study of DC, AC, and polyphase motor operation, mechanical and programmable machine controls, relays and programmable logic controllers (PLCs), ladder logic diagrams and the communication network linking the programmer, the controller, the laptop computer and the machine.

Associate Degree Applicable
Course credit transfers to CSU.

ELECTR 098
ELECTRONICS WORK EXPERIENCE 1-4 UNITS
PREREQUISITE: None.

Supervised training in the form of on the job employment that will enhance the student's knowledge in the selected field of study. 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 098 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. (Formerly ELECTR 198)

Associate Degree Applicable

ELECTR 110
DIRECT CURRENT CIRCUIT ANALYSIS 3 UNITS
PREREQUISITE: None.

COREQUISITE: ELECTR 111.

LECTURE: 3 contact hours per week.

This is a comprehensive course in direct current 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 contact hours per week.

This course is 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 contact hours per week.*

This course is an in depth analysis of alternating current circuits to include 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 LAB 1 UNIT

PREREQUISITES: *ELECTR 110 and ELECTR 111.*
COREQUISITE: *ELECTR 115.*

LABORATORY: *3 contact hours per week.*

This course is the laboratory complement to ELECTR 115 including skill training in reading and interpreting measurements on an oscilloscope, using 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 contact hours per week and*
LABORATORY: *3 contact hours per week.*

This course develops skills in interpreting and creating electronic drawings and circuit board construction and assembly with an emphasis on drawings, soldering, assembly and fundamentals of CAD.

Associate Degree Applicable
Course credit transfers to CSU.

ELECTR 220C
F.C.C. RULES AND REGULATIONS 3 UNITS

PREREQUISITE: *None.*
LECTURE: *3 contact hours per week.*

This course is a review of the requirements and questions for the General Radiotelephone Operator's License offered by the Federal Communications Commission.

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

ELECTR 230
SEMICONDUCTOR DEVICES 3 UNITS

PREREQUISITE: *ELECTR 110.*
LECTURE: *3 contact hours per week.*

This course is a study of semiconductor devices including the chemistry and physics of the structure of the atom and the operation of semiconductor 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 contact hours per week and*
LABORATORY: *3 contact hours per week.*

This course covers an analysis of discrete solid state circuits and their design including diodes, circuit configurations, amplifiers and amplification, biasing techniques, feedback principles, FETs, photo devices, and evaluation of designed circuits.

Associate Degree Applicable
Course credit transfers to CSU.

ELECTR 250C
RADIO TRANSMITTERS, RECEIVERS AND ANTENNAS 4 UNITS

PREREQUISITES: *ELECTR 115 and ELECTR 116.*
LECTURE: *3 contact hours per week and*
LABORATORY: *3 contact hours per week.*

This course includes coverage of 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 for elective credit only.

ELECTR 255C
TELEPHONE AND DATA NETWORKING 4 UNITS

PREREQUISITES: *ELECTR 115 and ELECTR 116.*
LECTURE: *3 contact hours per week and*
LABORATORY: *3 contact hours per week.*

This 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 for elective credit only.

ELECTR 257C
NAVIGATION AND COMMUNICATION SYSTEMS 4 UNITS

PREREQUISITE: *ELECTR 250C.*
LECTURE: *3 contact hours per week and*
LABORATORY: *3 contact hours per week.*

This course covers the bench test, installation and ramp test of transmitter and receiver systems and their operating principles. Systems include Auto Direction Finder, Very High Frequency Omnidirectional Range, LORAN-C, Omega, INS, DME, ILS, VHF communication, HF communication, FM transceivers and transponder.

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

ELECTR 265
DIGITAL LOGIC DESIGN 4 UNITS

PREREQUISITE: *None.*
LECTURE: *3 contact hours per week and*
LABORATORY: *3 contact hours per week.*

This course covers combinational logic utilizing Boolean algebra and the binary numbering system. Topics include Karnaugh maps, truth tables, coding, switching circuits, converters, logic circuit elements, timers, digital-to-analog and analog-to-digital conversions, decoders, multiplexers, demultiplexers, and displays.

Associate Degree Applicable
Course credit transfers to CSU.

ELECTR 266
MICROPROCESSOR TECHNOLOGY WITH ASSEMBLY LANGUAGE 4 UNITS

PREREQUISITE: ELECTR 265.
LECTURE: 3 contact hours per week and LABORATORY: 3 contact hours per week.

This course covers the fundamental principles of microprocessors, the 8051 series microcontroller, emphasizing 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 8051 series microcontroller.

Associate Degree Applicable
Course credit transfers to CSU.

ELECTR 270
LINEAR INTEGRATED CIRCUIT ANALYSIS 4 UNITS

PREREQUISITE: ELECTR 115 and ELECTR 116.
LECTURE: 3 contact hours per week and LABORATORY: 3 contact hours per week.

This course is 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 280C
COMPUTER OPERATION AND MAINTENANCE 4 UNITS

PREREQUISITE: ELECTR 266.
LECTURE: 3 contact hours per week and LABORATORY: 3 contact hours per week.

This course provides 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 for elective credit only.

ELECTR 290C
INDUSTRIAL COMPUTERS AND ROBOTICS MAINTENANCE 4 UNITS

PREREQUISITE: ELECTR 266.
LECTURE: 3 contact hours per week and LABORATORY: 3 contact hours per week.

This course is a comprehensive study of computers and robots used in industry. Including diagnostics and programming for controlling robots, machines and medical equipment.

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

TECALC 087
TECHNICAL CALCULATIONS 4 UNITS

PREREQUISITE: None.
LECTURE: 4 contact 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.

Associate Degree Applicable

ENGINEERING

DIVISION: Science
DIVISION DEAN: Susan Bangasser, Ph.D.
FACULTY CHAIR: Achala Chatterjee, M.S.C.E.,
P.E.
Chemistry 124
(909) 384-8522
ADMINISTRATIVE SECRETARY: Rose Garcia
DIVISION OFFICE: Chemistry 121
(909) 384-8645
LIAISON COUNSELOR: Denise McCrary, Ed.D.
(909) 384-4404

Engineers are employed in research, development, design, construction, manufacturing and operations of technical projects related to almost all aspects of modern life, including the environment, communications, transportation, food production, medicine and health, space exploration, housing and energy. Engineering should students meet with a counselor or Engineering Department for specific requirements for transfer.

ENGR 100
ENGINEERING CAREER EXPLORATION 1 UNIT

PREREQUISITE: None.
LECTURE: 1 contact hour per week.

An introduction to the major fields of specialization in engineering and engineering technology professions. This course gives students a broad understanding of various career opportunities and the specialized demands and rewards of each field.

Associate Degree Applicable
Course credit transfers to CSU and UC.

ENGR 265
ENGINEERING MECHANICS – STATICS 3 UNITS

PREREQUISITE: PHYSIC 200.
LECTURE: 3 contact hours per week.

This course lays the foundation of Newtonian mechanics for students to learn the basic fundamental engineering science and serves as the building blocks for further courses in analysis and design. A study of two- and three-dimensional equilibrium of particles and rigid bodies; concentrated and rigid bodies; concentrated and distributed force systems; shear and bending moment stresses in beams and other rigid bodies; analysis of frames, machine and trusses; force resultants using vectors in two and three dimensions; non-coplanar force systems, friction forces; center of gravity and moment of inertia.

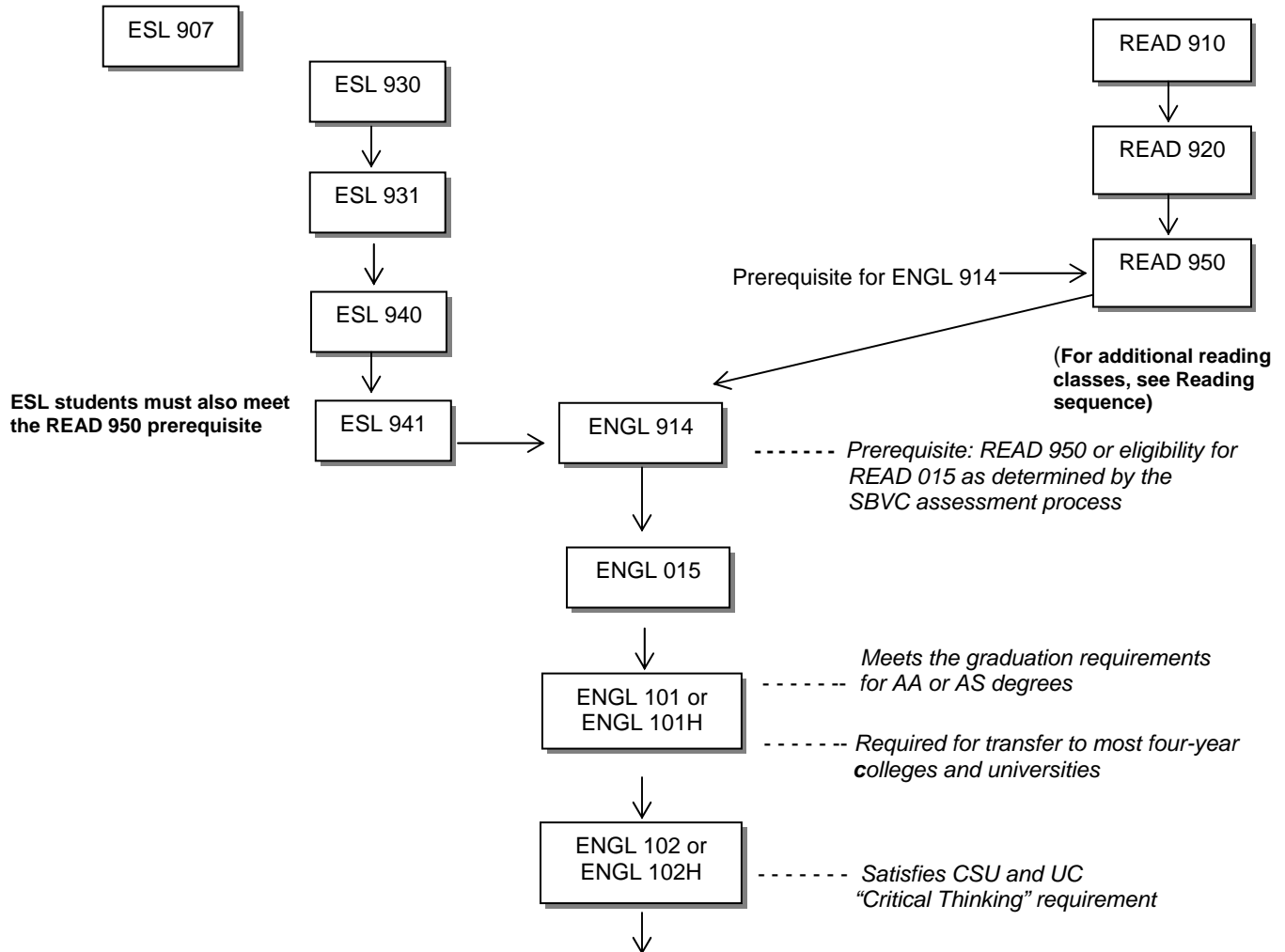
Associate Degree Applicable
Course credit transfers to CSU and UC.

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 are encouraged to take the Reading assessment as soon as possible)



ADVANCED ENGLISH COURSES

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

- 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 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

ENGLISH

DIVISION: Arts and Humanities
DIVISION DEAN: Kathryn Weiss, Ed.D.
FACULTY CHAIR: Diane Hunter, M.A.
Liberal Arts 220
(909) 384-8617

OTHER FACULTY: Horace Alexander, Ed.D.
Sharon Chapman, M.A.
Mary Copeland, M.F.A.
Paula Ferri-Milligan, M.A.
Sheela Free, Ph.D.
Edward Jones, M.F.A.
Thomas Kinnaird, M.A.
Joel Lamore, M.A.
Dirkson Lee, M.A.
Yvette Lee, M.A.
William McKie, M.A.
Dolores Moreno, M.A.
Joseph Notarangelo, M.A.
Edward Perez, Ph.D.
Michael Slusser, M.A.
Julie Tilton, M.A.

ADMINISTRATIVE SECRETARY: Linda Tymchek, M.A.
(909) 384-8633

DIVISION OFFICE: NH 223

LIAISON COUNSELOR: Laura Gomez, M.A.
(909) 384-4404

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. Test scores as well as other information, such as high school and/or work experience, are used to place students in the proper levels of courses.

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.

COURSES OFFERED BY THE DEPARTMENT OF ENGLISH:

ENGL 911
BASIC GRAMMAR AND USAGE REVIEW 1 UNIT
PREREQUISITE: None.

LECTURE: 1 contact hour per week.

This course covers a review of basic English grammar and common errors in grammar and usage.

Not applicable to the Associate Degree

ENGL 912
RESEARCH PAPER WORKSHOP 1 UNIT
PREREQUISITE: None.

LECTURE: 1 contact 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 4 UNITS

PREREQUISITE: READ 950 (or eligibility for READ 015) and eligibility for ENGL 914 as determined by the SBVC assessment process, or ESL 941 and READ 950 (or eligibility for READ 015) as determined by SBVC assessment process.

LECTURE: 4 contact hours per week.

This course is a basic skills writing course that prepares students for ENGL 015. The focus is on the following: reading for comprehension, grammar, punctuation, usage and practice in writing effective sentences, paragraphs and short essays.

Not Applicable to the Associate Degree

ENGL 920
GRAMMAR 3 UNITS

PREREQUISITE: None.

LECTURE: 3 contact 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 contact hours per week.

This is a writing course designed to prepare students for ENGL 101. The primary focus is on the development of the paragraph and short essay. The class includes a review of grammar, sentence structure, and punctuation.

Associate Degree Applicable

ENGL 020
FUNDAMENTALS OF NEWS WRITING 3 UNITS

PREREQUISITE: ENGL 914 or eligibility for ENGL 015 as determined by SBVC assessment process.

LECTURE: 3 contact 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 contact 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 contact hours per week.

This is an introductory course in creative writing focusing on poetry and fiction. It includes strategies for writing both poetry and fiction, and the development of critical standards for judging literature.
Associate Degree Applicable

ENGL 055
CHILDREN'S LITERATURE 3 UNITS
PREREQUISITE: ENGL 914 or eligibility for ENGL 015
as determined by SBVC assessment process.
LECTURE: 3 contact hours per week.

This survey course focuses on literature written for children with an 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 contact hours per week.

This course covers a representative survey of Chicano literature, including novels, drama, poetry, and essays which focus on the cultural, social, and political developments and themes that shape and characterize Chicano culture and literary expression. 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 063
CHICANO LITERATURE 3 UNITS
PREREQUISITE: ENGL 914 or eligibility for ENGL 015
as determined by SBVC assessment process.
LECTURE: 3 contact 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 065
AFRICAN-AMERICAN LITERATURE 3 UNITS
PREREQUISITE: None.
LECTURE: 3 contact hours per week.

An examination of poetry, stage plays, short stories, essays, and novels in the African-American genre. This non-transfer course is taught simultaneously with ENGL 165, a transfer-level course with differing assignments.
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 contact 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 contact 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 contact hours per week.

This course covers 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 contact 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 contact 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 contact 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 contact hours per week.

This course is a writing course which emphasizes expository and argumentative essays. It includes reading and analysis of various forms of writing, instruction in library research and preparation of documented research papers.

Associate Degree Applicable

*Course credit transfers to CSU and *UC.*

ENGL 101H
FRESHMAN COMPOSITION-HONORS **4 UNITS**

PREREQUISITE: ENGL 015 or eligibility for ENGL101 as determined by SBVC assessment process.
LECTURE: 4 contact hours per week.

This course is a writing course which emphasizes expository and argumentative essays. It includes reading and analysis of various forms of writing, instruction in library research and preparation of documented research papers. **Enrollment is limited to students eligible for the Honors Program.**

Associate Degree Applicable

*Course credit transfers to CSU and *UC.*

ENGL 102
INTERMEDIATE COMPOSITION AND CRITICAL THINKING **4 UNITS**

PREREQUISITE: ENGL 101 or ENGL 101H.
LECTURE: 4 contact hours per week.

This course provides students with 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 and *UC.*

ENGL 102H
INTERMEDIATE COMPOSITION AND CRITICAL THINKING – HONORS **4 UNITS**

PREREQUISITE: ENGL 101 or ENGL 101H.
LECTURE: 4 contact hours per week.

This course provides students with 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 and *UC.*

ENGL 120
FUNDAMENTALS OF NEWS WRITING **3 UNITS**

PREREQUISITE: ENGL 101.
LECTURE: 3 contact 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.

ENGL 122x4
JOURNALISM PRODUCTION **2 UNITS**

PREREQUISITE: ENGL 101 or ENGL 101H.
LABORATORY: 6 contact 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: 6 contact 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 or ENGL 101H.

LECTURE: 3 contact hours per week.

This course includes the study of fiction, poetry, and drama, with an emphasis on the fundamental principles of literacy criticism and interpretation, including student writing based on critical reading.

Associate Degree Applicable

Course credit transfers to CSU and UC.

ENGL 153
LITERATURE AND FILM 3 UNITS

PREREQUISITE: ENGL 101 or ENGL 101H.

LECTURE: 2 contact hours per week and

LABORATORY: 3 contact hours per week.

This course studies literature that has been 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 or ENGL 101H.

LECTURE: 3 contact hours per week.

This survey course focuses on literature written for children with emphasis on values common to all significant literature. This transfer course is taught simultaneously with English 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 contact 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 or ENGL 101H.

LECTURE: 3 contact hours per week.

This course covers a representative survey of Chicano literature, including novels, drama, poetry, and essays which focus on the cultural, social, and political developments and themes that 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 or ENGL 101H.

LECTURE: 3 contact hours per week.

This course is an examination of poetry, stage plays, short stories, essays, and novels in the African-American genre. It will include the definition of the "African-American" genre and what it is or is not. 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
THE LITERATURE AND RELIGION OF THE BIBLE 3 UNITS

PREREQUISITE: ENGL 101 or ENGL 101H.

LECTURE: 3 contact hours per week.

This course covers 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 transfer-level course is taught simultaneously with ENGL 075, a non-transfer course. Assignments differ for the two courses although students participate in the same lectures. 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 or ENGL 101H

LECTURE: 3 contact hours per week.

This is an introductory course in creative writing focusing on poetry and fiction. It 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.

ENGL 270
ENGLISH LITERATURE TO THE 18TH CENTURY 3 UNITS

PREREQUISITE: ENGL 101.

LECTURE: 3 contact 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.

ENGL 271
ENGLISH LITERATURE FROM THE 18TH CENTURY TO THE PRESENT 3 UNITS

PREREQUISITE: ENGL 101.

LECTURE: 3 contact 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.

ENGL 275
SHAKESPEARE **3 UNITS**
PREREQUISITE: ENGL 101.
LECTURE: 3 contact hours per week.
A critical analysis of a selection of Shakespeare's plays representative of his literary development. Lectures, films, and records examine life and the theatre in Elizabethan England.
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 contact 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 contact 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.

ESL 601
ESL BEGINNING LEVEL 1 - INTRODUCTION TO BASIC ENGLISH LITERACY **Non-Credit**
PREREQUISITE: None.
LECTURE: 10-15 contact hours per week.
This non-credit course is designed to introduce beginning English language learners to basic English letter-sound correspondence, vocabulary, and sentence patterns. Students will start using English to speak about themselves, their families, and their community. Students will learn to read and complete simple forms.
Not Applicable to the Associate Degree

ESL 602
ESL BEGINNING LEVEL 2 - ENGLISH AT HOME AND SCHOOL **Non-Credit**
PREREQUISITE: None.
DEPARTMENTAL ADVISORY: Successful completion of ESL 601 or eligibility as determined through the SBVC assessment process.
LECTURE: 10-15 contact hours per week.
This non-credit course is designed to prepare low beginning learners of English with vocabulary and sentence structure to communicate in social and academic settings. Students will learn the standard language to give and respond to directions, as well as to speak about home and classroom routines and community life using a variety of sentence patterns. In addition, students will learn beginning note-taking skills.
Not Applicable to the Associate Degree

ESL 603
ESL INTERMEDIATE LEVEL 3 - ENGLISH FOR WORK AND LEISURE **Non-Credit**
PREREQUISITE: None.
DEPARTMENTAL ADVISORY: Successful completion of ESL 602 or eligibility as determined through the SBVC assessment process.
LECTURE: 10-15 contact hours per week.
This non-credit course is designed to prepare high beginning English learners to use a variety of English structures and vocabulary for vocation and leisure. Students will learn appropriate linguistic behaviors with regards to the setting and time of the occasion being discussed. Students will use past, present, and future time verbs.
Not Applicable to the Associate Degree

ESL 604
ESL INTERMEDIATE LEVEL 4 - ENGLISH FOR WORK AND EDUCATION **Non-Credit**
PREREQUISITE: None.
DEPARTMENTAL ADVISORY: Successful completion of ESL 603 or eligibility as determined through the SBVC assessment process.
LECTURE: 10-15 contact hours per week.
This non-credit course is designed to prepare high beginning learners of English to use standard language at a job interview, and in conversations on the job and at school. Students will begin learning aspects of composition. In addition, students will continue learning note-taking skills.
Not Applicable to the Associate Degree

ESL 620
ENGLISH PRONUNCIATION **Non-Credit**
PREREQUISITE: None.
DEPARTMENTAL ADVISORY: Successful completion of ESL 604 or eligibility as determined through the SBVC assessment process.
LECTURE: 4 contact hours per week.
This non-credit course is designed to help ESL learners to improve their pronunciation skills in English. The class will focus on Standard English pronunciation, word stress, intonation differentiation, and vocabulary building.
Not Applicable to the Associate Degree

ESL 645**IDIOMS: THE SECRET LANGUAGE** Non-Credit**PREREQUISITE: None.****DEPARTMENTAL ADVISORY: Fluency in spoken English or eligibility as determined through the SBVC assessment process.****LECTURE: 4 contact hours per week.**

This non-credit course is designed to help nonnative students understand American idiomatic expressions commonly used by native speakers. Students will receive instruction on the meaning and use of idioms and how to apply their knowledge of idioms both through oral and written practice.

*Not Applicable to the Associate Degree***ESL 650****CITIZEN PREPARATION – PART 1: BASIC ENGLISH LISTENING, SPEAKING, READING AND WRITING**

Non-Credit

PREREQUISITE: None.**LECTURE: 10 contact hours per week.**

This non-credit course is designed to prepare prospective candidates for the English portion of the U.S. citizenship process. Students will learn skills to improve their basic listening, speaking, reading, and writing abilities through practice and drills.

*Not Applicable to the Associate Degree***ESL 651****CITIZEN PREPARATION – PART 2: CIVIC PRINCIPLES AND FUNDAMENTAL U.S. HISTORY**

Non-Credit

PREREQUISITE: None.**LECTURE: 10 contact hours per week.**

This non-credit course is designed to prepare prospective candidates for the civics portion of the U.S. citizenship process. Students will learn the rights and responsibilities of being a U.S. citizen, in addition to learning how to complete all required immigration forms and practicing the USCIS Citizenship Test by becoming familiar with U.S. history.

*Not Applicable to the Associate Degree***ESL 906****THE SOUND PATTERNS OF ENGLISH** 3 UNITS**PREREQUISITE: None.****LECTURE: 3 contact 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****BASIC CONVERSATIONAL ENGLISH** 3 UNITS**PREREQUISITE: None.****LECTURE: 3 contact hours per week.**

This course is designed to increase nonnative students' skills in basic conversation, listening and pronunciation of the English language.

*Not Applicable to the Associate Degree***ESL 930****COMPOSITION BASED ESL LEVEL 1 – BEGINNING**

4 UNITS

PREREQUISITE: None.**DEPARTMENTAL ADVISORY: Completion of the highest level ESL course commonly taught at adult schools.****LECTURE: 4 contact hours per week.**

This is the first of a four-course sequence designed to give non-native speakers of English a comprehensive understanding of English composition. The focus of this course is on creating effective sentences and paragraphs, including a review of grammar, punctuation and usage. The grammatical emphasis of this course will be on simple present, past and future tenses. It also has some emphasis on pronunciation, listening and speaking. This course is taught through total immersion.

*Not Applicable to the Associate Degree***ESL 931****COMPOSITION BASED ESL LEVEL 2 – BEGINNING**

4 UNITS

PREREQUISITE: ESL 930 or eligibility as determined by SBVC assessment process.**LECTURE: 4 contact hours per week.**

This is the second of a four-course sequence designed to give nonnative speakers of English a comprehensive understanding of English composition. The focus of this course is on creating effective sentences and paragraphs, including a review of grammar, punctuation and usage. The grammatical emphasis of this course will be on present, past and future continuous tenses and modal usage. It also has some emphasis on pronunciation, listening and speaking. This course is taught through total immersion.

*Not Applicable to the Associate Degree***ESL 940****COMPOSITION BASED ESL LEVEL 3 - INTERMEDIATE**

4 UNITS

PREREQUISITE: ESL 931 or eligibility as determined by SBVC assessment process.**LECTURE: 4 contact hours per week.**

This is the third of a four-course sequence designed to give nonnative speakers of English a comprehensive understanding of English composition. The focus of this course is on creating effective sentences and paragraphs, including a review of grammar, punctuation and usage.

*Not Applicable to the Associate Degree***ESL 941****COMPOSITION BASED ESL LEVEL 4 - ADVANCED**

4 UNITS

PREREQUISITE: ESL 940 or eligibility as determined through the SBVC assessment process.**LECTURE: 4 contact hours per week.**

This is the last of a four-course sequence designed to give nonnative speakers of English a comprehensive understanding of English composition. The focus of this course is on creating effective sentences and paragraphs, including a review of grammar, punctuation and usage.

Not Applicable to the Associate Degree

ESCROW

See the Department of REAL ESTATE AND ESCROW

ENVIRONMENTAL SCIENCE / STUDIES

DIVISION: Science
DIVISION DEAN: Susan Bangasser, Ph.D.
FACULTY CHAIR: Todd Heibel, Ph.D.
Chemistry 113
(909) 384-8638
ADMINISTRATIVE SECRETARY: Rose Garcia
DIVISION OFFICE: Chemistry 121
(909) 384-8645
DIVISION OFFICE: Health and Life Science 101
(909) 384-8550
LIAISON COUNSELOR: Jeanne Marquis, M.A.
(909) 384-4404

Both programs are approved by the State and courses are currently offered at San Bernardino Valley College. For details on course requirements for the A.A. degree in either Environmental Studies or Environmental Science, contact the Science Division Office, Chemistry 121, or see a counselor.

ENVIRONMENTAL SCIENCE

The goals of the Environmental Science program are to: 1) meet the needs of students who are majoring in one of the diverse fields encompassed by environmental science, and 2) provide options for students fulfilling general education science requirements.

Awareness of the issues of environmental quality is increasingly important in business, industry, and government. The growing human population and increasing consumption of resources are creating unprecedented pressures on our planetary life support systems. Environmental science majors need to complete an interdisciplinary set of core requirements that provide a basic understanding of the physical, biological, and social sciences and the relevance of these sciences to environmental processes and issues. In addition, the coursework will prepare students for related baccalaureate majors, including: biology, chemistry, engineering, geography (including emphasis in geographic information systems (GIS)), geology, mathematics, oceanography, and physics. For non-majors, the program's goal is to educate students to make better-informed choices about key environmental and health issues.

Students planning to transfer to a four-year institution and major in environmental science should consult with a counselor regarding the transfer process and institution-specific lower-division requirements. In upper division and graduate studies, students majoring in environmental science usually specialize in areas such as environmental toxicology, public health, environmental law, education, environmental economics, soil and water science, restoration ecology, environmental landscaping, environmental management and urban planning, and related careers.

ENVIRONMENTAL SCIENCE

ASSOCIATE OF SCIENCE DEGREE

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

REQUIRED COURSES:		UNITS
BIOL 201	Cell and Molecular Biology	4
BIOL 202	Organismal Biology and Ecology	4
CHEM 150	General Chemistry I or	5
CHEM 150H	General Chemistry I - Honors	5
CHEM 151	General Chemistry II or	5
CHEM 151H	General Chemistry II - Honors	5
MATH 250	Single Variable Calculus I	4

CHOOSE TWO COURSES FROM THE FOLLOWING:

		UNITS
BIOL 104	Human Ecology	3
BIOL 123	Ecology and Environment	3
BIOL 204	General Botany	4
BIOL 270	Microbiology	5
CHEM 205	Quantitative Chemical Analysis	5
CHEM 212	Organic Chemistry I or	4
CHEM 212H	Organic Chemistry I - Honors	4
CHEM 213	Organic Chemistry II or	4
CHEM 213H	Organic Chemistry II - Honors	4
GEOG 110	Physical Geography	3
GEOG 111	Physical Geography Laboratory or	1
GEOG 111H	Physical Geography Laboratory - Honors	1
GEOL 101	Introduction to Physical Geology	3
GEOL 111	Investigations in Physical Geology	1
GIS 130	Introduction to Geographic Information Systems (GIS)	3
GIS 131	GIS Applications	3
GIS 133	GIS Cartography and Base Map Development	3
MATH 108	Introduction to Probability and Statistics	4
MATH 251	Single Variable Calculus II	4
PHYSIC 150A	General Physics for the Life Sciences I	5
PHYSIC 150B	General Physics for the Life Sciences II	5

TOTAL UNITS: 28 - 32

FAMILY AND CONSUMER SCIENCE

DIVISION: Applied Technology,
Transportation and Culinary Arts
DIVISION DEAN, INTERIM: Kay Ragan, Ed.D.
FACULTY CHAIR: Chef Stacy Meyer, M.A.
Business 100B
(909) 384-8913
ADMINISTRATIVE SECRETARY: Cecile Smith
DIVISION OFFICE: Technical 108
(909) 384-8902
LIAISON COUNSELOR: André Wooten, M.S.
(909) 384-4404

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 dietitians in the provision of food service and nutritional programs.

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.

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:	UNITS
BUSAD 105 Small Business Management	3
TECALC 087 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 060
MODIFIED DIETS **3 UNITS**
PREREQUISITE: FCS 162.

LECTURE: 3 contact hours per week.

This course concentrates on the principles of nutrition in order to provide modified diets for individuals with a variety of health care conditions. The focus is on the rationale for the diet and how the modifications improve a person's overall well being. (Formerly FCS 260)

Associate Degree Applicable

Course credit transfers to CSU as elective credit only.

FCS 064
NUTRITION MANAGEMENT **3 UNITS**
PREREQUISITE: None.

LECTURE: 3 contact hours per week.

The focus of this course is on the management of a dietetic facility. It includes the development of policies, protocols and procedures for organizing, staffing and training, as well as the promotion of sound financial planning and a cost control system. (Formerly FCS 264)

Associate Degree Applicable

Course credit transfers to CSU as elective credit only.

FCS 066
NUTRITION CARE **2 UNITS**

PREREQUISITE: FCS 060.

COREQUISITE: FCS 067.

LECTURE: 2 contact hours per week.

This course integrates the academic knowledge and principles of nutrition, diet and menu development with the application of nutrition care, diet evaluation, diet education and dietetic practice.

Associate Degree Applicable

Course credit transfers to CSU as elective credit only.

FCS 067
NUTRITION CARE INTERNSHIP **2.5 UNITS**
PREREQUISITE: FCS 060.

COREQUISITE: FCS 066.

LABORATORY: 7.5 contact hours per week.

This course is a clinical field experience in a dietary health care facility. Course includes nutrition evaluation, implementation of a care plan, nutrition care, dietetic education and facility organizational processes.

Associate Degree Applicable

Course credit transfers to CSU as elective credit only.

FCS 098
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 knowledge in the selected field of study. 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 098 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. (Formerly FCS 198)

Associate Degree Applicable

FCS 160
INTRODUCTION TO FOODS **3 UNITS**
PREREQUISITE: None.
LECTURE: 2 contact hours per week and
LABORATORY: 3 contact 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 offered as CULART160.
Associate Degree Applicable
Course credit transfers to CSU.

FCS 161
QUANTITY FOOD PREPARATION **3 UNITS**
PREREQUISITE: FCS 160 or RM 160.
LECTURE: 3 contact 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 CULART 161.
Associate Degree Applicable
Course credit transfers to CSU.

FCS 162
NUTRITION **3 UNITS**
PREREQUISITE: None.
LECTURE: 3 contact hours per week.
 This course introduces the scientific concepts of nutrition relating to the functioning of nutrients in the basic life processes. Emphasis is on individual needs, food sources of nutrients, current nutritional issues and diet analysis.
Associate Degree Applicable
Course credit transfers to CSU and UC.

FCS 222
INDEPENDENT STUDY IN FAMILY AND CONSUMER SCIENCE **1-3 UNITS**
PREREQUISITE: None.
INDEPENDENT STUDY: 3-9 contact hours per week.
 Students with previous course work in Family and Consumer Science may do assigned projects involving research and analysis of selected topics. This independent study is for students who are interested in furthering their knowledge of nutrition, diets, foods and other related subjects. Prior to registration, a written 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 contact 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 CULART 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 contact 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 CULART 235.
Associate Degree Applicable
Course credit transfers to CSU as elective credit only.

FCS 240
PURCHASING **3 UNITS**
PREREQUISITE: None.
LECTURE: 3 contact 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 CULART 240.
Associate Degree Applicable
Course credit transfers to CSU as elective credit only.

FOOD SERVICE
 See the Department of
CULINARY ARTS

FRENCH

DIVISION: Arts and Humanities
 DIVISION DEAN: Kathryn Weiss, Ed.D.
 FACULTY CHAIR: Lydia Barajas-Zapata, M.A.
 NH 331
 (909) 384-8237
 ADMINISTRATIVE SECRETARY: Linda Tymchek, M.A.
 DIVISION OFFICE: NH 223
 (909) 384-8633
 LIAISON COUNSELOR: Laura Gomez, M.A.
 (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.

Positions for which four-year graduates in modern languages are qualified are teaching, business, foreign services, law enforcement, nursing, hospitality services, and secretarial services.

FRENCH COURSES OFFERED BY THE DEPARTMENT OF MODERN LANGUAGES:

FRENCH 101
COLLEGE FRENCH I **5 UNITS**
PREREQUISITE: None.
LECTURE: 5 contact hours per week.
 In this course students develop 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.

FRENCH 102
COLLEGE FRENCH II **5 UNITS**
PREREQUISITE: FRENCH 101.

LECTURE: 5 contact hours per week.

This course provides students the opportunity to continue 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.

GEOGRAPHIC INFORMATION SYSTEMS

DIVISION: Science
 DIVISION DEAN: Susan Bangasser, Ph.D.
 FACULTY CHAIR: Todd Heibel, Ph.D.
 Chemistry 113
 (909) 384-8638
 ADMINISTRATIVE SECRETARY: Rose Garcia
 DIVISION OFFICE: Chemistry 121
 (909) 384-8645
 DIVISION OFFICE: Health and Life Science 101
 (909) 384-8550
 LIAISON COUNSELOR: Jeanne Marquis, M.A.
 (909) 384-4404

GEOGRAPHIC INFORMATION SYSTEMS CERTIFICATE

Students working for certificates must have a basic knowledge of geographic and cartographic principles, 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 employment in Geographic Information Systems (GIS) and automated mapping technology, utilizing Earth resources data satellites, aerial photography, and computerized data banks of spatial data.

REQUIRED COURSES:	UNITS
GIS 130 Introduction to Geographic Information Systems (GIS)	3
GIS 131 GIS Applications	3
GIS 133 GIS Cartography and Base Map Dev	3
GIS 135 Spatial Analysis with GIS	3
GIS 136 GIS for Science, Government and Business	3
GIS 137 Advanced GIS Applications	(3)
GIS 039 Global Positioning Systems (GPS) Field Techniques	1
GIS 098 GIS Work Experience	1-4

RECOMMENDED COURSES:	UNITS
ARCH 120 Introduction to Computer Aided Drafting	4
CIT 101 Introduction to Computer Literacy	3
GEOG 110 Physical Geography	3
GEOL 101 Introduction to Physical Geology	3

TOTAL UNITS: 16-19

COURSES OFFERED BY THE DEPARTMENT OF GEOGRAPHIC INFORMATION SYSTEMS (GIS):

GIS 039
GLOBAL POSITIONING SYSTEMS (GPS) FIELD TECHNIQUES **1 UNIT**

PREREQUISITE: None.

DEPARTMENTAL ADVISORY: GIS 135.

LABORATORY: 3 contact hours per week.

The Global positioning systems (GPS) is a satellite-based navigation system comprised of a network of 24 satellites placed into orbit by the US Department of Defense. The aim of this course is to introduce students to the principles of the GPS and to demonstrate its application to GIS. GPS basic components are covered, including satellites, ground control stations, antennas, and receivers. GIS background or work experience in the field are recommended to succeed in this course. *(Formerly GIS 139)*

Associate Degree Applicable

Course credit transfers to CSU for elective credit.

GIS 098
GIS WORK EXPERIENCE **1-4 UNITS**

PREREQUISITE: None.

DEPARTMENTAL ADVISORY: GIS 135

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 contact 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 098 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

GIS 130
INTRODUCTION TO GEOGRAPHIC INFORMATION SYSTEMS (GIS) **3 UNITS**

PREREQUISITE: None.

DEPARTMENTAL ADVISORIES: ENGL 015 and MATH 942 and READ 015.

LECTURE: 2.5 contact hours per week.

LABORATORY: 1.5 contact hours per week.

This course provides an introduction to the fundamentals of Geographic Information Systems (GIS), including the history of automated mapping. The course includes a brief introduction to basic cartographic principles, including map scales, coordinate systems and map projections. GIS hardware and software are explored, as are various applications of GIS technology used in environmental science, business and government.

Associate Degree Applicable

Course credit transfers to CSU and UC.

GIS 131
GIS APPLICATIONS **3 UNITS**
PREREQUISITE: None.
DEPARTMENTAL ADVISORY: ENGL 015 and MATH 942 and READ 015 and GIS 130.
LECTURE: 2 contact hours per week and
LABORATORY: 3 contact hours per week.

This course provides students the basics of working with existing GIS data, creating GIS data from digitizing, and creating maps. This course will provide hands-on experience in using the latest, industry standard ArcGIS software to analyze both vector and raster based data structures through processes such as map overlays.

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 contact hours per week and
LABORATORY: 3 contact hours per week.

This course covers the nature of cartography, standard cartographic conventions, and graphic symbology. Map projections, scale, types of thematic maps, and map accuracy are reviewed. Current industry standard techniques used in GIS base map development are employed, including production and presentation techniques of professional quality maps.

Associate Degree Applicable

Course credit transfers to CSU.

GIS 135
SPATIAL ANALYSIS WITH GIS **3 UNITS**
PREREQUISITE: GIS 131.

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

This course is an introduction to spatial analysis with fundamental concepts and analytical procedures used to simplify complex spatial modeling. Specific methods covered include spatial queries, buffering, overlay, interpolation, network analysis, surface analysis, and spatial autocorrelation.

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 contact hours per week and
LABORATORY: 3 contact hours per week.

This course introduces students to the various GIS techniques deployed to help government, businesses, and consulting firms to operate in a constantly changing social, physical, economic, and political environment. Government agencies and businesses today face challenges that force them to think beyond traditional, non-geographic approaches to problem solving. Students are introduced to data integration, maps, and GIS outputs.

Associate Degree Applicable

Course credit transfers to CSU.

GIS 137
ADVANCED GIS APPLICATIONS **3 UNITS**
PREREQUISITE: GIS 135.

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

This course provides hands-on training in advanced applications of GIS using ArcView and ArcInfo, and a review of Visual Basic for Applications (VBA) for customizing ArcGIS. It includes introduction to ArcGIS Server, ArcIMS, and building maps and models for publishing to the web. Students will learn to build web applications with GIS capabilities using Application Service Provider (ASP).

Associate Degree Applicable

Course credit transfers to CSU for elective credit only.

GEOGRAPHY

DIVISION: Science
DIVISION DEAN: Susan Bangasser, Ph.D.
FACULTY CHAIR: Todd Heibel, Ph.D.
Chemistry 113
(909) 384-8638
OTHER FACULTY: Vanessa Engstrom, M.A.
ADMINISTRATIVE SECRETARY: Rose Garcia
DIVISION OFFICE: Chemistry 121
(909) 384-8645
DIVISION OFFICE: Health and Life Science 101
(909) 384-8550
LIAISON COUNSELOR: Jeanne Marquis, M.A.
(909) 384-4404

The environmental and spatial science of geography examines both physical and cultural landscapes across the Earth. As a spatial science, physical and cultural location and patterns on Earth's surface are central to the study of geography. It includes the study of all forces of nature and the consequences of those forces, with an emphasis on human-environment interactions.

Specifically, geography integrates multiple natural and social sciences and includes: 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 the students for majoring in geography at a four-year institution, and supplement other studies for students interested in careers in environmental studies, education, engineering, urban planning, and architecture.

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

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 110	Physical Geography	3
GEOG 111	Physical Geography Laboratory	or 1
GEOG 111H	Physical Geography Laboratory - Honors	1
REQUIRED COURSES: CHOOSE 12 UNITS FROM THE FOLLOWING:		UNITS
GEOG 106	Geographic Perspectives on the Environment	3
GEOG 114	Weather and Climate	4
GEOG 120	World Regional Geography	3
GIS 130	Introduction to Geographic Information Systems (GIS)	3
GIS 131	GIS Applications	3
GIS 133	GIS Cartography and Base Map Development	3
MATH 108	Introduction to Probability and Statistics	4
RECOMMENDED COURSES:		UNITS
ECON 100	Introduction to Economics	3
POLIT 100	American Politics	3
SOC 100	Introduction to Sociology	or 3
SOC 100H	Introduction to Sociology - Honors	3
TOTAL UNITS:		19

COURSES OFFERED BY THE DEPARTMENT OF GEOGRAPHY:

GEOG 102 CULTURAL GEOGRAPHY 3 UNITS

PREREQUISITE: None.

DEPARTMENTAL ADVISORY: ENGL 015.

LECTURE: 3 contact hours per week.

This course provides an introduction to the interrelationship between people and the environment. It includes population trends, regional analysis and livelihood patterns. There is an emphasis on historical development, diffusion of agriculture, languages, religions, and urban development.

Associate Degree Applicable

Course credit transfers to CSU and UC.

GEOG 106 GEOGRAPHIC PERSPECTIVES ON THE ENVIRONMENT 3 UNITS

PREREQUISITE: None.

DEPARTMENTAL ADVISORY: ENGL 015.

LECTURE: 3 contact hours per week.

This course provides an introductory study of the latest geographic perspectives of critical environmental issues occurring within and across local, regional, national, and global scales. It creates an awareness of the geography of human-environment relationships, in particular how nature and natural resources are defined, contested, distributed, and consumed. Emphasis is on social, political, cultural, psychological, and economic evaluation of natural resources and associated resource management.

Associate Degree Applicable

Course credit transfers to CSU and UC.

GEOG 110 PHYSICAL GEOGRAPHY 3 UNITS

PREREQUISITE: None.

DEPARTMENTAL ADVISORY: MATH 942 and ENGL 015.

LECTURE: 3 contact hours per week.

Within a human-environment framework, students will review basic physical elements of geography, with emphasis on weather, climate, water, soil, landforms, native animal life and natural vegetation, and their interrelationships and patterns of distribution on a worldwide basis. GEOG 111/GEOG 111H is strongly recommended for students who desire to transfer to CSU/UC.

Associate Degree Applicable

Course credit transfers to CSU and UC.

GEOG 111 PHYSICAL GEOGRAPHY LABORATORY 1 UNIT

PREREQUISITE/COREQUISITE: GEOG 110.

LABORATORY: 3 contact hours per week.

This is the laboratory companion for the GEOG 110 physical geography lecture course. This course is recommended for students concurrently enrolled in GEOG 110 or who have successfully completed the course within last three years. Students will apply lecture principles to in-class, hands-on, and field exercises. Students should be prepared to participate in one or more off-campus field exercises.

Associate Degree Applicable

Course credit transfers to CSU and UC.

GEOG 111H PHYSICAL GEOGRAPHY LABORATORY - HONORS 1 UNIT

PREREQUISITE/COREQUISITE: GEOG 110.

LABORATORY: 3 contact hours per week.

This is the laboratory companion for the GEOG 110 physical geography lecture course. This course is recommended for students concurrently enrolled in GEOG 110 or who have successfully completed the course within last three years. Students will apply lecture principles to in-class, hands-on, and field exercises. Students should be prepared to participate in one or more off-campus field exercises. This course is intended for students in the Honors Program but is open to all students who desire more challenging coursework. (Formerly GEOG 285)

Associate Degree Applicable

Course credit transfers to CSU and UC.

GEOG 114 WEATHER AND CLIMATE 4 UNITS

PREREQUISITE: None.

DEPARTMENTAL ADVISORIES: MATH 942 and ENGL 015.

LECTURE: 3 contact hours per week and

LABORATORY: 3 contact hours per week.

This course covers earth's atmospheric phenomena, with special reference to the causes and regional distribution of weather and climate, both past and present. Emphasis will be given to current environmental topics, including natural and anthropogenic global climate change, air pollution, and global dimming.

Associate Degree Applicable

Course credit transfers to CSU and UC.

GEOL 112
HISTORICAL GEOLOGY 4 UNITS
PREREQUISITE: *GEOL 100 or 101.*
LECTURE: 3 contact hours per week and
LABORATORY: 3 contact 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.
Associate Degree Applicable
Course credit transfers to CSU and UC.

GEOL 122
ENVIRONMENTAL GEOLOGY 3 UNITS
PREREQUISITE: *None.*
LECTURE: 3 contact 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 contact 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 contact hours per week and
LABORATORY: 3 contact 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.
Associate Degree Applicable
*Course credit transfers to CSU and *UC.*

GEOL 201
MINERALOGY 4 UNITS
PREREQUISITE: *CHEM 101.*
LECTURE: 3 contact hours per week and
LABORATORY: 3 contact 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.
Associate Degree Applicable
*Course credit transfers to CSU and *UC.*

GEOL 222
INDEPENDENT STUDY IN GEOLOGY 1-3 UNITS
PREREQUISITE: *GEOL 100 or 101.*
INDEPENDENT STUDY: 3-9 contact 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 contact 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.

GEOL 250
GEOLOGY OF CALIFORNIA 3 UNITS
PREREQUISITE: *None.*
LECTURE: 3 contact 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 contact 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.
Associate Degree Applicable
Course credit transfers to CSU.

GEOL 260
INTRODUCTION TO FIELD GEOLOGY 2 UNITS
PREREQUISITE: *GEOL 100 or 101.*
LECTURE: 1 contact hour per week and
LABORATORY: 3 contact hours per week.
Demonstration, discussion and practice of field investigations of geologic environments involving describing, mapping, and identifying geologic phenomena. Field studies are required.
Associate Degree Applicable
Course credit transfers to CSU and UC.

GEOL 270x2
GEOLOGY OF THE EASTERN SIERRA NEVADA 1 UNIT
PREREQUISITE: *Any GEOL course.*
LECTURE: .5 contact 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.

HEALTH EDUCATION
See the Department of
PHYSICAL EDUCATION AND HEALTH

HISTORY

DIVISION: Social Sciences, Human
Development and Physical
Education
DIVISION DEAN: Corene Schwartz, Ed.D.
FACULTY CHAIR: Colleen Calderon, M.A.
NH 322
OTHER FACULTY: Jeffrey Demsky, Ph.D.
Edward Gomez, M.A.
ADMINISTRATIVE SECRETARY: Karen Deck
DIVISION OFFICE: NH 345
(909) 384-8603
LIAISON COUNSELOR: Frank Dunn, 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.

**COURSES OFFERED BY THE DEPARTMENT
OF HISTORY:**

HIST 100
UNITED STATES HISTORY TO 1877 3 UNITS
PREREQUISITE: None.

DEPARTMENTAL ADVISORY: Eligible for ENGL 015 as determined by SBVC assessment process.
LECTURE: 3 contact hours per week.

This course provides a general survey of United States history with an emphasis on political, economic, social, and cultural developments from the pre-Colonial period through the Civil War and Reconstruction period.

Associate Degree Applicable
Course credit transfers to CSU and UC.

HIST 101
UNITED STATES HISTORY: 1865 TO PRESENT 3 UNITS

PREREQUISITE: None.
DEPARTMENTAL ADVISORY: Eligible for ENGL 015 as determined by SBVC assessment process.
LECTURE: 3 contact hours per week.

This course covers a general survey of United States history with an emphasis on social, political, cultural and economic developments from the Reconstruction period to present times.

Associate Degree Applicable
Course credit transfers to CSU and UC.

HIST 107
**THE UNITED STATES AND THE NORTH
AMERICAN INDIANS** 3 UNITS

PREREQUISITE: None.

LECTURE: 3 contact hours per week.

This course is a history of Native Americans in the region of current day United States from the time preceding European colonialism through the 21st century.

Associate Degree Applicable
Course credit transfers to CSU and UC.

HIST 110
HISTORY OF THE SERRANO PEOPLE 3 UNITS
PREREQUISITE: None.

DEPARTMENT ADVISORY: Eligible for ENGL 015 as determined by SBVC assessment process.

LECTURE: 3 contact hours per week.

This course provides a general historical overview of Serrano people. This course covers studies and research in Serrano history, as well as archeology, linguistics, and ethnography. Relationships with other Native Americans and European people as influences will also be explored.

Associate Degree Applicable
Course credit transfers to CSU and UC.

HIST 137
**RACIAL AND ETHNIC GROUPS IN UNITED
STATES HISTORY** 3 UNITS

PREREQUISITE: None.

DEPARTMENT ADVISORY: Eligible for ENGL 015 as determined by SBVC assessment process.

LECTURE: 3 contact hours per week.

This course is 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.

Associate Degree Applicable
Course credit transfers to CSU and UC.

HIST 138
AFRICAN-AMERICAN HISTORY TO 1877 3 UNITS
PREREQUISITE: None.

DEPARTMENT ADVISORY: Eligible for ENGL 015 as determined by SBVC assessment process.

LECTURE: 3 contact hours per week.

As a general survey of African-American history to 1877, this course will analyze and detail the creation and development of African-American culture. This course examines key historical events and movements, such as the Atlantic slave trade, colonial and antebellum slavery, slave resistance, and the role of Free Blacks.

Associate Degree Applicable
Course credit transfers to CSU and UC.

HIST 139
AFRICAN-AMERICAN HISTORY 1877 TO PRESENT **3 UNITS**

PREREQUISITE: None.

DEPARTMENT ADVISORY: Eligible for ENGL 015 as determined by SBVC assessment process.

LECTURE: 3 contact hours per week.

This course will emphasize the various social, political, and economic forces that have shaped the lives of African Americans from Reconstruction to the current time period. Topics include the post Reconstruction South, the Great Migration, the Harlem Renaissance, the Civil Rights Movement, and the conservative backlash of the 1980s and 1990s.

Associate Degree Applicable

Course credit transfers to CSU and UC.

HIST 140
CHICANO HISTORY **3 UNITS**

PREREQUISITE: None.

LECTURE: 3 contact hours per week.

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.

Associate Degree Applicable

Course credit transfers to CSU and UC.

HIST 150
INTRODUCTION TO LATIN AMERICAN HISTORY **3 UNITS**

PREREQUISITE: None.

LECTURE: 3 contact 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 170
WORLD HISTORY TO 1500 **3 UNITS**

PREREQUISITE: None.

DEPARTMENT ADVISORY: Eligible for ENGL 015 as determined by SBVC assessment process.

LECTURE: 3 contact hours per week.

This course covers the origins and development of civilizations in Europe, the Americas, Africa, the Near East and East Asia are explored. There is 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 developments to 1500.

Associate Degree Applicable

Course credit transfers to CSU and UC.

HIST 171
WORLD HISTORY SINCE 1500 **3 UNITS**

PREREQUISITE: None.

DEPARTMENT ADVISORY: Eligible for ENGL 015 as determined by SBVC assessment process.

LECTURE: 3 contact hours per week.

This course emphasizes the unique characteristics of world cultures as they entered into a critical period of increasing interaction. Specific themes include religion, economic and political revolution, the development of modern science, industrialism, imperialism, colonization and de-colonization, the rise and fall of superpowers, and the challenges of globalization.

Associate Degree Applicable

Course credit transfers to CSU and UC.

HIST 222
INDEPENDENT STUDY IN HISTORY **1-3 UNITS**

PREREQUISITE: None.

INDEPENDENT STUDY: 3-9 contact hours per week.

Students with previous course work in history may complete assigned research and analysis of selected topics. This independent study is for students who are interested in further developing their knowledge of history. 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.

HUMAN SERVICES

DIVISION: Social Science, Human Development and Physical Education
DIVISION DEAN: Corene Schwartz, Ed.D.
FACULTY CHAIR: James Robinson, M.A., C.A.T.S.
NH 318
(909) 384-8583
OTHER FACULTY: Melinda Moneymaker, B.A.
ADMINISTRATIVE SECRETARY: Karen Deck
DIVISION OFFICE: NH 345
(909) 384-8603
LIAISON COUNSELOR: Patty Jones, 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 may be applied toward Continuing Education Hours for Marriage and Family Therapists (MFT's) and Licensed Clinical Social Workers (LCSW's), Provider Number PCE 2005. Several courses also apply toward Continuing Education hours for Registered Nurses, Provider Number 01480.

HUMAN SERVICES ASSOCIATE OF ARTS DEGREE

To graduate with an Associate Degree with one of the following Human Services certificate specializations, (1) Alcohol/Drug Studies, (2) Career Specialist, (3) Case Management in the Public Sector (4) Eating Disorders Studies, or (5) Human Services, students must complete all of the requirements for the appropriate certificate with a grade of "C" or better plus the general breadth requirements for the Associate Degree (minimum total of 60 units).

Another option for students who want to graduate with an Associate Degree in Human Services, without one of the above certificate specializations, is to complete 18 units from the following required courses for the Human Services major plus the general education breadth requirements for the Associate Degree (minimum total of 60 units).

REQUIRED COURSES:		UNITS
HUMSV 170	Introduction to Human Services	3
HUMSV 172	Group and Family Dynamics	3
HUMSV 173	Helping and Interpersonal Skills	3
HUMSV 179	Legal/Ethical Issues in Human Services	3
PSYCH 100	General Psychology	or 3
PSYCH 100H	General Psychology - Honors	3
SOC100	Introduction to Sociology	or 3
SOC 100H	Introduction to Sociology - Honors	3

TOTAL UNITS: 18

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.

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 entry 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.

REQUIRED COURSES:	UNITS
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: UNITS

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: UNITS

ENGL 015 Preparation for College Writing	4
or	
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: UNITS

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 for entry-level employment in community agencies in counseling.

REQUIRED COURSES:	UNITS
HUMSV 170 Introduction to Human Services	3
HUMSV 172 Group and Family Dynamics	3
HUMSV 173 Helping and Interpersonal Skills	3
HUMSV 207 Career Specialist	3
PSYCH 132 Counseling Techniques	3

REQUIRED FIELD WORK COURSES: **UNITS**
A minimum of four Human Services courses required for the certificate, including HUMSV 207, should be completed prior to field work courses.

HUMSV 198E Career Specialist Work Experience	2
and	
HUMSV 195A or B Human Services: Intern Seminar I or II	1

REQUIRED GENERAL EDUCATION COURSES:	UNITS
ENGL 015 Preparation for College Writing	4
or	
ENGL 101 Freshman Composition	(4)
PSYCH 100 General Psychology	3
SOC 100 Introduction to Sociology	3
SPEECH 100 Elements of Public Speaking	3
TOTAL UNITS:	31

1. 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:	UNITS
HUMSV 140 Case Management in Public Service	3
HUMSV 167 Crisis Intervention, Assessment, Referral	3
HUMSV 170 Introduction to Human Services	3
HUMSV 173 Helping and Interpersonal Skills	3

REQUIRED FIELD WORK COURSES: **UNITS**
A minimum of three courses required for the certificate, including HUMSV 140 and HUMSV 170, should be completed prior to field work courses.

HUMSV 198F Case Management Work Experience	2
and	
HUMSV 195A or B Human Services: Intern Seminar I or II	1

REQUIRED GENERAL EDUCATION COURSES:	UNITS
ENGL 015 Preparation for College Writing	4
or	
ENGL 101 Freshman Composition	(4)
CIT 100 Introduction to Personal Computers	3
PSYCH 100 General Psychology	3
SPEECH 111 Interpersonal Communication	3
SPEECH 174 Intercultural Communication	3
TOTAL UNITS:	31

4. EATING DISORDERS STUDIES CERTIFICATE

This certificate is designed to prepare students for entry-level employment in the field of eating disorders intervention, counseling, and treatment.

REQUIRED COURSES:	UNITS
HUMSV 170 Introduction to Human Services	3
HUMSV 172 Group and Family Dynamics	3
HUMSV 173 Helping and Interpersonal Skills	3
HUMSV 175 Introduction to Eating Disorders	3
HUMSV 176 Treatment Modalities for Eating Disorders	3
HUMSV 178 Medical Aspects of Eating Disorders	3

REQUIRED FIELD WORK COURSES: **UNITS**
A minimum of four Human Services courses required for the certificate should be completed prior to field work courses.

HUMSV 198G Eating Disorders Work Experience	2
and	
HUMSV 195A or B Human Services: Intern Seminar I or II	1

REQUIRED GENERAL EDUCATION COURSES:	UNITS
ENGL 015 Preparation for College Writing	4
or	
ENGL 101 Freshman Composition	(4)
FCS 162 Nutrition	3
PSYCH 100 General Psychology	3
PSYCH 110 Abnormal Psychology	3
SOC 100 Introduction to Sociology	3
SPEECH 100 Elements of Public Speaking	3
TOTAL UNITS:	40

5. HUMAN SERVICES CERTIFICATE

This certificate is designed to prepare students for entry-level employment in human services with a knowledge of intervention methodologies at the individual, group, and community levels

REQUIRED COURSES:	UNITS
HUMSV 170 Introduction to Human Services	3
HUMSV 172 Group and Family Dynamics	3
HUMSV 173 Helping and Interpersonal Skills	3
HUMSV 179 Legal/Ethical Issues in Human Services	3
PSYCH 132 Counseling Techniques	3
SOC 110 Contemporary Social Issues	3
or	
SOC 141 Race & Ethnic Relations	(3)
and	
Six other units of Human Services courses	6

REQUIRED FIELD WORK COURSES: **UNITS**
A minimum of four Human Services courses required for the certificate should be completed prior to field work courses.

The following courses are to be taken together:	UNITS
HUMSV 195A Human Services: Intern Seminar I	1
HUMSV 198C Human Services Certificate Work Experience I	2

The following courses are to be taken together:	UNITS
HUMSV 195B Human Services: Intern Seminar II	1
HUMSV 198D Human Services Certificate Work Experience II	2

REQUIRED GENERAL EDUCATION COURSES:	UNITS
ENGL 015 Preparation for College Writing	4
or	
ENGL 101 Freshman Composition	(4)
PSYCH 100 General Psychology	3
SOC 100 Introduction to Sociology	3
TOTAL UNITS:	40

COURSES OFFERED BY THE DEPARTMENT OF HUMAN SERVICES:

**HUMSV 140
CASE MANAGEMENT IN PUBLIC SERVICE 3 UNITS
PREREQUISITE: None.**

LECTURE: 3 contact 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 contact 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 contact 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 contact 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 contact 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 contact 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 contact 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 and 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 contact 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. 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 178
MEDICAL ASPECTS OF EATING DISORDERS 3 UNITS

PREREQUISITE: None.

LECTURE: 3 contact 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.

Associate Degree Applicable
Course credit transfers to CSU.

HUMSV 179
LEGAL/ETHICAL ISSUES IN HUMAN SERVICES 3 UNITS

PREREQUISITE: None.

LECTURE: 3 contact hours per week.

This course is a study of the 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 contact 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 contact 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 contact 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 ADVISORIES: Complete four Human Services courses required for the Alcohol/Drug Studies Certificate and HUMSV 183, HUMSV 197A and HUMSV 198A.

LECTURE: 3 contact 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 186
ALCOHOL/DRUGS IN THE FAMILY 3 UNITS

PREREQUISITE: None.

LECTURE: 3 contact 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 contact 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 contact 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 contact 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 contact 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 contact 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 contact 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 197A****ALCOHOL/DRUG: INTERN SEMINAR I 1 UNIT**

DEPARTMENTAL ADVISORY: Prior to field work courses, students should complete four of the Human Services courses required for the Alcohol and Drug Studies Certificate (one of which must be either HUMSV 181 or HUMSV 190.) HUMSV 179, if not taken before field work courses, should be taken during the first semester of field work.

LECTURE: 1 contact 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. This course serves as a lecture-based support for students in fieldwork. **STUDENTS SEEKING ALCOHOL/DRUG STUDIES CERTIFICATE SHOULD ALSO TAKE HUMSV 183 AND HUMSV 198A.**

*Associate Degree Applicable**Course credit transfers to CSU.***HUMSV 197B****ALCOHOL/DRUG: INTERN SEMINAR II 1 UNIT**

DEPARTMENTAL ADVISORY: Students should complete HUMSV 183, HUMSV 197A and HUMSV 198A.

LECTURE: 1 contact 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. This course serves as a lecture-based support for students in fieldwork. **STUDENTS SEEKING ALCOHOL/DRUG STUDIES CERTIFICATE SHOULD ALSO TAKE HUMSV 183 AND HUMSV 198A.**

*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 contact 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-Z

198A ALCOHOL/DRUG WORK EXPERIENCE I

198B ALCOHOL/DRUG WORK EXPERIENCE II

198C HUMAN SERVICES CERTIFICATE WORK EXPERIENCE I

198D HUMAN SERVICES CERTIFICATE WORK EXPERIENCE II

198E CAREER SPECIALIST WORK EXPERIENCE

198F CASE MANAGEMENT WORK EXPERIENCE

198G EATING DISORDERS WORK EXPERIENCE

2-3 UNITS

PREREQUISITE: None.

DEPARTMENTAL ADVISORY: Complete the minimum courses required for taking the Field Work Courses for any of the Human Services Department Certificates.

Supervised work experience in specific agencies to provide student with field experience in the area of Human Services. Students work in their assigned agencies 10-15 contact hours per week with 5 hours each week equal to one unit. Schedule Description: Supervised work experience to provide students with field experience in the area of Human Services 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 contact 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 contact 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 contact 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 contact 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.

INSPECTION TECHNOLOGY

DIVISION:

Applied Technology,
Transportation and Culinary Arts

DIVISION DEAN, INTERIM:

Kay Ragan, Ed.D.

FACULTY CHAIR:

Jesse Galaviz, A.S.

Technical 108

(909) 384-8903

ADMINISTRATIVE SECRETARY:

Cecile Smith

DIVISION OFFICE:

Technical 108

(909) 384-8902

LIAISON COUNSELOR:

Frank Dunn, M.A.

(909) 384-4404

Courses in the Inspection Technology Department are designed to train construction inspectors and contractors who prepare construction for inspection. The training includes structural, mechanical, and technical aspects of construction. Building, plumbing, electrical, heating and air conditioning codes and related laws are included in the course offerings.

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.



**INSPECTION TECHNOLOGY
ASSOCIATE OF SCIENCE DEGREE**

This degree is designed to prepare students for entry-level employment in building inspection. International Conference of Building Officials (ICBO), International Code Councils (ICC), and California Code exams and licenses are covered to prepare students for employments in residential, commercial, and code enforcement. 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 of Science Degree (minimum total = 60 units).

REQUIRED COURSES:		UNITS
INSPEC 010B	Fundamentals of Construction Inspection I: Soils	3
INSPEC 011B	Fundamentals of Construction Inspection II: Concrete and Asphalt	3
INSPEC 012B	Fundamentals of Construction Inspection III: Wood, Steel, Masonry	3
INSPEC 013D	Advanced Construction Inspection: International Building Code (IBC)	3
INSPEC 014D	Advanced Construction Inspection: National Electrical Code (NEC)	3
INSPEC 015D	Advanced Construction Inspection: Uniform Plumbing Code (UPC)	3
INSPEC 016D	Advanced Construction Inspection: Uniform Mechanical Code (UMC)	3
INSPEC 017D	California State Energy Regulations for Residential Buildings	3
INSPEC 018D	California State Energy Regulations for Non-residential Buildings	3
INSPEC 024D	Community Relations for Civil Service Employees	3
INSPEC 025D	Building Inspection for Civil Service Employees: Communication and Enforcement	3
INSPEC 026D	Non-Structural Plan Review	3
TOTAL UNITS:		36

INSPECTION TECHNOLOGY 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 employment in construction inspection, International Conference of Building Officials (ICBO) and International Code Councils (ICC) exams and licenses for construction, alteration, or repair of buildings and other structures to ensure compliance with building codes and ordinances, zoning regulations, and contract specifications.

REQUIRED COURSES:		UNITS
INSPEC 010B	Fundamentals of Construction Inspection I: Soils	3
INSPEC 011B	Fundamentals of Construction Inspection II: Concrete and Asphalt	3
INSPEC 012B	Fundamentals of Construction Inspection III: Wood, Steel, Masonry	3

INSPEC 013D	Advanced Construction Inspection: International Building Code (IBC)	3
INSPEC 014D	Advanced Construction Inspection: National Electrical Code (NEC)	3
INSPEC 015D	Advanced Construction Inspection: Uniform Plumbing Code (UPC)	3
INSPEC 016D	Advanced Construction Inspection: Uniform Mechanical Code (UMC)	3
INSPEC 017D	California State Energy Regulations for Residential Buildings	3
INSPEC 018D	California State Energy Regulations for Non-residential Buildings	3
INSPEC 024D	Community Relations for Civil Service Employees	3
INSPEC 025D	Building Inspection for Civil Service Employees: Communication and Enforcement	3
INSPEC 026D	Non-Structural Plan Review	3
TOTAL UNITS:		36

COURSES OFFERED BY THE DEPARTMENT OF INSPECTION TECHNOLOGY:

**INSPEC 010B
FUNDAMENTALS OF CONSTRUCTION INSPECTION I: SOILS 3 UNITS**

PREREQUISITE: None.

LECTURE: 3 contact hours per week.

This course provides a basic study of soils engineering, soils construction methods, soils identification, soils terminology and nomenclature for inspectors.

Associate Degree Applicable

**INSPEC 011B
FUNDAMENTALS OF CONSTRUCTION INSPECTION II: CONCRETE AND ASPHALT 3 UNITS**

PREREQUISITE: None.

DEPARTMENTAL ADVISORY: INSPEC 010B.

LECTURE: 3 contact hours per week.

This course is 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 012B
FUNDAMENTALS OF CONSTRUCTION INSPECTION III: WOOD, STEEL, MASONRY 3 UNITS**

PREREQUISITE: None.

DEPARTMENTAL ADVISORY: INSPEC 011B.

LECTURE: 3 contact hours per week.

This course is a basic study of structures, including wood, steel, and masonry construction, building occupancies, construction and separations, acoustics and sound control.

Associate Degree Applicable

INSPEC 013D
ADVANCED CONSTRUCTION INSPECTION:
INTERNATIONAL BUILDING CODE (IBC) 3 UNITS
PREREQUISITE: None.
DEPARTMENTAL ADVISORY: INSPEC 012B.
LECTURE: 3 contact hours per week.
This course provides for inspectors a study of the International Building Code (IBC) including application, interpretation, and use of the code.
Associate Degree Applicable

INSPEC 014D
ADVANCED CONSTRUCTION INSPECTION:
NATIONAL ELECTRICAL CODE (NEC) 3 UNITS
PREREQUISITE: None.
DEPARTMENTAL ADVISORY: INSPEC 012B.
LECTURE: 3 contact hours per week.
This course provides an interpretation and a study of applications for the National Electrical Code.
Associate Degree Applicable

INSPEC 015D
ADVANCED CONSTRUCTION INSPECTION:
UNIFORM PLUMBING CODE (UPC) 3 UNITS
PREREQUISITE: None.
DEPARTMENTAL ADVISORY: INSPEC 012B.
LECTURE: 3 contact hours per week.
This course is a study, interpretation and application of the Uniform Plumbing Code (UPC).
Associate Degree Applicable

INSPEC 016D
ADVANCED CONSTRUCTION INSPECTION:
UNIFORM MECHANICAL CODE (UMC) 3 UNITS
PREREQUISITE: None.
DEPARTMENTAL ADVISORY: INSPEC 012B.
LECTURE: 3 contact hours per week.
This course is a study of requirements for the design, construction, installation and maintenance of heating, ventilating, cooling, refrigeration systems, incinerators and other heat-producing appliances required by the Uniform Mechanical Code (UMC).
Associate Degree Applicable

INSPEC 017D
CALIFORNIA STATE ENERGY REGULATIONS FOR
RESIDENTIAL BUILDINGS 3 UNITS
PREREQUISITE: None.
LECTURE: 3 contact hours per week.
This course studies basic compliance with California Title 24 Energy Efficiency Standards for residential buildings. It includes prescriptive and performance methods such as alternative packages and computer models.
Associate Degree Applicable

INSPEC 018D
CALIFORNIA STATE ENERGY REGULATIONS FOR
NON-RESIDENTIAL BUILDINGS 3 UNITS
PREREQUISITE: None.
LECTURE: 3 contact hours per week.
This course studies basic compliance with California Title 24 Energy Efficiency Standards for non-residential buildings. It includes prescriptive and performance methods such as alternative packages and computer models.
Associate Degree Applicable

INSPEC 024D
COMMUNITY RELATIONS FOR CIVIL SERVICE
EMPLOYEES 3 UNITS
PREREQUISITE: None.
LECTURE: 3 contact hours per week.
This course provides an introduction to community relations for civil service employees.
Associate Degree Applicable

INSPEC 025D
BUILDING INSPECTION FOR CIVIL SERVICE
EMPLOYEES: COMMUNICATION AND
ENFORCEMENT 3 UNITS
PREREQUISITE: None.
LECTURE: 3 contact hours per week.
This course provides the development of oral and written communication skills for code enforcement personnel. Topics include the proper methods of dealing with different types of encounters that an inspector may have with do-it-yourself homeowners, contractors, developers, etc. and the legal aspects of code administration and enforcement.
Associate Degree Applicable

INSPEC 026D
NON-STRUCTURAL PLAN REVIEW 3 UNITS
PREREQUISITE: None.
DEPARTMENTAL ADVISORY: INSPEC 013D.
LECTURE: 3 contact hours per week.
This course provides training in the application of the International Building Code to construction drawings, including legal requirements for non-structural plan review, local, State, and Federal laws applicable to construction drawings, and the use of plan reviews as a first step in performing consistent and thorough inspections.
Associate Degree Applicable

INSPEC 098
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 knowledge in the selected field of study. 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 098 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. (Formerly INSPEC 198)
Associate Degree Applicable

JOURNALISM
See the Department of ENGLISH

LIBERAL ARTS

Division: Instruction Office
Division Dean: Larry Buckley, Ph.D.
Vice President,
Instruction
Administrative Assistants: Laura Gowen
Nicole Williams
Division Office: Administration/
Student Services 200
(909) 384-8993
(909) 384-8239
LIAISON COUNSELOR: Cindy Parish, M.S.
(909) 384-4404

LIBERAL ARTS ASSOCIATE OF ARTS DEGREE

The Associate Degree in Liberal Arts is designed for students who wish a broad knowledge of liberal arts and sciences plus additional coursework in an "Area of Emphasis". An area of emphasis is ideal for students planning to transfer to the California State University (CSU) or University of California (UC). Students can satisfy required general education requirements, plus focus on transferable course work that relates to majors at CSU or UC. Students are advised to consult with a counselor for specific information regarding choice of major and transfer university. Students may obtain an Associate of Arts Degree in Liberal Arts by completing a minimum of 60 semester units as outlined below.

It is recommended that students complete either the IGETC or the CSUGE for the general education pattern related to your educational goal. Students are also strongly advised to consult with a counselor relative to required courses for the selected option.

For either the IGETC or CSUGE option, 39-48 units of general education are required.

- Complete 18 units in one "**Area of Emphasis**" from those outlined below. For depth of study, a minimum of two courses in one discipline is required. (Note: Where appropriate, courses in the "Area of Emphasis" may also be counted for Associate Degree Option #1 or #2.)
- For ALL OPTIONS, complete necessary SBVC graduation and proficiency requirements (Refer to page 30 in the SBVC catalog).
- All classes listed below transfer to CSU. Courses in **BOLD** are transferable to **UC**. Refer to www.assist.org for transfer details.
- Courses that include a symbol x in the number such as MUS 141x4 indicate the course may be taken four times for credit. Students may apply each course with a symbol x only one time toward graduation requirements.

I. AREAS OF EMPHASES

A. Biological and Physical Sciences

These courses emphasize the natural sciences which examine the physical universe, its life forms and natural phenomena. Courses in mathematics emphasize the development of mathematical and quantitative reasoning skills beyond the level of intermediate algebra. Students

will be able to demonstrate an understanding of the methodologies of science as investigative tools. Students will also examine the influence that the acquisition of scientific knowledge has on the development of world civilization.

Anthropology (ANTHRO)
106, 106H

Astronomy (ASTRON)
120, 125

Biology (BIOL)
100, 104, 109, 109H, 123, 155, 201, 202, 204, 250, 251, 260, 261, 270

Chemistry (CHEM)
101, 104, 110, 150, 150H, 151, 151H, 212, 212H, 213, 213H

Economics (ECON)
208

Geography (GEOG)
110, 111, 111H, 114, 285

Geology (GEOL)
101, 111, 112, 122, 200, 250, 251

Mathematics (MATH)
102, 103, 108, 115, 151, 250, 251, 252, 265, 266

Oceanography (OCEAN)
101, 111

Physical Science (PS)
101

Physics (PHYSIC)
101, 150A, 150B, 200, 201

Psychology (PSYCH)
105

B. Social and Behavioral Sciences

These courses emphasize the perspective, concepts, theories and methodologies of the disciplines typically found in the vast variety of disciplines that comprise study in the social and behavioral sciences. Topics and discussion to stimulate critical thinking about ways people have acted in response to their societies will allow students to evaluate how societies and social subgroups operate.

Anthropology (ANTHRO)
100, 102, 106, 106H, 107, 109, 110

Child Development (CD)
105, 105H, 126

Economics (ECON)
100, 200, 200H, 201

Geography (GEOG)
102, 106, 120

History (HIST)
100, 101, 107, 110, 137, 138, 139, 140, 150, 170, 171

Political Science (POLIT)
100, 110, 110H, 204

Psychology (PSYCH)
100, 100H, 102, 103, 110, 111, 112, 118

Radio/Television/Film (RTVF)
RTVF 100

Religious Studies (RELIG)
110, 135

Sociology (SOC)
100, 100H, 110, 130, 141, 145, 150

Speech (SPEECH)
135, 174, 176

French (FRENCH)
101, 102

History (HIST)
100, 101, 107, 110, 137, 138, 139, 140, 150, 170, 171

Music (MUS)
100, 101, 101L, 102, 102L, 104, 105, 106, 107, 117x4, 121, 122, 130, 131, 133, 134, 136, 141x4, 150x4, 152x4, 154x4, 156x4, 158x4, 201, 201L, 202, 202L

Philosophy (PHIL)
101, 101H, 105, 112, 180

Physical Science (PS)
PS 112

Radio/Television/Film (RTVF)
RTVF 101, 132, 134

Religious Studies (RELIG)
100, 100H, 101, 110, 135, 150, 175, 176, 180

Spanish (SPAN)
101, 102, 103, 103H, 104, 157, 158

Theatre Arts (THART)
100, 114x4, 120, 121, 131, 132, 135, 136, 139, 147, 160x4, 165, 166

TOTAL UNITS:

60

A. Humanities and Fine Arts

These courses emphasize the study of cultural, literary, humanistic activities and artistic expression of human beings. Students will evaluate and interpret the ways in which people throughout the ages in different cultures have responded to themselves and the world around them in artistic and cultural creation. Students will also learn to value aesthetic understanding and incorporate these concepts when constructing value judgments.

American Sign Language (ASL)
109, 110, 111, 112

Anthropology (ANTHRO)
107, 109, 110

Arabic (ARAB)
101, 102

Architecture (ARCH)
145, 146

Art (ART)
100, 102, 103, 105, 107, 108, 110, 111, 120, 124x4, 126x4, 132x4, 145, 148, 158x4, 161, 164x4, 175x4, 180, 212x4, 240x4, 270x4, 285

Dance (DANCE)
200, 203

English (ENGL)
151, 153, 155, 161, 163, 165, 175, 232, 260, 261, 270, 271, 275, 280, 281

LIBRARY TECHNOLOGY

DIVISION: Library and Learning Support Services
DIVISION DEAN: Marie Mestas, M.L.S.
FACULTY CHAIR: Patricia Wall, M.L.I.S.
Library 131
(909) 384-8577
ADMINISTRATIVE SECRETARY: Catalina Transporte
DIVISION OFFICE: Library 210
(909) 384-8684
OTHER FACULTY: Celia McKinley-Huston, Ph.D.
Ginny Evans-Perry, M.L.I.S.
LIAISON COUNSELOR: Ailsa Aguilar-Kitibutr, Psy.D.
(909) 384-4404

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.

**LIBRARY TECHNOLOGY
ASSOCIATE OF ARTS DEGREE**

To graduate with a specialization in Library Technology, 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:		UNITS
ENGL 055	Children's Literature	or 3
ENGL 155 **	Children's Literature	3
LIB 062	Care and Repair of Library Materials	1
LIB 064	Introduction to Libraries for Library Technicians	1
LIB 065	Public Services for Library Technicians	3
LIB 066	Acquisitions for Library Technicians	3
LIB 067	Library Technical Services	3
LIB 068	Library Media Services	2
LIB 069 *	Library Automation for Library Technicians	2

RECOMMENDED COURSES:		UNITS
LIB 110	Information Literacy	1

TOTAL UNITS: 19

* or any other hands-on college-level computer course
 ** or any other college-level literature course

LIBRARY TECHNOLOGY 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 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.

REQUIRED COURSES:		UNITS
CIT 010 **	Beginning Keyboarding	3
ENGL 055	Children's Literature	or 3
ENGL 155 ***	Children's Literature	3
LIB 062	Care and Repair of Library Materials	1
LIB 064	Introduction to Libraries for Library Technicians	1
LIB 065	Public Services for Library Technicians	3
LIB 066	Acquisitions for Library Technicians	3
LIB 067	Library Technical Services	3
LIB 068	Library Media Services	2
LIB 069 *	Library Automation for Library Technicians	2
LIB 098 ****	Library Technology Work Experience	1 - 4

TOTAL UNITS: 22 - 25

* or any other hands-on college-level computer course

** or demonstrated ability to type 30 wpm for five minutes

*** or any other college-level literature course

****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 contact hour per week and
LABORATORY: 1.5 contact hours per week.
 This course provides the basic, hands-on techniques used 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 contact hour per week.
 This course is an introduction to the philosophy of library services; 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 a positive workplace attitude.
Associate Degree Applicable

**LIB 065
PUBLIC SERVICES FOR LIBRARY TECHNICIANS 3 UNITS**

PREREQUISITE: None.
 This course is 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 contact hours per week.
 This course is an introduction to the publishing industry, principles of collection development, bibliographic searching, acquisitions tools and techniques, accounting and budgeting principles. Also included is an overview of ordering, receiving, claiming procedures, and weeding.
Associate Degree Applicable

**LIB 067
LIBRARY TECHNICAL SERVICES 3 UNITS**

PREREQUISITE: None.
LECTURE: 3 contact hours per week.
 This class is an introduction to descriptive and subject cataloging. It includes classification of materials using the Dewey Decimal and Library of Congress systems, preparation of catalog cards and computer database records, and use of electronic bibliographic utilities.
Associate Degree Applicable

LIB 068**LIBRARY MEDIA SERVICES****2 UNITS****PREREQUISITE: None.****LECTURE: 1.5 contact hours per week and****LABORATORY: 1.5 contact hours per week.**

This course 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 ADVISORY: LIB 065.****LECTURE: 1.5 contact hours per week and****LABORATORY: 1.5 contact hours per week.**

This class is an 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 and automated circulation and cataloging systems. In addition, students will gain knowledge of Web 2.0 applications and emerging technology that could be used in libraries.

*Associate Degree Applicable***LIB 098****LIBRARY TECHNOLOGY WORK EXPERIENCE****1-4 UNITS****PREREQUISITE: None.**

Supervised training, in the form of on the job employment will enhance the student's knowledge in the selected field of study. 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 098 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. (Formerly LIB 198)

*Associate Degree Applicable***LIB 110****INFORMATION LITERACY****1 UNIT****PREREQUISITE: None.****LECTURE: 1 contact hour per week.****LABORATORY: None.**

This is an introductory course covering the skills needed to effectively access library 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.***MACHINIST TECHNOLOGY**

DIVISION: Applied Technology,
Transportation and Culinary Arts
DIVISION DEAN, INTERIM: Kay Ragan, Ed.D.
FACULTY CHAIR: Jesse Galaviz, A.S.
Technical 108
(909) 384-8903
ADMINISTRATIVE SECRETARY: Cecile Smith
DIVISION OFFICE: Technical 108
(909) 384-8902
LIAISON COUNSELOR: Frank Dunn, M.A.
(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.

MACHINIST TECHNOLOGY**ASSOCIATE OF SCIENCE DEGREE**

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

REQUIRED COURSES:		UNITS
MACH 021B	Machine Shop I	4
MACH 022B	Machine Shop II	4
	Engineering Blueprint Reading, Geometric Dimensioning, and Tolerancing	3
MACH 090B	Tolerancing	
MACH 120B	Machine Shop Theory	2
MACH 123A	Machine Shop III	4
MACH 124A	Machine Shop IV	4

RECOMMENDED COURSE:		UNITS
MACH 010x2	Test Review for National Industry Metal Skills (NIMS) Certification	2 - 4

TOTAL UNITS: 21

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.

MACHINIST TECHNOLOGY CERTIFICATES

The following is a list of seven 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		25
(2) Machinist Standard	6	25
(3) Tool and Die	14	25
(4) Computer Numerical Control: CAD/CAM	18	25
(5) Mechanical Hydraulics/Pneumatics	27	N/A
(6) Basic Operation Computerized Numerical Control	16	N/A
(7) Basic Machine Operator	12	N/A

Note:

- Basic Operation Computerized Numerical Control (CNC) certificate is not applicable toward an Associate of Science in Machinist Technology degree.

- Students are required to take specialized courses and additional core courses in order to receive the following certificates: Machinist Standard Certificate; Tool and Die Certificate; and Computer Numerical Certificate

**Core Courses:	UNITS
MACH 120B Machine Shop Theory	2
MACH 021B Machine Shop I	4
MACH 022B Machine Shop II	4
MACH 123A Machine Shop III	4
MACH 124A Machine Shop IV	4
MACH 090B Engineering Blueprint Reading, Geometric Dimensioning and Tolerancing	3
TECALC 087 Technical Calculations	4
TOTAL UNITS for the Core Requirements:	25

1. MACHINE TECHNOLOGY CERTIFICATE

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.

REQUIRED COURSES:	UNITS
MACH 120B Machine Shop Theory	2
MACH 021B Machine Shop I	4
MACH 022B Machine Shop II	4
MACH 123A Machine Shop III	4
MACH 124A Machine Shop IV	4
MACH 090B Engineering Blueprint Reading, Geometric Dimensioning, and Tolerancing	3
TECALC 087 Technical Calculations	4
RECOMMENDED COURSE:	UNITS
MACH 010x2 Test Review for National Industry Metal Skills (NIMS) Certification	2 - 4
TOTAL UNITS:	25

2. MACHINIST STANDARD CERTIFICATE

This certificate is designed to prepare students for entry-level employment in manufacturing producing precision metal parts using machine tools such as lathes, milling machines, and spindles, or in the maintenance and manufacture of new parts for existing machinery.

REQUIRED COURSES:	UNITS
Machine Technology Core Requirements	25
MACH 070B Computer Numerical Control Machining I	3
MACH 129B Manufacturing Processes	3
TOTAL UNITS:	31

3. TOOL AND DIE CERTIFICATE

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 used daily - from clothing and furniture to heavy equipment and parts for aircraft.

REQUIRED COURSES:	UNITS
Machine Technology Core Requirements	25
MACH 160A Tool and Die	4
MACH 061B Jig and Fixture Making	4
MACH 129B Manufacturing Processes	3
TOTAL UNITS:	36

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.

REQUIRED COURSES:	UNITS
Machine Technology Core Requirements	25
MACH 070B Computer Numerical Control Machining I	3
MACH 071B Computer Numerical Control Machining II	3
MACH 072B Computer Aided Design/Computer Aided Manufacturing I	3
MACH 073B Computer Aided Design/Computer Aided Manufacturing II	3
MACH 074B Set-up and Operation of Various Machine Controls	3
MACH 129B Manufacturing Processes	3
TOTAL UNITS:	43

5. MECHANICAL HYDRAULICS/PNEUMATICS CERTIFICATE

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.

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 045 Shielded Metal Arc Welding	3
TOTAL UNITS:	27

6. BASIC OPERATION COMPUTERIZED NUMERICAL CONTROL (CNC) CERTIFICATE

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:	16

7. BASIC MACHINE OPERATOR CERTIFICATE

This certificate is designed to prepare students with basic entry-level machine operator skills, safety knowledge, theory, and quality control skills in manufacturing processes. Students obtaining this certificate will qualify for the first level certification in National Industry Metal Skills (NIMS).

REQUIRED COURSES:	UNITS
MACH 021B Machine Shop I	4
MACH 075X2 Introduction to Computer Aided Drafting Technologies	3
MACH 090B Engineering Blueprint Reading, Geometric Dimensioning, and Tolerancing	3
MACH 120B Machine Shop Theory	2
TOTAL UNITS:	12

COURSES OFFERED BY THE DEPARTMENT OF MACHINIST TECHNOLOGY:

**MACH 010x2
TEST REVIEW FOR NATIONAL INDUSTRY METAL SKILLS (NIMS) CERTIFICATION** 2 UNITS
PREREQUISITE: None.

LECTURE: 2 contact hours per week.

This course is a review of the expected range of knowledge (ROK) required to obtain the NIMS Certification. Topics include NIMS mathematics, bench and layout, turning between centers, chucking, milling, surface grinding, drill press, and computerized numerical control (CNC).

Associate Degree Applicable

**MACH 021B
MACHINE SHOP I** 4 UNITS

PREREQUISITE: None.

DEPARTMENTAL ADVISORY: MACH 120A.

**LECTURE: 2 contact hours per week and
LABORATORY: 6 contact 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 contact hours per week and
LABORATORY: 6 contact 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

PREREQUISITE: None.

**DEPARTMENTAL ADVISORIES: MACH 021B and
MACH 120B.**

**LECTURE: 3 contact hours per week and
LABORATORY: 3 contact 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 contact hour per week and
LABORATORY: 3 contact 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 contact hours per week and
LABORATORY: 3 contact hours per week.
Beginning Computer Numerical Control (CNC) programming covering programming concepts, Cartesian coordinate systems, geometric principles, and hands on programming.
Associate Degree Applicable

MACH 071B
COMPUTER NUMERICAL CONTROL MACHINING II 3 UNITS
PREREQUISITE: None.
LECTURE: 2 contact hours per week and
LABORATORY: 3 contact 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 contact hours per week and
LABORATORY: 3 contact 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: None.
LECTURE: 2 contact hours per week and
LABORATORY: 3 contact 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: None.
LECTURE: 2 contact hours per week and
LABORATORY: 3 contact 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 contact hour per week and
LABORATORY: 6 contact 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 090B
ENGINEERING BLUEPRINT READING, GEOMETRIC
DIMENSIONING AND TOLERANCING 3 UNITS
PREREQUISITE: None.
LECTURE: 3 contact hours per week.
Blueprint interpretation with emphasis on terminology, Coordinate Measuring Machines (CMM), and concepts related to engineering drawing standards, geometric dimensioning and tolerancing language ANSI Y14.5, and how these apply to the engineering blueprint inspection processes.
Associate Degree Applicable

MACH 091A
RIGGING SYSTEMS AND TECHNIQUES 3 UNITS
PREREQUISITE: None.
LECTURE: 2 contact hours per week and
LABORATORY: 3 contact hours per week.
Rigging system fundamentals and their various applications in the manufacturing, construction, and transportation industry. Students will study rigging equipment, rigging processes, and how to operate rigging systems such as power hoists, sling and assemblies, and overhead crane operations.
Associate Degree Applicable

MACH 092A
FLUID POWER SYSTEMS I 2 UNITS
PREREQUISITE: None.
LECTURE: 1 contact hour per week and
LABORATORY: 3 contact 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 contact hour per week and
LABORATORY: 3 contact 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
PREQUISITE: None.
LECTURE: 2 contact 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 contact hour per week.
 This course focuses on an introduction to piping and piping installation, tubing, hoses, and valves.
Associate Degree Applicable

MACH 096A
CENTRAL LUBRICATION 1 UNIT
LECTURE: 1 contact hour per week.
PREREQUISITE: None.
 This course focuses on an introduction to central lubrication operations, lubrication concepts, simple series/progressive lubrication, troubleshooting and maintenance.
Associate Degree Applicable

MACH 097A
MECHANICAL SYSTEMS 2 UNITS
PREREQUISITE: None.
LECTURE: 1 contact hour per week and
LABORATORY: 3 contact 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.
Associate Degree Applicable

MACH 098
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 knowledge in the selected field of study. 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 098 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. (Formerly MACH 198)
Associate Degree Applicable

MACH 120B
MACHINE SHOP THEORY 2 UNITS
PREREQUISITE: None.
LECTURE: 2 contact 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 contact hours per week and
LABORATORY: 6 contact 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 contact hours per week and
LABORATORY: 6 contact 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 contact 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: None.
DEPARTMENTAL ADVISORY: MACH 120B.
LECTURE: 3 contact hours per week and
LABORATORY: 3 contact 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.

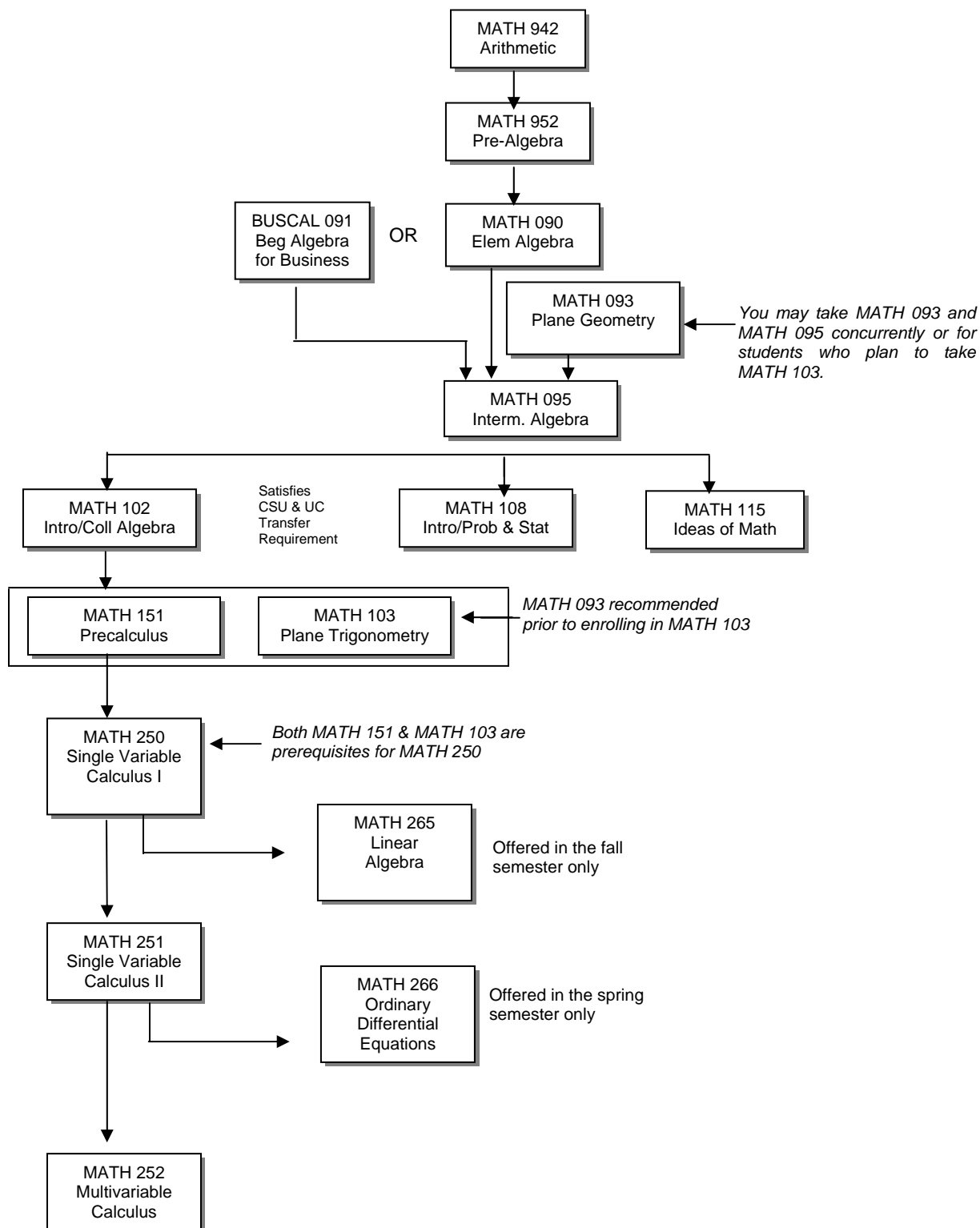
Sequence of Mathematics Courses at SBVC

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.)



MATHEMATICS

DIVISION:	Mathematics, Business and Computer Technology
DIVISION DEAN:	Haragewen Kinde, Ed.D.
FACULTY CHAIR:	Jeremiah Gilbert, Ph.D. Physical Science 248 (909) 387-1604
OTHER FACULTY:	Vicente Alvarez, Ph.D. Victoria Anemelu, Ph.D. Lori Ann Blecka, M.S. Stephanie Briggs, Ph.D. Kristen Dillard, M.A. Yvonne Marie Ellis, M.S. Ann Gibbons, M.A. Moustafa Kanawati, M.A. Abeir Israeil, M.A. Keith Lee, M.S. Michael Mayne, M.S. Zadock Reid, Ph.D. David Smith, M.A. Teri Strong, Ph.D.
ADMINISTRATIVE SECRETARY:	Vivian Marquez Business 100 (909) 384-8520/8908
LIAISON COUNSELOR:	Denise McCrary, Ed.D. (909) 384-4404

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.

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:	UNITS
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:	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 contact 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 contact hour per week.

This is the first course of a basic skills sequence emphasizing arithmetic topics including the fundamental operations 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: MATH 942A.

LECTURE: 1 contact hour per week.

This is the second course of a basic skills sequence emphasizing arithmetic topics including the fundamental operations of fractions and decimals as they apply to vocational fields.

Not applicable to the Associate Degree

MATH 942C
VOCATIONAL ARITHMETIC: PROPORTIONS, RATIOS, PERCENTS, AND GEOMETRY **1 UNIT**

PREREQUISITE: MATH 942B.

LECTURE: 1 contact hour per week.

This is the third course of a basic skills sequence emphasizing arithmetic topics including proportions, ratios, percents, and geometry as they apply to vocational fields.

Not applicable to the Associate Degree

MATH 952
PREALGEBRA **4 UNITS**
PREREQUISITE: MATH 942 or MATH 942C or eligibility for MATH 942 as determined through the SBVC assessment process.

LECTURE: 4 contact hours per week.

An introduction to mathematical properties; exponential notation; linear equations in one variable; algebraic word problems; variables; polynomials; and the appropriate rules for rational numbers, whole numbers, and integers; an emphasis on speaking, listening, reading, and writing in communicable mathematical terminology.

Not applicable to the Associate Degree

MATH 952A
PREALGEBRA: INTEGERS **1 UNIT**
PREREQUISITE: MATH 942 or MATH 942C or eligibility for MATH 952 as determined through the SBVC assessment process.

LECTURE: 1 contact hour per week.

First course of a sequence emphasizing prealgebra topics including properties of real numbers, operations with integers, an introduction to variables, and simplifying algebraic expressions by adding subtracting, multiplying and dividing polynomials.

Not Applicable to Associate Degree

MATH 952B
PREALGEBRA: FRACTIONS 1 UNIT
PREREQUISITE: MATH 952A.
LECTURE: 1 contact hour per week.
Second course of a sequence emphasizing prealgebra topics including properties of fractions, operations with fractions, and simplifying algebraic expressions and solving simple linear equations containing fractions.
Not Applicable to Associate Degree

MATH 952C
PREALGEBRA: EXPONENTS AND LINEAR EQUATIONS 1 UNIT
PREREQUISITE: MATH 952B.
LECTURE: 1 contact hour per week.
Third course of a sequence emphasizing prealgebra topics including odd, even and prime numbers, rules of exponents, performing operations with exponents, simplifying algebraic expressions containing exponents, and further work solving simple linear equations.
Not Applicable to Associate Degree

MATH 952D
PREALGEBRA: DECIMALS, PERCENT, AND RATIOS 1 UNIT
PREREQUISITE: MATH 952C.
LECTURE: 1 contact hour per week.
Fourth course of a sequence emphasizing prealgebra topics including operations with decimals, percent, and ratios, simplifying algebraic expressions containing decimals and percent, solving proportions, solving simple linear equations containing decimals, and applications involving decimals, percent, and proportions.
Not Applicable to Associate Degree

MATH 010
FOUNDATIONAL SKILLS FOR MATHEMATICAL MAJORS .25 UNIT
PREREQUISITE: None.
COREQUISITE: MATH 102, 103, 151, 250, 251, 252, 265, or 266.
LABORATORY: 13.5 contact hours per semester.
This course enables students to develop and strengthen foundational mathematical skills during enrollment in major's-level mathematics coursework. Workshops emphasize skill-building in the analytical and communication skills necessary for success in major's-level mathematics classes and professional-level mathematics careers. Topics include applied math, word problems, data manipulation, graphing, logical argument and writing to support a thesis, critical thinking, and the use of technology. Graded on a Pass/No Pass basis only.
Associate Degree Applicable

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 contact hours per week.
Covers the basic concepts typically introduced in high school algebra, including operations on polynomials, exponents, solving linear and quadratic equations, linear inequalities, word problems, factoring, and rational expressions.
Associate Degree Applicable

MATH 093
PLANE GEOMETRY 4 UNITS
PREREQUISITE: MATH 090 or eligibility for MATH 095 as determined through the SBVC assessment process.
LECTURE: 4 contact 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.
LECTURE: 4 contact hours per week.
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 throughout the different topics.
Associate Degree Applicable

MATH 102
COLLEGE ALGEBRA 4 UNITS
PREREQUISITE: MATH 095 or eligibility for MATH 102 as determined through the SBVC assessment process.
LECTURE: 4 contact hours per week.
This course is designed for students with a strong foundation in algebra. It includes the study of quadratic equations and inequalities and their applications, an introduction to functions including operations and inverses, exponential functions and their graphs, logarithmic functions and their graphs and properties, in depth work graphing functions with transformations, an introduction to sequences, series, and the Binomial Expansion Theorem.
Associate Degree Applicable
*Course credit transfers to CSU and *UC.*

MATH 103
PLANE TRIGONOMETRY 4 UNITS
PREREQUISITE: MATH 102 or eligibility for MATH 103 as determined through the SBVC assessment process.
LECTURE: 4 contact 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.

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 contact hours per week.
This course is an introduction to probability, descriptive and inferential statistics, with applications to the natural sciences, business, economics, and the behavioral sciences.
Associate Degree Applicable
*Course credit transfers to CSU and *UC.*

MATH 115
IDEAS OF MATHEMATICS 3 UNITS
PREREQUISITE: MATH 095 or eligibility for MATH 102 as determined through the SBVC assessment process.

LECTURE: 3 contact hours per week.

This transfer level course is designed for non-science majors and includes sets, propositional logic, inductive reasoning and applications, mathematical patterns, counting methods, and finite probability spaces.

Associate Degree Applicable

Course credit transfers to CSU and UC.

MATH 151
PRECALCULUS 4 UNITS
PREREQUISITE: MATH 102 or eligibility for MATH 151 as determined through the SBVC assessment process.

LECTURE: 4 contact hours per week.

This course provides foundational skills to facilitate success in calculus. The course includes inequalities, functions and their graphs, polynomials and rational functions, exponential and logarithmic functions, conics, sequences and series, mathematical induction, the Binomial Theorem, and systems of equations and inequalities.

Associate Degree Applicable

*Course credit transfers to CSU and *UC.*

MATH 222
INDEPENDENT STUDY IN MATHEMATICS 1-3 UNITS
PREREQUISITE: MATH 095 or eligibility for MATH 102 as determined through the SBVC assessment process.

INDEPENDENT STUDY: 3-9 contact hours per week.

Assigned projects involving research or directed study for selected students who are interested in furthering their knowledge of mathematics on an independent study basis. Each unit of independent study requires 3 contact hours per week for an entire semester. Enrollment is limited to students who meet independent study criteria. A contract must be prepared with the instructor prior to registration.

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 or eligibility for MATH 250 as determined through the SBVC assessment process.

LECTURE: 4 contact hours per week.

A first course in calculus including limits, continuity, derivatives of algebraic and trigonometric functions, applications of derivatives, antiderivatives, and definite integrals and their applications.

Associate Degree Applicable

Course credit transfers to CSU and UC.

MATH 251
SINGLE VARIABLE CALCULUS II 4 UNITS
PREREQUISITE: MATH 250.

LECTURE: 4 contact hours per week.

This second course in calculus provides further application of definite integrals, differentiation and integration of transcendental functions, techniques of integration, L'Hopital's rule and improper integrals, infinite sequences and series, Taylor and power series.

Associate Degree Applicable

Course credit transfers to CSU and UC.

MATH 252
MULTIVARIABLE CALCULUS 5 UNITS
PREREQUISITE: MATH 251.

LECTURE: 5 contact hours per week.

A third course in calculus including vectors, lines, and simple surfaces in three dimensional space, some linear algebra topics, vector-valued functions, partial derivatives, multiple integrals, line integrals and Green's Theorem, Divergence Theorem, surface integrals and the theorems of Gauss and Stokes.

Associate Degree Applicable

Course credit transfers to CSU and UC.

MATH 265
LINEAR ALGEBRA 3 UNITS
PREREQUISITE: MATH 250 or eligibility as determined through the SBVC assessment process.

LECTURE: 3 contact 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.

MATH 266
ORDINARY DIFFERENTIAL EQUATIONS 3 UNITS
PREREQUISITE: MATH 251.

DEPARTMENTAL ADVISORY: MATH 252.

LECTURE: 3 contact 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 linear differential equations, linear systems, and an introduction to series solutions and the Laplace transform.

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, Arabic, French, and Spanish

MUSIC

DIVISION: Arts and Humanities
 DIVISION DEAN: Kathryn Weiss, Ed.D.
 FACULTY CHAIR: Matie Scully, M.M.
 NH 134
 (909) 384-8545
 ADMINISTRATIVE SECRETARY: Linda Tymchek, M.A.
 DIVISION OFFICE: NH 223
 (909) 384-8633
 LIAISON COUNSELOR: Ailsa Aguilar-Kitibutr, Psy.D.
 (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.

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).

REQUIRED COURSES:		UNITS
MUS 101	Music Theory I: Fundamentals	3
MUS 101L	Musicianship I	1
MUS 102	Music Theory II: Scales and Modes	3
MUS 102L	Musicianship II	1
MUS 201	Music Theory III: Basic Harmony	3
MUS 201L	Musicianship III	1
MUS 202	Music Theory IV: Harmony	3
MUS 202L	Musicianship IV	1
MUS 121	Music Literature I –Middle Ages Through Classicism	3
MUS 122	Music Literature II – Classicism To Present	3
MUS 133	Beginning Piano	3
Four semester units from the following performance courses:		4
MUS 141x4, 150x4, 152x4, 154x4, 156x4, 158x4		
TOTAL UNITS:		29

COURSES OFFERED BY THE DEPARTMENT OF MUSIC:

MUS 100
INTRODUCTION TO MUSIC **3 UNITS**
PREREQUISITE: None.

LECTURE: 3 contact 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.

DEPARTMENTAL ADVISORIES: ENGL 015 or eligibility for ENGL 101 or ENGL 101H as determined by SBVC assessment process.

LECTURE: 3 contact 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.

LABORATORY: 3 contact 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 and UC.

MUS 102
MUSIC THEORY II: SCALES AND MODES **3 UNITS**
PREREQUISITES: MUS 101 and MUS 101L

COREQUISITE: MUS 102L.

LECTURE: 3 contact 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, Schoenberg 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.
LABORATORY: 3 contact 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 and UC.

MUS 104
HISTORY OF ROCK AND ROLL 3 UNITS
PREREQUISITE: None.
LECTURE: 3 contact 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 contact 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 contact 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 contact 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.
Associate Degree Applicable
Course credit transfers to CSU and UC.

MUS 117x4
GUITAR INSTRUCTION 1 UNIT
PREREQUISITE: None.
LABORATORY: 3 contact hours per week.
 A progressive study of the guitar beginning with stringing, tuning and fingering, 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 contact 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 contact hours per week.
 An overview is provided of music's historical development from Classicism to the present. Emphasis is placed on appreciation of musical form, and the role of music in a multicultural society to political and artistic events.
Associate Degree Applicable
Course credit transfers to CSU and UC.

MUS 123
BEGINNING MIDI WORKSTATION 3 UNITS
PREREQUISITE: None.
LECTURE: 2 contact hours per week and
LABORATORY: 3 contact 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 contact hours per week and
LABORATORY: 3 contact 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 130
ELEMENTARY VOICE 3 UNITS
PREREQUISITE: None.
LECTURE: 2 contact hours per week and
LABORATORY: 2 contact 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.
LECTURE: 2 contact hours per week and
LABORATORY: 2 contact 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 contact hours per week and
LABORATORY: 2 contact 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 contact hours per week and
LABORATORY: 2 contact 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 contact hours per week and
LABORATORY: 2 contact 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 contact 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 contact 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 contact hours per week.
 In this course, students will study and perform 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. Neither experience nor an audition is necessary. This course may be taken four times.
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 contact hours per week.
 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 contact 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 contact 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 201
MUSIC THEORY III: BASIC HARMONY **3 UNITS**

PREREQUISITES: MUS 102 and MUS 102L.

COREQUISITE: MUS 102.

LECTURE: 3 contact hours per week.

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.

Associate Degree Applicable

Course credit transfers to CSU and UC.

MUS 201L
MUSICIANSHIP III **1 UNIT**

PREREQUISITES: MUS 102 and MUS 102L.

COREQUISITE: MUS 201.

LABORATORY: 3 contact hours per week.

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.

Associate Degree Applicable

Course credit transfers to CSU.

MUS 202
MUSIC THEORY IV: HARMONY **3 UNITS**

PREREQUISITES: MUS 201 and MUS 201L.

COREQUISITE: MUS 202L.

LECTURE: 3 contact hours per week.

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.

Associate Degree Applicable

Course credit transfers to CSU and UC.

MUS 202L
MUSICIANSHIP IV **1 UNIT**

PREREQUISITES: MUS 201 and MUS 201L.

COREQUISITE: MUS 202.

LABORATORY: 3 contact hours per week.

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.

Associate Degree Applicable

Course credit transfers to CSU and UC.

MUS 222
INDEPENDENT STUDY IN MUSIC **1-3 UNITS**

PREREQUISITE: None.

INDEPENDENT STUDY: 3-9 contact 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 music on an independent study basis. For each unit earned, students are required to devote three contact 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.

NURSING

DIVISION:	Science
DIVISION DEAN:	Susan Bangasser, Ph.D.
DIRECTOR:	Priscilla Taylor, M.S.N. (909) 384-8525
FACULTY CHAIR:	Tamara Maurizi, M.S.N. (909) 384-8919
OTHER FACULTY:	Rochelle Fender, M.S.N. June Hill, M.S. Laura Leedah, Ed.D. Gail Mack, M.S.N. Marion Meines, M.S.N. Violeta Obra, M.S. Geoff Schroder, M.S.N. Yolanda Simental, M.S.N. Michele Spahn, A.S. Alicia Tuvida, M.N. Sandra Waters, M.S.N. Christie Winter, M.S.
ADMINISTRATIVE SECRETARY:	Judy Velasquez
DIVISION OFFICE:	Health and Life Science 101 (909) 384-8550
ADMINISTRATIVE SECRETARY:	Rose Garcia
DIVISION OFFICE:	Chemistry 121 (909) 384-8645
LIAISON COUNSELOR:	Laura Gomez, M.A. (909) 384-4404

NURSING ASSOCIATE OF SCIENCE DEGREE

This degree program is designed to prepare students to become Registered Nurses who provide nursing care to assist patients in attaining their maximum level of wellness. Graduates are eligible to take the national licensing examination. 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.

Students are admitted in the Fall and Spring semesters. Students must complete program prerequisites, support courses, required courses, and apply and be accepted to the program. To enroll in the program, students must pass a background check and meet the health requirements. California law allows for denial of the RN license based on any conviction or legal action related to nursing practice. For further information: www.rn.ca.gov. Licensed Vocational Nurses may also take courses leading to Registered Nurse licensure. See options below.

PREREQUISITES FOR THE NURSING PROGRAM

- High school completion or equivalent (transcript, diploma, G.E.D. or the California State High School Proficiency Exam, or college degree)
- Freshman Composition, ENGL 101 with a grade of C or higher

- C. Intermediate Algebra, MATH 095 or higher level with a grade of C or higher
- D. Science courses listed below must be completed with a grade of C or higher and a minimum G.P.A. of 2.75 in the four courses:
 1. Human Anatomy and Physiology, BIOL 250 & 251 or BIOL 260 & 261
 2. Microbiology, BIOL 270
 3. General Psychology, PSYCH 100 or PSYCH 100H

Note: BIOL 261 (or BIOL 250 & 251) and BIOL 270 must be taken within 5 years of application to the program; BIOL 251 has a prerequisite of BIOL 250; BIOL 261 has a prerequisite of BIOL 260 and CHEM 101; BIOL 270 has a prerequisite of BIOL 250 or 260 or 261 and CHEM 101, CHEM 101 has a prerequisite of MATH 090.

SUPPORT COURSES FOR THE NURSING PROGRAM

Complete courses below by the end of the program with a grade of C or higher.

- A. Elements of Public Speaking, SPEECH 100 or 100H or Interpersonal Communication, SPEECH 111
- B. Introduction to Sociology, SOC 100 or 100H or Cultural Anthropology, ANTHRO 102

APPLICATION TO THE NURSING PROGRAM

Applications to the nursing program may only be submitted when all program prerequisites have been completed. Applications must be received or postmarked 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. Late applications will only be considered if space is available. Submit the following to the Health Science Division Office, HLS 101:

- A. Application form - available in the Health Science Division or on-line.
- B. Official college transcripts from all colleges or universities attended except for SBVC or Crafton Hills College. Transcripts must be issued within the last 6 months and document that the program prerequisites have been completed. If transcripts are from a foreign country, they must be evaluated for equivalency - see Admission Clerk.
- C. High School completion document.

ACCEPTANCE PROCEDURE

Applications are evaluated according to program prerequisites. Applicants who meet all program prerequisites will be considered for acceptance depending on space availability. If there are more students with requirements met than spaces available, students will be randomly ranked and accepted or placed on the Wait List. Applicants will be notified in writing of their application status.

LVN to RN PROGRAM

California Licensed Vocational Nurses may apply to the regular nursing program or select the LVN to RN Option:

- A. **LVN to RN Degree Option:**
 1. Prerequisites. Same as the RN program, plus one year full-time work experience as an LVN, and California LVN license
 2. By the end of the program, complete Support Courses and SBVC general education breadth requirements for the Associate of Science Degree.
 3. Required courses: 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 NURS 200, 202, 210, 211, 212, and 217).

- 4. Apply by December 1 for February entry. Applicants must have all prerequisites completed or in progress when the application is submitted. Submit to the Health Science Division Office, HLS 101: LVN to RN application, official transcript of vocational nursing program and all colleges attended except SBVC and Crafton Hills College, document verifying High School completion, copy of LVN license, and resume summarizing work experience as an LVN (employer, type of patient care unit, month/year starting and ending dates).

To graduate with an Associate of Science degree with a major in nursing, complete each of the following courses with a grade of C or higher and the general education breadth requirements.

REQUIRED NURSING COURSES:		UNITS
NURS 100	Introduction to the Associate Degree Nursing Program	1
NURS 102	Fundamentals of Nursing	4.5
NURS 104	Medical-Surgical Nursing I	5
NURS 108	Pharmacology for Nurses	1
NURS 110	Medical-Surgical Nursing II	5.5
NURS 112	Maternity Nursing	5
NURS 200	Medical-Surgical Nursing III	5.5
NURS 202	Pediatric Nursing	4.75
NURS 210	Nursing Care of Critically Ill	2.5
NURS 211	Medical-Surgical Nursing IV	3.75
NURS 212	Psychiatric Nursing	2.75
NURS 217	Advanced Ethical and Legal Aspects of Nursing	1
TOTAL UNITS:		42.25

COURSES OFFERED BY THE DEPARTMENT OF NURSING:

**NURS 100
INTRODUCTION TO THE ASSOCIATE DEGREE
NURSING PROGRAM 1 UNIT**

PREREQUISITE: None.

LECTURE: 1 contact hour per week.

This introductory course focuses on the core concepts of the nursing curriculum: conceptual framework, anxiety/stress, defense mechanisms, crisis interventions and nursing ethics. It 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 2 UNITS
PREREQUISITE: None.
COREQUISITES: NURS 102 or NURS 104.
LECTURE: 1 contact hour per week and
LABORATORY: 3 contact hours per week.
This course is designed to facilitate development of critical thinking and the application of first level medical-surgical nursing theory. Included is the 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 a PASS/NO PASS 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
PREREQUISITE: None.
COREQUISITE: NURS 100.
LECTURE: 2.5 contact hours per week and
LABORATORY: 4.5 contact hours per week.
This fundamentals of nursing course is an introduction to the nursing care of adult and older adult clients with basic alterations in the physiologic 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 contact hour per week and
LABORATORY: 1.5 contact hours per week.

This course is designed to facilitate development of critical thinking and the application of second level medical-surgical and maternity nursing theory. Included is the analysis of clinical situations, practice of selected second level nursing skills, mathematical nursing problems, and use of the nursing process. Graded on a PASS/NO PASS 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 as elective credit only.

NURS 104
MEDICAL-SURGICAL NURSING I 5 UNITS
PREREQUISITE: NURS 102.
COREQUISITE: NURS 108.
LECTURE: 2.75 contact hours per week and
LABORATORY: 6.75 contact hours per week.

A first level medical-surgical nursing course that 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 is used 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.
COREQUISITE: NURS 104.
LECTURE: 1 contact hour per week.

This course covers the fundamental principles of pharmacology that govern the action of drugs on the human body. There is an overview of major drug classifications and use in relation to the physiological and developmental variables. The clinical use of drug therapy will be approached as a method of assisting clients to 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 109
VOCATIONAL TO PROFESSIONAL NURSE TRANSITION 2 UNITS
PREREQUISITE: None.
LECTURE: 1.5 contact hours per week and
LABORATORY: 1.5 contact hours per week.

This course prepares Licensed Vocational Nurses to transition into the Registered Nursing program. Includes role transition content, nursing process, standards of practice, and critical thinking in nursing. In the degree option challenge examinations covering first and 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 contact hours per week and
LABORATORY: 6.75 contact hours per week.

This second level medical-surgical nursing course focuses on the physiological, psychological, sociocultural, and developmental variables as they relate to selected alterations in oxygenation, digestion/bowel elimination, metabolism, and cerebral/peripheral innervation. Application of the nursing process is used 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

NURS 112
MATERNITY NURSING 5 UNITS

PREREQUISITE: NURS 104.

LECTURE: 2.75 contact hours per week and
LABORATORY: 6.75 contact hours per week.

Maternity nursing focuses on the physiological, psychological, sociocultural and developmental variables of the childbearing family. **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 contact hour per week.

Nursing Care Plan Enrichment is a supplementary course designed to assist students to increase their understanding and improve their 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 for elective credit only.

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 contact 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 100 and NURS 108 and
NURS 110 and NURS 112.

LECTURE: 3.25 contact hours per week and
LABORATORY: 6.75 contact hours per week.

This third level medical-surgical nursing course focuses 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 is used 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: None.

COREQUISITE: NURS 200 or NURS 202.

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

This course is 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 PASS/NO PASS 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 100 and NURS 108 and NURS
110 and NURS 112.

LECTURE: 2.75 contact hours per week and
LABORATORY: 6 contact 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 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 203
APPLICATION OF CRITICAL THINKING TO
FOURTH LEVEL NURSING PRACTICE 1 UNIT

PREREQUISITE: None.

COREQUISITES: NURS 210 and NURS 212.

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

This course is 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 PASS/NO PASS 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

PREREQUISITES: NURS 200 and NURS 202.

LECTURE: 1.5 contact hours per week and
LABORATORY: 3 contact hours per week.

This course is an advanced medical-surgical nursing course with a focus on the application of the nursing process to critically ill adult patients with single or multiple subsystem failure. **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 contact hour per week and****LABORATORY: 8.25 contact hours per week.**

Fourth level medical-surgical nursing focuses on the physiological, psychological, sociocultural, and developmental variables that affect clients. Application of the nursing process is used to manage the nursing care 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 NCLEX (National Council Licensure Examination) 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****PREREQUISITES: NURS 200 and NURS 202.****LECTURE: 1.5 contact hours per week and****LABORATORY: 3.75 contact hours per week.**

This is an introduction to psychiatric nursing with a focus on neurobiological theory, suicide, substance abuse, and crisis interventions. Application of the nursing process is used to assist clients with major alterations in the psychological variable to attain and maintain an 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

NURS 217**ADVANCED ETHICAL AND LEGAL ASPECTS OF NURSING 1 UNIT****PREREQUISITES: NURS 200 and NURS 202.****LECTURE: 1 contact hour per week.**

This course explores ethical, legal and professional aspects of 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.*

NUTRITION/FOOD

See the Department of
FAMILY and CONSUMER SCIENCE

OCEANOGRAPHY

DIVISION: Science
 DIVISION DEAN: Susan Bangasser, Ph.D.
 FACULTY CHAIR: Todd Heibel, Ph.D.
 Chemistry 113
 (909) 384-8638
 ADMINISTRATIVE SECRETARY: Rose Garcia
 DIVISION OFFICE: Chemistry 121
 (909) 384-8645
 DIVISION OFFICE: Health and Life Science 101
 (909) 384-8550
 LIAISON COUNSELOR: Jeanne Marquis, M.A.
 (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 101 ELEMENTS OF OCEANOGRAPHY 3 UNITS****PREREQUISITE: None.****DEPARTMENT ADVISORIES: ENGL 015 or placement in ENGL 101 as determined by SBVC assessment process and MATH 942.****LECTURE: 3 contact hours per week.**

This course explores the geological processes that created the ocean basins, chemistry of sea water, physical motions of the oceans, and the interrelationships of biological communities with their physical environments. It is recommended that transfer students also enroll in the companion OCEAN 111, Elements of Oceanography Laboratory.

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

OCEAN 111 ELEMENTS OF OCEANOGRAPHY LABORATORY 1 UNIT**PREREQUISITE/COREQUISITE: OCEAN 101.****LABORATORY: 3 contact hours per week.**

This hands-on course introduces students to techniques of oceanography, including bathymetry, charts, and methods of studying the physical ocean environment. This course is recommended for students concurrently enrolled in OCEAN 101 or who have successfully completed the course within the last three years.

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

PARALEGAL STUDIES

DIVISION: Mathematics, Business and Computer Technology
 DIVISION DEAN: Haragewen Kinde, Ed.D.
 FACULTY CHAIR: Michael Assumma, M.B.A.
 Business 100G
 (909) 384-8923
 ADMINISTRATIVE SECRETARY: Vivian Marquez
 Business 100
 (909) 384-8520
 LIAISON COUNSELOR: Patty Jones, M.A.
 (909) 384-4404

The Paralegal Studies Program prepares students for employment as a legal assistant in law offices, courts or related positions where knowledge of law is necessary. The work assumes proficiency in word processing and keyboarding. In addition to the coursework listed below, courses within Computer Information Technology (CIT) are recommended and students must successfully pass the general breadth requirements for the Associate Degree.

**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.

COURSES OFFERED BY THE DEPARTMENT OF PARALEGAL STUDIES:

**PARLGL 100
LAW OFFICE MANAGEMENT FOR THE PARALEGAL
3 UNITS**

PREREQUISITE: None.

LECTURE: 3 contact 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.*

**PARLGL 110
LEGAL RESEARCH METHODS: FEDERAL AND CALIFORNIA
3 UNITS**

PREREQUISITE: None.

LECTURE: 3 contact 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.*

**PARLGL 111
LEGAL WRITING AND ANALYSIS
3 UNITS**
PREREQUISITE: PARLGL 110.
DEPARTMENTAL ADVISORY: ENGL 101 and ENGL 101H.

LECTURE: 3 contact 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.*

**PARLGL 120
WILLS, PROBATE AND ESTATE PLANNING
3 UNITS**

PREREQUISITE: None.

LECTURE: 3 contact 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.*

**PARLGL 130
FAMILY LAW
3 UNITS**

PREREQUISITE: None.

LECTURE: 3 contact hour 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.*

**PARLGL 200
CIVIL LITIGATION AND PROCEDURES
3 UNITS**

PREREQUISITE: None.

DEPARTMENTAL ADVISORY: BUSAD 210.

LECTURE: 3 contact 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.*

**PARLGL 205
LEGAL REMEDIES
3 UNITS**

PREREQUISITE: None.

DEPARTMENTAL ADVISORY: PARLGL 200.

LECTURE: 3 contact 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.
DEPARTMENTAL ADVISORIES: ENGL 015 or eligibility for ENGL 101 or ENGL 101H as determined by the SBVC assessment process.
LECTURE: 3 contact hours per week.

This course is designed to equip students with the tools to face ethical dilemmas on the job. It provides a comprehensive description of attorney rules of ethics and how those rules apply to the lawyers and non-lawyers whom the attorneys supervise.
Associate Degree Applicable
Course credit transfers to CSU.

**PARLGL 230
TORTS 3 UNITS**

PREREQUISITE: None.
DEPARTMENTAL ADVISORY: PARLGL 100.
LECTURE: 3 contact 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.

**PARLGL 240
BANKRUPTCY LAW AND PROCEDURES 3 UNITS**

PREREQUISITE: None.
DEPARTMENTAL ADVISORY: CIT 031 or ENGL 015.
LECTURE: 3 contact 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.

PHARMACY TECHNOLOGY

DIVISION: Science
DIVISION DEAN: Susan Bangasser, Ph.D.
ADMINISTRATIVE SECRETARY: Judy Velasquez
DIVISION OFFICE: Health and Life Science 101 (909) 384-4450
ADMINISTRATIVE SECRETARY: Rose Garcia
DIVISION OFFICE: Chemistry 121 (909) 384-8645
LIAISON COUNSELOR: Ailsa Aguilar-Kitibutr, Psy.D. (909) 384-4404

The Pharmacy Technology Program is designed to prepare students for entry level employment as a pharmacy technician, providing medications and other healthcare products to patients and consumers. Under the supervision of a Pharmacist, students learn to fill prescriptions, establish and maintain patient profiles, prepare insurance claim forms, take inventory, and stock medications. A background check may be required for clinical experience. The California Board of Pharmacy may deny the Pharmacy Technician license based on convictions substantially related to Pharmacy Technician practice. 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 may also earn an Associate of Science Degree in Pharmacy Technology.

**PHARMACY TECHNOLOGY
ASSOCIATE OF SCIENCE DEGREE**

To earn an Associate Degree with a specialization in Pharmacy Technology, students must complete the required courses plus the general breadth requirements (minimum total = 60 units).

REQUIRED COURSES: UNITS

Complete the following courses with a grade of C or higher:

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
BIOL 155	Introductory Anatomy and Physiology	4
	or	
BIOL 250	Human Anatomy and Physiology I	4
	and	
BIOL 251	Human Anatomy and Physiology II	4
	or	
BIOL 260	Human Anatomy	4
	and	
BIOL 261	Human Physiology	4

TOTAL UNITS: 20 - 24

PHARMACY TECHNOLOGY CERTIFICATE

This certificate is designed to prepare students for entry level employment as a pharmacy technician, providing medications and other healthcare products to patients. Under the supervision of a Pharmacist, students learn to fill prescriptions, establish and maintain patient profiles, prepare insurance claim forms, take inventory, and stock medications. A background check may be required for clinical experience. The California Board of Pharmacy may deny the Pharmacy Technician license based on convictions substantially related to Pharmacy Technician practice. 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 ^{or} higher	Prealgebra	4
ENGL 015	Preparation for College Writing	4
	or	
ENGL 101	Freshman Composition	4

TOTAL UNITS: 24

COURSES OFFERED BY THE DEPARTMENT OF PHARMACY TECHNOLOGY:

PHT 020 INTRODUCTION TO PHARMACY TECHNOLOGY 2 UNITS

PREREQUISITE: None.

LECTURE: 2 contact hours per week.

Introduction to the role of the Pharmacy Technician in the delivery of pharmacy services in acute care and community pharmacy settings. Emphasizes pharmaceutical terminology, legal-ethical issues, pharmacy standards and resources.

Associate Degree Applicable

PHT 030 PHARMACOLOGY 3 UNITS

PREREQUISITE: None.

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

An application of mathematical skills to the calculation of medication dosages, intravenous solutions, and pharmacy operations.

Associate Degree Applicable

PHT 041 PHARMACY SYSTEMS 3 UNITS

PREREQUISITES: PHT 030 and PHT 031.

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

This course covers the application of advanced distribution and methods for dispensing medications within a laboratory setting. Emphasizes advanced concepts of pharmacy inventory control, data input, and repackaging systems.

Associate Degree Applicable

PHT 042 PHARMACY INTERN SEMINAR 1 UNIT

PREREQUISITE/COREQUISITE: PHT 041.

COREQUISITE: PHT 043.

LECTURE: 1 contact hour per week.

Emphasizes the application of pharmacy technology principles and skills in a clinical setting.

Associate Degree Applicable

PHT 043 PHARMACY CLINICAL EXPERIENCE 4 UNITS

PREREQUISITES: PHT 020 and PHT 030 and PHT 031.

PREREQUISITE/COREQUISITE: PHT 041

COREQUISITE: PHT 042.

LABORATORY: 12 contact hours per week.

Application of prescription processing, inventory management and dispensing of medications in a pharmacy under the direct supervision of a pharmacist. Emphasizes use of a pharmacy data base, customer service, communication and professional ethics.

Associate Degree Applicable

PHILOSOPHY / RELIGIOUS STUDIES

DIVISION: Social Sciences, Human Development and Physical Education

DIVISION DEAN: Corene Schwartz, Ed.D.

FACULTY CHAIR: Julius Jackson, Ph.D.

NH 335

(909) 384-8595

OTHER FACULTY: Leonard López, J.D.

ADMINISTRATIVE SECRETARY: Karen Deck

DIVISION OFFICE: NH 345

(909) 384-8603

LIAISON COUNSELOR: Jeanne Marquis, M.A.

(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 baccalaureate institution and major in philosophy or religious studies should consult a counselor regarding the transfer process and lower division requirements.

COURSES OFFERED BY THE DEPARTMENT OF PHILOSOPHY / RELIGIOUS STUDIES:

PHIL 101 INTRODUCTION TO PHILOSOPHY 3 UNITS

PREREQUISITE: None.

LECTURE: 3 contact hours per week.

This course is a general introduction to the major problems in philosophy, with attention directed to both classical and modern philosophy as a basis for discussion of issues such as epistemology, metaphysics, ethics, and aesthetics.

Associate Degree Applicable

Course credit transfers to CSU and UC.

PHIL 101H INTRODUCTION TO PHILOSOPHY – HONORS 3 UNITS

PREREQUISITE: None.

LECTURE: 3 contact hours per week.

This course is a general introduction to the major problems of philosophy, with attention directed to classical and modern philosophy as a basis for discussion of issues such as epistemology, metaphysics, ethics, and aesthetics. This course is intended for students in the Honors Program but is open to all students who desire more challenging coursework.

Associate Degree Applicable

*Course credit transfers to CSU and *UC.*

PHIL 102
CRITICAL THINKING AND WRITING 3 UNITS
PREREQUISITE: ENGL 101 or ENGL 101H.
LECTURE: 3 contact 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 contact hours per week.
Introduction to the techniques of critical thought, including language analysis, inductive and deductive logic, symbolic logic, and the development of the scientific method.

Associate Degree Applicable
Course credit transfers to CSU and UC.

PHIL 105
INTRODUCTION TO ETHICS 3 UNITS
PREREQUISITE: None.

LECTURE: 3 contact hours per week.
This course is an introduction to ethics focusing on the analysis of the basic ideas and principles underlying moral conduct. Theories such as utilitarianism, deontology, virtue ethics, and many others will form the basis of the course. Specific ethical problems arising in disciplines such as business, health care, administration of justice, and politics, as well as specific ethical problems confronting individuals, will also be addressed in this course.

Associate Degree Applicable
Course credit transfers to CSU and UC.

PHIL 112
PHILOSOPHY IN LITERATURE 3 UNITS
PREREQUISITE: None.

LECTURE: 3 contact hours per week.
This course addresses ethical and metaphysical themes as presented in literature from the classical to the modern period. Philosophical problems such as freedom and determinism, the nature of virtue, the meaning of death, and the individual's relationship to the state and the structure of reality are explored through the encounter with novels, plays, short stories, and film.

Associate Degree Applicable
Course credit transfers to CSU and UC.

PHIL 180
DEATH AND DYING 3 UNITS
PREREQUISITE: None.

LECTURE: 3 contact hours per week.
This course is a study of dying, death, and bereavement. Medical, ethical, legal, philosophical, and religious considerations will be explored (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 contact hours per week.
This course is an introductory study of religion, with emphasis on religious experience, the origins and function of religion, and the various modes of religious expression. Necessarily broad in scope, this course will draw on Eastern, Western, ancient, and modern religious phenomena to help students understand various religious components, such as myth, ritual, scripture, art, doctrine, and mysticism.

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

RELIG 100H
INTRODUCTION TO RELIGIOUS STUDIES- HONORS
3 UNITS

PREREQUISITE: None.
LECTURE: 3 contact hours per week.
This course is an introductory study of religion, with emphasis on religious experience, the origins and function of religion, and the various modes of religious expression. Necessarily broad in scope, this course will draw on Eastern, Western, ancient, and modern religious phenomena to help students understand various religious components, such as myth, ritual, scripture, art, doctrine, and mysticism. This course is intended for students in the Honors Program but is open to all students who desire more challenging coursework.

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

RELIG 101
INTRODUCTION TO WORLD RELIGIONS 3 UNITS
PREREQUISITE: None.

LECTURE: 3 contact hours per week.
This course is an introduction to the major religious 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 contact hours per week.
This course is a comparative study of religious expressions in tribal and/or ethnic 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 rituals, symbols, and beliefs 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 contact hours per week.

This course is an introduction to the diverse expression of religion in the United States. Although limited by the history and geography of one country, the course necessarily draws from religions around the globe to help students understand how religion has grown and developed in the U.S. So, this course deals with a wide variety of expressions of religion, including the Puritans, slave religion, the religious reform movements, the Catholic, Protestant, Jewish, and Muslim communities, the African American religious experience, Eastern religions in America, and contemporary syncretistic religious movements.

Associate Degree Applicable

Course credit transfers to CSU and UC.

RELIG 150
INTRODUCTION TO MYTHOLOGY **3 UNITS**
PREREQUISITE: None.

LECTURE: 3 contact hours per week.

This course is an introduction to myth and its function in culture through an examination of creation stories, end-of-the world stories, hero stories, and trickster stories. Although focusing on the narrative expression of religion, this course necessarily draws from many traditions, including Native American, Greek, Roman, European, Islamic, Chinese, Hindu, and Japanese traditions of myth. In addition, this class will examine modern American myths.

Associate Degree Applicable

Course credit transfers to CSU and UC.

RELIG 175
THE LITERATURE AND RELIGION OF THE BIBLE **3 UNITS**

PREREQUISITE: ENGL 101 or ENGL 101H.

LECTURE: 3 contact hours per week.

This course covers 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 contact hours per week.

This course is 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 contact hours per week.

This course is a study of dying, death, and bereavement. Medical, ethical, legal, philosophical, and religious considerations will be explored (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 HEALTH

DIVISION: Social Sciences, Human Development and Physical Education
DIVISION DEAN: Corene Schwartz, Ed.D.
FACULTY CHAIR: Susan Crebbin, M.S.
OTHER FACULTY: Dawn Adler, M.S.
Erwin Banola, M.S.
Ken Blumenthal, M.A.
Quincy Brewer, M.S.
Kevin Emerson, M.A.
Kristin Hauge, M.A.
Patrick Meech, M.A.
Michael Powell, M.S.
Patricia Rossman, M.A.
ADMINISTRATIVE SECRETARY: Karen Deck
DIVISION OFFICE: NH 345
(909) 384-8603
LIAISON COUNSELOR: André Wooten, M.S.
(909) 384-4404

Courses in the Physical Education and Health 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 and Physical Education 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.

COURSES OFFERED BY THE DEPARTMENT OF PHYSICAL EDUCATION AND HEALTH:

HEALTH EDUCATION

HEALTH 101
HEALTH EDUCATION **3 UNITS**
PREREQUISITE: None.

LECTURE: 3 contact hours per week.

This course is an exploration of health topics and their impact on an individual's health status. Awareness and assessment of current lifestyle behaviors and choices, identification of risk factors, and implementation of prevention strategies are emphasized.

Associate Degree Applicable

Course credit transfers to CSU and UC.

HEALTH 103**INTRODUCTION TO HOLISTIC HEALTH 3 UNITS**
PREREQUISITE: None.**LECTURE: 3 contact 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 098****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 knowledge in the selected field of study. 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 098 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. (Formerly PE 198)
Associate Degree Applicable

PE 200**INTRODUCTION TO PHYSICAL EDUCATION AND KINESIOLOGY 3 UNITS**
PREREQUISITE: None.**LECTURE: 3 contact 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 contact 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 and *UC.

PE 210**SPORTS OFFICIATING 2 UNITS**
PREREQUISITE: None.**LECTURE: 2 contact 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 and *UC.

PE 222**INDEPENDENT STUDY IN PHYSICAL EDUCATION 1-3 UNITS****PREREQUISITE: None.****INDEPENDENT STUDY: 3-9 contact 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 contact 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 and *UC.

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

PE 231**FIRST AID AND CPR 3 UNITS****PREREQUISITE: None.****LECTURE: 3 contact 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: PE 231.****LECTURE: 2 contact hours per week and LABORATORY: 3 contact 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 and UC.

PE 236**STRESS MANAGEMENT AND WELLNESS 3 UNITS****PREREQUISITE: None.****LECTURE: 2 contact hours per week and LABORATORY: 3 contact 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 282x2**PROFESSIONAL ACTIVITIES: BASEBALL 2 UNITS****PREREQUISITE: None.****LECTURE: 1 contact hour per week and LABORATORY: 3 contact 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 and *UC.

PE 283x2

PROFESSIONAL ACTIVITIES: BASKETBALL

2 UNITS

PREREQUISITE: None.

LECTURE: 1 contact hour per week and

LABORATORY: 3 contact 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 and *UC.*

PE 285x2

PROFESSIONAL ACTIVITIES: FOOTBALL

2 UNITS

PREREQUISITE: None.

LECTURE: 1 contact hour per week and

LABORATORY: 3 contact 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 and *UC.*

PE 288x2

PROFESSIONAL ACTIVITIES: SOFTBALL

2 UNITS

PREREQUISITE: None.

LECTURE: 1 contact hour per week and

LABORATORY: 3 contact 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 and *UC.*

PE 291x2

PROFESSIONAL ACTIVITIES: TRACK AND FIELD

2 UNITS

PREREQUISITE: None.

LECTURE: 1 contact hour per week and

LABORATORY: 3 contact 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 and *UC.*

PE 293x2

PROFESSIONAL ACTIVITIES: VOLLEYBALL

2 UNITS

PREREQUISITE: None.

LECTURE: 1 contact hour per week and

LABORATORY: 3 contact 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 and *UC.*

INDIVIDUAL/ DUAL ACTIVITIES AND SPORTS

PE/I 103x4

BADMINTON

1 UNIT

PREREQUISITE: None.

LABORATORY: 3 contact 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 and *UC.*

PE/I 105x4

LOW IMPACT AEROBICS

1 UNIT

PREREQUISITE: None.

LABORATORY: 3 contact hours per week.

This course is designed to teach fitness concepts and movement skills to enhance strength, flexibility, endurance, movement memory, balance, coordination, and cardiovascular fitness. Instruction will be modified to accommodate students of all fitness and skill levels. This course may be taken four times.

Associate Degree Applicable

*Course credit transfers to CSU and *UC.*

PE/I 108x4

WEIGHT TRAINING

1 UNIT

PREREQUISITE: None.

LABORATORY: 3 contact 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 and *UC.*

PE/I 127x4

WALKING FOR FITNESS

1 UNIT

PREREQUISITE: None.

LABORATORY: 3 contact hours per week.

Designed to teach the various techniques and strategies of walking for fitness. Emphasis will be on developing cardiovascular efficiency and providing the students information that encourages lifelong fitness. This course may be taken four times.

Associate Degree Applicable

*Course credit transfers to CSU and *UC.*

PE/I 132x4

DISTANCE RUNNING

1 UNIT

PREREQUISITE: None.

LABORATORY: 3 contact hours per week.

Designed to teach the various skills, techniques, and strategies of distance running. Instruction will focus on improving the student's running efficiency, cardiovascular fitness, and distance running. The course will include individual and group instruction and practice. This course may be taken four times.

Associate Degree Applicable

*Course credit transfers to CSU and *UC.*

**PE/I 138x4
PHYSICAL FITNESS 1 UNIT**

PREREQUISITE: None.

LABORATORY: 3 contact 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 and *UC.*

**PE/I 148x4
TENNIS 1 UNIT**

PREREQUISITE: None.

LABORATORY: 3 contact 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 and *UC.*

**PE/I 164x4
SWIMMING 1 UNIT**

PREREQUISITE: None.

LABORATORY: 3 contact 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 and *UC.*

**PE/I 168x4
YOGA 1 UNIT**

PREREQUISITE: None.

LABORATORY: 3 contact 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 and *UC.*

**PE/I 173x4
WATER AEROBICS 1 UNIT**

PREREQUISITE: None.

LABORATORY: 3 contact 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.*

ADAPTED PHYSICAL EDUCATION

**PE/I 184x4
ADAPTED PHYSICAL EDUCATION: SWIMMING 1 UNIT**

PREREQUISITE: None.

LABORATORY: 3 contact hours per week.

Designed for students with disabilities who want to learn to swim and become safe in the water. A completed adapted P.E. physical form, obtained from either the instructor or DSPS, is required prior to participation in this class. This course may be taken four times.

Associate Degree Applicable

*Course credit transfers to CSU and *UC.*

**PE/I 186x4
ADAPTED PHYSICAL EDUCATION:
STRETCHING AND STRESS REDUCTION 1 UNIT**

PREREQUISITE: None.

LABORATORY: 3 contact hours per week.

Designed for students with disabilities to improve or maintain their flexibility and joint range of motion as well as learn techniques for stress reduction and relaxation. A completed adapted P.E. physical form, obtained from either the instructor or DSPS, is required prior to participation in this class. This course may be taken four times.

Associate Degree Applicable

*Course credit transfers to CSU and *UC.*

**PE/I 188x4
ADAPTED PHYSICAL EDUCATION: FITNESS AND
CONDITIONING 1 UNIT**

PREREQUISITE: None.

LABORATORY: 3 contact hours per week.

Designed for students with disabilities to improve range of motion, muscular strength, and cardiovascular endurance. A completed adapted P.E. physical form, obtained from either the instructor or DSPS, is required prior to participation in this class. This course may be taken four times.

Associate Degree Applicable

*Course credit transfers to CSU and *UC.*

**PE/I 189x4
ADAPTED PHYSICAL EDUCATION: RESISTANCE
TRAINING 1 UNIT**

PREREQUISITE: None.

LABORATORY: 3 contact hours per week.

Designed for students with disabilities to improve muscular strength and endurance. A completed adapted P.E. physical form, obtained from either the instructor or DSPS, is required prior to participation in this class. This course may be taken four times.

Associate Degree Applicable

*Course credit transfers to CSU and *UC.*

**PE/I 190x4
TAI CHI 1 UNIT**

PREREQUISITE: None.

LECTURE: None.

LABORATORY: 3 contact 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.

Associate Degree Applicable

*Course credit transfers to CSU and *UC.*

PE/I 192x4
KARATE: CHINESE KENPO 1 UNIT
PREREQUISITE: None.
LABORATORY: 3 contact hours per week.
Designed to study and practice Chinese Kenpo Karate from the introductory through advanced levels. The history, research, and benefits of Kenpo will be examined, and the techniques and master form will be explored. The course will include individual and group instruction and practice.
Associate Degree Applicable
*Course credit transfers to CSU and *UC.*

PE/T 100x4
TEAM SPORTS ACTIVITIES: BASEBALL 1 UNIT
PREREQUISITE: None.
LABORATORY: 3 contact 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.*

PE/T 104x4
TEAM SPORTS ACTIVITIES: BASKETBALL 1 UNIT
PREREQUISITE: None.
LABORATORY: 3 contact hours per week.
Instruction in the skills, techniques, strategies, etiquette and rules of basketball 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.*

PE/T 108x4
TEAM SPORTS ACTIVITIES: FOOTBALL 1 UNIT
PREREQUISITE: None.
LABORATORY: 3 contact 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.*

PE/T 116x4
TEAM SPORTS ACTIVITIES: SOCCER 1 UNIT
PREREQUISITE: None.
LABORATORY: 3 contact 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.*

PE/T 120x4
TEAM SPORTS ACTIVITIES: SOFTBALL 1 UNIT
PREREQUISITE: None.
LABORATORY: 3 contact 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 carryover skills. This course may be taken four times.
Associate Degree Applicable
*Course credit transfers to CSU and *UC.*

PE/T 124x4
TEAM SPORTS ACTIVITIES: VOLLEYBALL 1 UNIT
PREREQUISITE: None.
LABORATORY: 3 contact 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 certain carryover skills. This course may be taken four times.
Associate Degree Applicable
*Course credit transfers to CSU and *UC.*

PE/T 132x2
TEAM SPORTS ACTIVITIES: ADVANCED VOLLEYBALL 1 UNIT
PREREQUISITE: None.
LABORATORY: 3 contact 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.*

PE/V 100-103
INTERCOLLEGIATE SPORTS ACTIVITIES (VARSITY) 2 UNITS
PREREQUISITE: None.
LABORATORY: 10 contact 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.*

PHYSICAL SCIENCE

DIVISION: Science
 DIVISION DEAN: Susan Bangasser, Ph.D.
 FACULTY CHAIR: John Stanskas, Ph.D.
 Chemistry 114
 (909) 384-8268
 ADMINISTRATIVE SECRETARY: Rose Garcia
 DIVISION OFFICE: Chemistry 121
 (909) 384-8645
 DIVISION OFFICE: Health and Life Science 101
 (909) 384-8550
 LIAISON COUNSELOR: Denise McCrary, Ed.D.
 (909) 384-4404

COURSES OFFERED BY THE DEPARTMENT OF PHYSICAL SCIENCE:

PS 101
INTRODUCTION TO PHYSICAL SCIENCE **3 UNITS**

PREREQUISITE: None.

LECTURE: 3 contact hours per week.

This course is an introduction to Physical Science Fundamental concepts of chemistry, physics, astronomy, geology, and oceanography as they apply to everyday life.

Associate Degree Applicable

*Course credit transfers to CSU and *UC.*

PS 112
INTRODUCTION TO THE DEVELOPMENT OF MODERN SCIENCE **3 UNITS**

PREREQUISITE: None.

DEPARTMENTAL ADVISORY: ENGL 015.

LECTURE: 3 contact hours per week.

A survey of the rise of modern science from the Scientific Revolution of the 16th and 17th centuries through the biological and earth science revolutions of the 20th century and today. The historical forces that led to major scientific developments and the impact of science and science-based technology on society will be examined.

Associate Degree Applicable

Course credit transfers to CSU and UC.

PHYSICS / ASTRONOMY

DIVISION: Science
 DIVISION DEAN: Susan Bangasser, Ph.D.
 FACULTY CHAIR: Michael Lysak, Ph.D.
 Physical Science 209
 (909) 384-8529
 ADMINISTRATIVE SECRETARY: Rose Garcia
 DIVISION OFFICE: Chemistry 121
 (909) 384-8645
 DIVISION OFFICE: Health and Life Science 101
 (909) 384-8550
 LIAISON COUNSELOR: Denise McCrary, Ed.D.
 (909) 384-4404

Physics is a 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.

Students majoring in physics will be rewarded on a 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 “will” 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.

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).

REQUIRED COURSES:	UNITS
PHYSIC 200 Physics I	6
PHYSIC 201 Physics II	6
PHYSIC 210 Modern Physics	4
MATH 250 Single Variable Calculus I	4
MATH 251 Single Variable Calculus II	4
MATH 252 Multivariable Calculus	5
TOTAL UNITS:	29

RECOMMENDED COURSES:	UNITS
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 010
FOUNDATIONAL SKILLS FOR PHYSICS MAJORS
.25 UNIT**

PREREQUISITE: None.
COREQUISITE: PHYSIC 150A, 150B, 200, 201, or 210.
LABORATORY: 13.5 contact hours per semester.
This course enables students to develop and strengthen foundational science skills during enrollment in major's-level science coursework. Workshops emphasize skill-building in the analytical and communication skills necessary for success in major's-level science classes and professional-level science careers. Topics include applied math, word problems, data manipulation, graphing, scientific writing, critical thinking, scientific method, and the use of technology. Graded Pass/No Pass only.
Associate Degree Applicable

**PHYSIC 101
INTRODUCTRY PHYSICS
4 UNITS**
PREREQUISITE: MATH 090 or eligibility for MATH 095 or higher as determined by SBVC assessment.
DEPARTMENTAL ADVISORY: ENGL 015 or eligibility for ENGL 101 or ENGL 101H as determined by the SBVC assessment process.
LECTURE: 3 contact hours per week and
LABORATORY: 3 contact hours per week.

This is an introductory algebra based physics course. Emphasis is placed on developing an understanding of motion, forces, energy, momentum, waves, light, electricity, magnetism, and concepts of modern physics.
Associate Degree Applicable
*Course credit transfers to CSU and *UC.*

**PHYSIC 150A
GENERAL PHYSICS FOR THE LIFE SCIENCES I
5 UNITS**
PREREQUISITE: PHYSIC 101 and MATH 103 or eligibility for MATH 151 or higher as determined by SBVC assessment and ENGL 015 or eligibility for ENGL 101 or ENGL 101H or higher as determined by SBVC assessment.
LECTURE: 3 contact hours per week and
LABORATORY: 6 contact hours per week.

This is the first course in a two-semester physics sequence designed primarily for students in biology, pharmacology, pre-medicine, physical therapy, and allied health programs. 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.*

**PHYSIC 150B
GENERAL PHYSICS FOR THE LIFE SCIENCES II
5 UNITS**
PREREQUISITE: PHYSIC 150A.
LECTURE: 3 contact hours per week and
LABORATORY: 6 contact hours per week.

This is the second course in a two-semester physics sequence designed primarily for students in biology, pharmacology, pre-medicine, physical therapy, and allied health programs. 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 and *UC.*

**PHYSIC 200
PHYSICS I
6 UNITS**
PREREQUISITES: PHYSIC 101 and ENGL 015 or eligibility for ENGL 101 or ENGL 101H or higher as determined by SBVC assessment and MATH 250 or
COREQUISITE: MATH 250.
DEPARTMENTAL ADVISORY: None.
LECTURE: 4 contact hours per week and
LABORATORY: 6 contact hours per week.

This is a calculus based physics course covering mechanics, waves, fluids, and thermodynamics. This course is designed to satisfy the lower division physics requirement for majors in physics, engineering, astronomy, chemistry, geology, computer science and mathematics.
Associate Degree Applicable
*Course credit transfers to CSU and *UC.*

**PHYSIC 201
PHYSICS II
6 UNITS**
PREREQUISITES: PHYSIC 200 and MATH 251 or
COREQUISITE: MATH 251.
LECTURE: 4 contact hours per week and
LABORATORY: 6 contact hours per week.

This is a calculus based physics course covering electricity, magnetism, optics, and modern physics. This course is designed to satisfy the lower division physics requirement for majors in physics, engineering, astronomy, chemistry, geology, computer science and mathematics.
Associate Degree Applicable
*Course credit transfers to CSU and *UC.*

**PHYSIC 210
MODERN PHYSICS
4 UNITS**
PREREQUISITES: PHYSIC 201 or PHYSIC 150B and MATH 251.
LECTURE: 3 contact hours per week and
LABORATORY: 3 contact hours per week.

This is a calculus based physics course in modern physics. Topics include relativity, quantum mechanics, atoms, molecules, condensed matter, nuclear, and particle physics.
Associate Degree Applicable
*Course credit transfers to CSU and *UC.*

**PHYSIC 222
SPECIAL PROBLEMS IN PHYSICS I
1 UNIT**
PREREQUISITES: PHYSIC 101 and ENGL 101.
INDEPENDENT STUDY: 3 contact hours per week.
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 three contact 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.

**PHYSIC 223
SPECIAL PROBLEMS IN PHYSICS II
2 UNITS**
PREREQUISITES: PHYSIC 101 and ENGL 101.
INDEPENDENT STUDY: 6 contact hours per week.
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 contact 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 contact 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.*

ASTRON 125
ASTRONOMY LABORATORY **1 UNIT**

PREREQUISITE/COREQUISITE: ASTRON 120.

LABORATORY: 3 contact hours per week.

This course is the companion course to ASTRON 120 Introduction to Astronomy. Laboratory work provides a hands-on enrichment and deeper understanding of topics discussed in the astronomy lecture. Topics include use of star maps, identification of constellations, determination of orbits, rotation rate, and mass of celestial objects using astronomical methods of observation and analysis. Students will also perform 3-D modeling of the solar system and constellations, study the nature of light, lenses and telescopes, make some direct observations with telescopes, and utilize astronomical software.

Associate Degree Applicable

*Course credit transfers to CSU and *UC.*

ASTRON 222
SPECIAL PROBLEMS IN ASTRONOMY I **1 UNIT**

PREREQUISITE: None.

INDEPENDENT STUDY: 3 contact 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 contact 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 223
SPECIAL PROBLEMS IN ASTRONOMY II **2 UNITS**

PREREQUISITE: None.

INDEPENDENT STUDY: 6 contact 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 six contact 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.

POLICE SCIENCE
(also see CRIMINAL JUSTICE)

DIVISION: Criminal Justice
ADMINISTRATIVE DEAN: Gloria Fisher, J.D.
ADMINISTRATIVE SECRETARY: Laura Cross
CAMPUS OFFICE: NH 139
(909) 384-8538
SECRETARY: Amanda Moody
(909) 384-4431
GLEN HELEN OFFICE: Sheriff's Training Center
(909) 473-2695
LIAISON COUNSELOR: Frank Dunn, 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 driver's license, and never have been convicted of a felony. Many of the Police Science classes are certified by the California Commission on Peace Officer Standards and Training.

COURSES OFFERED BY THE DEPARTMENT OF POLICE SCIENCE:

Police Science courses are not offered every semester. Please refer to the college class schedule for class offerings.

POLICE 002
BASIC LAW ENFORCEMENT ACADEMY **27.75 UNITS**

COREREQUISITES: POLICE 100, POLICE 101, POLICE 102 and POLICE 103.

LECTURE: 312 contact hours per semester and LABORATORY: 392 contact 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

PHYSIOLOGY

See courses within the Department of BIOLOGY

POLICE 004X20
USE OF FORCE-DECISION MAKING LESS .25 UNIT

PREREQUISITE: CRMJUS 058.

LECTURE: 2 contact hours per semester and
LABORATORY: 6 contact 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 peach 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 contact hours per semester and
LABORATORY: 6 contact 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 peach officers. This course may be taken twenty times.

Associate Degree Applicable

POLICE 010
INTERVIEW AND INTERROGATION .50 UNIT

PREREQUISITE: CRMJUS 058.

LECTURE: 8 contact 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 020
GANG AWARENESS 1.25 UNITS

PREREQUISITES: POLICE 002, 100, 101, 102 and 103
or CRMJUS 059.

LECTURE: 20 contact hours per semester and
LABORATORY: 4 contact 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 025
CLANDESTINE LABORATORY SAFETY .50 UNIT
PREREQUISITES: POLICE 002, 100, 101, 102 and 103
or CRMJUS 059.

LECTURE: 8 contact 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 028
BREATHALYZER TRAINING .25 UNIT

PREREQUISITE: None.

LECTURE: 3 contact hours per semester and
LABORATORY: 1 contact 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 contact hours per semester and
LABORATORY: 4 contact 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 036
SURVIVAL SPANISH FOR LAW ENFORCEMENT .25 UNIT

PREREQUISITE: CRMJUS 058.

LECTURE: 4 contact hours per semester and
LABORATORY: 4 contact 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 040
BASIC BICYCLE POLICE COURSE 1 UNIT

PREREQUISITES: POLICE 002, 100, 101, 102 and 103
or CRMJUS 058.

DEPARTMENTAL ADVISORY: Students must be in
good physical condition and be proficient bicyclers.

LECTURE: 12 contact hours per semester and
LABORATORY: 20 contact 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 contact hours per semester and
LABORATORY: 25.5 contact 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 050
NARCOTICS .50 UNIT

PREREQUISITE: CRMJUS 058.
LECTURE: 8 contact 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 054
SUBJECT CONTACTS .25 UNIT

PREREQUISITES: POLICE 002, 100, 101, 102 and 103.
LECTURE: 5 contact hours per semester and
LABORATORY: 3 contact hours per semester.

Scenarios and basic skills will provide the law enforcement officer with some new ideas and approaches to the everyday 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 058
REPORT WRITING AND COURTROOM SURVIVAL .50 UNIT

PREREQUISITE: CRMJUS 058.
LECTURE: 8 contact 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 retrial 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 contact 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.**

Associate Degree Applicable

POLICE 064
IDENTIFICATION, COLLECTION AND PRESERVATION OF EVIDENCE .50 UNIT

PREREQUISITE: CRMJUS 058.
LECTURE: 8 contact 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.**

Associate Degree Applicable

POLICE 065
CIVIL LIABILITIES .50 UNIT

PREREQUISITE: CRMJUS 058.
LECTURE: 8 contact 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 069
TRAFFIC RECONSTRUCTION INVESTIGATION 4.00 UNITS

PREREQUISITE: POLICE 074.
LECTURE: 56 contact hours per semester and
LABORATORY: 24 contact hours per semester.

This is an advance technical course that includes higher mathematics, physics, momentum theories, vehicle dynamics, reconstruction methodology and motorcycle, auto-pedestrian/bicycle, and heavy duty articulated vehicle collision analysis. The student will build on concepts taught in basic, intermediate and advanced traffic accident investigation school.

Associate Degree Applicable

POLICE 070
VEHICLE STOPS .50 UNIT

PREREQUISITE: CRMJUS 058.
LECTURE: 8 contact 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

PREREQUISITES: POLICE 002, 100, 101, 102 and 103.
LECTURE: 30 contact hours per semester and
LABORATORY: 10 contact hours per semester.

Accident investigation from on-the-scene procedures to follow up. 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 contact hours per semester and
LABORATORY: 18 contact 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 contact hours per semester and
LABORATORY: 24 contact 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 contact 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 078
OFFICER SAFETY/FIELD TACTICS 2 UNITS

PREREQUISITES: POLICE 002, 100, 101, 102 and 103.
LECTURE: 32 contact hours per semester and
LABORATORY: 8 contact 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

PREREQUISITES: POLICE 002, 100, 101, 102 and 103.
LECTURE: 20 contact hours per semester and
LABORATORY: 60 contact 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

PREREQUISITES: POLICE 002, 100, 101, 102 and 103.
LECTURE: 32 contact hours per semester and
LABORATORY: 8 contact 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 082
PROBLEM-ORIENTED POLICING .25 UNIT

PREREQUISITE: CRMJUS 058.
LECTURE: 4.5 contact hours per semester and
LABORATORY: 3.5 contact 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 contact 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 086
DOMESTIC VIOLENCE .50 UNIT

PREREQUISITE: CRMJUS 058.
LECTURE: 8 contact 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 contact hours per semester and
LABORATORY: 8 contact 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
PREREQUISITES: POLICE 002, 100, 101, 102 and 103.

LECTURE: 16 contact hours per semester and
LABORATORY: 9 contact 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

PREREQUISITES: POLICE 002, 100, 101, 102 and 103.
LECTURE: 8 contact 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
PREREQUISITES: POLICE 002, 100, 101, 102 and 103.
DEPARTMENTAL ADVISORY: POLICE 090.

LECTURE: 4 contact hours per semester and
LABORATORY: 4 contact 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 092
HIGH TECH CRIMES .75 UNIT
PREREQUISITES: POLICE 002, 100, 101, 102 and 103.

LECTURE: 12 contact hours per semester and
LABORATORY: 4 contact hours per semester.

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

POLICE 093
RACIAL PROFILING .25 UNIT
PREREQUISITES: POLICE 002, 100, 101, 102 and 103.

LECTURE: 4 contact hours per semester and
LABORATORY: 2 contact hours per semester.

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

POLICE 095
JAIL OPERATIONS 3.25 UNITS
PREREQUISITES: POLICE 002, 100, 101, 102 and 103.

LECTURE: 56 contact hours per semester and
LABORATORY: 3 contact hours per semester.

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, size 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



POLICE 100
CRIMINAL LAW 3 UNITS
PREREQUISITE: None.
COREQUISITES: POLICE 002, POLICE 101, POLICE 102 and POLICE 103.
LECTURE: 48 contact hours per semester.

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, PENAL CODE AND THE COMMISSION ON PEACE OFFICER STANDARDS AND TRAINING ADMINISTRATIVE MANUAL.**

Associate Degree Applicable
Course credit transfers to CSU

POLICE 101
PROCEDURE AND EVIDENCE 3 UNITS
PREREQUISITE: None.
COREQUISITES: POLICE 002, POLICE 100, POLICE 102 and POLICE 103.
LECTURE: 48 contact hours per semester.

This course will address the origin, concepts and philosophy of evidence, search and seizure, degrees of evidence, case studies, evidence procedures, judicial theories and decisions interpreting individual rights. **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
Course credit transfers to CSU

POLICE 102
COMMUNITY POLICING 3 UNITS
PREREQUISITE: None
COREQUISITES: POLICE 002, POLICE 100, POLICE 101 and POLICE 103
LECTURE: 48 contact hours per semester.

This course will address the origin, concepts and philosophy of community policing, cultural diversity, victim awareness and the development of positive relationships with the public. **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
Course credit transfers to CSU

POLICE 103
INTRODUCTION TO CRIMINAL INVESTIGATION 3 UNITS
PREREQUISITE: None.
COREQUISITES: POLICE 002, POLICE 100, POLICE 101 and POLICE 102.
LECTURE: 48 contact hours per semester.

This course will address the examination of crime, evidence and police procedures in investigating crime. This includes organized crime, street crime and white-collar crime. **ENROLLMENT IS LIMITED TO THOSE STUDENTS WHO MEET 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
Course credit transfers to CSU

POLICE 996-997
SELECTED STUDIES IN POLICE SCIENCE .25-4 UNITS

PREREQUISITE: None.
LECTURE: 4-64 contact hours per semester and/or
LABORATORY: 8-144 contact hours per semester.
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.
Not applicable to Associate Degree

POLITICAL SCIENCE

DIVISION: Social Sciences, Human Development and Physical Education
DIVISION DEAN: Corene Schwartz, Ed.D.
FACULTY CHAIR: Edward Millican, Ph.D.
NH 319
(909) 394-8587
ADMINISTRATIVE SECRETARY: Karen Deck
DIVISION OFFICE: NH 345
(909) 384-8603
LIAISON COUNSELOR: Jeanne Marquis, 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.

COURSES OFFERED BY THE DEPARTMENT OF POLITICAL SCIENCE:

POLIT 100
AMERICAN POLITICS 3 UNITS
PREREQUISITE: None.
LECTURE: 3 contact hours per week.

This course is a basic introduction to American politics that is designed to meet requirements in United States and California constitution and government with primary emphasis on the American national government. Topics covered include the political theory of democracy; the United States Constitution and Bill of Rights; the operations of national political institutions including Congress, the President, and the Supreme Court; the role of political parties; and an overview of California government and politics.

Associate Degree Applicable
Course credit transfers to CSU and UC.

POLIT 110
INTRODUCTION TO POLITICAL THEORY 3 UNITS

PREREQUISITE: None.

LECTURE: 3 contact 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 Contact 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 and UC.

POLIT 138
SERVICE LEARNING: STUDENT LEADERSHIP 3 UNITS

PREREQUISITE: None.

LECTURE: 1 contact hour per week and

LABORATORY: 6 contact hours per week.

This course is a service learning course designed for the development of leadership skills through participation in student government or other campus activities. The topics covered include: community college governance, collaborative problem solving, student issues, methods of effective advocacy, parliamentary procedures, relevant laws, and the challenges and opportunities of social diversity.

Associate Degree Applicable

Course credit transfers to CSU for elective credit only.

POLIT 139
SERVICE LEARNING: COMMUNITY LEADERSHIP 3 UNITS

PREREQUISITE: None.

LECTURE: 1 contact hour per week and

LABORATORY: 6 contact hours per week.

This course is a service learning course designed for the development of leadership skills through participation in community affairs on the federal, state, and local levels. The topics covered include street-level politics, coalition-building, direct and indirect lobbying, mass media communications, multicultural relations, legal requirements, and other aspects of civic involvement.

Associate Degree Applicable

Course credit transfers to CSU for elective credit only.

POLIT 204
INTRODUCTION TO WORLD POLITICS 3 UNITS

PREREQUISITE: None.

DEPARTMENTAL ADVISORY: POLIT 100 or HIST 171.

LECTURE: 3 contact hours per week.

This introductory course in world politics (international relations) surveys the principal actors, issues and processes involved in international relations. It includes paradigms and approaches in the study of world politics; foreign policy; issues of war and peace; international organizations; international law; globalization; international political economy, including global financial and trade institutions; human rights; and the global environment with respect to sustainable development.

Associate Degree Applicable

Course credit transfers to CSU and UC.

POLIT 222
SPECIAL PROBLEMS IN POLITICAL SCIENCE I 1 UNIT

PREREQUISITE: None.

INDEPENDENT STUDY: 3 contact hours per week.

Assigned readings, 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 contact 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 contact hours per week.

Assigned readings, 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 contact 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:	Science
DIVISION DEAN:	Susan Bangasser, Ph.D.
FACULTY CHAIR:	Dennis Jackson, M.S.N. (909) 384-8934
OTHER FACULTY:	Marcia Alfano-Wyatt, M.A. Marianne Klingstrand, M.A. Neomi Sabio, A.S.
ADMINISTRATIVE SECRETARY:	Judy Velasquez
DIVISION OFFICE:	Health and Life Science 101 (909) 384-4550
ADMINISTRATIVE SECRETARY:	Rose Garcia
DIVISION OFFICE:	Chemistry 121 (909) 384-8645
LIAISON COUNSELOR:	Ailsa Aguilar-Kitibutr, Psy.D. (909) 384-4404

The Psychiatric Technology program is a one-year certificate program that prepares students to monitor, provide care, and participate in the treatment of mentally and developmentally disabled clients. Learning activities are conducted on the San Bernardino Valley College campus and in a variety of community agencies. The curriculum prepares students to take the California Psychiatric Technician license examination. Students may also elect to earn an Associate degree. The Psychiatric Technology program is accredited by the California Board of Vocational Nursing and Psychiatric Technicians.

Students must complete program prerequisites, apply, and be accepted into the Psychiatric Technology Program. A booklet explaining details of application is available in the Health Science Division and online. Information meetings are conducted periodically. To apply, submit the following when all program prerequisites are completed or in-progress: application form, official transcripts from all colleges attended except SBVC or Crafton Hills College, proof of high school completion, college assessment scores, enrollment print-out of any in-progress prerequisite courses, and proof of reading proficiency. Application and supporting documents must be submitted by February 1 to be considered for Fall semester entrance or September 1 for Spring semester entrance. Late applications will only be considered if space is available.

A background check is required for enrollment in the Program. The California Board of Vocational Nursing and Psychiatric Technicians may deny a license based on any conviction or action substantially related to Psychiatric Technician practice. Students may earn a certificate or an Associate of Science degree in Psychiatric Technology.

PREREQUISITES FOR ADMISSION TO THE PSYCHIATRIC TECHNOLOGY PROGRAM:

Complete the following courses with a grade of C or better:

BIOL 155	Anatomy and Physiology	4 units
ENGL 101	Freshman Composition	4 units
MATH 090	Elementary Algebra	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 will exceed the minimum total of 60 units.

REQUIRED COURSES:	UNITS
PSYTCH 084 Introduction to Psychiatric Technology	17
PSYTCH 085 Psychiatric Technology: Nursing Science	12
PSYTCH 086 Psychiatric Technology: Behavioral Science	17
TOTAL UNITS:	46

PSYCHIATRIC TECHNOLOGY 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 employment as a Psychiatric Technician, providing care and participating in the treatment of mentally and developmentally disabled clients. Learning activities are conducted on the college campus and a variety of community agencies. The curriculum prepares students to take the California Psychiatric Technician license examination. The Psychiatric Technology program is accredited by the California Board of Vocational Nursing and Psychiatric Technicians. Students must complete program prerequisites, apply, and be accepted into the Psychiatric Technology program. To enroll in the program, students must pass a background check and meet health requirements. The California Board of Vocational Nursing and Psychiatric Technicians may deny a license based on any conviction or action substantially related to Psychiatric Technician practice.

PREREQUISITES FOR THE PSYCHIATRIC TECHNOLOGY PROGRAM

- High school completion (official transcript or Diploma or G.E.D., AA Degree, BS Degree, or foreign graduate that has been evaluated by AERC (American Educational Research Corporation), or IERF (International Education Research Foundation), or World Education Services.
- Reading Proficiency: complete READ 015 with a grade of C or higher, or eligibility for READ 100 or higher as determined by assessment test, or previous college degree
- Mathematics Proficiency: complete MATH 090 or higher with a grade of C or higher or eligibility for MATH 095 or higher as determined by assessment, or previous college degree.
- Complete the following courses with a grade of C or higher:
 - Anatomy and Physiology, BIOL 155
 - Freshman Composition ENGL 101 or ENGL 101H
 - General Psychology, PSYCH 100 or PSYCH 100H
 - Note: BIOL 155 and PSYCH 100 must be completed within 5 years of application to the program. Foreign transcripts must be evaluated for equivalency by an approved agency. See program Director/Department Chair.

APPLICATION TO THE PSYCHIATRIC TECHNOLOGY PROGRAM

Applications and supporting documents must be submitted by February 1 to be considered for Fall semester entrance or September 1 for Spring semester entrance. Late applications will only be considered if space is available. Submit the following:

- A. Application form (available in the Health Science Division Office, HLS 101, or on-line)
- B. Official transcripts from all colleges attended except SBVC and Crafton Hills College
- C. Document showing high school completion (high school diploma or transcript or G.E.D.) or a college degree.
- D. College assessment scores

ACCEPTANCE PROCEDURE

Applications are evaluated according to program prerequisites. Applicants who meet all program prerequisites will be considered for acceptance, depending on space availability and date of application. Applicants will be notified in writing of their application status.

To earn a certificate in Psychiatric Technology, complete each of the following courses with a grade of C or higher.

REQUIRED COURSES:	UNITS
PSYTCH 084 Introduction to Psychiatric Technology	17
PSYTCH 085 Psychiatric Technology: Nursing Science	12
PSYTCH 086 Psychiatric Technology: Behavioral Science	17
TOTAL UNITS:	46

COURSES OFFERED BY THE DEPARTMENT OF PSYCHIATRIC TECHNOLOGY:

**PSYTCH 084
INTRODUCTION TO PSYCHIATRIC TECHNOLOGY
17 UNITS**

PREREQUISITE: None.
LECTURE: 10 contact hours per week and
LABORATORY: 21 contact hours per week.

An introduction to psychiatric technology emphasizing basic therapeutic communication, pharmacology, growth and development, developmental disabilities, behavior modification, nutrition, and nursing care. Application of basic nursing skills to the care of clients with developmental disabilities. **REGISTRATION IS LIMITED TO STUDENTS WHO HAVE COMPLETED PROGRAM PREREQUISITES AND HAVE BEEN ACCEPTED INTO THE PSYCHIATRIC TECHNOLOGY PROGRAM.**

Associate Degree Applicable

**PSYTCH 085
PSYCHIATRIC TECHNOLOGY: NURSING SCIENCE
12 UNITS**

PREREQUISITE: PSYTCH 084.
LECTURE: 7 contact hours per week and
LABORATORY: 15 contact hours per week.

Study of basic nursing science concepts and skills with emphasis on nursing care for pediatric, adult and geriatric clients with medical and surgical disorders. Application of theory to the care of physically ill clients in acute and long-term care agencies. **REGISTRATION IS LIMITED TO STUDENTS WHO HAVE COMPLETED THE PROGRAM PREREQUISITES AND HAVE BEEN ACCEPTED INTO THE PSYCHIATRIC TECHNOLOGY PROGRAM.**

Associate Degree Applicable

**PSYTCH 086
INTRODUCTION TO PSYCHIATRIC TECHNOLOGY:
BEHAVIORAL SCIENCE
17 UNITS**

PREREQUISITE: PSYTCH 084.
LECTURE: 10 contact hours per week and
LABORATORY: 21 contact hours per week.

Study of psychiatric mental disorders with emphasis on causes, clinical manifestations, diagnosis, interventions and treatments. Application of mental health theory to the basic nursing care of clients in acute, long-term care, and state mental health institutional settings. **REGISTRATION IS LIMITED TO STUDENTS WHO HAVE COMPLETED PREREQUISITES AND HAVE BEEN ACCEPTED INTO THE PSYCHIATRIC TECHNOLOGY PROGRAM.**

Associate Degree Applicable

PSYCHOLOGY

- DIVISION: Social Sciences, Human Development and Physical Education
- DIVISION DEAN: Corene Schwartz, Ed.D.
- FACULTY CHAIR: Susan Shodahl, Ph.D.
NH 317
(909) 387-1633
- OTHER FACULTY: Sandra Moore, Ph.D.
- ADMINISTRATIVE SECRETARY: Karen Deck
- DIVISION OFFICE: NH 345
(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.

COURSES OFFERED BY THE DEPARTMENT OF PSYCHOLOGY:

PSYCH 052
PRACTICAL PSYCHOLOGY 3 UNITS
PREREQUISITE: None.

LECTURE: 3 contact hours per week.

In this course, students will study the principles of psychology as applied to everyday living, communication with others and effective behavior. Strategies for self-improvement will be discussed.

Associate Degree Applicable

PSYCH 100
GENERAL PSYCHOLOGY 3 UNITS
PREREQUISITE: None.

LECTURE: 3 contact hours per week.

This course surveys the nature of human behavior and examines 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.

PSYCH 100H
GENERAL PSYCHOLOGY – HONORS 3 UNITS
PREREQUISITE: None.

LECTURE: 3 contact hours per week.

This course surveys the nature of human behavior and examines 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. **This course is intended for students in the Honors Program but is open to all students who desire more challenging course work.**

Associate Degree Applicable

Course credit transfers to CSU and UC.

PSYCH 102
PERSONAL AND SOCIAL ADJUSTMENT 3 UNITS
PREREQUISITE: PSYCH 100 or PSYCH 100H.

LECTURE: 3 contact hours per week.

This course is the study of personal growth and adjustment issues from a variety of theoretical perspectives and includes a review of the characteristics of healthy and unhealthy behavior patterns. Topics include 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 105
STATISTICS FOR THE BEHAVIORAL SCIENCES 3 UNITS

PREREQUISITE: MATH 095.

DEPARTMENTAL ADVISORY: PSYCH 100 or PSYCH 100H.

LECTURE: 3 contact hours per week.

This class focuses on 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 and UC

PSYCH 110
ABNORMAL PSYCHOLOGY 3 UNITS
PREREQUISITE: PSYCH 100 or PSYCH 100H.

LECTURE: 3 contact hours per week.

This class is a 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 or PSYCH 100H.

LECTURE: 3 contact hours per week.

This course is a survey of lifespan developmental psychology from conception through aging. The focus is on five areas: (1) physical development, (2) social development, (3) cognitive development, (4) personality development, and (5) current theory and research which contribute to an understanding of human development over the lifespan.

Associate Degree Applicable

*Course credit transfers to CSU and *UC.*

PSYCH 112
DEVELOPMENTAL PSYCHOLOGY: CHILD AND ADOLESCENT PSYCHOLOGY 3 UNITS

PREREQUISITE: PSYCH 100 or PSYCH 100H.

LECTURE: 3 contact hours per week.

This course is a survey of the psychological growth of the normal individual from conception through adolescence with emphasis on stages of development. Particular emphasis is given to physical development, intellectual development, social and emotional development during the first two decades of life. Other topics include good and bad parenting styles and the potential problems encountered by children and adolescents.

Associate Degree Applicable

*Course credit transfers to CSU and *UC.*

PSYCH 118
HUMAN SEXUAL BEHAVIOR 3 UNITS
PREREQUISITE: PSYCH 100 or PSYCH 100H.

LECTURE: 3 contact hours per week.

This course is a study of selected factors in human sexual behavior. Emphasis is on the psychology of sex and an analysis of assumptions and attitudes toward human sexuality.

Associate Degree Applicable

Course credit transfers to CSU and UC.

PSYCH 222
INDEPENDENT STUDY IN PSYCHOLOGY 1-3 UNITS

PREREQUISITE: PSYCH 100 or PSYCH 100H.

INDEPENDENT STUDY: 3-9 contact hours per week.

Students with previous course work in Psychology 100 or Psychology 100H may do assigned projects involving research and analysis of selected topics. This independent study is for students who are interested in furthering their knowledge of psychology. Prior to registration, a written 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:	Arts and Humanities
DIVISION DEAN:	Kathryn Weiss, Ed.D.
FACULTY CHAIR:	Leticia Hector, M.A. Liberal Arts 239 (909) 384-8618
OTHER FACULTY:	Diane Dusick, Ph.D.
ADMINISTRATIVE SECRETARY:	Linda Tymchek, M.A. NH 223 (909) 384-8633
DIVISION OFFICE:	
LIAISON COUNSELOR:	Patty Jones, M.A. (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.

RTVF (FILM) ASSOCIATE OF ARTS DEGREE

To graduate with an Associate of Arts degree with a specialization in the Film concentration, students must: 1) complete the following core course, 2) complete the Film concentration, and 3) complete the general education breadth requirements for the associate degree for a total of 60 units.

REQUIRED (CORE) COURSE:	UNITS
RTVF 100 Introduction to Electronic Media or	3
SPEECH 135 Mass Media and Society	3

REQUIRED COURSES: FILM CONCENTRATION	UNITS
RTVF 101 Introduction to Cinema	3
RTVF 106 Media Writing	3
RTVF 131 Digital Video Editing	3
RTVF 240 Motion Picture Production	3

ADDITIONALLY, CHOOSE TWO (2) COURSES FROM THE FOLLOWING:

RTVF 132 Lighting for Stage and Screen	3
RTVF 133 Video Field Production	3
RTVF 134 Acting and Directing for Television and Film	3

TOTAL UNITS: 21

RTVF (TELEVISION) ASSOCIATE OF ARTS DEGREE

To graduate with an associate of arts degree with a specialization in the Television Concentration, students must: 1) complete the following core course, 2) complete the Television concentration, and 3) complete the general education breadth requirements for the associate degree for a total of 60 units.

REQUIRED (CORE) COURSES:	UNITS
RTVF 100 Introduction to Electronic Media or	3
SPEECH 135 Mass Media and Society	3

REQUIRED COURSES: TELEVISION CONCENTRATION

RTVF 130 Introduction to Studio Production	3
RTVF 131 Digital Video Editing	3
RTVF 133 Video Field Production	3

CHOOSE ONE (1) COURSE FROM THE FOLLOWING:

RTVF 104 Basic Writing for Broadcasting or	3
RTVF 106 Media Writing	3

CHOOSE ONE (1) COURSE FROM THE FOLLOWING:

RTVF 132 Lighting for Stage and Screen or	3
RTVF 230 Intermediate Studio Production	3

CHOOSE ONE (1) COURSE FROM THE FOLLOWING:

RTVF 134 Acting and Directing for Television and Film or	3
RTVF 221 Broadcast Station Management or	3
RTVF 231 Advanced Video Production	3

TOTAL UNITS: 21

RTVF (RADIO) ASSOCIATE OF ARTS DEGREE

To graduate with an Associate of Arts degree with a specialization in the Radio concentration, students must: 1) complete the following core courses, 2) complete the Radio concentration, and 3) complete the general breadth requirements for the Associate Degree for a total of 60 units.

REQUIRED (CORE) COURSES:	UNITS
RTVF 100 Introduction to Electronic Media or	3
SPEECH 135 Mass Media and Society	3

REQUIRED COURSES: RADIO CONCENTRATION

RTVF 102 Announcing and Performing in Electronic Media	3
RTVF 104 Basic Writing for Broadcasting	3
RTVF 120 Introduction to Audio Production	3
RTVF 121 Digital Audio Post Production	3
RTVF 220 Intermediate Radio Station Operations	3
RTVF 221 Broadcast Station Management	3

TOTAL UNITS: 21

RTVF ASSOCIATE OF ARTS DEGREE

To graduate with an associate of arts degree with a specialization in the general RTVF Concentration, students must: 1) complete the following core course, 2) complete the general RTVF Concentration, and 3) complete the general education breadth requirements for the associate degree for a total of 60 units.

REQUIRED (CORE) COURSES:		UNITS
RTVF 100	Introduction to Electronic Media or	3
SPEECH 135	Mass Media and Society	3

REQUIRED COURSES: RTVF CONCENTRATION		UNITS
RTVF 120	Introduction to Audio Production	3

REQUIRED COURSES: RTVF CONCENTRATION (CHOOSE ONE (1) COURSE)		UNITS
RTVF 104	Basic Writing for Broadcasting or	3
RTVF 106	Media Writing	3

REQUIRED COURSES: RTVF CONCENTRATION (CHOOSE ONE (1) COURSE)		UNITS
RTVF 102	Announcing and Performing in Electronic Media or	3
RTVF 134	Acting and Directing for Television and Film	3

SELECT TWO (2) COURSES FROM THE FOLLOWING:		UNITS
RTVF 101	Introduction to Cinema	3
RTVF 130	Introduction to Studio Production	3
RTVF 131	Digital Video Editing	3
RTVF 132	Lighting for Stage and Screen	3
RTVF 240	Motion Picture Production	3

SELECT ONE (1) FROM THE FOLLOWING:		UNITS
RTVF 220	Intermediate Radio Station Operations or	3
RTVF 221	Radio Station Management	3
TOTAL UNITS:		21

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.

RTVF (FILM) CERTIFICATE

To complete a Film certificate, students must: 1) complete the following core course, and 2) complete the Film concentration for a total of 21 units.

REQUIRED (CORE) COURSES:		UNITS
RTVF 100	Introduction to Electronic Media or	3
SPEECH 135	Mass Media and Society	3

FILM CONCENTRATION:		UNITS
RTVF 101	Introduction to Cinema	3
RTVF 106	Media Writing	3
RTVF 131	Digital Video Editing	3
RTVF 240	Motion Picture Production	3

ADDITIONALLY, CHOOSE TWO (2) FROM THE FOLLOWING:		UNITS
RTVF 132	Lighting for Stage and Screen or	3
RTVF 133	Video Field Production or	3
RTVF 134	Acting and Directing for Television and Film	3

TOTAL UNITS:	21
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RTVF (TELEVISION) CERTIFICATE

To complete a Television certificate, students must: 1) complete the following core course, and 2) complete the Television concentration for a total of 21 units.

REQUIRED (CORE) COURSES:		UNITS
RTVF100	Introduction to Electronic Media or	3
SPEECH135	Mass Media and Society	3

TELEVISION CONCENTRATION:		UNITS
RTVF130	Introduction to Studio Production	3
RTVF131	Digital Video Editing	3
RTVF133	Video Field Production	3

CHOOSE ONE (1) COURSE FROM THE FOLLOWING:		UNITS
RTVF104	Basic Writing for Broadcasting or	3
RTVF106	Writing for Television & Film	3

CHOOSE ONE (1) COURSE FROM THE FOLLOWING:		UNITS
RTVF132	Lighting for Stage and Screen or	3
RTVF230	Intermediate Studio Production	3

CHOOSE ONE (1) COURSE FROM THE FOLLOWING:		UNITS
RTVF134	Acting and Directing for Television and Film or	3
RTVF221	Broadcast Station Management or	3
RTVF231	Advanced Video Production	3

TOTAL UNITS:	21
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RTVF (RADIO) CERTIFICATE

To complete a Radio certificate, students must: 1) complete the following core course, and 2) complete the Radio concentration for a total of 21 units.

REQUIRED (CORE) COURSES:		UNITS
RTVF100	Introduction to Electronic Media	3
SPEECH135	Mass Media and Society	3

RADIO CONCENTRATION:		UNITS
RTVF102	Announcing and Performing in Electronic Media	3
RTVF104	Basic Writing for Broadcasting	3
RTVF120	Introduction to Audio Production	3
RTVF121	Digital Audio Post Production	3
RTVF220	Intermediate Radio Station Operations	3
RTVF221	Broadcast Station Management	3
TOTAL UNITS:		21

RTVF CERTIFICATE

To complete a certificate, students must: 1) complete the following core course, and 2) complete either Radio, Television, Film, or the general RTVF concentration for a total of 21 units.

REQUIRED (CORE) COURSES:		UNITS
RTVF100	Introduction to Electronic Media	3
SPEECH135	Mass Media and Society	3

REQUIRED COURSE: RTVF CONCENTRATION	UNITS	
RTVF120	Introduction to Audio Production	3

REQUIRED COURSES: RTVF CONCENTRATION (CHOOSE ONE (1) COURSE)		UNITS
RTVF104	Basic Writing for Broadcasting	3
RTVF106	Media Writing	3

REQUIRED COURSES: RTVF CONCENTRATION (CHOOSE ONE (1) COURSE)		UNITS
RTVF102	Announcing and Performing in Electronic Media	3
RTVF134	Acting and Directing for Television and Film	3

SELECT TWO (2) COURSES FROM THE FOLLOWING:		UNITS
RTVF101	Introduction to Cinema	3
RTVF130	Introduction to Studio Production	3
RTVF131	Digital Video Editing	3
RTVF132	Lighting for Stage and Screen	3
RTVF240	Motion Picture Production	3

SELECT ONE (1) FROM THE FOLLOWING:		UNITS
RTVF220	Intermediate Radio Station Operations	3
RTVF221	Broadcast Station Management	3
TOTAL UNITS:		21

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	3 UNITS
INTRODUCTION TO ELECTRONIC MEDIA	

PREREQUISITE: None.
LECTURE: 3 contact hours per week.
This course provides a survey of electronic media, including radio, television, film and multimedia. The impact of the media on culture and society is studied, including a look at media history, economics, technological development, programming, ratings, legal aspects and social aspects of broadcasting. An international perspective is given on all aspects of media studied.
Associate Degree Applicable
Course credit transfers to CSU and UC.

RTVF 101	3 UNITS
INTRODUCTION TO CINEMA	

PREREQUISITE: None.
LECTURE: 3 contact hours per week.
An introductory course on the aesthetics, history, literature, creative techniques, depiction of social cultures, history, and values in film.
Associate Degree Applicable
Course credit transfers to CSU and UC.

RTVF 102	3 UNITS
ANNOUNCING AND PERFORMING IN ELECTRONIC MEDIA	

PREREQUISITE: None.
LECTURE: 2 contact hours per week and LABORATORY: 3 contact hours per week.
This course will give instruction and practice in performing and announcing. Topics include interpretation of copy, news casting, music continuity, interviewing, and the operation of audio equipment while performing. Students will practice commercial material and improvisational announcing.
Associate Degree Applicable
Course credit transfers to CSU

RTVF 104
BASIC WRITING FOR BROADCASTING 3 UNITS
PREREQUISITE: ENGL 914.
LECTURE: 3 contact hours per week.
This course provides instruction and practice in writing and editing news for radio and television, including rewriting from wire copy, newspapers, and documents. Topics include how to write for speaking, writing objectively, journalism ethics, and legal issues such as libel and right to privacy.
Associate Degree Applicable
Course credit transfers to CSU.

RTVF 106
MEDIA WRITING 3 UNITS
PREREQUISITE: ENGL 914
LECTURE: 3 contact hours per week.
Introduction to the techniques of narrative and documentary writing and scripting. Course includes the analysis and writing of radio, television, and film materials as well as storytelling and screenwriting.
Associate Degree Applicable
Course credit transfers to CSU.

RTVF 120
INTRODUCTION TO AUDIO PRODUCTION 3 UNITS
PREREQUISITE: None.
LECTURE: 2 contact hour per week and
LABORATORY: 3 contact hours per week.
This course introduces the theory and practice of audio techniques in radio, television, film, and multimedia. Topics include acoustics, audio signal flow, use of sound and production equipment, and the aesthetic aspects of sound mixing.
Associate Degree Applicable
Course credit transfers to CSU.

RTVF 121
DIGITAL AUDIO POST PRODUCTION 3 UNITS
PREREQUISITE: RTVF 120.
LECTURE: 2 contact hour per week and
LABORATORY: 3 contact hours per week.
This post production course provides specialized training in digital audio work stations and synchronization with the visual image for radio, television, film, and multimedia. Topics include the use of audio post production techniques and the skills necessary to compete in the entertainment, communications, and multimedia industries.
Associate Degree Applicable
Course credit transfers to CSU.

RTVF 130
INTRODUCTION TO STUDIO PRODUCTION 3 UNITS
PREREQUISITE: None.
LECTURE: 2 contact hour per week and
LABORATORY: 3 contact hours per week.
This introductory course covers the organization of the television studio, control room, production language, and studio personnel. Topics include: sound recording and mixing, shooting composition and aesthetics, camera operation, studio lighting, microphones and audio techniques, basic television graphics, and an introduction to the video switcher.
Associate Degree Applicable
Course credit transfers to CSU.

RTVF 131
DIGITAL VIDEO EDITING 3 UNITS
PREREQUISITE: None.
LECTURE: 2 contact hour per week and
LABORATORY: 3 contact hours per week.
This course includes theory and practice in digital video editing techniques including: hardware and software requirements, capturing/digitizing, sound mixing and editing, titles and effects, saving, importing and exporting.
Associate Degree Applicable
Course credit transfers to CSU.

RTVF 132
LIGHTING FOR STAGE AND SCREEN 3 UNITS
PREREQUISITE: None.
LECTURE: 2 contact hours per week and
LABORATORY: 3 contact hours per week.
This course is an introduction to the equipment and techniques of lighting design involving hands-on training and computer technology. This course is also offered as THART 132.
Associate Degree Applicable
Course credit transfers to CSU and UC.

RTVF 133
VIDEO FIELD PRODUCTION 3 UNITS
PREREQUISITE: None.
LECTURE: 2 contact hours per week and
LABORATORY: 3 contact hours per week.
An introductory course in the theory, terminology, and operation of video production. Includes topics in composition, camera operation, portable lighting, video recorder, audio control, and editing. The aesthetics and fundamentals of scripting, producing, and directing on location, as well as multimedia and postproduction are also reviewed.
Associate Degree Applicable
Course credit transfers to CSU.

RTVF 134
ACTING AND DIRECTING FOR TELEVISION AND FILM 3 UNITS
PREREQUISITE: None.
LECTURE: 2 contact hours per week and
LABORATORY: 3 contact hours per week.
This course provides instruction and practice in acting and directing for television and film, including voice, poise, and character development.
Associate Degree Applicable
Course credit transfers to CSU and UC.

RTVF 198
RADIO, TELEVISION, AND FILM OCCUPATIONAL
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 contact 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 220
INTERMEDIATE RADIO STATION OPERATIONS **3 UNITS**

PREREQUISITE: RTVF 120.
DEPARTMENTAL ADVISORY: RTVF 121.
LECTURE: 2 contact hour per week and
LABORATORY: 3 contact hours per week.

This is the second class in a two-course sequence, with emphasis on individual and group production of short and long-form radio projects. Projects include remote broadcasts, promotional spots, features, music programming, and news; as well as project development, management and implementation. All student projects will air on the student radio-station KJRP, with some selected projects also airing on our PBS station, KVCR.
Associate Degree Applicable
Course credit transfers to CSU.

RTVF 221
BROADCAST STATION MANAGEMENT **3 UNITS**

PREREQUISITE: RTVF 120 or RTVF 130 or RTVF 133.
LECTURE: 2 contact hour per week and
LABORATORY: 3 contact hours per week.

This course deals with radio and television station management functions, models, and operations. Students will program and manage the student radio and television stations 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 and television stations, 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 contact hours per week.
 Students with previous course work in RTVF may do assigned projects involving research and analysis of selected topics. This independent study is for students who are interested in furthering their knowledge of RTVF. Prior to registration, a written 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: 2 contact hour per week and
LABORATORY: 3 contact hours per week.
 This is the second level course in techniques of planning, producing, writing, and directing television programs; with an emphasis on polishing technical skills, creativity, and teamwork. Explores advanced video switching techniques, video recording and editing formats, program rundowns, timing, and advanced director's cues.
Associate Degree Applicable
Course credit transfers to CSU.

RTVF 231
ADVANCED VIDEO PRODUCTION **3 UNITS**

PREREQUISITES: RTVF 131 and RTVF 230.
LECTURE: 1 contact hour per week and
LABORATORY: 6 contact 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 productions, individually and in teams.
Associate Degree Applicable
Course credit transfers to CSU.

RTVF 240
MOTION PICTURE PRODUCTION **3 UNITS**

PREREQUISITE: RTVF 131 or RTVF 133.
LECTURE: 2 contact hour per week and
LABORATORY: 3 contact hours per week.
 This course covers basic cinematography for motion pictures and television. Includes operation, function, and creative use of the tools of motion picture production, composition of shots, editing, sound recording and mixing, editing, animation, special effects, and scriptwriting.
Associate Degree Applicable
Course credit transfers to CSU.

RAILROAD OPERATIONS

DIVISION: Applied Technology,
 Transportation and Culinary Arts
 DIVISION DEAN, INTERIM: Kay Ragan, Ed.D.
 FACULTY CHAIR: Kevin Kammer, M.S.
 Technical 108
 (909) 384-8503
 DEPARTMENT OFFICE: 264 S. Leland Norton Way
 Suite A120, San Bernardino
 LIAISON COUNSELOR: Frank Dunn, M.A.
 (909) 384-4404

**GENERAL RAILWAY OPERATIONS
 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 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, tracks and structures, and installation of signaling and control systems.

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 contact hours per week.

This course provides information on the development and evolution of the railroad industry in North America. The course will focus on the geographical expansion, technical advancement, sociological influences, government involvement, and economic impact of the railroads and related businesses in the United States, Canada, and Mexico.

Associate Degree Applicable

**RAIL 051
RAILROAD TECHNICAL CAREERS 3 UNITS**

PREREQUISITE: None.

LECTURE: 3 contact hours per week.

The primary objective of this course is to examine the various technical positions and work groups responsible for the day-to-day operations of a railroad. Topics include 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.

Associate Degree Applicable

**RAIL 052
RAILROAD OPERATIONS 3 UNITS**

PREREQUISITE: None.

LECTURE: 3 contact 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 in the railroad industry with an emphasis on the tools and techniques used to improve these conditions on the job.

Associate Degree Applicable

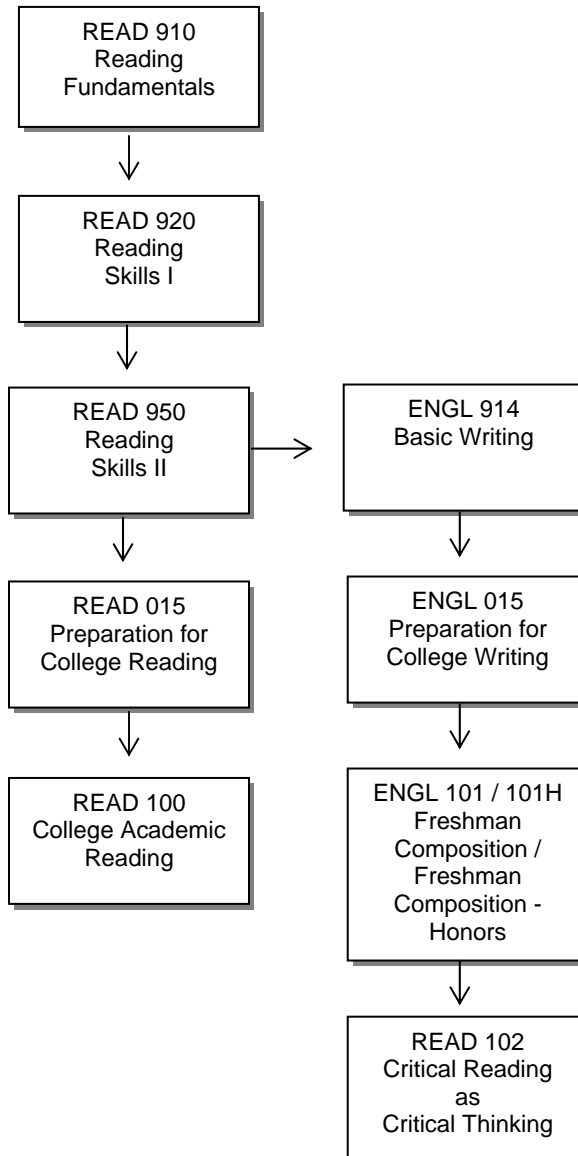
Sequence of Reading Courses at SBVC

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:	Arts and Humanities
DIVISION DEAN:	Kathryn Weiss, Ed.D.
FACULTY CHAIR:	Paula Ferri-Milligan, M.A. Liberal Arts 237 (909) 384-8244
OTHER FACULTY:	Carolyn Allen-Roper, M.A. Kimberly Anderson-Jefferson, M.A. Helen Garcia, Ph.D. Magdalena Jacobo, M.A.
ADMINISTRATIVE SECRETARY:	Linda Tymchek, M.A.
DIVISION OFFICE:	NH 223 (909) 384-8633
LIAISON COUNSELOR:	Laura Gomez, M.A. (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 course. 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 are college-level reading and study skills courses.

COURSES OFFERED BY THE DEPARTMENT OF READING AND STUDY SKILLS:

READ 910
READING FUNDAMENTALS **4 UNITS**
PREREQUISITE: None.
LECTURE: 3 contact hours per week and
LABORATORY: 3 contact 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 contact hours per week and
LABORATORY: 3 contact 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 contact hours per week and
LABORATORY: 3 contact 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 contact hours per week and
LABORATORY: 3 contact 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 contact 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 contact 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:	Mathematics, Business and Computer Technology
DIVISION DEAN:	Haragewen Kinde, Ed.D.
FACULTY CHAIR:	Michael Assumma, M.B.A. Business 100G (909) 384-8923
OTHER FACULTY:	Michael Durrett, M.B.A.
ADMINISTRATIVE SECRETARY:	Vivian Marquez
DIVISION OFFICE:	Business 100 (909) 384-8520/8908
LIAISON COUNSELOR:	Patty Jones, 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 study 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 preparation for pre-qualification for the real estate sales or brokers examinations.

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

1. ESCROW CERTIFICATE

This certificate qualifies students for entry-level employment in title and escrow companies, mortgage companies, savings and loans, and related firms.

REQUIRED COURSES:	UNITS
ESCROW 101 Escrow Procedures I	3
ESCROW 102 Escrow Procedures II	3
ESCROW 103 Escrow Procedures III	3
REALST 100 Real Estate Principles	3
REALST 210 Real Estate Finance	3
REALST 215 Legal Aspects of Real Estate	3
Six units from the list of RECOMMENDED COURSES	6
TOTAL UNITS:	24

RECOMMENDED COURSES:	UNITS
ACCT 100 Introduction to Accounting I or	4
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

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.

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
REALST 230 Real Estate Economics	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 or	4
ACCT 200 Principles of Accounting I	(4)
BUSAD 100 Introduction to Business	3
BUSAD 103 Marketing Principles	3
BUSAD 210 Business Law	3
BUSCAL 050 Quantitative Methods in Business	3
ECON 100 Introduction to Economics	3
ESCROW 101 Escrow Procedures I	3
REALST 220 Property Management	3

**COURSES OFFERED BY THE DEPARTMENT OF
REAL ESTATE/ESCROW:**

**REALST 901
REAL ESTATE PRE-LICENSE 3 UNITS
PREREQUISITE: None.**

LECTURE: 3 contact 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 contact 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

**REALST 100
REAL ESTATE PRINCIPLES 3 UNITS
PREREQUISITE: None.**

LECTURE: 3 contact 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. The California Real Estate Commission requires this course in order to take the State of California Real Estate Salesperson License exam.
*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 contact 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 contact 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 contact hours per week and LABORATORY: 2 contact 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.**

LECTURE: 3 contact hours per week.
This course includes the day-to-day operations in real estate, overview of brokerage procedures and the various roles of the employee. The California Real Estate Commission requires this course in order to take the State of California Real Estate Salesperson and Broker License exams.
*Associate Degree Applicable
Course credit transfers to CSU for elective credit only.*

**REALST 205
REAL ESTATE APPRAISAL: RESIDENTIAL 3 UNITS
PREREQUISITE: REALST 100.**

LECTURE: 3 contact hours per week.
This course addresses purpose of appraisals, appraisal process and the different methods, approaches and techniques used to determine the value of various types of property. Successful completion of this course meets elective qualification for salesperson or broker licensing approval.
*Associate Degree Applicable
Course credit transfers to CSU for elective credit only.*

**REALST 210
REAL ESTATE FINANCE 3 UNITS
PREREQUISITE: REALST 100.**

LECTURE: 3 contact hours per week.
This courses addresses the 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. Successful completion of this course meets elective qualification for salesperson or broker licensing approval.
*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 contact 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.
*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 contact hours per week.
This course is the study of real estate law with emphasis on applications in real estate brokerage and related fields. Successful completion of this course meets elective qualification for salesperson or broker licensing approval.
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 contact 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 contact 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.

ESCROW 101
ESCROW PROCEDURES I **3 UNITS**
PREREQUISITE: None.
LECTURE: 3 contact 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 contact 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 contact hours per week.
Case studies of unusual and difficult types of escrows with emphasis on escrows in which conflicts or disputes arise.
Associate Degree Applicable
Course credit transfers to CSU for elective credit only.

REFRIGERATION AND AIR CONDITIONING

DIVISION: Applied Technology,
Transportation and Culinary Arts
DIVISION DEAN, INTERIM: Kay Ragan, Ed.D.
FACULTY CHAIRS: Edward Szumski, M.A.
(909) 384-8501
ADMINISTRATIVE SECRETARY: Cecile Smith
DIVISION OFFICE: Technical 108
(909) 384-8902
LIAISON COUNSELOR: Frank Dunn, M.A.
(909) 384-4404

The Refrigeration and Air Conditioning Department prepares students for employment in the field of refrigeration and air conditioning. The employment opportunities 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. Refrigeration is also necessary for the production, storage, and marketing of food and other perishables.

REFRIGERATION AND AIR CONDITIONING (HVAC) 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 C or better plus the general breadth requirements for the Associate of Science Degree (minimum total = 60 units).

REQUIRED COURSES:		UNITS
REFRIG 001	Refrigeration I	4
REFRIG 002	Refrigeration II	4
REFRIG 003	Refrigeration III	4
REFRIG 004	Refrigeration Electricity I	4
REFRIG 005	Refrigeration Electricity II	4
REFRIG 006	Air Conditioning and Heating (HVAC)	4
REFRIG 007	Refrigeration Welding	3
TECALC 087	Technical Calculations or	4
MATH 095	Intermediate Algebra	4
Environmental Protection Agency (EPA) Universal Certification (608)		0

RECOMMENDED COURSE:
Students are encouraged to take this course to augment their knowledge of air conditioning and heating:

AUTO 056	Automotive Heating and Air Conditioning	4
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TOTAL UNITS: 31

REFRIGERATION AND AIR CONDITIONING (HVAC) 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 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.

REQUIRED COURSES:		UNITS
REFRIG 001	Refrigeration I	4
REFRIG 002	Refrigeration II	4
REFRIG 003	Refrigeration III	4
REFRIG 004	Refrigeration Electricity I	4
REFRIG 005	Refrigeration Electricity II	4
REFRIG 006	Air Conditioning and Heating (HVAC)	4
REFRIG 007	Refrigeration Welding	3
TECALC 087	Technical Calculations	or 4
MATH 095	Intermediate Algebra	4
Environmental Protection Agency (EPA) Universal Certification (608)		0

RECOMMENDED COURSE:

Students are encouraged to take this course to augment their knowledge of air conditioning and heating:

AUTO 056	Automotive Heating and Air Conditioning	4
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TOTAL UNITS: 31

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 001 REFRIGERATION I 4 UNITS

PREREQUISITE: None.

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

This course covers basic principles of refrigeration, refrigerants, refrigeration components and tools; repair and testing of refrigeration units; and basic brazing and soldering. (Formerly REFRIG 001x3)
Associate Degree Applicable

REFRIG 002 REFRIGERATION II 4 UNITS

PREREQUISITE: REFRIG 001.

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

This course covers principles of refrigeration compression systems, operations and controls, refrigeration and freezer construction, piping and parts layout. Included in the lab work is troubleshooting and servicing domestic refrigeration units. (Formerly REFRIG 002x3)
Associate Degree Applicable

REFRIG 003 REFRIGERATION III 4 UNITS

PREREQUISITE: REFRIG 001.

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

This course covers theory of compressor construction and operation, principles of all types of refrigerant controls and multi-stage control devices pertaining to commercial and industrial refrigeration including practical lab work. (Formerly REFRIG 003x3)
Associate Degree Applicable

REFRIG 004 REFRIGERATION ELECTRICITY I 4 UNITS

PREREQUISITE: None.

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

This course covers fundamentals of direct and alternating current circuits, test equipment, electric motors of all types, wiring and control devices used in modern refrigeration equipment including practical lab work with electrical refrigeration trainers and projects. (Formerly REFRIG 004x3)
Associate Degree Applicable

REFRIG 005 REFRIGERATION ELECTRICITY II 4 UNITS

PREREQUISITE: REFRIG 004.

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

This course covers solid state control systems with emphasis on schematic reading and electrical troubleshooting pertaining to refrigeration equipment including practical lab work with electrical refrigeration trainers and projects. (Formerly REFRIG 005x3)
Associate Degree Applicable

REFRIG 006 AIR CONDITIONING AND HEATING (HVAC) 4 UNITS

PREREQUISITE: REFRIG 001.

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

This course covers theory of multiple-stage systems and multiple-control devices with emphasis on condensing and evaporation equipment, heavy duty piping layout, forced-air heating, ventilation, and air conditioning including lab work with refrigeration trainers and projects. (Formerly REFRIG 006x3)
Associate Degree Applicable

REFRIG 007 REFRIGERATION WELDING 3 UNITS

PREREQUISITE: None.

LECTURE: 1 contact hours per week and LABORATORY: 6 contact hours per week.

This course covers intensive training in soldering, brazing and welding techniques on copper tubing, steel and dissimilar metals using oxyacetylene and special gas torches as practiced in the refrigeration, HVAC industry including blueprint reading and fabrication.
Associate Degree Applicable

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 050C
REFRIGERATION AND AIR CONDITIONING I **3 UNITS**

PREREQUISITE: None.
DEPARTMENTAL ADVISORY: HVAC Refrigeration Work Experience.
LECTURE: 3 contact hours per week.

This is one of three courses of a three-semester national training course offered by the Refrigeration Service Engineers Society (RSES) and the North American Technician Excellence (NATE) 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.
Associate Degree Applicable

REFRIG 051C
REFRIGERATION AND AIR CONDITIONING II **3 UNITS**

PREREQUISITE: None.
DEPARTMENTAL ADVISORY: HVAC Refrigeration Work Experience
LECTURE: 3 contact hours per week.

This is one of three courses of a three-semester national training course offered by the Refrigeration Service Engineers Society (RSES) and the North American Technician Excellence (NATE) 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.
Associate Degree Applicable

REFRIG 052C
REFRIGERATION AND AIR CONDITIONING III **3 UNITS**

PREREQUISITE: None.
DEPARTMENTAL ADVISORY: HVAC Refrigeration Work Experience
LECTURE: 3 contact hours per week.

This is one of three courses of a three-semester national training course offered by the Refrigeration Service Engineers Society (RSES) and the North American Technician Excellence (NATE) and is a comprehensive study of air conditioning. This course is designed to help certify journeymen-level refrigeration technicians and keep their knowledge current.
Associate Degree Applicable

REFRIG 055C
REFRIGERATION HEATING I **3 UNITS**

PREREQUISITE: None.
DEPARTMENTAL ADVISORY: HVAC Refrigeration Work Experience
LECTURE: 3 contact hours per week.

This is one of three courses of a three-semester national training course offered by the Refrigeration Service Engineers Society (RSES) and the North American Technician Excellence (NATE) and is a comprehensive study of heating systems. This course is designed to help certify journeymen-level refrigeration technicians and keep their knowledge current.
Associate Degree Applicable

REFRIG 056C
REFRIGERATION HEATING II **3 UNITS**
PREREQUISITE: None.
DEPARTMENTAL ADVISORY: HVAC Refrigeration Work Experience
LECTURE: 3 contact hours per week.

This is one of three courses of a three-semester national training course offered by the Refrigeration Service Engineers Society (RSES) and the North American Technician Excellence (NATE) and is a comprehensive study of heat sources and distribution. This course is designed to help certify journeymen-level refrigeration technicians and keep their knowledge current.
Associate Degree Applicable

REFRIG 057C
REFRIGERATION HEATING III **3 UNITS**
PREREQUISITE: None.
DEPARTMENTAL ADVISORY: HVAC Refrigeration Work Experience
LECTURE: 3 contact hours per week.

This is one of three courses of a three-semester national training course offered by the Refrigeration Service Engineers Society (RSES) and the North American Technician Excellence (NATE) and is a comprehensive study of heating controls, filtering, and cleaning equipment. This course is designed to help certify journeymen-level refrigeration technicians and keep their knowledge current.
Associate Degree Applicable

REFRIG 060c
REFRIGERATION AND A/C ELECTRICITY I **3 UNITS**
PREREQUISITE: None.
DEPARTMENTAL ADVISORY: HVAC Refrigeration Work Experience
LECTURE: 3 contact hours per week.

This is one of three courses of a three-semester national training course offered in conjunction with the Refrigeration Service Engineers Society (RSES) and the North American Technician Excellence (NATE) and is a comprehensive study of fundamentals of electricity. This course is designed to help certify journeymen-level refrigeration technicians and keep their knowledge current.
Associate Degree Applicable

REFRIG 061C
REFRIGERATION AND A/C ELECTRICITY II **3 UNITS**
PREREQUISITE: None.
DEPARTMENTAL ADVISORY: HVAC Refrigeration Work Experience
LECTURE: 3 contact hours per week.

This is one of the three, semester long, national training courses offered in conjunction with the Refrigeration Service Engineers Society (RSES) and the North American Technician Excellence (NATE) 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 062C
REFRIGERATION AND A/C ELECTRICITY III **3 UNITS**

PREREQUISITE: None.

DEPARTMENTAL ADVISORY: HVAC Refrigeration
Work Experience

LECTURE: 3 contact hours per week.

This is one of three courses of a three-semester national training course offered in conjunction with the Refrigeration Service Engineers Society (RSES) and the North American Technician Excellence (NATE) 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 065C
HEAT-PUMP THEORY **3 UNITS**

PREREQUISITE: None.

DEPARTMENTAL ADVISORY: HVAC Refrigeration
Work Experience.

LECTURE: 3 contact hours per week.

This is one-semester national training course offered in conjunction with the Refrigeration Service Engineers Society (RSES) and the North American Technician Excellence (NATE) 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.

Associate Degree Applicable

REFRIG 066C
CONTROLS I **3 UNITS**

PREREQUISITE: None.

DEPARTMENTAL ADVISORY: HVAC Refrigeration
Work Experience.

LECTURE: 3 contact hours per week.

This is one of three courses of a three-semester national training course offered in conjunction with the Refrigeration Service Engineers Society (RSES) and the North American Technician Excellence (NATE) 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 067C
CONTROLS II **3 UNITS**

PREREQUISITE: None.

DEPARTMENTAL ADVISORY: HVAC Refrigeration
Work Experience.

LECTURE: 3 contact hours per week.

This is one of three courses of a three-semester national training course offered in conjunction with the Refrigeration Service Engineers Society (RSES) and the North American Technician Excellence (NATE) 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 068C
CONTROLS III **3 UNITS**

PREREQUISITE: None.

DEPARTMENTAL ADVISORY: HVAC Refrigeration
Work Experience.

LECTURE: 3 contact hours per week.

This is one of three courses of a three-semester national training course offered in conjunction with the Refrigeration Service Engineers Society (RSES) and the North American Technician Excellence (NATE) 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

REFRIG 098
REFRIGERATION WORK EXPERIENCE **1-4 UNITS**

PREREQUISITE: None.

Supervised training, in the form of on the job employment that will enhance the student's knowledge in the selected field of study. 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 098 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. (Formerly REFRIG 198)

Associate Degree Applicable

RELIGIOUS STUDIES

See the Department of
PHILOSOPHY/ RELIGIOUS STUDIES

RESTAURANT MANAGEMENT/CULINARY ARTS
and
RESTAURANT MANAGEMENT/CULINARY ARTS
WORK EXPERIENCE

See courses within the Department of
CULINARY ARTS

SIGN LANGUAGE

See AMERICAN SIGN LANGUAGE

SOCIOLOGY

DIVISION: Social Sciences, Human Development and Physical Education
DIVISION DEAN: Corene Schwartz, Ed.D.
FACULTY CHAIR: Romana Pires, M.A., M.S.
NH 324
(909) 384-8602
ADMINISTRATIVE SECRETARY: Karen Deck
DIVISION OFFICE: NH 345
(909) 384-8603
LIAISON COUNSELOR: André Wooten, M.S.
(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 contact hours per week.

This course is a comprehensive examination of the social influences on human behavior focusing on a scientific and humanistic approach to the study of social patterns and processes, structure and function, conflict and change in society and culture in general with emphasis on American institutions in a multi-cultural society and their relationship to global patterns.

Associate Degree Applicable

*Course credit transfers to CSU and *UC.*

SOC 100H INTRODUCTION TO SOCIOLOGY – HONORS 3.00 UNITS

PREREQUISITE: None.

LECTURE: 3 contact hours per week.

This course is a comprehensive examination of the social influences on human behavior focusing on a scientific and humanistic approach to the study of social patterns and processes, structure and function, conflict and change in society and culture in general with emphasis on American institutions in a multi-cultural society and their relationship to global patterns. **This course is intended for students in the Honors Program, but is open to all students who desire more challenging course work.**

Associate Degree Applicable

*Course credit transfers to CSU and *UC.*

SOC 110 CONTEMPORARY SOCIAL ISSUES 3 UNITS PREREQUISITE: None.

LECTURE: 3 contact hours per week.

This course is an analysis of issues of concern in American society with an emphasis on social institutions and other areas such as crime, racism, sexism, aging, substance abuse, divorce, social inequality, poverty and social change.

Associate Degree Applicable

Course credit transfers to CSU and UC.

SOC 130 MARRIAGE AND THE FAMILY 3 UNITS PREREQUISITE: None.

DEPARTMENTAL ADVISORIES: ENGL 015 or eligibility for ENGL 101 as determined by SBVC assessment process.

LECTURE: 3 contact hours per week.

This course is a survey of the structure and developmental process of marriage and contemporary families. This analysis includes an examination of intimate relationships, racial-ethnic, class, gender, culture, socioeconomic, political and other systematic and demographic trends related to marriage and the family.

Associate Degree Applicable

Course credit transfers to CSU and UC.

SOC 141 RACE AND ETHNIC RELATIONS 3 UNITS PREREQUISITE: None.

DEPARTMENTAL ADVISORIES: ENGL 015 or eligibility for ENGL 101 as determined by SBVC assessment process.

LECTURE: 3 contact hours per week.

This course is an analysis of the major sociological perspectives pertaining to racial and ethnic relations in the United States and globally. There is an emphasis on historical and contemporary trends of these relations in the United States 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 ADVISORIES: ENGL 015 or eligibility for ENGL 101 as determined by SBVC assessment process.

LECTURE: 3 contact hours per week.

This course is a study of the changing roles of women and men in contemporary United States. A sociological and humanistic approach will be utilized to analyze gender socialization and relations with an emphasis on gender in major social institutions: economic, political, mass media, medical, educational, religious and family structures with some comparisons to global contemporary trends.

Associate Degree Applicable

Course credit transfers to CSU and UC.

SOC 150
SOCIOLOGY OF AGING AND THE LIFE COURSE
3 UNITS

PREREQUISITE: None.

DEPARTMENTAL ADVISORIES: ENGL 015 or eligibility for ENGL 101 as determined by SBVC assessment process.

LECTURE: 3 contact hours per week.

This course is an analysis of the interaction between the human life course and social structures with an emphasis on aging as a social process including adjustment to aging among individuals, families, generational cohorts and society. Historical, cultural, socioeconomic, political, other social contexts and public policy issues such as healthcare, housing and retirement in the United States will also be examined.

Associate Degree Applicable

Course credit transfers to CSU and UC.

SPANISH

DIVISION: Arts and Humanities
DIVISION DEAN: Kathryn Weiss, Ed.D.
FACULTY CHAIR: Lydia Barajas-Zapata, M.A.
NH 331
(909) 384-8237
OTHER FACULTY: Yon Che, M.A.
Jose Recinos, Ph.D.
Nori Sogomonian, M.A.
ADMINISTRATIVE SECRETARY: Linda Tymchek, M.A.
DIVISION OFFICE: NH 223
(909) 384-8633
LIAISON COUNSELOR: Laura Gomez, M.A.
(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.

SPANISH COURSES OFFERED BY THE DEPARTMENT OF MODERN LANGUAGES:

SPAN 015
CONVERSATIONAL SPANISH I
3 UNITS
PREREQUISITE: None.

LECTURE: 3 contact hours per week.

In this course students will learn to develop conversational listening, comprehension and speaking skills in the Spanish language. The course is designed for students who wish to learn to communicate orally in Spanish for purposes of personal use or business.

Associate Degree Applicable

SPAN 016
CONVERSATIONAL SPANISH II
3 UNITS
PREREQUISITE: SPAN 015.

LECTURE: 3 contact hours per week.

In this course students will develop 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 contact hours per week.

In this course students will develop 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 countries. This course corresponds to the first two years of high school study.

Associate Degree Applicable

Course credit transfers to CSU and UC.

SPAN 102
COLLEGE SPANISH II
5 UNITS
PREREQUISITE: SPAN 101.

LECTURE: 5 contact hours per week.

In this course students continue to develop conversational, reading and writing skills in Spanish with emphasis on past tense verbs, grammar, vocabulary expansion and the culture of Spanish speaking countries.

Associate Degree Applicable

Course credit transfers to CSU and UC.

SPAN 103
COLLEGE SPANISH III
4 UNITS
PREREQUISITE: SPAN 102.

LECTURE: 4 contact hours per week.

In this intermediate level course students develop complex conversational, reading and writing skills, with emphasis on the subjunctive and hypothetical situations. This course expands vocabulary in the Spanish language and awareness of Hispanic culture.

Associate Degree Applicable

*Course credit transfers to CSU and *UC.*

SPAN 103H
COLLEGE SPANISH III - HONORS
4 UNITS
PREREQUISITE: SPAN 102.

LECTURE: 4 contact hours per week.

In this intermediate level course students develop complex conversational, reading and writing skills, with emphasis on the subjunctive and hypothetical situations. This course expands vocabulary in the Spanish language and awareness of Hispanic culture. This course is intended for students in the Honors Program but is open to all students who desire more challenging coursework.

Associate Degree Applicable

*Course credit transfers to CSU and *UC.*

SPAN 104
COLLEGE SPANISH IV 4 UNITS
PREREQUISITE: SPAN 103 or SPAN 103H or SPAN 158.

LECTURE: 4 contact hours per week.
 This course develops language skills through reading, discussion, analysis, and writing about culturally representative works from Spain and Latin America. Emphasis is on composition and literature as an expression of culture.

Associate Degree Applicable
Course credit transfers to CSU and UC.

SPAN 157
SPANISH FOR NATIVE SPANISH SPEAKERS I 5 UNITS

PREREQUISITE: None.
LECTURE: 5 contact hours per week.
 This is the first of two courses intended for native or heritage Spanish speakers whose formal training in the language has been incomplete. This course develops spelling, conversational, reading and writing skills with special emphasis on past tense verbs, grammar, vocabulary expansion and the culture of Spanish speaking regions. The course is conducted in Spanish and focuses on grammatical topics equivalent to those covered in Spanish 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 contact 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.*

SPEECH

DIVISION: Arts and Humanities
 INTERIM DIVISION DEAN: Kathryn Weiss, Ed.D.
 FACULTY CHAIR: Leticia Hector, M.A.
 Liberal Arts 239
 (909) 384-8618
 OTHER FACULTY: Diane Alblinger, M.A.
 Jay Danley, M.A., J.D.
 Susan Mattson, M.A.
 ADMINISTRATIVE SECRETARY: Linda Tymchek, M.A.
 DIVISION OFFICE: NH 223
 (909) 384-8633
 LIAISON COUNSELOR: Laura Gomez, M.A.
 (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.

COURSES OFFERED BY THE DEPARTMENT OF SPEECH:

SPEECH 910
PREPARATION FOR PUBLIC SPEAKING 3 UNITS
PREREQUISITE: None.

LECTURE: 3 contact 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 contact 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.*

SPEECH 100H
ELEMENTS OF PUBLIC SPEAKING - HONORS 3 UNITS

PREREQUISITE: None.
LECTURE: 3 contact 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.*

SPEECH 110
BEGINNING VOICE AND DICTION 3 UNITS
PREREQUISITE: None.

LECTURE: 3 contact 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.
Associate Degree Applicable
Course credit transfers to CSU and UC.

SPEECH 111
INTERPERSONAL COMMUNICATION 3 UNITS
PREREQUISITE: None.

LECTURE: 3 contact 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.

SPEECH 120
ORAL INTERPRETATION 3 UNITS
PREREQUISITE: SPEECH 100.

LECTURE: 3 contact 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 contact 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.

SPEECH 130
INTRODUCTION TO COMMUNICATION 3 UNITS
PREREQUISITE: None.

LECTURE: 3 contact 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.

SPEECH 135
MASS MEDIA AND SOCIETY 3 UNITS
PREREQUISITE: None.

LECTURE: 3 contact 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.

SPEECH 140
SMALL GROUP COMMUNICATION 3 UNITS
PREREQUISITE: None.

LECTURE: 3 contact hours per week.

This course explores discussion principles, communication skills, conflict management, participation practices, and leadership within small groups in a variety of contexts. Group formation, verbal and non-verbal 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.

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 contact 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 contact 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 contact 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 contact 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.***SDEV 906****SUPPORTIVE LEARNING IN READING 2 UNITS****PREREQUISITE: None.****LABORATORY: 6 contact 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 Pass/No Pass basis only.

*Not applicable to Associate Degree.***STUDENT DEVELOPMENT**

DEPARTMENT: Counseling and Matriculation
 DEAN: Marco Cota, M.A.
 DEPARTMENT OFFICE: Administration/
 Student Services 103
 (909) 384-8969
 ADMINISTRATIVE SECRETARY: Anita Moore
 LIAISON COUNSELOR: Cindy Parish, M.S.
 (909) 384-4404

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 DIVISION OF STUDENT SERVICES:

SDEV 900
ASSESSMENT OF LEARNING DISABILITIES .50 UNIT

PREREQUISITE: None.**LECTURE: .5 contact 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 a Pass/No Pass basis only.

Not applicable to Associate Degree.

SDEV 905
SUPPORTIVE LEARNING IN MATHEMATICS 1 UNIT
PREREQUISITE: None.

LABORATORY: 3 contact 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 Pass/No Pass basis only.

Not applicable to Associate Degree.

SDEV 010
EDUCATION PLANNING .5 UNIT

PREREQUISITE: None.**DEPARTMENTAL ADVISORY: Students are encouraged to complete the course in their first or second semester.****LECTURE: .5 contact 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. Graded on a Pass/No Pass basis only.

Associate Degree Applicable

SDEV 015
PUENTE: STRATEGIES FOR COLLEGE SUCCESS 1 UNIT

PREREQUISITE: None.**LECTURE: 1 contact 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 102
COLLEGE TO CAREER 2 UNITS
PREREQUISITE: None.

LECTURE: 2 contact 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.*

SDEV 103
CAREER EXPLORATION AND LIFE PLANNING 3 UNITS

PREREQUISITE: None.

LECTURE: 3 contact hours per week.

This course is an in-depth study in career and life planning designed for students seeking direction in setting life, 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 and developmental achievements.

Associate Degree Applicable

Course credit transfers to CSU and UC.

TECHNICAL CALCULATIONS
See courses within the Department of
ELECTRICITY/ELECTRONICS

THEATRE ARTS

DIVISION: Arts and Humanities
DIVISION DEAN: Kathryn Weiss, Ed.D.
FACULTY CHAIR: Matie Scully, M.M.
NH 134
(909) 384-8545
OTHER FACULTY: Denise Dale Jacobs, M.F.A.
ADMINISTRATIVE SECRETARY: Linda Tymchek, M.A.
DIVISION OFFICE: NH 223
(909) 384-8633
LIAISON COUNSELOR: Laura Gomez, M.A.
(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.

COURSES OFFERED BY THE DEPARTMENT OF THEATRE ARTS:

THART 100
INTRODUCTION TO THE THEATRE 3 UNITS
PREREQUISITE: None.

LECTURE: 3 contact 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.

THART 110
BEGINNING VOICE AND DICTION 3 UNITS
PREREQUISITE: None.

LECTURE: 3 contact 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.

Associate Degree Applicable

Course credit transfers to CSU and UC.

THART 114x4
THEATRE PRACTICUM 4 UNITS
PREREQUISITE: None.

LECTURE: 2 contact hours per week and
LABORATORY: 6 contact 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.

THART 120
ACTING FUNDAMENTALS I 3 UNITS
PREREQUISITE: None.

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

THART 121
ACTING FUNDAMENTALS II 3 UNITS
PREREQUISITE: THART 120.

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

THART 131
SOUND FOR STAGE AND SCREEN 3 UNITS
PREREQUISITE: None.

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

This course is an introductory course in the equipment and techniques used in theatrical and studio sound design, utilizing hands-on and computer training methods.

Associate Degree Applicable

Course credit transfers to CSU and UC.

THART 132
LIGHTING FOR STAGE AND SCREEN 3 UNITS
PREREQUISITE: None.
LECTURE: 2 contact hours per week and
LABORATORY: 3 contact hours per week.
This course is an introduction to the equipment and techniques of lighting design involving hands-on training and computer technology. This course is also offered as RTVF 132.
Associate Degree Applicable
Course credit transfers to CSU and UC.

THART 135
DIRECTING FUNDAMENTALS 3 UNITS
PREREQUISITE: THART 120.
LECTURE: 2 contact hours per week and
LABORATORY: 3 contact 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 136
FUNDAMENTALS OF STAGE DESIGN 3 UNITS
PREREQUISITE: None.
LECTURE: 3 contact hours per week.
This course is an introductory study in the principles and elements of design with relation to theatrical sets, lights, and costume design. Two and three dimensional models will be constructed.
Associate Degree Applicable
Course credit transfers to CSU and UC.

THART 139
FUNDAMENTALS OF COSTUME DESIGN 3 UNITS
PREREQUISITE: None.
LECTURE: 2 contact hours per week and
LABORATORY: 3 contact hours per week.
This is an introductory course on the principles and elements of costume design, including research, materials and fabrics, measuring, and basic construction.
Associate Degree Applicable
Course credit transfers to CSU and UC.

THART 147
BEGINNING THEATRE MOVEMENT 3 UNITS
PREREQUISITE: None.
LECTURE: 3 contact hours per week.
This course is an introduction to the beginning theory and fundamentals of stage movement, including but not limited to pantomime, Commedia dell'Arte and masks, and fencing and stage combat.
Associate Degree Applicable
Course credit transfers to CSU and UC.

THART 160x4
THEATRE CRAFTS 3 UNITS
PREREQUISITE: None.
LABORATORY: 9 contact 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.

THART 165
STAGE MAKEUP 3 UNITS
PREREQUISITE: None.
LECTURE: 2 contact hours per week and
LABORATORY: 3 contact 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.
Associate Degree Applicable
Course credit transfers to CSU and UC.

THART 166
IMPROVISATIONAL ACTING 3 UNITS
PREREQUISITE: None.
LECTURE: 3 contact hours per week.
This is a course of instruction in the art of improvisational acting to include theatrical presentation, elements of comedy, history of the form, modern audition and rehearsal techniques, dramatic structure, utilization of contributions of other cast members, and interaction with the a multi-cultural audience are included.
Associate Degree Applicable
Course credit transfers to CSU and UC.

THART 222
INDEPENDENT STUDY IN THEATRE 1-3 UNITS
PREREQUISITE: None.
INDEPENDENT STUDY: 3-9 contact 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 contact 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.

WAREHOUSE

DIVISION: Applied Technology,
Transportation and Culinary Arts
DIVISION DEAN, INTERIM: Kay Ragan, Ed.D.
FACULTY CHAIR: Kevin Kammer, M.S.
Technical 108
(909) 384-8503
DEPARTMENT OFFICE: 264 S. Leland Norton Way
Suite A120, San Bernardino
LIAISON COUNSELOR: Frank Dunn, M.A.
(909) 384-4404

The Warehouse program is designed to train and prepare students for immediate entry-level employment in the Logistics Industry. Training will be provided to students in various topics including global supply chain, warehouse distribution procedures, warehouse layout, Warehouse Management Systems (WMS), and goods movement. Training will be provided to students in forklift principles, safety, operation, with hands on experience leading to 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.

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 forklift and other industrial powered trucks. Training covers operation, inspection, and basic maintenance. Upon successful completion of the course, the student will receive certification in accordance with CalOSHA to operate forklifts.

REQUIRED COURSES:	UNITS
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 computer literacy are recommended.

COURSES OFFERED BY THE DEPARTMENT OF WAREHOUSE:

WAREHS 020 INTRODUCTION TO WAREHOUSE OPERATIONS 4 UNITS

PREREQUISITE: None.
LECTURE: 3 contact hours per week and
LABORATORY: 3 contact 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 contact hour per week and
LABORATORY: 1.5 contact hours per week.

This course provides 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 Cal/OSHA standards, and upon successful completion of the course, the student will receive certification in accordance with Cal/OSHA to operate Sitdown Counterbalance Forklifts and Narrow Aisle Order Pickers.

Associate Degree Applicable

WATER SUPPLY TECHNOLOGY

DIVISION: Science
DIVISION DEAN: Susan Bangasser, Ph.D.
FACULTY CHAIR: Achala Chatterjee, M.S.C.E., P.E.
Chemistry 124
(909) 384-8522
ADMINISTRATIVE SECRETARY: Rose Garcia
DIVISION OFFICE: Chemistry 121
(909) 384-8645
DIVISION OFFICE: Health and Life Science 101
(909) 384-8550
LIAISON COUNSELOR: Jeanne Marquis, M.A.
(909) 384-4404

Water Supply Technology program is designed to serve students who are employed or interested in employment in water/wastewater field. The program provides technical classes in water distribution, water treatment, wastewater collection, and wastewater treatment. The courses prepare students to upgrade their skills and/or prepare for licensing examination and certification from the State of California, the American Water Works Association, and California Water Environment Association.

The certificate program is designed to prepare students for entry level jobs in water treatment, water distribution, and wastewater reclamation industries. The associate of science degree graduates often work in city, county, or state agencies in positions such as plant operator, engineering technician, surface water manager, environmental lab coordinator, and industrial pre-treatment coordinator.

**WATER TECHNOLOGY
ASSOCIATE OF SCIENCE DEGREE**

To graduate with specialization in Water Technology, students must complete the following required courses plus the general breadth requirements for the Associate of Science degree (total = 60 units)

REQUIRED COURSES:		UNITS
CHEM 110	Environmental and Consumer Chemistry	3
CIT 031	Business English	or 3
ENGL 015	Preparation for College Writing	or 4
Eligibility for ENGL 101 as determined by the SBVC assessment process		
WST 052	Water Technology Math	or 3
WST 052A	Water Technology Math I	and 1
WST 052B	Water Technology Math II	and 1
WST 052C	Water Technology Math III	or 1

Eligibility for MATH 090 as determined by the SBVC assessment process

24 UNITS FROM THE FOLLOWING WATER SUPPLY TECHNOLOGY COURSES:

	UNITS
WST 031	Water Conservation Practitioner I 3
WST 061	Water Distribution I 3
WST 062	Water Distribution II 3
WST 063	Water Distribution III 3
WST 071	Water Treatment I 3
WST 072	Water Treatment II 3
WST 073	Water Treatment III 3
WST 081	Wastewater Collection I 3
WST 082	Wastewater Collection II 3
WST 091	Wastewater Treatment I 3
WST 092	Wastewater Treatment II 3
WST 093	Wastewater Treatment III 3

ONE COURSE FROM THIS LIST OF RECOMMENDED COURSES:

	UNITS
CIT 101	Introduction to Computer Literacy 3
CIT 102	Advanced Computer Literacy 3
GIS 130	Introduction to Geographic Information Systems (GIS) 3

TOTAL UNITS: 32 - 38

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.

WATER DISTRIBUTION CERTIFICATE

A mini-certificate in water distribution which prepares students for entry level positions as Water Distribution Operators. Some of the work done by distribution operators is as follows: read meters, repair pipelines, connect/disconnect service to consumers, maintain fire hydrants, pumps, storage facilities and other appurtenances.

REQUIRED COURSES:		UNITS
WST 052	Water Technology Math	or 3
WST 052A	Water Technology Math I	and 1
WST 052B	Water Technology Math II	and 1
WST 052C	Water Technology Math III	or 1
Eligibility for MATH 090 as determined by SBVC assessment process and		

WST 061	Water Distribution I	3
WST 062	Water Distribution II	3
WST 063	Water Distribution III	3

TOTAL UNITS: 9 - 12

WATER SUPPLY TECHNOLOGY CERTIFICATE

This certificate is designed to prepare students with the necessary knowledge and skills to obtain entry-level employment in the water supply technology field. [Note: the Water Supply Technology Certificate is not equivalent to the State License in Water Supply Distribution, Treatment or Wastewater Treatment]. Work Experience WST 098 is highly recommended if student is not currently employed in the field.

REQUIRED COURSES:		UNITS
CHEM 110	Environmental and Consumer Chemistry	3
CIT 031	Business English	or 3
ENGL 015	Preparation for College Writing	4
WST 052	Water Technology Math	or 3
WST 052A	Water Technology Math I	and 1
WST 052B	Water Technology Math II	and 1
WST 052C	Water Technology Math III	or 1
Eligibility for MATH 090 as determined by the SBVC assessment process		
WST 074	Water/Wastewater Analysis	3

24 UNITS FROM THE FOLLOWING WATER SUPPLY TECHNOLOGY COURSES:

	UNITS
WST 061	Water Distribution I 3
WST 062	Water Distribution II 3
WST 063	Water Distribution III 3
WST 071	Water Treatment I 3
WST 072	Water Treatment II 3
WST 073	Water Treatment III 3
WST 081	Wastewater Collection I 3
WST 082	Wastewater Collection II 3
WST 091	Wastewater Treatment I 3
WST 092	Wastewater Treatment II 3
WST 093	Wastewater Treatment III 3

ONE COURSE FROM THIS LIST OF RECOMMENDED COURSES:

	UNITS
CIT 101	Introduction to Computer Literacy 3
CIT 102	Advanced Computer Literacy 3
WST 098	Water Supply Technology Work Experience 1-4

TOTAL UNITS: 33 - 39

WATER TREATMENT CERTIFICATE

This is a mini-certificate in water treatment which prepares the students for an entry level position in water treatment plants.

REQUIRED COURSES:		UNITS
CHEM 110	Environmental and Consumer Chemistry	3
WST 052	Water Technology Math	or 3
WST 052A	Water Technology Math I	and 1
WST 052B	Water Technology Math II	and 1
WST 052C	Water Technology Math III	or 1
	Eligibility for MATH 090 as determined by SBVC assessment process	and
WST 071	Water Treatment I	3
WST 072	Water Treatment II	3
WST 073	Water Treatment III	3
TOTAL UNITS:		12 - 15

COURSES OFFERED BY THE DEPARTMENT OF WATER SUPPLY TECHNOLOGY:

WST 010x2
TEST REVIEW FOR WATER DISTRIBUTION OPERATORS D1 – D2 .50 UNIT
PREREQUISITE: None.

LECTURE: .50 contact hours per week.

This course is a review of the expected Range of Knowledge (ROK) required to obtain the California Department of Health Services (DHS) Distribution Operator Licenses at grades D1 and D2. The review topics include distribution system operations, disinfection, related mathematics, and safety. Graded on Pass/No Pass basis only.

Associate Degree Applicable

WST 020x2
TEST REVIEW FOR WATER TREATMENT T1 – T2 .50 UNIT

PREREQUISITE: None.

LECTURE: .50 contact hours per week.

This course is a review of the expected Range of Knowledge (ROK) required to obtain the California Department of Health Services (DHS) Water Treatment Operator Licenses at grades T1 and T2. The review topics include conventional treatment techniques, flocculation, sedimentation, filtration, system pressures, and related math. This course may be taken twice. Graded on Pass/No Pass basis only.

Associate Degree Applicable

WST 031
WATER CONSERVATION PRACTITIONER I 3 UNITS
PREREQUISITE: None.

DEPARTMENTAL ADVISORY: WST 061.

LECTURE: 3 contact hours per week.

This introductory water conservation course is designed for students interested in working as a water conservation practitioner. It includes the expected range of knowledge required for American Water Works Association (AWWA) Water Conservation Practitioner I Certificate.

Associate Degree Applicable

WST 045
BACKFLOW PREVENTION DEVICES 3 UNITS
PREREQUISITE: None.

LECTURE: 2.50 contact hours per week and
LABORATORY: 1.50 contact hours per week.

This course provides instruction in theory, testing, and maintenance of backflow prevention assemblies. It prepares journeyman plumbers and utility operators to take the American Water Work Association Backflow Prevention Certification test. (Formerly WST 145)
Associate Degree Applicable

WST 048
CROSS-CONNECTION CONTROL 3 UNITS
PREREQUISITE: WST 045 or a current backflow prevention license.

LECTURE: 3 contact hours per week.

This course is a study of the administrative and technical procedures required to establish a cross-connection control program, including a review of applicable local, state and federal regulations. The course includes the identification and study of backflow devices required to mitigate hazards of actual or potential connections between a potable water supply and any source of contamination. It also prepares students to become certified as cross-connection control program specialists. (Formerly WST 144)

Associate Degree Applicable

WST 052
WATER TECHNOLOGY MATH 3 UNITS
PREREQUISITE: MATH 942 or eligibility for MATH 952 as determined by the SBVC assessment process.

LECTURE: 3 contact hours per week.

This vocational math course is recommended for students who are currently enrolled in water technology course(s). The course includes math required to solve problems commonly encountered in water technology. (Formerly WST 050)

Associate Degree Applicable

WST 052A
WATER TECHNOLOGY MATH I 1 UNIT
PREREQUISITE: MATH 942 or eligibility for MATH 952 as determined by the SBVC assessment process.

LECTURE: 1 contact hours per week.

This is the first in a sequence of three vocational math courses recommended for students who are currently enrolled in water supply technology course(s). The course includes unit conversion, area and volume calculation, and the use of a scientific calculator.

Associate Degree Applicable

WST 052B
WATER TECHNOLOGY MATH II 1 UNIT
PREREQUISITE: WST 052A or eligibility for MATH 090 as determined by the SBVC assessment process.

LECTURE: 1 contact hours per week.

This is the second in a sequence of three vocational math courses recommended for students currently enrolled in water technology course(s). The course includes the pound formula and the rate of flow equation used in solving problems commonly encountered in water technology.

Associate Degree Applicable

WST 052C
WATER TECHNOLOGY MATH III 1 UNIT
PREREQUISITE: *WST 052B or eligibility for MATH 090 as determined by the SBVC assessment process.*
LECTURE: 1 contact hours per week.

This is the last in a sequence of three vocational math courses recommended for students currently enrolled in water technology course(s). The course includes calculations to prepare standard solutions of known concentration, to blend and dilute water, and to set up chemical feed systems in treatment processes.

Associate Degree Applicable

WST 053
WASTEWATER TECHNOLOGY MATH 3 UNITS
PREREQUISITE: *WST 052 or WST 052C or MATH 090 or placement in MATH 095 per SBVC assessment process.*
LECTURE: 3 contact hours per week.

This vocational math course is recommended for students who are currently enrolled in wastewater treatment course(s). The course includes math required to solve problems commonly encountered in the primary, secondary, and tertiary treatment of wastewater.

Associate Degree Applicable

WST 061
WATER DISTRIBUTION I 3 UNITS
PREREQUISITE: *MATH 942 or eligibility for MATH 952 as determined through SBVC assessment process.*
DEPARTMENTAL ADVISORIES: *WST 052 or WST 052A.*

LECTURE: 3 contact hours per week.

This introductory course is designed for students interested in the field of water distribution. It covers the configuration, operation and maintenance of a water distribution system, and includes the Expected Range of Knowledge (ERK) required for California Department of Public Health (CDPH) water distribution exam at D1 and D2 levels. Successful completion of this course fulfills the requirements for specialized training covering fundamentals of water supply principles required to apply for CDPH D2 examination. (Formerly WST 140)

Associate Degree Applicable

Course credit transfers to CSU as elective credit only.

WST 062
WATER DISTRIBUTION II 3 UNITS
PREREQUISITE: *WST 061*
DEPARTMENTAL ADVISORY: *WST 052*
LECTURE: 3 contact hours per week.

This intermediate level course prepares students for apprentice or journey person positions in the field of water distribution. The course covers the Expected Range of Knowledge (ERK) required to pass California Department of Public Health (CDPH) water distribution examination at D3 level. Successful completion of this course fulfills the requirements for specialized training covering the fundamentals of water supply principles required to apply for CDPH D3 examination. (Formerly WST 141)

Associate Degree Applicable

Course credit transfers to CSU as elective credit only.

WST 063
WATER DISTRIBUTION III 3 UNITS
PREREQUISITE: *WST 062.*
DEPARTMENTAL ADVISORIES: *WST 052 or WST 052B.*

LECTURE: 3 contact hours per week.

This advanced level course prepares students for work in a highly skilled or supervisory position in the operation of a water distribution system. It includes the Expected Range of Knowledge (ERK) required for the California Department of Public Health (CDPH) water distribution exam at D4 and D5 levels. Successful completion of this course fulfills the requirements for specialized training covering fundamentals of water supply principles required to apply for CDPH D4 examination.

Associate Degree Applicable

WST 071
WATER TREATMENT I 3 UNITS
PREREQUISITE: *MATH 942 or eligibility for MATH 952 as determined by SBVC assessment process.*
DEPARTMENTAL ADVISORIES: *WST 052 or WST 052C and WST 061.*

LECTURE: 3 contact hours per week.

This introductory course is designed for students interested in the field of water treatment. It includes processes required to treat source water into potable water and includes the Expected Range of Knowledge (ERK) required to pass the California Department of Public Health (CDPH) water treatment examination at T1 level. Successful completion of this course fulfills the requirements for specialized training covering drinking water treatment required to apply for CDPH T2 examination. (Formerly WST 142X2)

Associate Degree Applicable

Course credit transfers to CSU as elective credit only.

WST 072
WATER TREATMENT II 3 UNITS
PREREQUISITE: *WST 071.*
DEPARTMENTAL ADVISORIES: *CHEM 110 and WST 052C.*

LECTURE: 3 contact hours per week.

This intermediate level course prepares students for apprenticeship or entry level position in the field of water treatment. The course covers the Expected Range of Knowledge (ERK) required to pass the California Department of Public Health (CDPH) water treatment examination at T2 level. Successful completion of this course fulfills the specialized training, covering fundamentals of water supply principles, required to apply for CDPH T3 and D3 examination.

Associate Degree Applicable

WST 073
WATER TREATMENT III 3 UNITS
PREREQUISITE: *WST 072.*
DEPARTMENTAL ADVISORIES: *WST 052 or WST 052C.*

LECTURE: 3 contact hours per week.

This advanced level course prepares students for journeyman level plant operator in the field of water treatment. The course covers the Expected Range of Knowledge (ERK) required to pass the California Department of Public Health (CDPH) water treatment examination at T3 and T4 level. Successful completion of this course fulfills the requirements for specialized training covering fundamentals of water supply principles required to apply for CDPH T4 and D4 examination.

Associate Degree Applicable

WST 074
WATER/WASTEWATER ANALYSIS 2 UNITS
PREREQUISITES: CHEM 110 and WST 072 or WST 092.
LECTURE: 1 contact hours per week.
LABORATORY: 3 contact hours per week.
This course examines fundamentals of laboratory analysis with emphasis on chemical and microbiological procedures used by water and wastewater plant operators. The course includes procedures and techniques used in physical, chemical, and bacteriological examination of water/wastewater.
Associate Degree Applicable

WST 081
WASTEWATER COLLECTION I 3 UNITS
PREREQUISITE: MATH 942A and MATH 942B and MATH 942C or MATH 942 or eligibility for MATH 952 as determined by SBVC assessment process.
DEPARTMENTAL ADVISORIES: WST 052A and WST 052B or WST 052
LECTURE: 3 contact hours per week.
This course is designed to train operators in the practical aspects of operating and maintaining wastewater collector systems, emphasizing safe practices and procedures. The course focuses on the knowledge, skills, and abilities required to perform the essential duties of an entry level collection system maintenance technologist and prepares students to take the California Water Environment Association (CWEA) Collection System Certification exam at Grade I.
Associate Degree Applicable

WST 082
WASTEWATER COLLECTION II 3 UNITS
PREREQUISITE: WST 081.
LECTURE: 3 contact hours per week.
This course is designed to provide an in-depth understanding of the operation and maintenance of wastewater collector systems. The course focuses on the knowledge, skills, and abilities required to perform the essential duties of a skilled or journey level collection system maintenance technologist and prepares students to take the California Water Environment Association (CWEA) Collection System Certification exam at Grade II.
Associate Degree Applicable

WST 091
WASTEWATER TREATMENT I 3 UNITS
PREREQUISITE: MATH 942 or eligibility for MATH 952 as determined by SBVC assessment process.
DEPARTMENTAL ADVISORY: WST 081.
LECTURE: 3 contact hours per week.
This is an introductory course in wastewater treatment. The course covers material included in the State Water Resources Control Board (SWRCB) grade I certification exam. (Formerly WST 146)
Associate Degree Applicable
Course credit transfers to CSU.

WST 092
WASTEWATER TREATMENT II 3 UNITS
PREREQUISITES: WST 091.
LECTURE: 3 contact hours per week.
This is a second course in a series on wastewater treatment. It includes material usually found in the State Water Resources Control Board (SWRCB) Grade II Certificate exam.
Associate Degree Applicable

WST 093
WASTEWATER TREATMENT III 3 UNITS
PREREQUISITES: WST 092.
DEPARTMENTAL ADVISORY: CHEM 110.
LECTURE: 3 contact hours per week.
This is the third course in a series on wastewater treatment. It includes material usually found in the State Water Resources Control Board (SWRCB) grade III certificate examination.
Associate Degree Applicable

WST 095 A-Z
SPECIAL TOPICS IN WATER TECHNOLOGY .25 - 2 UNITS
PREREQUISITE: None.
LECTURE: .25 - 2 contact hours per week.

These short seminars are offered to provide training in topics of timely, special, unusual interest or which are not contained in the regular course offerings in Water Technology. They are specifically designed for employees who are currently working in the field of water distribution/treatment or wastewater collection/treatment.
Associate Degree Applicable

WST 098
WATER SUPPLY 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 098 or 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



WELDING TECHNOLOGY

DIVISION: Applied Technology,
Transportation and Culinary Arts
 DIVISION DEAN, INTERIM: Kay Ragan, Ed.D.
 FACULTY CHAIR: Jesse Galaviz, A.S.
 Technical 108
 (909) 384-8903
 ADMINISTRATIVE SECRETARY: Cecile Smith
 DIVISION OFFICE: Technical 108
 (909) 384-8902
 LIAISON COUNSELOR: Frank Dunn, M.A.
 (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 \$100 and the light gauge (13-plate test) is \$175. These fees entitle applicants to a maximum of 8 hours lab practice prior to test. Retest fee is \$75 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.

GENERAL WELDING ASSOCIATE OF SCIENCE DEGREE

To graduate with a specialization in Welding Technology, students must complete all requirements for GENERAL WELDING CERTIFICATE plus the general breadth requirements for the Associate of Science Degree (minimum total of 60 units).

Students must complete ALL of the REQUIRED COURSES plus ONE of the RESTRICTED ELECTIVE COURSES.

REQUIRED COURSES:	UNITS
TECALC 087 Technical Calculations	4
Higher level math course	3 - 4
WELD 023 Oxy-Acetylene Welding	3
WELD 027 Strength of Materials Testing: Destructive	3
WELD 045 Shielded Metal Arc Welding	3
WELD 046 Intermediate Arc Welding	3
WELD 060 Layout Fitter I	3
WELD 066B Los Angeles City Welding Certification	3
WELD 070X4 TIG Welding	1
WELD 077X4 Continuous Wire Welding	1

RESTRICTED ELECTIVE COURSES:		UNITS
WELD 028	Strength of Materials Testing: Non-Destructive	3
WELD 061	Layout Fitter II	3
WELD 065B	Welding Inspection Visual	4
TOTAL UNITS:		26 - 28

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 ELECTIVE COURSES.

REQUIRED COURSES:		UNITS
TECALC 087	Technical Calculations	4
	Higher level math course	3 - 4
WELD 023	Oxy-Acetylene Welding	3
WELD 027	Strength of Materials Testing: Destructive	3
WELD 045	Shielded Metal Arc Welding	3
WELD 046	Intermediate Arc Welding	3
WELD 060	Layout Fitter I	3
WELD 066B	Los Angeles City Welding Certification	3
WELD 070X4	TIG Welding	1
WELD 077X4	Continuous Wire Welding	1

RESTRICTED ELECTIVE COURSES:		UNITS
WELD 028	Strength of Materials Testing: Non-Destructive	3
WELD 061	Layout Fitter II	3
WELD 065B	Welding Inspection Visual	4
TOTAL UNITS:		26 - 28

2. CONSOLIDATED WELDING CERTIFICATE

This certificate is designed to provide students with comprehensive training in all welding areas including oxy-acetylene, Shielded Metal Arc Welding (SMAW), Gas Metal Arc Welding (GMAW), Flux Core Arc Welding (FCAW) and Gas Tungsten Arc Welding (GTAW). Upon completing this certificate, students will be certified in accordance with the American Welding Society (AWS) 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 REQUIRED COURSES plus ONE of the RESTRICTED ELECTIVE COURSES.

REQUIRED COURSES:		UNITS
WELD 062	Consolidated Welding	2 - 13
or		
WELD 063	Consolidated Welding	2 - 13
or		
WELD 064X4	Consolidated Welding	2 – 13

RESTRICTED ELECTIVE COURSES:		UNITS
WELD 027	Strength of Materials Testing: Destructive	3
or		
WELD 028	Strength of Materials Testing: Non-Destructive	3
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 045	Shielded Metal Arc Welding	3
WELD 060	Layout Fitter I	3
WELD 077X4	Continuous Wire Welding	1

RESTRICTED ELECTIVE COURSES:		UNITS
WELD 027	Strength of Materials Testing: Destructive	3
or		
WELD 028	Strength of Materials Testing: Non-Destructive	3
or		
WELD 061	Layout Fitter II	3
or		
WELD 065B	Welding Inspection Visual	4
TOTAL UNITS:		10 - 11

4. GAS METAL ARC WELDING (GMAW) CERTIFICATE

This certificate is designed to provide students with training in the Metal Inert Gas (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 023	Oxy-Acetylene Welding	3
WELD 045	Shielded Metal Arc Welding	3
WELD 077X4	Continuous Wire Welding	1
TOTAL UNITS:		7

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 Tungsten Inert Gas (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 023	Oxy-Acetylene Welding	3
WELD 045	Shielded Metal Arc Welding	3
WELD 070X4	TIG Welding	1

RESTRICTED ELECTIVE COURSES:		UNITS
WELD 027	Strength of Materials Testing: Destructive	3
or		
WELD 028	Strength of Materials Testing: Non-Destructive	3
or		
WELD 065B	Welding Inspection Visual	4
or		
WELD 067B	Structural Steel Special Inspection (ICBO)	2
TOTAL UNITS:		9 - 11

6. SHIELDED METAL ARC WELDING (SMAW) CERTIFICATE

This certificate is designed to prepare students with the 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 023	Oxy-Acetylene Welding	3
WELD 045	Shielded Metal Arc Welding	3
WELD 046	Intermediate Arc Welding	3
TOTAL UNITS:		9

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 American Welding Society (AWS) and/or International Conference of Building Officials (ICBO) Welding Inspector examination. 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
WELD 027 Strength of Materials Testing: Destructive	3
WELD 028 Strength of Materials Testing: Non-Destructive	3
WELD 045 Shielded Metal Arc Welding	3
WELD 065B Welding Inspection Visual	4
WELD 067B Structural Steel Special Inspection (ICBO)	2
TOTAL UNITS:	15

COURSES OFFERED BY THE DEPARTMENT OF WELDING TECHNOLOGY:

WELD 023
OXY-ACETYLENE WELDING 3 UNITS
PREREQUISITE: None.

LECTURE: 1 contact hour per week and
LABORATORY: 6 contact hours per week.

Intensive training in oxy-acetylene welding, which includes plate and sheet metal welding, brazing and soldering, fundamentals of welding equipment and related subjects with a strong emphasis on safety.
Associate Degree Applicable

WELD 027
STRENGTH OF MATERIALS TESTING: DESTRUCTIVE 3 UNITS

PREREQUISITE: None.
LECTURE: 2 contact hours per week and
LABORATORY: 3 contact hours per week.

This course provides instruction in destructive testing techniques, using equipment such as tensile testing machines, hardness testers and impact testers. Topic includes the molecular structure of metal and how it varies under testing.
Applicable to Associate Degree

WELD 028
STRENGTH OF MATERIALS TESTING: NON-DESTRUCTIVE 3 UNITS

PREREQUISITE: None.
DEPARTMENTAL ADVISORY: WELD 027.
LECTURE: 2 contact hours per week and
LABORATORY: 3 contact hours per week.

This course provides instruction in non-destructive testing techniques such as dye, penetrants, eddy current, magnetic particles, and ultra-sonic tests.
Applicable to Associate Degree

WELD 045
SHIELDED METAL ARC WELDING 3 UNITS
PREREQUISITE: None.

LECTURE: 1 contact hour per week and
LABORATORY: 6 contact 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.
Associate Degree Applicable

WELD 046
INTERMEDIATE ARC WELDING 3 UNITS
PREREQUISITE: WELD 045.

LECTURE: 1 contact hour per week and
LABORATORY: 6 contact hours per week.

Continuation of training and development skills for arc welding on plate, pipe, and sheet metal. Continuing theory of welding, electrode usage, weld symbols, and American Welding Society code information.
Associate Degree Applicable

WELD 047
INTERMEDIATE SHIELDED METAL ARC WELDING 3 UNITS

PREREQUISITE: WELD 045.
LECTURE: 1 contact hour per week and
LABORATORY: 6 contact 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

WELD 060
LAYOUT FITTER I 3 UNITS
PREREQUISITE: None.

DEPARTMENTAL ADVISORY: WELD 045.
LECTURE: 2 contact hours per week and
LABORATORY: 3.5 contact hours per week.

This course is 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 060 or WELD 045.

LECTURE: 2 contact hours per week and
LABORATORY: 3.5 contact 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 contact hours per week and
LABORATORY: 3 - 24 contact hours per week.
This course covers oxy-acetylene welding and cutting, brazing and arc welding in all positions. It includes welding theory, electrode identification, metals, blue-print reading, technical math, and a strong emphasis on safety.
Associate Degree Applicable

WELD 063
CONSOLIDATED WELDING 2-13 UNITS
PREREQUISITE: None.
LECTURE: 1 - 5 contact hours per week and
LABORATORY: 3 - 24 contact hours per week.
This course covers arc welding including Metal Inert Gas (MIG), flux core welding in all positions, and Tungsten Inert Gas (TIG) welding on various types of metals. It includes 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: 1- 5 contact hours per week and
LABORATORY: 3 - 24 contact hours per week.
This course is 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, Metal Inert Gas (MIG) and Tungsten Inert Gas (TIG) welding, welding theory, technical math, blueprint reading, metals, and electrode identification with special emphasis on safety. This course may be taken four times.
Associate Degree Applicable

WELD 065B
WELDING INSPECTION VISUAL 4 UNITS
PREREQUISITE: None.
DEPARTMENTAL ADVISORY: WELD 045.
LECTURE: 4 contact 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 OR RELATED CONSTRUCTION FIELD IS REQUIRED PRIOR TO TESTING FOR THE INSPECTION LICENSE.**
Associate Degree Applicable

WELD 066B
LOS ANGELES CITY WELDING CERTIFICATION 3 UNITS
PREREQUISITE: None.
DEPARTMENTAL ADVISORY: WELD 045.
LECTURE: 3 contact 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 a focus on the codes used in the structural steel industry.
Associate Degree Applicable

WELD 067B
STRUCTURAL STEEL SPECIAL INSPECTION (ICBO) 2 UNITS
PREREQUISITES: None.
DEPARTMENTAL ADVISORY: WELD 045 or WELD 060 or WELD 061.

LECTURE: 1 contact hour per week and
LABORATORY: 3 contact hours per week.
This course is designed to prepare students for the International Conference of Building Officials (ICBO) Inspector Certifications examinations and to 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 and report writing.
Associate Degree Applicable

WELD 068
LOS ANGELES CITY REINFORCING STEEL AND STRUCTURAL SHEET STEEL (LIGHT GAUGE) 3 UNITS

PREREQUISITES: None.
DEPARTMENTAL ADVISORY: WELD 045.
LECTURE: 2 contact hour per week and
LABORATORY: 3 contact hours per week.
This class will prepare students for the Los Angeles Reinforcing Steel and Structural Sheet Steel written examination with emphasis on the American Welding Society (AWS) D1.3 and AWS D1.4 Welding Code. The laboratory will enable students to prepare for the performance (weld test) that can be taken at an approved testing facility registered with the City of Los Angeles Building and Safety Department.
Associate Degree Applicable

WELD 070x4
TIG WELDING 1 UNIT
PREREQUISITE: None.
DEPARTMENTAL ADVISORY: WELD 023 or WELD 045.
LABORATORY: 3 contact hours per week.
This course is a practical application of welding techniques used in the Gas Tungsten Arc Welding (GTAW) 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: None.
DEPARTMENTAL ADVISORY: WELD 045.
LABORATORY: 3 contact hours per week.
This course covers techniques and methods of continuous wire welding with and without gas shields in all positions and on various thicknesses of metals. This course may be taken four times.
Associate Degree Applicable

WELD 098

WELDING WORK EXPERIENCE

1-4 UNITS

PREREQUISITE: None.

Supervised training in the form of on the job employment that will enhance the student's knowledge in the selected field of study. 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 098 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. (Formerly WELD 198)
Associate Degree Applicable

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 098 or 198 for specific information.)

DIVISION: Applied Technology,
Transportation and Culinary Arts
DIVISION DEAN, INTERIM: Kay Ragan, Ed.D.
ADMINISTRATIVE SECRETARY: Cecile Smith
DIVISION OFFICE: Technical 108
(909) 384-8902
LIAISON COUNSELOR: André Wooten, M.S.
(909) 384-4404

WKEXP 099

GENERAL WORK EXPERIENCE

1-3 UNITS

PREREQUISITE: None.

WORK EXPERIENCE: 5-15 contact 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	Inspection
Aeronautics	Library
Art	Machine Technology
Automotive	Nursing
Business Administration	Physical Education
Child Development	Radio/Television/Film
Computer Information Technology	Refrigeration
Computer Science	Restaurant Mgt.
Electronics	(see <i>Culinary Arts</i>)
Family & Consumer Science	Welding
Human Services	General Work
Inspection	Experience

For information visit the Work Experience Office in Technical 108 or call (909) 384-4451



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 COLLEGE FOUNDATION**

The mission of the San Bernardino Valley College Foundation is to strengthen student success by matching community resources with the needs of the college’s students, faculty and its facilities. The mission rests on the premise that education is central to the preservation of society and the enhancement of the human spirit. The Foundation’s mission directly supports the college’s mission to provide accessible, quality programs that enable students to achieve their educational and career goals.

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2010-2011 ACADEMIC CALENDAR

FALL SEMESTER 2010

August 16	First Day of Fall Semester Instruction
September 6	Labor Day – Holiday
October 1	Deadline - Last Day to apply for Fall 2010 graduation
November 11	Veteran's Day – Holiday
November 25-27	Thanksgiving Recess
December 11	Last Day of Instruction, Day and Evening
December 13-18	Final Examinations
December 24-January 2	Winter Recess

SPRING SEMESTER 2011

January 18	First Day of Spring Semester Instruction
January 17	Martin Luther King Day – Holiday
February 11	Lincoln's Birthday – Holiday
February 21	Washington's Birthday – Holiday
March 1	Deadline - Last Day to apply for Spring 2010 graduation
March 21-26	Spring Recess
May 12	Last Day of Instruction, Day and Evening
May 19-25	Final Examinations
May 26	Commencement

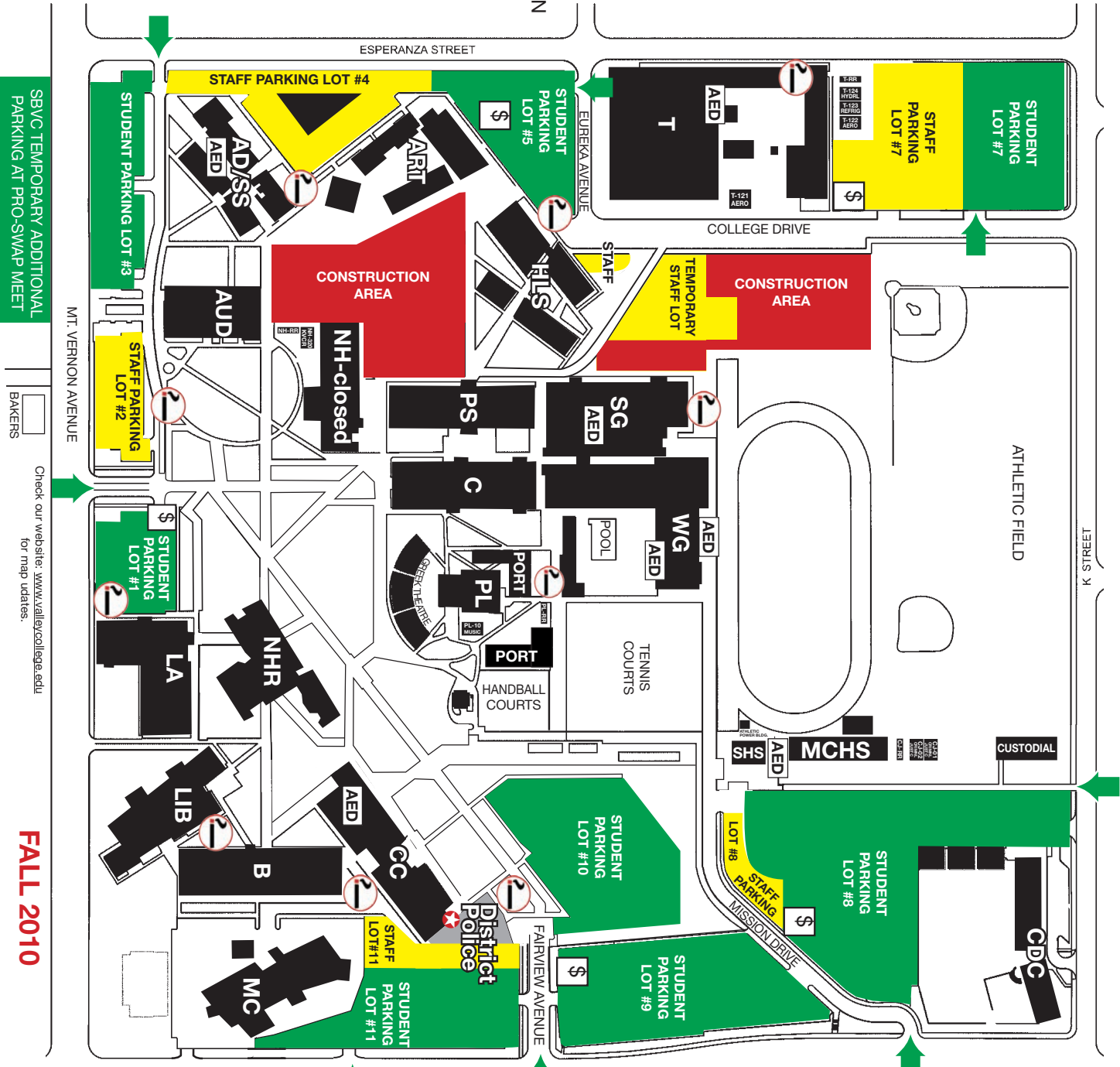
SUMMER SESSION 2011

Start dates will be available during the Spring 2011 semester. Check the Fall, Spring or Summer Class Schedules as well as www.valleycollege.edu for specific dates within each semester (priority registration schedules, add/drop deadlines, holidays, etc.).



San Bernardino Valley College

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



INDICATES CONSTRUCTION AREAS

ARROWS DESIGNATE STUDENT PARKING LOT ENTRANCES

AED AUTOMATED EXTERNAL DEFIBRILLATOR

\$ INDICATES PARKING PERMIT DISPENSER

INDICATES APPROVED SMOKING AREAS (10)

This is a smoke-free campus - smoking in non-designated areas or buildings may result in the issuance of a citation (Board Policy #3570; Government Code #7597)

INDICATES APPROVED SMOKING AREAS (10)

DISTRICT POLICE
Campus Center Rm. 100
(909) 384-4491

Parking permits are required to park in all parking lots and on all college streets.

Parking in disabled stalls requires a valid California disabled placard and a valid SBCCD parking permit.

Building Symbols

AD/SS	Administration/Student Services
AUD	Auditorium
ART	Art Center
B	Business Building
C	Chemistry Building
CC	Campus Center
CDC	Child Development Center
HLS	Health & Life Science Building
LA	Liberal Arts Building
LIB	Library
MCHS	Media/Communications
NH	Middle College High School
NHR	North Hall
PL	North Hall Replacement Planetarium
PL PORT	Planetarium
PS	Physical Science Building
SG	Snyder Gym
SHS	Student Health Services
T	Technical Building
WG	Women's Gym

TECHNICAL CENTER
M&O
PARENT EDUCATION CENTER
WAREHOUSE
SHIPPING & RECEIVING

SBVC TEMPORARY ADDITIONAL PARKING AT PRO-SWAP MEET

Check our website: www.valleycollege.edu for map updates.

FALL 2010