
VICTOR VALLEY
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COLLEGE

VICTOR VALLEY COLLEGE DEGREES AND CERTIFICATES

Administration of Justice, A.S.
Administration of Justice Certificate (CA)
Autopsy Assistant Certificate (CA)
Correctional Science Certificate (CA)
Corrections Certificate (CP)
Fingerprint Recognition and Classification Certificate (CP)
Forensic Specialist Certificate (CP)
Juvenile Counselor Course Certificate (CP)
Law Enforcement Modulated Course Level II Certificate (CP)
Law Enforcement Modulated Course Level III Certificate (CP)
Module A Reserve Academy Firearms Only Certificate (CP)
PC 832 Law Enforcement Course Certificate (CP)
Police Technician Specialist Certificate (CP)
School Police Course: PC 832.3 Certificate (CP)

Agriculture and Natural Resources
Environmental Horticulture, A.S.
Animal Science Technician Certificate (CP)
Ecological Restoration Technician Certificate (CP)
Environmental Field Studies Certificate (CP)
Equine Science Specialist Certificate (CP)
Floral Design Certificate (CP)
Geospatial Technician Certificate (CP)
Horticulture & Landscape Technician Certificate (CP)
Horticulture Specialist Certificate (CA)
Landscape Specialist Certificate (CA)
Landscape Irrigation Certificate (CP)
Mojave Desert Master Gardener Certificate (CP)
Natural Resource Management Technician Certificate (CP)

Allied Health
Certified Phlebotomy Technician IA Certificate (CP)
Certified Phlebotomy Technician IB Certificate (CP)
Certified Phlebotomy Technician IC Certificate (CP)
Nursing Assistant/Home Health Aide Certificate (CP)

Anthropology
GIS for the Social Sciences Certificate (CP)

Automotive Technology, A.S.
Automotive Brake & Suspension Specialist Certificate (CP)
Automotive Drivability Specialist Certificate (CP)
Automotive Inspection and Maintenance (CP)
Technician Certificate (CP)
Automotive Repair Shop Manager Certificate (CP)
Automotive Specialist I Certificate (CA)
Automotive Specialist II Certificate (CA)
Automotive Technician Certificate (CA)
Automotive Transmission Specialist Certificate (CP)
Automotive Window Tinting Technician Certificate (CP)
Basic Inspection Area Smog Technician Certificate (CP)
Collision Repair Technician Certificate (CP)
Engine Machinist Specialist Certificate (CP)
Enhanced Inspection Area Smog Technician Certificate (CP)
Heavy Duty Diesel Truck Lubrication and Inspection Specialist Certificate (CP)
Heavy Duty Truck Brake Repair Specialist Certificate (CP)
Import Sport Tuning and Customization Certificate (CP)
Motorcycle Repair Technician (CP)
Recreational Vehicle Service and Repair Technician (CP) Certificate (CP)
Small Engine Repair Specialist Certificate (CP)

Aviation
Airframe - Aviation Maintenance Technology Certificate (CA)
General Aviation Maintenance Technology Certificate (CP)
Powerplant - Maintenance Technology Certificate (CA)

Biological Science
Biotechnology Certificate (CP)

Business, A.S.

Business Administration, A.S.
Bookkeeping I Certificate (CP)
Management Certificate (CA)

Business Education Technologies, A.S.
Administrative Assistant Certificate (CA)
Computer Systems I Certificate (CP)
Computer Systems II Certificate (CA)
Data Typist Certificate (CP)
Legal Office Certificate (CA)
Medical Office Certificate(CA)
Office Services Certificate (CP)
Spreadsheet Processor Certificate (CP)
Word Processor Certificate (CP)

Business Real Estate and Escrow, A.S.
Advanced Business Real Estate Certificate (CA)
Basic Business Real Estate Certificate (CA)
Business Real Estate Apprentice Certificate (CP)
Property Management Certificate (CA)
Real Estate Appraiser Certificate (CA)
Real Estate Marketing Certificate (CA)
Real Estate Secretarial Services Certificate (CA)

Child Development, A.S.
Level I: Associate Teacher (CA)
Level II: Teacher (CA)
Level III: Supervisor (CA)

Computer Information Systems, A.S.
Database Administration Certificate (CA)
My SQL Database Developer Certificate (CP)
Netware Certificate (CP)
Network Specialist Certificate (CP)
Programming I Certificate (CA)
Programming II Certificate (CA)
Productivity Software Specialist Certificate (CA)
UNIX Administrator Certificate (CP)
Visual Basic Programming Certificate (CP)
Web Authoring Certificate (CP)

Computer Integrated Design and Graphics, A.S.
Architectural CADD Technician I Certificate (CP)
CADD Technician I Certificate (CP)
Civil CADD Technician I Certificate (CP)
Digital Animation Artist Certificate (CP)
Digital Animation Technician I-Softimage XSI Certificate (CP)
Digital Animation Technician I-3ds Max Certificate (CP)
Drafting Technician I Certificate (CP)
Geographical Information Systems Certificate (CP)
Visual Communications Graphic Design Certificate (CP)
Visual Communications Print Production Certificate (CP)

Construction and Manufacturing Technology, A.S.
Basic Electrical Technician Certificate (CP)
Basic HVAC/R Certificate (CP)
Basic Residential Maintenance Technician Certificate (CP)
Basic Woodworking Certificate (CP)
Building Construction Certificate (CA)
Building Inspection Certificate (CA)
Construction Management Certificate (CA)
Construction Technology Certificate (CA)
Plumbing Technician Certificate (CP)
Public Works Certificate (CA)
Renewable Energy Certificate (CP)

Education Technology
Collegial Education I/II Certificates (CP)
Education Technology Certificate (CP)

Electronics and Computer Technology, A.S.
A+ Certification Examination Preparation Certificate (CP)
CISCO Networking Academy
I, II, III, IV, V, VI, VII Certificates (CP)
Communication Electronics Certificate CA)
Computer Technology Certificate (CA)
Digital Electronics Certificate (CA)
Electronic Technology Certificate (CA)
Fiber Optic Cabling Technician Certificate (CP)
N+ Certification Examination Preparation Certificate (CP)
Network Cabling Technician Certificate (CP)
Wireless Communication Technology Certificate (CA)
Wireless MSCSE Examination Preparation Certificate
Level I, II (CA)

Electronics Engineering Technology, A.S.
Associate Degree Electronics Engineering Technology
Certificate (CA)

Emergency Medical Technician
Emergency Medical Technician I (Ambulance)
Certificate (CP)
Emergency Medical Technician (Refresher) Certificate(CP)

Fine Arts, A.A.
This majoris recommended for students interested in areas such as the following:
Art, Music, Photography, Theatre Arts

Fire Technology, A.S.
Fire Company Officer Certificate (CA)
Fire Fighter Certificate (CA)
Fire Prevention Officer Certificate (CA)

Journalism
Journalism Certificate (CP)

Liberal Arts, A.A.
This is usually the major for students who are undecided but who wish to transfer to a university, and/or for those who are interested in areas such as the following,
Anthropology, Economics, English, French, Geography; History, Journalism, Liberal Studies, Philosophy, Political Science, Psychology, Religious Studies, Sociology, Spanish

Math/Science, A.S.
This is usually the major for students interested in areas such as the following,
Anatomy, Astronomy, Biology, Chemistry, Geography, Geology, Mathematics, Microbiology, Oceanography, Physical Education, Physical Science, Physiology, Physics

Media Arts
Digital Animation Artist Certificate (CP)
Digital Animation Technician I-Softimage XSI Certificate(CP)
Digital Animation Technician I-3ds max Certificate (CP)

Medical Assistant, A.S.
Medical Assistant Certificate (CA)

Nursing, A.S.
Associate Degree Nursing Certificate (CA)
Nursing Licensure Certificate (CA)

Paralegal
Paralegal Studies Certificate (CA)

Paramedic, A.S.
Paramedic Certificate (CA)

Photography
Digital Photography Certificate (CP)

Physical Education
Physical Education Dance Certificate (CP)

Political Science
International Studies Certificate (CP)

Respiratory Therapy, A.S.
Respiratory Therapy Certificate (CA)

Restaurant Management, A.S.
Restaurant Management Certificate (CA)

Welding, A.S.
Welding Certificate (CA)

I.
WELCOME TO VICTOR VALLEY COLLEGE

“Education forms the common mind:
Just as the twig is bent, the tree will follow.”

-Alexander Pope
1688-1744 5

Vision, Values, Mission & Goals

VISION

Victor Valley Community College uplifts the diverse communities we teach and serve by promoting educational excellence, enhancing local prosperity, and ensuring environmental leadership.

VALUES

As a student-centered learning organization, we will uphold the following core values:

Excellence - providing superior service and educational *learning* opportunities

Integrity - guiding the college's actions with an internally consistent framework of principles

Accessibility - facilitating access to the college's programs from other locations

Diversity - valuing different points of view and contributions of all

Collaboration - encouraging recursive interaction of knowledge experience and mutual learning of people who are working together toward a common creative goal

Innovation - providing creative approaches to learning problem solving and growth

MISSION

The mission of Victor Valley Community College is to:

Cultivate - intellectual growth, social responsibility, environmental stewardship, cultural enrichment, and economic development.

Create - exceptional and accessible lifelong learning opportunities that afford students within our expanding communities the attainment of knowledge and skills necessary for success in the global economy.

Embrace - difference in our communities by integrating their wealth of multicultural knowledge and wisdom into a cohesive and resourceful *learning* environment for all.

Inspire - innovative teaching and service with imaginative uses of collaboration and technology, fostering vibrant programs that are measurably effective in addressing *student learning* and community needs.

Empower - each student to learn by modeling academic integrity, democratic citizenship, and meaningful contribution to society.

GOALS

The goals of Victor Valley Community College are to:

- create sustainability and environmental stewardship for our colleagues, our students, and our community.
- become an agile learning organization consistent with the needs of students and the communities that the college serves.
- offer educational programs that lead to meaningful and measurable student learning and success through seamless transfer opportunities to colleges, universities, and careers.
- increase the number of students served through recruitment, persistence, and retention strategies.
- provide affordable and attractive options for members of the community seeking a post secondary education, which includes an environment in which diversity thrives.
- develop and deliver enriching courses for community members and businesses seeking additional training and development.

RICH HISTORY

Victor Valley Community College is one 109 community colleges in California that are attended by 10 percent of all students in the United States. For more than 45 years, the college has served students from the High Desert, across the country, and around the world. The same pioneering spirit that brought people to this region of the country, drove local residents to move the college forward from a shared idea to a burgeoning reality.

Victor Valley Community College serves one of the largest geographical areas in the state. The area was first inhabitated by several Native American tribes. Spanish missionaries followed and established Ranchos throughout the region. Later, pioneers moved through the area from Utah and other northern outposts on their way to establish settlements in what later became known as Southern California. The first non-indigenous people to reside in the Victorville area were merchants who built trading posts to provide provisions for gold miners, railroaders, farmers and ranchers that included staples such as ammunition, tools, mining equipment, food stock, horses, pack animals, postal service, and other necessities.

Commerce grew over time and a community began to form. The first town was called Oro Grande and then came Victorville followed by Hesperia, Apple Valley and Adelanto. The population of the area soon reached 60,000 people. It was at this time that local residents decided to bring higher education to the valley.

The Victor Valley Community College District was created by a vote of the public in 1960, when residents enthusiastically approved the creation of a new community college district for the benefit of local residents.

Classes began in the fall of 1961 on the campus of the only high school in the region, Victor Valley High School. Originally, the college served a little over 600 students and employed a total of 15 faculty and staff. Construction began on the present campus in 1963 on land that was once a sprawling 230-acre ranch. Six buildings opened to students in 1965 and the landscape didn't change until an expanded technical complex was completed in 1979. This facility was followed by the Performing Arts Center that began operations in 1981.

Next,a building dedicated to Allied Health studies opened in 1983. In 1988, the Student Services Building was added to the campus complex.

In the 90's the campus grew with additions of: Gymnasium, Science, Library, Construction Technology, Student Activities Center, and Child Development Center. Student population also increased from 6,000 to approximately 9,500 during this period.

Most recently, the college opened the doors for two projects that included a 51,682 square foot Technology Center and the 28,156 square foot Speech/Drama Addition to the Performing Arts Center.

The Technology Center offers High Desert students a facility that contains a large open computer lab (mall), five smaller computer labs, three large class labs, four medium size class labs, and four smaller class labs. It houses 26 faculty and staff offices, a Management Information Systems office meeting room, and a server room. Almost all of the computerized training conducted on campus is located within this building. Digital Art, Writing labs, Computer Education classes and other related training are some of the programs which have been relocated to this building.

The Speech/Drama Addition to the Performing Arts Center feaures an experimental theater, a new scene shop, a rehearsal lab, a makeup lab, a costume lab, a lighting lab, a design lab, four speech labs, a large speech lab and an open communications lab.

The latest project under construction is the $7 million Adapted Physical Education Building. This building will provide the college with dance and adapted PE facilities, open courtyard for presentations and performances, offices and showers. This facility, when completed, will enhance the college's ability to offer programs for a traditionally underserved segment of the High Desert population.

Today the college serves more than 11,000 students. It doesn't stop there. The college is expected to grow, enhance programs and services, and expand within its service area to meet the overall demand of our communities. Victor Valley College is a dynamic institution of higher learning and our history is still being written.

BOARD OF TRUSTEES

Elected by the voters of the community, the Victor Valley Community College District Board of Trustees is the governing body of the college.

The Board of Trustees sets overall standards and academic policies for the college and guides the development of college programs and policies.

Policies set by the board are implemented on a day-to-day basis by the superintendent/president of the district and a well-trained group of administrators, faculty, and staff on behalf of the trustees.

Many Victor Valley College students transfer to four-year colleges and universities, and the Board of Trustees designs those educational programs in conjunction with the entire network of community colleges and universities in California.

The Victor Valley Community College District Board of Trustees also works closely with local community and business leaders to establish programs which will benefit the community at large. These and other initiatives are parts of the Integrated Plan mandated by the Board.

Working with employers within the Victor Valley area, the Board of Trustees has approved a number of programs to train students for specific jobs. With these technical programs, the Board of Trustees aims to help provide greater vocational opportunities within the Victor Valley area.

The Victor Valley Community College District Board of Trustees is under the advisory supervision of the California Board of Governors, which oversees higher education in California.

The Board of Trustees is responsible for budgeting funds received from state and local districts for the benefit of the college and its student body.

CAMPUS CULTURE AND CLIMATE

At Victor Valley College there is one constant upon which everything is based: The student is always first! This is true in all stages of planning and implementation. This includes the preparation of the college's budget, program development, and all services offered to the student. It is basic to our success and the success of our students.

According to Terrence E. Deal and Allen A. Kennedy, in *Corporate Culture* (1982, ch. 1), "A strong culture is a system of informal rules that spells out how people are to behave most of the time." Climate, on the other hand, is the informal day-to-day behavior, with its underlying attitudes, beliefs, and values, of members of the organization. Climate is not visual, but it is the feel, tone, atmosphere, and internal characteristics of the institution. Accordingly, Victor Valley College will seek to enhance its supportive organizational culture and climate by

continuous implementation of all elements of a well defined plan. We will:

- motivate all members of the college community to do their best.
- recognize that tone and expectation, in essence climate and culture, are at the CEO level.
- foster the development and support the success of an increasingly diverse student population.
- encourage a quality-focused paradigm characterized by embracing institutional effectiveness, measuring student success, and creating innovative yet relevant educational programs and services.
- build cooperation and trust and create cross-cultural teams capable of meeting the political and educational demands for effectiveness and quality.
- develop leaders who are self-confident, group-oriented, facilitative of change, catalytic toward quality, and persuasive with all external and internal constituencies.
- destroy the illusion that constituent groups are separate, unrelated, and often competing forces.
- provide leadership that will guide activities resulting in appropriate change.
- promote continuous development of administration, faculty, and staff to provide programs and services of quality and excellence.
- encourage decision-making to be decentralized, management to be participative, and governance to be shared.
- advocate a college-wide problem-solving attitude desirous of institutional excellence and a quality college for the 21st century.
- acknowledge that learning and work can and should be fun and satisfying.
- thrive on effective communications, vertically and laterally, formally and informally, throughout the organization and in the community.
- reward and respect quality, excellence, and success, constantly and continuously seek institutional renewal and improvement.

ADMINISTRATION

Dr. Robert Silverman, Superintendent/President
Dr. Christopher O'Hearn, Deputy Superintendent/
Executive Vice President, Instruction/Student Services
Fusako Yokotobi, Vice President, Human Resources
Dr. Victoria Hindes, Executive Dean, Student Services
Virginia Moran, Executive Dean, Institutional Effectiveness
Jeffrey Holmes, Interim Dean, Student Workforce Development
Dr. E. Paul Williams, Dean, Humanities & Social Sciences
Dr. Lori Kildal, Academic Dean, STEM
Dr. Pat Luther, Dean, Health Sciences & Public Safety

The administration of Victor Valley College implements the policies and direction set by the Victor Valley Community College District Board of Trustees.

Under the direction of the superintendent/president, the administration of Victor Valley College keeps the college running smoothly on a day-to-day basis.

WHAT WE OFFER

Adult/Continuing Education

Victor Valley College maintains a program of Adult/Continuing Education which offers a variety of day and evening classes as well as some classes on weekends. All of these classes are non-credit.

Adult/Continuing Education classes are designed to meet a broad range of needs in the Victor Valley community, and include subjects such as basic skills training, older adult education, parenting, ESL and physical fitness.

Adult Education also provides classes in vocational areas such as home economics, which allow students to grow personally and professionally.

Awards

Each year, Victor Valley College sponsors an awards program where scholarships are given by companies, private groups, or individuals to college students who excel.

Information on awards, as well as a variety of student financial aid programs, is available in detail from the Financial Aid Office where application forms for scholarships and grants may be found (see Section VI - Financing Your Education) .

Phi Theta Kappa, the International Honor Society of the Two-Year College, was established in 1918. It is the only internationally acclaimed honor society serving institutions which offer associate degree programs. Membership is given added significance by the fact that the society is recognized by the American Association of Community Colleges as the official honor Society for two-year colleges.

The purpose of Phi Theta Kappa is to encourage scholarship and community service. To achieve this purpose, Phi Theta Kappa provides opportunities for the development of leadership

in an intellectual climate to exchange ideas and ideals, for lively fellowship for scholars, and for stimulation of interest in continuing academic excellence.

Included in the lifetime membership is a nationwide job search program and the availability of over $1,000,000 of transfer scholarships. Our chapter's name is Alpha Phi Gamma. To qualify for membership, a student must complete 12 units at Victor Valley College and have a cumulative G. P. A. of at least 3.5.

Community Service

Victor Valley College offers self-financing Community Services classes in areas in which students may desire personal growth or have a particular interest. These classes often include a cultural component involving seminars, film festivals, forums, and short-term general interest courses.

Community Service classes are funded entirely by fees collected at the time of registration and not by the Victor Valley Community College District. Fees for community service classes are not refundable unless the particular class is canceled.

Degrees and Certificates

Victor Valley College offers two degrees and over 100 certificates of achievement for satisfactory completion of specific programs of study. For a complete listing see pages I, II in the front of the catalog.

Associate degrees typically require two years of full-time study, although the length of time may vary according to individual student programs.

Associate in Science (A.S.) degrees are awarded in the areas of Math/Science and various technical areas.

Associate in Arts (A.A.) degrees are awarded in the areas of liberal arts and fine arts.

Non-degree continuing education courses for adults are also offered at Victor Valley College on a regular basis during the day, evening, or on Saturdays.

Requirements For Degrees/Certificates

Recipients of Associate in Arts (A.A.) or Associate in Science (A.S.) degrees from Victor Valley College must have completed 60 units of college work, with a grade point average of "C" or better. For a complete listing of requirements, see page 54.

Units to be counted toward graduation must include 18 or more units in an approved departmental major or in a certificate program having 18 or more units. At least 18 units of general education courses must also be completed to meet requirements in the areas of natural science, social science, the humanities, language skills, and logic/mathematical skills. Courses used to satisfy the major cannot also fulfill general education requirements. In addition, students must complete a physical education course.

At least 12 units must be completed while the student is a resident of the Victor Valley Community College District. Students receiving a Certificate of Achievement must have completed all required courses with a grade point average of "C" or better, including 12 units in residence at VVC.

The College accepts most lower division courses from other colleges accredited by the following institutions: Middle States Association of Colleges and Schools and Colleges, The Northwest Association of Schools and Colleges, North Central Association of Schools and Colleges, New England Association of Schools and Colleges, Inc./Commission on Institutions of High Education, Southern Association of Colleges and Schools/Commission on Colleges, Western Association of Schools and Colleges/Accrediting Commission for Senior Colleges and Universities (see Accredited Institutions of Post Secondary Education Handbook xi).

Student Honors

The President's List, the Dean's List, and the Honor Roll are marks of superior academic achievement.

To qualify for these prestigious honors, students must complete at least 12 units of credit classes with a letter grade (A, B, C) each semester and achieve outstanding grades as follows:

- To qualify for the President's List, a student must achieve a grade point average of 4.0 or an "A" grade in all classes.
- To qualify for the Dean's List, a student must achieve a grade point average of 3.50 - 3.99.
- To qualify for the Honor Roll, a student must achieve a grade point average of 3.0 - 3.49.

Technical Education

Certificates of Achievement are available to students who successfully complete the requirements of various certificate programs. These certificates are evidence of proficiency which are recognized by potential employers.

Victor Valley College offers certificates in major areas of study, including Administration of Justice, Allied Health, Automotive Technology, Business Administration, Business Real Estate and Escrow, Business Education Technologies, Child Development, Construction Technology, Computer Information Systems, Drafting Technology, Electronics and Computer Technology, Fire Technology, Nursing, Ornamental Horticulture, Paralegal Studies, Restaurant Management, Respiratory Therapy, and Welding.

To be awarded a certificate, a student must have completed all prescribed course work with a cumulative grade point average of 2.0 or a "C" average. At least 12 units of course work must have been completed at Victor Valley College.

Technical Education students who are earning certificates of achievement may also take additional courses to earn an Associate Degree.

Technical certificates are listed in *Section VIII* along with programs of study and course descriptions.

Graduation Honors

Students completing associate degree programs with prescribed cumulative grade point averages are recognized as honor students through the college commencement exercises and diplomas. These honor students will also be eligible to wear honor cords at graduation.

All lower division degree applicable courses, units, and grades earned by students at VVC and other colleges and universities are included in calculating grade point averages for graduation and academic honors.

Academic honors are as follows:

Highest Honors	3.90 - 4.00 GPA
High Honors	3.75 - 3.89 GPA
Academic Distinction	3.50 - 3.74 GPA

These honors are noted on student degrees.

ABOUT YOUR CAMPUS

Student Responsibilities

Students have a responsibility to understand and follow all college policies and procedures.

Students should study the schedule of classes as well as this catalog, which provides a wealth of information on admissions, registration, graduation, transfer, and managing and financing a college education.

Students must plan their own education by carefully considering the courses they take and the requirements for the educational degrees and certificates which they seek.

Student responsibilities include the selection of courses which will complete the general education and major requirements of the area in which they are studying (See Section XIII - Moving On).

Counseling and guidance services are available to help students plan and successfully complete their education at Victor Valley College.

Academic Freedom

Teachers must be free to think and to express ideas, free to select and employ materials and methods of instruction, free from undue pressures of authority, and free to act within their professional group. Such freedom should be used judiciously and prudently to the end that it promotes the free exercise of intelligence and student learning.

Academic freedom is not an absolute. It must be exercised within basic ethical responsibilities of the teaching profession.

Open Class Policy

Victor Valley College strives to maintain an “open class” policy which allows any person admitted to the college to enroll in any course section or class. This includes all students who meet prerequisites in Chapter II, Division 3, Part VI, Title 5 of the California Administrative Code, commencing with Section 51820, unless specifically exempted by law.

No preference in admission shall be given to either men or women, in accordance with Title IX.

California law requires that the average daily attendance in classes be recorded for state reimbursement.

Student Accident Insurance

All students who are properly registered at Victor Valley College are provided student accident insurance for accidents which occur in class or during college-sponsored activities such as sporting events. This insurance is secondary to other insurances.

If a student is injured in an athletic or nonathletic activity, claim forms are available in the Athletic Trainer’s office which is located in the Victor Valley College Main Gymnasium.

Student Handbook

Important procedural and policy information is contained in the Student Handbook, which is available to all Victor Valley College students at no cost. Copies may be obtained in the Office of the Vice President for Student Services.

The **Student Handbook** includes important information on:

- Activities
- College Regulations
- Matriculation
- Student Services

Drug and Alcohol-Free Campus

Victor Valley College is a drug and alcohol-free campus.

This means that the use, possession, or distribution of either illicit drugs or alcohol by students or their guests is prohibited on college property or at any college sponsored activity.

Students or their guests who violate these requirements may be suspended or expelled from Victor Valley College.

Counseling and referral services are available through the Counseling Department for students who have concerns about alcohol or drugs.

Smoke-Free Campus

Victor Valley College has been designated as a smoke-free campus. This means that smoking is prohibited in all buildings and enclosures at the college and at activities sponsored by the college.

This policy is to protect the well-being of students, faculty, staff, and guests. Student violators are subject to procedures found in the Student Code of Conduct.

Campus Security/Police

As to be expected with more than 15,000 students and with open public access to the campus, students need to understand that unlawful activities may occur at Victor Valley College and at activities which the college sponsors.

Although the college provides security and takes reasonable preventive measures, it is important that students also take reasonable preventive steps to prevent or avoid criminal behavior.

For example, students should keep their automobiles locked and their possessions secured at all times to discourage and prevent thefts.

Other Campus Regulations

1. Only officially registered students are allowed to attend classes. Minors or other students who are not registered or do not have permission to be in the class may not remain in the classroom.
2. Students are not permitted to eat or drink in classrooms.
3. Smoking is prohibited in all college buildings.
4. Card playing on Victor Valley College premises is prohibited except in a designated game or recreation area.
5. Dogs (except service eye dogs) and other pets are not allowed on Victor Valley College premises.
6. Printed materials to be distributed must be approved for distribution by the Office of Student Activities.
7. Students must be fully attired, including shoes, while in the classroom or on Victor Valley College premises.
8. Library books and materials must be returned promptly.
9. Use of audio equipment on Victor Valley College premises is restricted to personal headphones or preapproved authorized activities.
10. Children must be under the supervision of parents at all times.

Equal Opportunity Policy

Victor Valley College is an equal educational opportunity college: It follows all federal guidelines including Title IX of the Educational Amendments of 1972 relating to the recruitment, employment and retention of employees. VVC does not discriminate on the basis of race, color, national origin, sex, age, or disability in any of its policies, procedures or practices. This nondiscrimination policy covers admis-sion and access to, and treatment and employment in, college employment programs and activities. The Section 504-Disabled Counselor/Enabler at Victor Valley College may be reached at (760) 245-4271, extension 2212.

Reglamento Imparcial de Oportunidad

El Colegio de Victor Valley es un colegio de oportunidad educacional imparcial: sique las guías federales incluyendo el Título IX de la Enmienda Educacional de 1972 la cual se relata al reclutamiento, empleo y la re-tención de empleados. VVC no hace distinción a base de raza, color, sexo, origen nacional, edad, situación de inferioridad o edad, en ninguna de sus prácticas o procedimientos. Este reglamento imparcial abarca admisión y acceso y también tratamiento y empleo en las actividades y programas de empleo del colegio. Puede llamar a la consejera y habilitadora bajo la sección 504 en el Colegio Victor Valley, (760) 245-4271, extensión 2212.

Sexual Harassment

Victor Valley College policies prohibit sexual harassment. The college abides by the policy and appeal procedures of Assembly Bill 803, “Protection For Students and Staff Regarding Sexual Harassment.” If a student experiences sexual harassment problems, he or she should immediately notify the District Affirmative Action Officer, Victor Valley College, 18422 Bear Valley Rd., Victorville, CA 92395 (760) 245-4271, extension 2386.

Acoso Sexual

El reglamento del Colegio de Victor Valley prohibe el acoso sexual. El colegio se atiene a las normas y al procedimiento de apelación del Proyecto de ley 803, “Protección del acoso sexual para los estudiantes y los empleados.” Si el estudiante experimenta acoso sexual, él o ella debe notificar inmediatamente al Oficial del distrito de acción afirmativa, Colegio de Victor Valley, Calle Bear Valley 18422, Victorville, CA 92395 (760) 245-4271, extensión 2386.

Student Affirmative Action Plan

Victor Valley College strives to overcome any remaining ethnic, economic, disabled, and gender under-representation in the composition of the student body or any factors that discriminate against students who seek to be educated here.

The college has responsibility for ensuring equal educational opportunity for all eligible residents of the district. Within its financial capacity, Victor Valley College will provide for the prompt, fair, and impartial consideration of all student grievances regarding race, color, religion, gender, disability, sexual orientation, or national origin.

The college provides access to counseling or grievance procedures for all students and encourages the resolution of students’ problems on an informal basis.

As an equal educational opportunity campus, Victor Valley College complies with Title IX of the 1972 Education Amendments and Section 504 of the Rehabilitation Act of 1974.

The college will make every attempt to eliminate any remaining barriers that cause significant under-representation of minority, disabled, or economically, educationally, or socially disadvantaged students.

Discrimination Complaint Procedure

Any student who feels he or she has been discriminated against has the right to file a complaint of unlawful discrimination with the Affirmative Action Officer, Victor Valley College, 18422 Bear Valley Rd., Victorville, CA 92395 (760) 245-4271, extension 2386.

Nondiscrimination Policy

Victor Valley Community College District provides opportunities for the pursuit of excellence through educational programs and services primarily for college district residents. The purpose of these programs and services is to enhance the quality of human life by providing public access to college education without regard to race, ethnic or national origin, sex, age, disability, sexual orientation, or prior educational status or any other

unreasonable basis for discrimination. The lack of English language skills will not be a barrier to admission and participation in vocational education programs.

Inquiries regarding the application of this policy may be directed to the appropriate compliance officer for Title 5 and Coordinator for Title IX, Regulation 504/ADA - Director of Human Resources, Victor Valley College, 18422 Bear Valley Rd., Victorville, CA 92395 (760) 245-4271, extension 2386.

Política No Discriminatoria

El Colegio Victor Valley proporciona, principalmente a los residentes de su distrito, oportunidades a fin de alcanzar metas de excelencia por medio de sus programas educativos y de otros servicios. El propósito de estos programas y servicios es mejorar la calidad de la vida humana haciendo accesible la educación universitaria al público en general, sin prestar atención a su raza, origen étnico o nacional, sexo, edad, insuficiencias o incapacidad fîsica, su orientación sexual, previa situación educacional, o cualquier otra base irrazonable de discriminación. La falta de habilidad en el lenguaje inglés no será una barrera a la admisión o participación en el programa de educación vocacional.

Preguntas respecto a la aplicación de esta política pueden dirigirse al oficial designado responsable de al áplicación del Título 5 y al coordinador del Título IX, Regulación 504/ADA - Oficial de Recursos Humanos, Colegio del Victor Valley, Calle Bear Valley 18422, Victorville, CA 92395 (760) 245-4271, extensión 2386.

Information Para Estudiantes de Inglés Como Segundo Idioma (ESL)

Los estudiantes que no tengan un inglés fluido pueden pedir ayuda sobre preguntas respecto a los cursos ofrecidos en el Colegio Victor Valley y para inscribirse en las clases, está disponible por cita el consejera bilingüe en el edificio de Servicios Estudiantes en el Departamento de Consejería.

Estudiantes deberán inscribirse en las clases para inglés como segundo idioma hasta que estén preparados para seguir un programa de educacíon.

Student Record Notice/Directory Information

The Federal Family Education Rights and Privacy Act of 1974, as implemented by the California Education Code (76200...) and Title V (54600...), protects the privacy of student records. The college is authorized to release "Directory Information" which at VVC includes a student's name, major field of study, participation in officially recognized activities and sports, weight and height of members of athletic teams, degrees and awards received, and any other information authorized in writing by the student. A student may prohibit the release of this information by marking the appropriate box on the application for admission. The college may also release records.

Student records primarily include those found in the Admission and Records Office (admission application, transcripts, petitions...) and the Office of the Dean of Students (discipline). The required log of access to these records is kept in the respective offices. Officials and employees may have access to these records if they are operating within the scope of their assigned duties. These access logs are kept for minimum of five years. Students may have access to their records with appropriate notice and on payment of appropriate cost and may challenge the content as defined by campus policy. Students may also file a complaint with the U.S. Dept. of Education concerning any alleged failure by the institution to comply with Section 43 of the General Education Provisions Act.

Americans With Disabilities Act (ADA)/504

Victor Valley College does not unlawfully discriminate based on physical or mental disability. Any complaints from students, employees or the public about unlawful discrimination in academic accommodation or facility access due to disability should be directed to the ADA/504 Coordinator who is the Vice President for Administrative Services. The Complaint Procedures may be obtained at that office or the Dean of Students Office. Assistance with disabilities for students can be obtained at the campus DSPS office located in the Student Services Building for physically disabled or the Academic Commons for Learning Disabled Center.

Student Right To Know

In agreement with the federal government and under the terms of the "Student Right-To-Know Subscription Agreement," Victor Valley Community College (VVCC) makes available its outcomes regarding the 1998 cohort. Rates were assembled from a **cohort** including only:

- First-time, full-time, credit freshman students in Fall 1998
- Indicated a goal of degree, certificate, or transfer

In looking at VVCC's Fall '98 initial cohort, only 225 students are represented. This amounts to only 2.7% of students enrolled in credit courses at the time of first census. Out of this proportionately small cohort, 28.0% of students either graduated, completed, or became transfer prepared. The overall transfer rate was viewed at 16.4%.

The Tracking Period for the current cohort was three years (Fall '98-Spring '01). Summer sessions were not included. Students in the '98 cohort were placed into categories based upon the following criteria:

- **Graduation/Completion/Transfer Preparation Rate**: A student received an Associate Degree, Certificate of Completion, or became eligible for transfer (earned at least 56 transferable units with a 2.0 GPA or greater).
- **Transfer**: A student who does not meet the graduation /completion /transfer preparation definition, but does transfer to a UC, CSU, or another CCC.
- **Still enrolled**: A student who has not completed a degree or certificate program but is still enrolled at the college.
- **Left in good standing**: A student who left the college in good academic standing.
- **Left in poor standing**: A student who left the college in poor academic standing.

- **Other**: A student either became permanently disabled, left to serve in the armed forces, left to serve in the foreign aid services, left to serve on a church mission, or died.

According to the IPEDS-GRS methodology, a student can only be counted once in any of the aforementioned categories. For example, a student who has received a degree yet is still attending the college will only be counted under the "Graduation/completion/transfer preparation rate" category and not the "Still enrolled" category. In addition, students who leave school to serve in the armed forces are also excluded from the cohort.

VVCC's results are shown below:

Completers	28.0%
Left in good standing	14.7%
Left in poor standing	16.0%
Still enrolled	21.8%
Transfers	16.4%
Other	3.1%

16.0% of students left in poor standing, whereas 66.2% either completed a degree or certificate, transferred, are still enrolled or became transfer prepared

In viewing the previous data, one must realize that the selected cohort discloses a very narrow view of college success. VVCC has been founded upon very diverse andestablished goals which are not reflected in the current rates. Some of VVCC's goals have translated into characteristics such as:

- Providing programs for disabled students and special populations
- Offering programs for low income students
- Teaching English as a second language
- Offering an AA degree in 2 academic areas, an AS degree in 21 academic and technical areas, and over 100 certificates
- Providing many courses in Vocational Education
- Providing many courses in precollegiate basic skills

II.
GETTING AROUND CAMPUS

“Education is a progressive discovery of our own ignorance.”

-Will Durant

AN OASIS OF LEARNING

The bright red tile roofs which top Victor Valley College buildings are part of a carefully designed architectural scheme in which all the companion parts work together to create a pleasant environment for learning.

More than a dozen handsome, mission-style buildings circle a large man-made lake near the center of the campus, designed to form an oasis of learning in the High Desert.

Conveniently placed parking lots, pay telephones, and vending machines are located all around the campus for easy access and use by college students.

Here is a list of Victor Valley College facilities:

Athletic Facilities

Victor Valley College encourages its students to participate in athletic activities to further their physical, emotional, and mental development as individuals.

Athletic facilities are located on the lower campus and include the main gymnasium (Building 71) with a seating capacity of 2,040, 10 outdoor tennis courts, softball diamond, baseball diamond, football field, clay track, and four soccer fields.

The intercollegiate sports offered are football, softball, baseball, men's/women's tennis, men's/women's soccer, women's volleyball, men's/women's basketball, wrestling, men's golf, and men's/women's cross country, Victor Valley College Rams compete against other teams within the Foothill Athletic Conference, as well as teams from other colleges and universities.

Regarding availability and rental fees, community groups wishing to use any facilities must contact the Facilities Scheduling Office at (760) 245-4271, extension 2707.

RAMS Bookstore

Located in the Student Activities Center/Community Conference Center (Building 44), the Rams Bookstore is owned and operated by the Victor Valley Community College District. The Board of Trustees or their designee establishes a reasonable profit margin for all required textbooks and supplementary materials based on invoice price to the bookstore. This profit margin and a list of current projects funded by the bookstore are published in a manner which provides ready access of this information to students and other members of the college community.

Textbooks, trade books, supplies, general merchandise and computer software are available through Rams Bookstore. Other academic supplies such as graduation announcements, graduation regalia and college rings may also be purchased.

The Rams Bookstore is generally open Monday-Tuesday, 8am-7pm; Wednesday-Thursday, 8am-5pm; and Friday, 8am-2pm. The hours of operation are extended during the beginning of the Fall and Spring semesters, and the bookstore is open on Saturdays during this period. You can make purchases online by using the Rams Bookstore website: www.vvcRams.com.

Campus Police Services

Located in front of the Student Activities Center (Building 44). Police office hours are Monday-Thursday, 7:00am - 7:00pm, Friday, 7:00am-4:00pm. (760) 245-4271, ext. 2329.
After hours and weekends (760) 245-4271, ext. 2555.

Child Development Center

The Child Development Center (CDC) is located in building 12 on upper campus, next to Excelsior Education Center. The primary goal for the CDC is to provide a lab for the Child Development Department students to receive professional training that is required for certification and to observe children in a quality program to further their understanding of child growth and development.

Additionally, we are funded by the California Department of Education, Child Development Division as a State Preschool so that we can provide free care to eligible families. Eligibility is determined by income level and family size.

The CDC is a high quality, state licensed, (#360906573) facility with credentialed staff who strive to provide a positive nurturing, active learning environment for children.

Please call the CDC office at 760.245.4271 ext. 2618 for further information.

Classroom Complexes:

■ ACADEMIC COMMONS (Building 42) – Located at the north side of the lake and is the site for the Office of the Dean of Humanities, Arts, and Social Sciences, Cooperative Education office, Student Support Services, Upward Bound (Math & Sciences), BADM and CIS full-time instructors, AFT faculty offices and CIS classrooms.

■ ADMINISTRATION BUILDING (Building 10) —The Administration Building, located on the west end of the campus near Spring Valley Lake Parkway, contains the Administration offices and Human Resources office. On the south side of the building in AD8 the Restaurant Management and Food Handlers classes meet.

■ ALLIED HEALTH BUILDING (Building 32, 32A, 32B, 32C) — The Allied Health Building, located to the northwest of the lake, contains classrooms for the study of nursing, respiratory therapy, and other health-related subjects. Faculty offices are located in portable buildings nearby and the Allied Health Building.

■ ART (Building 22) —The Art Building is a hexagonal-shaped building located west of the lake and is the site for fine arts, graphics, and photography classes. The building also hosts the department's faculty offices.

■ ANIMATION LABORATORY (Building 67) —The Animation Lab is located on the lower campus between Vocational Education and Construction Technology.

■ SEWING COMPLEX (Building 72) — The Sewing Center is located on the lower campus between the Main Gymnasium and the Auxiliary Gymnasium. It also contains a general purpose classroom.

■ COUNSELING/ADMINISTRATION (Building 55) — Located on the south end of the lake. This building includes the offices of the Career Center, Counseling, Mailroom, Student Employment, Switchboard, Transfer Center, Executive Dean of Student Services, Deputy Superintendent/Executive Vice President, Instruction, and the Superintendent/President.

■ FIRE ACADEMY (Building 94) — Located on lower campus near the VVC Printshop and Maintenance & Operations office. The Fire Academy Building houses the Fire Technology classes.

■ HUMANITIES CENTER (Building 80) —Houses CSUSB and AZUSA Pacific University. It's located on the lower campus near the corner of Bear Valley and Fish Hatchery Roads.

■ LIBERAL ARTS BUILDING (Building 30) — The Liberal Arts Building is located behind the Science Lab Building and contains general purpose classrooms and faculty offices.

■ LOWER PORTABLES (Buildings 66A, 66B) — Houses AJ classes and the ALDH lab. These portables are located on the lower campus behind the Construction Technology Building.

■ MUSIC BUILDING (Building 20) —The Music Building is a hexagonal-shaped building located southwest of the lake, near the Counseling/Administration Building. Music classes are held and practice studios are housed in this complex.

■ PERFORMING ARTS CENTER (PAC) (Building 54) —The PAC houses the Communication Studies (CMST) and Theater Arts (TA) classes. The design lab, lighting lab, costume lab, rehearsal room, make-up lab, and scene shop are located on the first floor of the PAC. The CMST classrooms and communication lab are located on the second floor of the PAC.

■ SCIENCE LAB BUILDING (Building 31) —The Science Lab Building is located to the west of the lake and is situated in front of the Liberal Arts Building. This building contains laboratory classrooms for the life and physical science programs, a planetarium and faculty offices.

■ STUDENT ACTIVITIES CENTER (SAC) (Building 44) — Located on upper campus, east of the lake. Classes may be held on the 2nd floor: SAC A, SAC B, SAC C, SAC D, and Quiet Room. The SAC houses the ASB, RamPage and PTK offices.

■ TECHNOLOGY CENTER (Building 21) — The Technology Center is located on the southwest corner of the lake between the Art and Music buildings. The 34,117 square foot center is a multipurpose laboratory and office facility that provides voice, video, data and power ports to more than 700 student computer stations. The facility also has a computer center for open entry individual study courses. Faculty offices are located in the building along with special purpose rooms that are equipped with the latest in smart classroom interactive technology. The Computer and Information Resources (CIR), formerly MIS and IT, are located in the technology center.

■ TECHNICAL/VOCATIONAL COMPLEX (Building 60, 60A, 60B, 60C, 61, 62, 63, 64, 65) —The Technical/Vocational Complex, located on the lower campus across from the football field, is the site of specialized classes in areas such as electronics, automotive technology, welding, agriculture, drafting, computer integrated design and graphics, administration of justice and construction technologies. The complex includes an auto shop with specialized equipment, a greenhouse for the cultivation and study of various plants and agricultural crops, and a construction technology center.

■ UPPER PORTABLES (Building 51C) — This building includes the offices of CalWORKs.

Library

Located at the north side of the lake (Building 41), the library offers a diverse collection that includes books, periodicals, electronic databases, pamphlets, microfilm, audio and video cassettes, CDs and DVDs. In addition to circulating books, the library has collections of reference, local history, and instructor-reserved materials available for use within the library. Photocopiers, typewriters, video players for instructional tapes and microfiche/film reader printers are also available. Group study rooms may be reserved at the circulation desk.

Library holdings may be found by searching the online catalog available from the Internet at http://www.vvc.edu/library. There are 34 computers in the library available for accessing the Internet, online catalog, and subscription databases. An ADA workstation equipped with adaptive technology software is available for students. Currently enrolled students may apply for passwords for off-campus access to the subscription databases.

Professional librarians are available at the reference desk during all library hours, providing a variety of information services to help students become more confident and self-sufficient in using the library.

Students must present either a current student I.D. or a registration printout or current ASB card to verify enrollment status each semester prior to checking out materials. Community members may borrow materials by paying a $12 annual membership fee to join Friends of the Library, a subsidiary of the VVC Foundation. The library charges fees for late returns, damaged or lost materials, according to guidelines set by the College Board of Trustees.

Library hours during the fall and spring semesters are:
Monday-Thursday, 8:00 a.m.-9:00 p.m., Friday, 8:00 a.m.-4:00 p.m., and Saturday, 10:00 a.m.-3:00 p.m. Hours during the winter and summer sessions vary. For more information call (760) 245-4271, ext. 2262.

Instructional Media Services (IMS)

IMS is located on the lower level of the Library. Media services are available to faculty, staff, and students.

Faculty and staff can schedule equipment demonstrations and training with IMS staff. Equipment can be scheduled for campus wide for use in classrooms or for meetings. Faculty and staff are encouraged to immediately report malfunctions of equipment assigned to classrooms, equipment hubs, or other locations on campus to IMS. Call 245-4271, ext. 2263 or ext. 2424, to report problems with equipment along with placing a work order in the OPRA system. Carrels adjacent to IMS are available for students visiting the library to view VHS or DVD media materials that are indexed in the library card catalog. Audiocassette and CD players with headphones, as well as slide projectors are also housed in the carrels.

Instructional Media Services hours: Monday-Thursday, 7:30 am-4:30 pm and Fridays, 7:30 am-4:00 pm. For additional information call IMS at (760) 245-4271, ext. 2263 or ext. 2424.

Parking

Parking lots located around the campus are provided for students displaying valid parking permits.

Semester permits are available from the Bursar. The parking fee is $40 per vehicle, per semester, for the fall and spring semesters. The parking fee for Financial Aid students is $20 per vehicle per semester. Motorcycle permits are $5 in addition to the purchase of a vehicle permit. The parking fee for Summer/Winter is $20 per vehicle. Parking fees are subject to change. Permits are required Monday through Saturday.

Alternative Parking Options

In addition to semester parking permits, the College offers students and visitors two alternate parking options:

1. *Daily parking permits* are available for $2.00 per day (machines accept quarters only) through vending machines located on campus.

2. *Parking meters* are located in Lot #6. They are intended to meet short-term parking needs. The cost is 25 cents for each 15 minutes (meters accept quarters only). Student permits are not valid in metered stalls.

Parking Rules & Regulations

All vehicles parking on the campus must abide by the parking rules and regulations.

Parking violations include:

- not displaying a valid parking permit
- improper display of permit
- backed into stalls/head-in parking only
- unauthorized parking in faculty/staff parking stalls
- not parked in marked parking stall
- exceeded time at a parking meter
- possession of a lost/stolen permit
- unauthorized parking RED, Green or Yellow zones
- unauthorized parking in Disabled parking stalls
- parking in unauthorized dirt areas

Citations. The VVC Campus Police Department receives its authority to enforce traffic and parking regulations from the California Penal Code, the California Vehicle Code, and provisions established by the California State Legislature. Ignoring a citation will result in immediate legal action in the form of substantial additional penalties and a hold placed on your vehicle registration with the DMV, and a transcript hold at VVC.

Motorcycles. A motorcycle parked at VVC must display a student parking permit which must be affixed to the motorcycle and clearly visible. A staff permit is required on all motorcycles parked in staff stalls.

Disabled Persons Parking. Vehicles parked in the blue-lined disabled persons parking stalls are required to properly display a state-issued disabled person's license placard and a VVC student parking permit.

Habitual Parking Offenders. Any vehicle that has been issued five (5) or more parking citations that are unpaid are subject to tow-away per CVC 22651.

Traffic Rules. All California vehicle laws are enforced. Violators are issued citations to the Victorville Traffic Court.

WHAT CAN I DO TO PROTECT MYSELF?

Be alert!
Be concerned at all times for your safety and the safety of others.
Immediately report any suspicious activity and/or persons to the Campus Police.
Walk and park your vehicle in lighted areas at night.
Share any safety concerns you have with your Campus Police Department.
Know emergency numbers and locations of the nearest telephone.
Report all criminal activity you observe to the Campus Police Department immediately.

Prohibited Conduct On Campus

- Disorderly, lewd, indecent, obscene or offensive conduct on college property or at College-sponsored or supervised functions.
- Alcohol & drug use is prohibited.
- Gambling by any person, any place on campus is prohibited.

EMERGENCY	9-911
CAMPUS POLICE (760) 245-4271	x2329
(after hours & weekends)	x2555
CAMPUS POLICE EMERGENCY	X2555

Performing Arts Center

Located off Jacaranda Road and Bear Valley Road at the center of the campus, the PAC (Building 54) is a 493-seat proscenium theatre that supports professional dance, ballet, symphony, musical and dramatic stage productions, choral concerts and a wide variety of community events. Seminars, travel lecture series, public forums are also supported. For event information 24 hours a day, call: (760) 245-2787 (A.R.T.S.) For rental information call (760) 245-4271, ext. 2440.

The PAC houses the Communication Studies (CMST) and Theater Arts (TA) classes. The design lab, lighting lab, costume lab, rehearsal room, make-up lab, and scene shop are located on the first floor of the PAC. The CMST classrooms and the communications lab are loctaed on the second floor of the PAC.

VICTOR VALLEY COLLEGE- VVC PRESENTS — A delightful season of live entertainment featuring professional, student and community talent. There's something for the entire family on the calendar including Theatre, Music, Dance, Special Events, Travelogue and so much more. For ticket information call (760) 245-4271, extension 849.

Past performances include: Shirley Jones, John Raitt, The Joffrey II Ballet, Montovani Orchestra, Western Opera Theatre, Glenn Miller Orchestra, California Shakespeare Festival, Guthrie Theatre, Bella Lewitsky, and others.

Organizations or individuals wishing to use this facility should call the Performing Arts Center Coordinator (760) 245-4271, extension 2440, regarding availability and rental fees.

Restrooms

Restrooms for men and women are located in most main buildings on campus.

Student Activities Center/Community Conference Center

Located on the east side of the lake, this building (Building 44) is a central gathering place for students, faculty, staff and the VVC community.

Included in the center are the Associated Student Body (ASB) offices, Computer Room, RamPage student newspaper office, PTK (Honor Society), Conference Center, Faculty/Staff Dining (Desert Rock Café), S & B Foods (Chinese, pizza, and American dishes), Rams Café (gourmet coffee, teas, pastries, and the famous Seattle Freeze), Foundation Office, and the Rams Bookstore. Campus Police are located in front of the Student Activities Center.

The elevator complex connecting lower and upper campus empties onto the Student Activities Center patio.

Student Services Building 1

A "one-stop" student center for admissions (Building 52), assessment, registration, Bursar (fees) and financial aid.

Student Services Building 2

Located on the east side of the lake (Building 50) just east of the Performing Arts Center. This building includes DSPS, EOPS, CARE, and the ACT Lab. (This building also includes a CIT classroom.)

Telephones and Vending Machines

Public telephones have been placed at several locations around the campus for the convenience of students. Pay telephone locations include the Student Services Building (2), Library, Allied Health Building, Technical/Vocational Complex, Gym, Science Lab Building, Student Activities Center and Humanities Complex.

Telecommunication devices for the deaf (TDD) have been placed on the telephone located in the Student Activities Center.

Vending machines dispensing a variety of food and beverage products are located throughout the campus. School supply vending machines have been placed in the Student Activities Center.

Ticket Information Center

Located near the south entrance to the Performing Arts Center (building 54), just off parking lot 6. Tickets for college sponsored events may be purchased in person, Tuesday – Friday from 10:00 a.m. – 6:00 p.m. or 1 hour prior to performance time. Tickets will be available online beginning in November 2008. For more information about upcoming events call (760) 245-4271 extension 849 (TiX)

III.

ADMISSIONS AND RECORDS

“Learning is not attained by chance, it must be sought for with ardor and attended to with diligence.”

-Abigail Adams
1744-1818

ADMISSIONS

For nearly half a century, Victor Valley College has provided educational opportunities to students with courses and programs of study which meet the diverse needs of students within the entire community.

While most students admitted come from within the Victor Valley Community College District, the college will admit students who live outside the district. Residents of the district may also apply to other California community colleges if they choose. Admissions procedures are basically the same for most students.

However, some programs are considered impacted and may require special procedures and approvals for admission. Impacted programs include the Registered Nursing, Respiratory Therapy, Media Arts and Paramedic programs. The Office of the Dean, Vocational Programs, located in the Voc Ed Building 8A, can provide details regarding application procedures and deadlines for these programs. Directors of the individual programs will also provide application information.

Students who are eligible to attend Victor Valley College should first be admitted to the college, and then register for classes prior to the semester in which they start school.

Eligibility

Admission to Victor Valley College is governed by the laws of the state and such supplementary regulations as have been prescribed by the Board of Trustees.

Students must meet one of the following criteria to be eligible for admission to Victor Valley College:

- California residents who have graduated from an accredited high school, or who have passed the California High School Proficiency Examination or the General Education Development (GED) test;
- Previous students at Victor Valley College who left in good standing and who have not attended another college or university;
- Transfer students eligible to return to the college or university which they previously attended;
- Any apprentice, as defined in Section 3077 of the Labor Code;
- Out-of-state residents who have graduated from high school;
- Foreign students who meet the requirements for foreign student admissions and apply by the current deadlines for foreign student admissions;
- California residents who are at least 18 years old, but have not graduated from an accredited high school or passed a high school proficiency or GED test. These students must have previous training, work experience, or assessment results which demonstrate they would benefit from attending Victor Valley College.

Residency Requirements

As a public community college under California law, Victor Valley College is bound by certain legal requirements pertaining to residence which must be observed. Residence is that location with which a person is considered to have the most settled and permanent connection. It is that place where one intends to remain and where one intends to return during absences. Legal residence results from the union of act (physical presence) and intent. (Ed. Code 68062) Residency determination date is the day before the first day of classes for each semester. Residence rules are as follows:

1. *California residence*: Proof of one continuous residence year in California prior to the above residency determination date is required for purposes of tuition-free education.

2. *Nonresidents and foreign students*: Foreign students may be admitted to VVC provided their applications are approved by the Director of Admissions. A nonresident tuition fee will be charged students who are classified as foreign students and those who do not meet the one-year California residence requirements. The fee is determined by the VVC Board of Trustees.

3. *Member of military*: An active military student must provide the Office of Admissions with a statement from the student's commanding officer or personnel officer that the assignment to active duty in the state is not for educational purposes. The student must also produce evidence of the assignment date to California.

4. *Military dependents*: A dependent natural or adopted child, stepchild or spouse of a member of the armed forces of the U.S. should provide the Director of Admissions with a statement from the military person's commanding officer or personnel officer that the military person's duty station is in California on active duty as of the residence determination date or is outside the continental U.S. on active duty after having been transferred immediately and directly from a California duty station. A statement that the student is a dependent of the military person for an exemption on federal taxes should also be provided.

Authority To Determine Residence

The Director of Admissions is the college official responsible for making residence decisions.

Students who need clarification on their residence status may contact the office of Admissions and Records.

Victor Valley College

Requisito Legal: La ley del estado del California (Código de educación de California, Capítulo Uno, Artículo Uno, empezando con sección 68000-70902) requiere que cada estudiante matriculado o que está solicitando admisión en un Community College de California provea tal información y evidencia según la necesidad de determinar como el individuo se clasifica en cuanto a su residencia. La responsabilidad de la veracidad de la evidencia presentada para probar la condición de su residencia es enteramente del estudiante.

EL PROCESO PARA ESTABLECER RESIDENCIA EN CALIFORNIA

Residencia Física En California

Los siguientes requisitos son usados para determina la presencia fisica en el estado de California:

- Adultos con más de 18 años y son ciudadanos de los Estados Unidos que han declarado su residencia en California por más de un año y un día antes del primer día de instrucciones o de semestre y se ha sostenido independientemente por aquel tiempo y presenta los requisitos de residencia.

- Personas de menos de 18 años que depende de un residente legal del estado de California por más de un año y un día antes del primer día de instrucciones o de semestre de admisión que requiere una clasificación.

NOTA para los que no son ciudadanos de los Estados Unidos:

El esado residencial de los no inmigrantes van hacer evaluados y dependiendo en sus estados o el tipo de visa que tienen se va usar para establecer la residencia en el estado de California y el intento de ser California como residencia permanente. Los estudiantes con las siguientes visas B, C, D, F, H-s, H-3, J, M, O-2, P y Q Y los estudiantes que no viven en los Estados Unidos legalmente no están permitidos a establecer residencia en California.

El Intento de Declara Residencia Fisica en el Estado de California

El periodo de un año empieza cuando uno no solamente está presente en California pero también ha demostrado clara intención de hacerse residente permanente de California. **En solo vivir en este estado por uno año no representa el intento que uno es residente**. Reglas de residencia: Pueden establecer residencia en Callifornia con los siguientes criterios:

- Mostrar una dirección de domicilio en California en los documentos de impuestos estatales.

- Mostrar una dirección de domicilio en California en los documentos de impuestos federales.

- Documentos que demostré la entrada a California en forma de un acuerdo legal (ejemplos: casamiento u divorcio)

- Poseer documentos que son requeridos por las fuerzas armadas y que demostré el estado de California como residente

- Obtener una licencia de California para práctica profesionalmente

- Registrarse para votar y votar en California

- Mantener California como su estado legal de residencia en el formulario W-2

- Establecer y mantener activas y abiertas cuentas bancarias en California y con su dirección postal (Apartado Postales no se permiten)

- Poseer propiedad donde se reside o continuamente ocupar propiedad alquilada en California

- La tarjeta de registro del *SELECTIVE SERVICE* con una dirección postal en el estado de California

- Facturas de cuentas de servicios como de gas, agua, electricidad y teléfono y que tienen un periodo de un año antes de ingresar

- Poseer documentos por el estudiante como residente que han recibido ayuda de rehabilitación, desempleo, welfare, u otros servicios estatales

- Poseer placas de un vehículo motorizado y registro del mismo en California

- Poseer una licencia de conducir de California

NOTA: Se requiere **dos** de los documentales menionado, uno con la fecha de un año y un día antes que empieza el semestre o secesión que usted piense ingresar y el segundo puede ser reciente.

Miembros de las Fuerzas Armadas y/o Dependientes

El colegio de Victor Valley College va a clasificar a los miembros de las fuerzas armadas que no son residentes de California y que están estacionados in California en estado activo como residentes. Sólo se necesita una tarjeta de identificación y que indica que están en un estado de servicio activo. El estado de estos estudiantes será verificado semestre por semestre.

Los dependientes de los miembros de las fuerzas armadas y que no son residentes del estado de California serán clasificados como residentes mientras el miembro de las fuerzas armadas esta estacionado permanentes en California.

Special Part-time Students/Special Full-time Students

K-12 students may be admitted as concurrently enrolled students if they:

- Apply as special part-time students who would benefit from advanced scholastic or technical study and have the approval of the principal of the school they attend and the approval of their parents, or
- Apply as special full-time students who would benefit from advanced scholastic or vocational study and have the approval of the school board in the area in which they live and the approval of their parents.

Admission By Petition

Students on academic or progress dismissal may be admitted to Victor Valley College by petition through the Counseling Office.

This includes both students on academic or progress dismissal from Victor Valley College and students who have attended other colleges and universities.

Out-of-state residents who are under 18 years old and have not graduated from an accredited high school or students who have passed the GED test also must petition for admission.

Petitions must be submitted to the college Petitions Committee prior to the beginning of classes. Students must demonstrate that they can benefit from enrolling in further course work.

Students admitted by petition may have limitations placed on their class loads, be required to enroll in prescribed courses, or have their attendance and academic progress monitored.

International Students

All international students must be at least 18 years of age at the time of registration for classes.

An international student attending on a nonimmigrant student visa (F-l) is required by the United States Immigration and Naturalization Service to maintain full-time student status. This requires a completion of a minimum of 12 units for each semester in attendance.

A certificate of eligibility for nonimmigrant (F-l) student status will be issued by the Admissions Office only after the following documents are received and approved:

1. F1 Visa Student Agreement
2. Application for Admission
3. Financial Certification
4. A score of 500 written or 173 computer based or higher on English proficiency tests such as the TOEFL
5. Health Questionnaire
6. High School Transcripts
7. College Transcripts (if applicable)

Fees set by the California Board of Trustees must be paid in advance.

For further information, please contact the office of Admissions and Records.

REGISTRATION

Registration is the process of becoming officially enrolled in college.

Properly completing all steps of the most current registration process is the responsibility of the student.

Students who have expressed an interest in Victor Valley College should obtain a Schedule of Classes or view the schedule at www.vvc.edu prior to the beginning of each semester.

Victor Valley College's current Schedule of Classes for the fall, winter, spring, and summer terms contains complete instructions on how to register using *RamTalk/Web* Registration.

Students (other than K-12) may register for classes using *RamTalk*, the phone-in registration system, or by using the registration link through our website: www.vvc.edu. A *RamTalk/Web* Registration Help Line is available for assistance or questions. Call on any scheduled *RamTalk/Web* Registration day (760) 245-4271, extension 2354.

Registration and other deadline dates are available in the Schedule of Classes and on our website.

Students who do not properly complete the registration process, cannot be admitted to classes or receive course credit.

Registration is a privilege and may be withheld if a student has outstanding loans, unpaid parking fines, returned checks, library fines, or has not returned physical education materials and/or equipment or has other outstanding financial obligations to the college.

Students who experience academic difficulties may also be limited as to the number and types of courses in which they will be permitted to enroll.

Student Registration Priorities

To ensure open access to classes for students on a first-come, first-served basis, students are scheduled for registration based on the following priority:

1. Continuing/New/Returning EOPS/Disabled students
2. Victor Valley College ASB Council members, Work Study students, student athletes, current high school graduates, Phi Theta Kappa members, military veterans, PACE program students
3. Victor Valley College continuing students
4. New and returning fully matriculated students

5. New/returning/transfer students
6. Special part-time students (K-12 Concurrent Enrollment)

Requirements For Registration

The Office of Admissions and Records must receive all required materials prior to registration at Victor Valley College. Required materials include:

- A completed admissions application and statement of legal residence to the college. Apply online at www.vvc.edu.
- For veterans, receipt of a copy of honorable discharge papers or DD 214. Veterans or military personnel on active duty should submit certificates of completion of courses in the military after completion of 12 units at Victor Valley College.
- Applicable International Student forms.
- Establishment of California residency, without which nonresident tuition must be paid (see Non-Resident Tuition section in Section VI-Financing Your Education).
- The completion of all admissions procedures, orientation, assessment, and program advisement requirements, except for the exemptions noted in class schedules.
- Concurrent Enrollment Form (K-12)
- Students (other than Concurrent K-12) may register for a maximum of 18 units for either fall or spring semester. Concurrent K-12 students may register for a maximum of 11 units for either spring or fall semester. All students may register for a maximum of 8 units for the winter or summer session.

To complete the registration process, all forms must be completed and all required fees paid.

Priorities for registration are determined at the time of admission to Victor Valley College.

Adding and Dropping Classes

It is the student's responsibility to complete the drop and/or add process.

Students who want to drop or add a class should do so as soon as possible after classes begin.

Forms to drop or add a class are available at the Office of Admissions and Records. Students may also use *RamTalk/Web* registration at certain times during the Registration cycle to process adds and/or drops.

If a class has **full** enrollment and is closed to **registration,** a student must obtain the instructor's permission with a signed add form, which must be brought to Admissions and Records for processing.

Refer to the Add/Drop policy and Important Dates and Deadlines in the current schedule of classes.

Transcripts for Admissions

Transcripts from other colleges and universities must be received by the Office of Admissions and Records no later than the end of the first semester of attendance.

Transcripts received become the property of Victor Valley College and cannot be returned to the student or forwarded to other schools.

Courses, units, and grades which are accepted from other accredited colleges and universities will be applied toward the completion of academic degrees or certificates of completion at Victor Valley College.

Transcripts from foreign schools or universities must be evaluated by an approved credential evaluation service.

Prerequisites, Corequisites, Advisories

Victor Valley College enforces the prerequisites, corequisites, and limitations on enrollment which have been formally established and are listed in the class schedule and college catalog. In some cases students will be responsible for submitting at the time of admission, documentation that they have met all prerequisites. If you attempt to enroll in a course but do not meet the enrollment conditions, you may be dropped from the course.

1. A "Prerequisite" is a course or other condition of enrollment which a student must meet with a grade of "C" or better before enrolling in a course or program.
2. A "Corequisite" is a course which a student must take simultaneously in order to enroll in another course.
3. An "Advisory" or recommended preparation, is a course or other condition of enrollment which a student is advised, but not required to meet, before or concurrent with enrollment in a course or program.
4. "Limitations on Enrollment" are conditions for enrollment in honors courses or courses which include public performance or intercollegiate competition.

Any student who does not meet a prerequisite or corequisite, or who is not permitted to enroll due to a limitation on enrollment, may seek entry into the class through initiating a challenge based on one or more of the following reasons:

1. The prerequisite, corequisite, or limitation on enrollment violates VVCC District Policy 5109.
2. The prerequisite, corequisite, or limitation on enrollment violates Article 2.5 of Title 5 of the California Administrative Code.
3. The prerequisite or corequisite is unlawfully discriminatory or is being applied in such a manner.
4. The student has the knowledge or ability to succeed without meeting the prerequisite, corequisite, or limitation on enrollment.

5. The prerequisite or corequisite has not been made reasonably available and the student as a result will be subject to undue delay.

6. A limitation on enrollment will delay by at least one semester the attainment of a degree or goal specified in the student's Education Plan.

7. Enrollment will not pose a threat to the student or others in a course with a health and safety prerequisite.

The Challenge Process requires the approval of a fully completed Challenge Form available from the Dean of Students Office. Challenges involving academic qualifications, health and safety, or noncourse prerequisites such as interview or recency require approval of the chair of the department in which the course is offered. Challenges based on unlawful discrimination require approval by the VVC Affirmative Action Officer.

Complete and documented Challenge Forms must be submitted by June 30 for the fall semester, October 15 for the spring semester, and April 15 for the summer term. Late challenges will be considered but enrollment will not be guaranteed pending their resolution. For more details contact the Office of Admissions and Records or Executive Dean of Student Services.

IV.

SERVICES FOR STUDENTS

“Education is not preparation for life: education is life itself.”

-John Dewey
1859-1952

BASIC SKILLS

The Basic Skills program is housed in the Humanities Center on the lower campus. Ten Basic Skills courses provide students with the foundational skills in reading, writing and mathematics need to complete further introductory college courses. These courses are one credit, open entry/open exit and allow the student to work at his or her own pace. Basic skills courses do not apply to the Associate Degree. All students registered for Basic Skills courses must attend an orientation before they undertake their work.

Maximum Units in Remedial Classes

Students at Victor Valley College are eligible to enroll in a cumulative maximum of 30 semester units of remedial classes including reading, writing, mathematics, learning skills, and study skills courses. For example, the Basic Skills Program includes 10 one credit courses which would count as remedial level work. Remedial classes also include English as a Second Language (ESL) courses which are designed to ensure acquisition of skills necessary for completion of associate degree, transfer, and technical courses.

Students identified by the district as being learning disabled are exempt from the 30-unit maximum. Students with other types of disabilities may be exempted on a case-by-case basis.

Waivers of this policy may be made for students who show significant, measurable progress toward the development of skills appropriate to their enrollment in college-level courses, yet need limited course work beyond the 30 semester unit limit. Significant and measurable progress is defined as completion of precollegiate basic skills classes with grades of “C” or better, or a grade of “credit” if the course is categorized as mandatory credit/non-credit.

The Petitions Committee is granted the authority to issue Remedial Semester Unit Limitation waivers.

Unless provided with a waiver, students who do not attain full eligibility status for college-level work within the prescribed 30 semester unit limit are to be dismissed and referred to adult non-credit education courses.

Dismissed students may petition for reinstatement for the purpose of enrolling in college-level course work upon successful completion of appropriate adult noncredit classes or upon demonstration of skill levels which can reasonably be expected to assure success in college-level courses.

CAREER CENTER/TRANSFER CENTER

Students interested in obtaining career information or transfer options should visit this unique multifaceted center.

Career Center

Trained staff, utilizing computerized guidance programs and professional publications, will assist you with career research.
An extensive library of career related material can be used to discover career alternatives and identify your educational goals.

Transfer Center

The Transfer Center provides interaction with four-year institutions for those students who wish to continue their education. Appointments with CSUSB, UCR, and other university representatives are available on a regular basis. An annual College Fair is held in the Fall. Computers are available for applying to the four-year colleges on line, and locating education programs nationwide.

The Career/Transfer Center is located in the Counseling/Administration Building. The Center is open Monday through Thursdays, 8:30a.m. to 7:00p.m. and Fridays, 8:30a.m. to 3:00 p.m. For further information, call (760) 245-4271, extension 2447.

COOPERATIVE AGENCIES RESOURCES FOR EDUCATION (CARE)

An educational support program for single parents over 18 years of age. CARE has been funded by the state of California since 1989. CARE is educationally emphasized to enhance employability, increase confidence, elevate self-esteem and promote self-sufficiency to make possible the transition from welfare to independence.

Services include: financial aid grants-child care, books, and/or transportation, school supplies, typing services, study room, and personal educational options development counseling. Referrals and liaison to on-campus and community agencies. Support programs include: group weekly meetings, family day, adults day, and the “famous” Wall of Encouragement.

To qualify for CARE, a single parent must be eligible and active with the EOPS program and must be enrolled in twelve units, and have applied for financial aid. You must be considered single and head of the household by AFDC/TANF or CalWORKs and have at least one child under the age of fourteen.

To apply either attend the CARE Intake/Orientation or view the Intake/Orientation video. To find out more, come to the CARE office located in the Student Services Building 2. Office hours are Monday through Friday, 8:30a.m. to 5:00p.m.

COUNSELING SERVICES

Counseling services are available to all students. Students are invited to come in for confidential help in strengthening academic performance, selecting an educational major, developing educational and career plans, solving situational problems, and improving self understanding.

Career Planning

Counselors can assist students with exploring career options. Students are also encouraged to enroll in a career planning class, GUID 100. This educational planning class helps students discover their own interests, attitudes, and values and will help them make an initial career choice.

Academic Counseling

Counselors are available to help students plan their long and short-term educational careers.

Advice on setting educational goals and matching classes to a student's particular needs are some of the types of guidance to be obtained through academic counseling.

Information on the college's requirements for certificates of achievement and A.A. or A.S. degrees is available, as are transfer requirements to other schools.

Social/Personal Development Counseling

All through life, people must fit into society at work and in their leisure time.

To make this process easier for students, the college offers both individual consultations with a counselor and special group sessions through the personal development courses, such as GUID 59, 100 and 105 (see course descriptions in Section IX).

The college maintains a staff of professionally educated counselors to serve its students. Counseling services are available to every student and member of the college community. With professional counselors, students may explore freely and in confidence concerns which are important to them.

DISABLED STUDENTS PROGRAMS and SERVICES (DSPS)

Disabled Students Programs and Services provide individualized accommodations and services to students with various disabilities who are determined eligible for the program. Students with disabilities which will impact their academic experience at Victor Valley College and who want to receive services must apply at the DSPS office. Students will be asked to provide appropriate documentation to verify their disability. The campus of VVC is accessible to students with mobility impairments. Department of Motor Vehicles (DMV) placards or disabled plates are required along with a current VVC student permit for the use of disabled parking. The DSPS is located in Student Services Building II, Bldg. #50.

Who may be eligible?

Currently enrolled students with disabilities which impact them academically may be eligible for DSPS services. Examples of disabilities, which may impact the academic experience, are:

- **Learning Disabilities Program**
  Students with learning disabilities typically have average or above average intelligence, but experience difficulty processing information. For these students, information becomes "scrambled" as it is taken in through the senses, carried to the brain, stored, or expressed through speech and writing.

- **Physical or Other Disabilities**
  Eligible students include those with mobility impairments, visual and/or hearing impairments, acquired brain injuries, back injuries, diabetes, heart conditions, psychological disabilities, or any other physical impairment, which interferes with academic functioning.

What types of services does DSPS offer?

DSPS offers a wide variety of accommodations and services including specific academic support for students with learning disabilities, as well as individualized training in the use of adaptive computer technology in the Adaptive Computer Technology Center.

- **Adaptive Computer Training Center**
  The primary purpose of the ACT Center is to teach needed adaptive technology skills to individuals with disabilities. The acquired skills will empower these students with disabilities to work independently on computers at home, at work, and in campus labs, classrooms, and the library.

- **Accommodation Services**
  Eligible students will meet with a DSPS counselor or Learning Disabilities Specialist/Counselor to determine individualized accommodations required. Accommodations may include, but are not limited to: alternative testing, academic and vocational counseling, priority registration assistance, text in alternative format, note taking assistance, sign language interpreters, ACT Center referral, study skills instruction, equipment loans, liaison with faculty, and referral to public agencies.

- **DSPS Courses**
  DSPS also offers courses in the area of disability related issues designed to provide information, support, and strategies to students with disabilities. These include:

1. Guidance 70, "Alternative Learning Strategies ," which provides students with learning disabilities the opportunity to identify their individual learning styles and to investigate compensatory learning strategies.

2. DVST 1, 2, 3, "Language Analysis Development," which provides activities designed to address language based learning disabilities.

EXTENDED OPPORTUNITY PROGRAM AND SERVICES (EOPS)

Extended Opportunity Program and Services (EOPS) (a state-funded program) provides book service, priority registration, tutoring, career counseling, student assisting, and other support services to disadvantaged Victor Valley College students.

To be eligible for EOPS, a student must be a resident of California and be enrolled in at least 12 units of classes for Fall and Spring and 4 units for Summer and Winter, but not have received an associate's degree (AA/AS) or completed more than 70 degree applicable units from any college, including Victor Valley College. Students must also be qualified for the Board of Governors Waiver A or B (financially disadvantaged) and be educationally disadvantaged based on Victor Valley College Assessment Scores.

To become eligible for EOPS, students must submit an EOPS application to the EOPS Office located in the Student Services Building 2. Office hours are Monday through Thursday from 8:30a.m. to 5:00p.m. and on Friday from 8:30a.m to 2:00p.m.

TRiO STUDENT SUPPORT SERVICES

The goal of the TRiO Student Support Services (SSS) program is to increase the college retention and graduation rates of under represented students and to facilitate their transition to a four-year college. Eligibility is determined by low income/first generation status and the need for academic support..

Program services include:

- Grant assistance for eligible students
- Academic, personal and financial aid counseling
- Career counseling and planning
- Individual tutorial services
- Use of computer lab to complete homework, receive tutoring and conduct financial aid, academic and career research
- Peer mentoring
- Workshops in personal and academic success
- Opportunities to visit colleges and participate in cultural activities

How to apply to the program:

Students must first be enrolled in at least 9 units.

1. Obtain an application packet from the Student Support Services (SSS) office or website.
2. Complete the application and schedule an appointment with the SSS counselor.
3. Office hours are M-F, 8:30 a.m. – 5:00 p.m.

LANGUAGE LAB

Our language programs focus on developing reading, writing and audio-oral communication skills in French, German and Spanish. The software available in the language lab supports the students language acquisition by offering a variety of exercises (grammar, written and oral expression, and listening comprehension) which allow them to practice the subjects learned in the classroom. Among the most important features the language lab offers to the students in developing their linguistic competence and achieving their academic goals are listening to the target vocabulary as many times as individual needs require, practicing the grammatical structures at their own pace, improving their test results by receiving immediate feedback, and voice recording.

For additional information see Foreign Languages Web page or call (760) 245-4271, extension 2655.

STUDENT ACTIVITIES

Many activities and services are available to students who attend Victor Valley College.

College services help facilitate each student's educational career and should make college life more pleasant and productive while students pursue their educational goals.

Student Body Privileges

Every student enrolled at Victor Valley College is a member of the student body and is entitled to participate in both academic and extracurricular activities at the college.

The Associated Student Body (ASB) is the organization which constitutes official membership in the community of students at Victor Valley College.

ASB fees are $10 for all students. These fees are used to support the Athletic programs, Theatre Arts productions, student events and also afford the student availability to scholarship programs, community discounts and access to the ASB Computer Lab.

Students receive an ASB card which entitles them to FREE admission to all VVC Dance, Music & Theater Arts performances and discounts to other activities and free copies of the Victor Valley College newspaper/newsletter and other campus publications such as the college viewbook. The College Web Page address is: www.vvc.edu.

In addition, ASB card holders are eligible to be employed by the Associated Students, to compete for Associated Student awards, scholarships, and to hold office in student government.

Student Clubs

Clubs for students with a variety of special interests are an on-going part of campus life at Victor Valley College. A complete listing of clubs is available from the Office of the Associated Student Body (ASB).

Students interested in a particular activity find that campus clubs are a good way to meet other students and share ideas and information.

Interested students may join a club of their choice by contacting the club's president or advisor.

Among the clubs now in existence are the PTK Honor Society, Model United Nations, Gay Straight Alliance, CNSA, Nursing Proc. 4 Club, GSA, EMT Club, Ready Rams, Theatre Club, Art Club, Biology Club, Cornerstone Christian Club, AWARE (Adults Who Are Returning to Education) Club, and the Rambassadors.

The VVC Rambassador Program is a student organization aimed at enhancing existing community outreach through campus tours, college fair exhibits and group presentations—all from a VVC student perspective. Current VVC students volunteer their time and energy by sharing their experiences with prospective students at high schools and other area community agencies or businesses. They may also participate in the peer support component, which serves to assist fellow continuing students with their acclimation to college life. Dedicated Rambassador volunteers often make excellent candidates for paid leadership positions in the club. Whether as a leader or a volunteer, Rambassadors enjoy many benefits, such as tee-shirts and other exclusive Rambassador logo gear. More importantly, they gain an intrinsic reward from helping others reach their goals, while learning acute professional skills.

Student Government

As members of the Associated Student Body of Victor Valley College, all students are eligible to vote for student representatives to student government and to participate in the government of their campus.

Elections for the ASB Council are held in the spring of each year. ASB election information is available through the ASB office located on the 2nd floor of the Student Activities Center. ASB Council meets on a regular basis and determines social policies and program activities for students at Victor Valley College. Students on campus are encouraged to bring matters of interest before the council or to sit in on student council meetings.

According the ASB Constitution, ASB students who are taking six or more units with a cumulative grade point average of 2.0 are eligible to run for office or be appointed to student government positions.

The student council's executive board consists of a President, Vice President, Executive Senator, Secretary and Treasurer.

A number of student senators sit on the student council as representatives of various departments on campus.

ASB Council members have membership on governance committees that have a significant effect on students.

If you would like to learn more or become involved, please call (760) 245-4271, extensions 2331, 2278 or 2378

STUDENT EMPLOYMENT OFFICE

The Student Employment Office at Victor Valley College offers employment resources, job referrals, and job placement services to students. Our mission is to assist Victor Valley College students with the opportunity to gain work experience and marketable skills in their field of study.

The Student Employment Office staff is sensitive to the needs of students and employers, and is committed to a program of personal attention to both participants.

The Student Employment Office focus is one of matching interests, training, and work history of the student to the job qualifications listed by the employer.

Services Include

- Student Employment Service
- Job referrals
- On-line job search
- Interview techniques
- On-campus interviews
- Off-campus interviews
- Computerized resume building
- Federal Work Study Placements
- Paid and no-paid internships

THE WRITING CENTER

Located in the Humanities Center (80-5), the Writing Center instructional assistants and student tutors are trained to work with students in a variety of writing tasks, including generating ideas, focusing on topics, adding support, organizing ideas, revising essays, researching ideas, documenting research, as well as recognizing grammar, punctuation, and spelling errors.

Software programs, word processing, and reference texts are available to help students. Tutors can also instruct in computer operations. Students from all disciplines are welcome. For information on services and hours of operation call (760) 245-4271, extension 2607. For those students not regularly on campus, visit our website for writing information and online tutoring: www.vvc.edu/writingcenter/index.htm.

V.

MANAGING YOUR EDUCATION

“Man must acquire wisdom and knowledge in order to express himself and reach decisions.”
“Man must acquire the skill to transfer ideas and judgments into action.”
“Man must seek morality, goodness, and virtue.”

-Hesiod, 753-608 BC
‘The History of Educational Ideas In The West’
Chapter 1, pgs 15, 16

MATRICULATION

Matriculation is a process that brings a college and a student who enrolls for credit into an agreement for the purpose of realizing the student's educational objective through the college's established programs, policies, and requirements. As a student you have certain rights and responsibilities, and as an institution of higher learning, Victor Valley College has some obligations to you. Here is a brief overview of some of these factors.

VVC agrees to. . .

- provide admission and registration services
- provide assessment services
- orient you to college programs, services and policies
- provide assistance in selecting courses and defining an educational major and plan
- provide support services and provide quality instruction
- provide appropriate follow-up and referral services

VVC students agree to. . .

- declare a broad educational goal on initial enrollment (transfer, AA. . .)
- participate in assessment and orientation and have all prior transcripts sent to VVC
- read the Catalog, Schedule of Classes, Student Handbook and other college materials
- meet all course prerequisites, corequisites and limitations
- attend the first class session of each class and regularly attend all classes
- properly add and drop all classes
- complete class assignments
- develop an Educational Plan and choose a specific educational major by the completion of 15 units
- seek support services as needed
- make progress toward your goals by successfully completing classes
- follow all campus rules and regulations.

Matriculation Steps

The objective of Matriculation is to attain your goals in education by defining an agreement between you and the college. Responsibilities are established that utilize the programs and resources of VVC to efficiently complete certificate or degree programs.

APPLICATION - Complete VVC admission application and turn in to Admissions and Registration or process admissions online. Notify previous colleges to send transcripts to VVC.

ORIENTATION - Computerized orientation is available to familiarize you with VVC policies, programs, and services.

ASSESSMENT - Complete the computerized Assessment /Placement process for reading, sentence skills and math as one component of course selection.

Assessment Exemptions: If one of the following conditions applies to you, you may choose not to complete the Assessment and/or Orientation. Provide documentation supporting your exemption to the Counseling Office.

- You have received a degree from an accredited college.
- You completed Intermediate Algebra equivalent to Math 90 and English Composition equivalent to English 101 at an accredited college.
- You have completed the Computerized Placement Test at another California Community College within the last three years.
- You will enroll in only non-credit classes (Adult/Continuing or Community Service).
- You are completing coursework for self-improvement (non-degree seeking).

Other factors considered in the selection of courses include study habits, certainty of educational goals, specific skills, emotional well-being, employment, family or other commitments, family support, health, maturity and motivation, self assessment, and education history, etc.

You have the right to challenge your Assessment Placement results and course recommendations. See page 23 for additional information.

- COUNSELING - Make an appointment with a VVC Counselor to discuss course selection, choosing an academic major, and developing an Educational Plan which lists the courses you need to meet your academic goal. The major and Ed Plan should be developed no later than the completion of 15 VVC credits, and may be revised as needed. Counselors can also assist with personal issues and career choice (as can the Career Center). Also, consider taking the following Guidance courses:

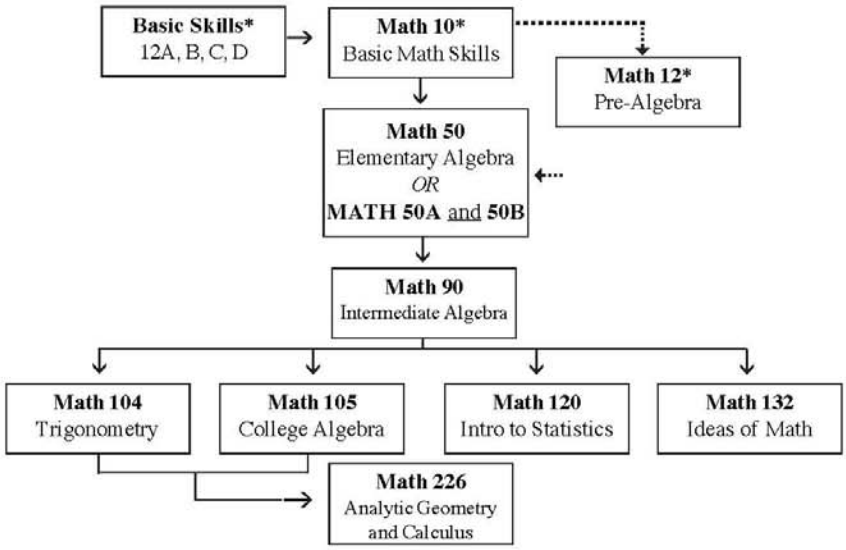
GUID 50	College Success
GUID 51	College Orientation
GUID 59	Reentry Issues for Personal Development
GUID 59	Self Esteem and/or Math Confidence
GUID 100	Career Planning
GUID 101	First Year Experience
GUID 105	Personal and Career Success
GUID 107	Learning Strategies

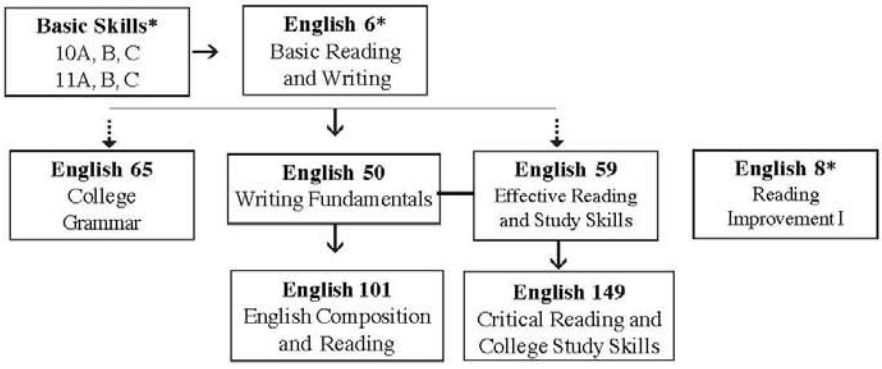
HERE IS WHAT YOUR ASSESSMENT SCORES MEAN!

Everyone enters college with different levels of skill and experience in English, reading and math. Your assessment scores are one indicator of your level in each of these areas. Among the other factors to consider are what classes you took in high school, how well you learned that material, what you've done since high school, and your commitment to your educational goals.

The following tables show course sequences. Start at the level you place into on the assessment test, and move through the courses as needed for your particular objective.

Math Course Sequences





**These courses do not count toward the associate degree.*

Important College Information Sources

Students should be familiar with the following sources of information about VVC:

SCHEDULE OF CLASSES - Each fall, winter and spring semester and summer intersession, VVC publishes a Schedule of Classes of what will be offered during that term. The schedule shows the course description, day, time, and location of each class. It also lists important campus policies. Schedules are posted on our WEBSITE at www.vvc.edu.

Challenge to Matriculation Policies

Students may appeal any portion of the matriculation policies (other than prerequisites, etc.) by contacting the Executive Dean of Student Services Office. The policy for challenging Corequisites, and Advisories is listed on page 25. This includes claims that the process is unlawfully discriminatory or is being applied in such a manner. The Dean will conduct a timely review and make such adjustments as are appropriate. A record of all complaints will be maintained in the Dean of Student Services for three years.

Reto a la Política de Matriculación

Estudiantes pueden hacer una petición sobre cualquier parte de la política de matriculación (menos los requisitos) dirigido al Decano de Servicios Estudiantiles. Esto incluye reclamos acerca del proceso discriminatorio. El Decano va a conducir una revisión para hacer algunos ajustes que sean apropiados. Un record de los reclamos será mantenido en la oficina del Decano de Servicios Estudiantiles por tres años.

Units and Credits

One "unit" of credit represents one lecture hour per week, or three hours in a laboratory.

Students are considered full-time students if they take 12 or more units per normal 16-week semester, 6 units during an 8-week term, or 4 units during winter or summer sessions.

A common schedule is 15 college units per semester. With a normal course load, students may expect to devote 2 hours study time for every unit to support academic success equaling approximately 45 hours per week.

Students are limited to a maximum of 18 units per fall or spring semester. Concurrent students are limited to 11 units, and cannot petition. All students are limited to a maximum of 8 units per winter or summer session.

An exception is sometimes granted if a student has achieved a grade point average of 3.0 (a "B" average) or better and a request to take additional units is approved by the college Petitions Committee.

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 Department 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.

Final grades are issued after the close of each term. The student has two years following the semester in which the grade was recorded to request a change of grade or to request any corrections to the academic record in which the grade was never awarded. After the two-year limit, the grade, or any other corrections of the academic record are no longer subject to change.

Grade Points

Cumulative grade point averages are calculated by dividing the total number of **grade points** by the total number of **units attempted**. For the academic record, calculations are made on a semester and on a cumulative basis.

Here is the system of evaluative grade symbols and grade points currently in effect:

Grade Symbol	Explanation	Grade Points
A	Excellent	4.0
B	Good	3.0
C	Satisfactory	2.0
D	Passing	1.0
F	Failing	0.0
FW*	Unofficial Withdrawal	0.0

*Note: An "FW" grade is issued when a student has both ceased participating in a course sometime after the last day to officially withdraw from the course without having achieved a final passing grade, and that the student has not received district authorization to withdraw from the course under extenuating circumstances.

OTHER SYMBOLS: **(NOT CALCULATED INTO GPA)**

CR Credit (not counted in GPA, equivalent to "C" or better)
NC No Credit (not counted in GPA, less than "C")
I Incomplete
W Withdrawal from class
IP In Progress—Class extends beyond the end of the academic term. Remains on the permanent record to satisfy enrollment documentation but is replaced by the grade and unit credit when the course is completed. Not used in calculating GPA.
RD Report Delayed—Assigned by the Registrar when the assignment of a grade is delayed due to circumstances beyond the control of the student. This is a temporary symbol, not to be used in calculating GPA, and to be replaced by a permanent grade as soon as possible.
MW Military Withdrawal—The "MW" is to be assigned for students who are members of an active or reserve military service and who receive verified orders compelling a withdrawal from courses. The "MW" symbol is not counted in Progress Probation and Dismissal calculations.

Satisfactory Standing

Each student's work is considered to be satisfactory if an average of 2.0, or "C" or better, is maintained.

Attendance

Students are expected to attend their classes regularly. Failure to attend the first class session may result in the student being dropped.

Failure to attend class jeopardizes not only a student's grades but the learning potential of the other students who were unable to gain access to the class due to enrollment limits.

The class instructor has the right to terminate a student's enrollment when a student is absent for more than one hour for each unit of class credit.

Authority of Instructors

According to Education Code Section 76032, faculty members have the authority to manage their classes and classrooms and to maintain an acceptable level of conduct within each class.

Faculty may suspend students from class for up to two consecutive class meetings for misconduct which disrupts the class.

Students suspended from class may not return to class during the time they are suspended unless permission to return is granted by the instructor.

Instructors must complete an incident report on all suspensions and forward the form to the Executive Dean of Student Services.

Withdrawal From Class

It is the student's responsibility to initiate the withdrawal or drop procedure in a timely manner. Don't just not show up! Don't just disappear! Non-attendance does not drop the student from a class or classes. A drop form must be completed and processed by the Admissions and Records office for a drop or withdrawal to be official. (***RamTalk/Web*** **can also be used for drops at certain times during the registration cycle**.) Drop forms are available in the Student Services Building.

Withdrawals should be initiated prior to the semester's first census day. Students may withdraw from classes of less than a semester in length during the first 20 percent of the class. In these situations, a "W" will not be recorded on a student's academic record.

Student or instructor initiated withdrawals beginning the third week of classes and before the twelfth week for semester classes, or through the first 66 percent of class for other classes, will be recorded as a "W" on student transcripts. Students who do not withdraw by this time are grade obligated and cannot receive a "W."

In case of accidents, illness, or other circumstances beyond the control of the student, withdrawals may be initiated by petition after the designated time limit. Forms for this petition procedure are available in the Office of Admissions and Records in the Student Services Building. Approved petitions will result in a "W" recorded on academic records.

Academic Renewal Policy

Academic renewal is a process whereby a student's previous academic work of substandard quality is disregarded to facilitate the completion of requirements necessary for an academic degree, certificate, or transfer. A student whose current performance is demonstrably superior to a prior level of accomplishment may petition for academic renewal. The following conditions apply:

- The student may petition for academic renewal for not more than 24 semester units of work completed at VVC.
- The student must submit evidence that the previously recorded work was substandard and thus not reflective of current academic ability. Any of the following criteria will be accepted as evidence of current satisfactory academic performance.
  12-17 semester units with at least a 3.00 GPA
  18-23 semester units with at least a 2.50 GPA
  24 or more semester units with at least a 2.00 GPA

This more current coursework may have been completed at VVC or at other institutions.

- At least 24 months must have elapsed between the end of the semester in which the most recent disregarded academic work was completed and the submissions of the petition.
- A student may request academic renewal only once.
- Only "D," "F," and "NC" grades can be disregarded through academic renewal.
- The student's permanent record is annotated to remove the "D" and/or "F" grades from the calculation of the GPA. However, all work remains legible on the permanent record to ensure a true and complete academic history.
- The student should be aware that other institutions may have different policies regarding academic renewal and may not honor this policy.

Information on this policy is available from the Office of Admissions and Records.

Course Repetition

Per Board Policy 4225 and Administrative Procedure 4225, repetition of courses is subject to the following conditions:

1. Substandard Grades ("D", "F", "FW", "NC")
   a. A course may be repeated when the grade earned was substandard ("D", "F", "NC") or the grade earned was a "W".
   b. Upon completion of a repeated course in which a substandard grade was earned, the most recent grade will be computed in the cumulative grade point average. The previous grades and credit shall be disregarded in the computation of grade point average.
   c. A student can repeat a course only one time to alleviate a substandard grade. A student must petition to repeat a course a second time. If approved, all grades for any subsequent repetitions will be calculated in the cumulative grade point average. State apportionment cannot be claimed for subsequent repetitions.

2. Satisfactory Grades ("C" or better)

Only under specific conditions can a course be repeated in which a satisfactory grade ("C" or better) was earned.

   a. The student is repeating a course after a lapse of 5 or more years (must be requested and approved through the petition process).
   b. The student is repeating the course to meet legally mandated training requirements as a condition of continued employment or the course is required for recertification in a technical or medical field (must be requested and approved through the petition process).
   c. Special classes for students with disabilities can be repeated if appropriate as a reasonable accommodation for a disability (must be requested and approved through the petition process).
   d. In special circumstances where the student needs to acquire knowledge or skills in order to progress to the next higher level course work (must be requested and approved through the petition process).
   e. Changes have been made in course content since the course was completed (must be requested and approved through the petition process).

In the case of an approved petition to repeat a course for which a satisfactory grade ("C" or better) grade was originally awarded, only the original (first) grade is calculated in the cumulative grade point average.

3. "W" Grades
   a. A student can receive a maximum of two "W" grades for any course. After two "W" grades a student must petition to repeat the class again.
4. Repeatable Courses
   a. Certain courses are repeatable for credit and are so designated in the college catalog.
   b. Substandard grades for repeatable courses may be alleviated according to section 1. above. However, once the maximum number of enrollments has been reached, the student must petition to repeat the course again.
5. Annotating the permanent academic record shall be done in a manner that all work remains legible, insuring a true and complete academic history.
6. Nothing can conflict with Education Code Section 76224 pertaining to the finality of grades assigned by instructors, or with Title 5 or district procedures relating to retention and destruction of records.

Credit/No Credit Grade Option

Some courses may be taken for Credit or No Credit, which is recorded as a "CR" or "NC" on transcripts.

According to California regulations governing community colleges, a grade of "CR" is not counted in calculating a student's cumulative grade point average but is equivalent to a "C" or above. One or more grades of "NC" can be a factor in progress probation and dismissal.

For students working toward an associate degree, no more than 15 units of credit for CR/NC classes or courses may be taken at Victor Valley College.

Students who plan to transfer should note that the number of CR/NC courses they may transfer is determined by the policies of the particular college or university.

Students who wish to transfer have a responsibility to investigate the policies of colleges and universities in which they may be interested and to determine if particular courses taken for CR/NC will be accepted for transfer credit there.
Students should note that some graduate schools also do not look favorably on CR/NC grades.

Students who do elect to take the CR/NC grade option for a course should declare their intent by delivering a signed credit/no credit grade option form to the Office of Admissions and Records. Students should remember that their decision to take a course for CR/NC may not be changed after 30 percent of the class term has passed.

The deadline for electing to take a course for CR/NC is the end of the fourth week of an 16-week semester or the end of the second week for eight-week classes.

Incomplete

Incomplete academic work for unforeseeable, emergency, and justifiable reasons at the end of the term may result in an "I" symbol being entered in the student's record. The condition for removal of the "I" is stated by the instructor in a written record. This record is given to a student with a copy on file with the registrar until the "I" is made up or the time limit has passed. A final grade is assigned when the work stipulated has been completed and evaluated, or when the time limit for completing the work has passed.

The "I" may be made up no later than two weeks prior to the end of the second succeeding semester except that a student may petition for a time extension due to unusual circumstances.

The "I" symbol is not used in calculating units attempted nor for grade points, but may be a factor in probation and dismissal.

Students may not re-register for the course in order to make up the incomplete.

Auditing

Auditing of classes is only permitted within these provisions:

1. Cost of audit is $15 per unit per semester.

2. Students enrolled in less than ten units will be charged the maximum audit fee allowed ($15 per unit per semester).

3. Students enrolled in ten or more semester units will be permitted to audit up to three units at no charge.

4. Students auditing courses cannot change enrollment status to receive credit for those courses.

5. Priority in class enrollment shall be given to students desiring to take courses for credit toward degree or certificate completion.

6. Students wishing to audit courses must meet course prerequisites and matriculation requirements.

(Education Code 72252.3)

Study Abroad

See International Studies Program.

Veterans and Service Credit

Victor Valley College allows service personnel and their dependents a maximum of 32 units (53 percent) of credit toward the A.A. or A.S. degree requirements to be completed through non-traditional means such as the College Level Examination Program, academic challenge examinations, or service credit.

These non-traditional units will be for elective credit, unless the student's major department of study recommends otherwise.

Veterans and active duty service personnel who have served a minimum of 180 days are considered to have satisfied the college's general education requirements in physical education. In accordance with American Council on Education recommendations, students in a six-month reserve training program are not eligible for this credit.

Other credit may also be granted for military service schools on receipt of proof of completion of courses in the service.

In evaluation of prior work, the college follows guidelines set forth in the American Council on Education publication, **A Guide to the Evaluation of Educational Experiences in the Armed Forces.**

Air Force ROTC (Department of Aerospace Studies)

Through arrangements with California State University,-San Bernardino (CSUSB), students may participate in the Air Force Reserve Officer Training Corps (AFROTC) program. Aerospace Studies classes and Leadership Laboratories are conducted each Friday on the main campus of CSU-San Bernardino.

Air Force ROTC is a college-level program designed to select and train highly qualified men and women to become commissioned Air Force officers. After graduation from college and completion of all Air Force ROTC requirements, cadets are commissioned as second lieutenants in the U.S. Air Force. Typical service is four years; however, service duration for pilots, navigators and nurses is longer. These individuals serve in a broad range of careers to include actual flying, engineering, administration and a host of other fields, depending on the individual's academic background.

To enter Air Force ROTC, an individual must have at least two years of college remaining, which may include graduate study. In addition, the individual must be a United States citizen prior to entering the last two years of the program, be available to pass an Air Force medical exam, be of high moral character and be in good academic standing in school. Entry into the last two years of the program is on a competitive basis.

Students are required to graduate with a bachelor's degree, in any academic major, and complete one of the two program options. AFTROTC offers 2, 3, and 4-year scholarships of up to $15,000, but scholarships are not required to participate in the program. AFROTC cadets under scholarship and all juniors and seniors receive a $300-$500 per month tax-free stipend,

plus a $900 textbook allowance each year. Currently, CSU-SB does not charge for courses. No military commitment is incurred until entering the last two years of the program (Professional Officer Course) or accepting an AFROTC scholarship.

Classes consist of one hour of academics plus two hours of leadership laboratory for freshman and sophomores. Juniors and seniors will have three hours of academics plus two hours of leadership laboratory. The academic hours earned can normally be counted as elective credit toward graduation. All AFROTC classes and laboratories are held on Fridays to better accommodate students commuting from other colleges and universities.

For more information, contact the California State University, San Bernardino (CSU-SB) Department of Aerospace Studies (AFROTC) at (909) 537-5440. Details are also available here: afrotc.csusb.edu and http://DoSomethingAmazing.com.

Credit By Examination

As authorized by Section 55753 of Title 5 of the California Administrative Code, students may apply for Credit by Examination.

After successfully completing 12 semester units of credit at Victor Valley College, a registered student may receive college credit for courses challenged through departmental examinations. These may be in subjects in which the student is qualified based on prior training and/or experience for which credit or advanced placement has not already been awarded.

Applications for this type of credit are available through Admissions and Records and must be approved first by the appropriate academic department. After credit by examination eligibility has been established, a non-refundable fee of $35 will be charged for each administered exam and is payable at the Bursar's Office.

Awarding credit by examination is subject to the following guidelines:

A request for credit by examination must be submitted by the fourth week of the term (second week for Summer courses).

The student must be enrolled in at least one course, maintain a 2.0 G.P.A. or better, and must have successfully completed 12 semester units of credit at Victor Valley College.

A faculty member must be willing to prepare an exam. If a faculty member is unavailable to prepare an exam, the challenge cannot go forward.

Credit by examination may not be received for any course which is a prerequisite to one for which credit has been previously granted.

In order to challenge, the student must not have previously failed the course nor have been enrolled in it during the semester for which the exam is requested.

A student may challenge a course only once.

Credit by examination cannot be used to satisfy Victor Valley College's 12 unit residency requirement for the Associate Degree.

A maximum of 32 units earned through nontraditional means (CLEP, AP, DANTES, Department Exam, Military) may apply toward the Associate Degree with no more than 15 units permitted for college courses graded on a CREDIT/NO CREDIT basis. This limitation does not apply to units earned at the community college of the Air Force (CCAF).

Credit by examination will be annotated "CREDIT" or "NO CREDIT" or A-F, with unit value and a notation entered on the transcript that credit was earned by "CREDIT BY EXAMINATION."

If the subject content of an AP or CLEP Subject Exam is comparable to or can be substituted for a course taught at Victor Valley College, the identified course will be recorded on the transcript, along with units credited.

College Board Advanced Placement (AP) Examination Program

Victor Valley College will grant credit for successful completion of Advanced Placement Program Examinations of the College Board for some AP exams. A maximum of 6 semester credits will be awarded to students who attain scores of 5, 4, or 3 with the exception of Chemistry, French, and Spanish which award 10 units. Subject credit may also be granted in those instances in which the department/division concerned has determined that the Advanced Placement (AP) exam content parallels a particular course taught by that department. The department/division recommends the appropriate AP course equivalency and the minimum passing score.

Advanced Placement credit and units will be applied toward the Associate Degree, but grades will not be entered on the student's transcript. After applying for admission, students who have taken and passed AP examinations should request that the Education Testing Service send the examination test report directly to Admissions and Records at VVC.

Students should be aware that other colleges or universities may have different policies concerning the granting of credit for advanced placement and may not award credit for AP exams or may award more credit for AP exams than VVC. It is the student's responsibility to contact other schools to determine

the acceptability of any credit earned by examination. Credit will be awarded upon completion of 12 units at Victor Valley College. See Advanced Placement Equivalencies on page 44.

Military Service Schools and Defense Activity for Non-Traditional Education Support (DANTES)

Victor Valley College will award credit toward the Associate Degree for suitably validated military service training including military service schools and DANTES test scores. A standard guide to the evaluation of educational experiences in the armed service is used in evaluating military service school training.

College credit earned through military service schools will appear on the student's transcript as unit credit only, without an indication of grades. Credit evaluations are made after the student has completed at least 12 units at Victor Valley College. Successful completion of DANTES Subject Standardized Tests (DSSTs), using American Council on Education

(ACE) guidelines, will result in credit applied toward the Associate Degree.

College Level Examination Program (CLEP)

The College Board, with support from the Carnegie Corporation of New York, has established the College Level Examination Program (CLEP) to evaluate, confirms, and assess college-level achievement acquired outside of the conventional academic environment.

The CLEP is divided into general exams which measure college-level achievement in five basic areas of the liberal arts and 30 subject exams measuring achievement in specific college subjects.

CLEP credit is awarded in accordance with the American Council on Education (ACE) recommendations, and credits will be granted as follows:

1. General Examination (limit of 24 units)
   a. English composition (no credit will be awarded)
   b. Humanities (six units)
   c. Mathematics (six units)
   d. Natural science (six units)
   e. Social science and history (six units)

2. Subject Examinations Credit will be awarded in subjects comparable to those offered by Victor Valley College as recommended by VVC department/division faculty.

Four-year colleges and universities may impose transfer limitations on credit earned through non-traditional means. Therefore, students who plan to transfer should consult with the transfer school to determine the transferability of credit earned by examination.

The nearest CLEP test site is LaSierra University in Riverside. The phone number is (951) 785-2453.

Tech Prep

Tech Prep is a program offered in conjunction with local high schools, the San Bernardino County Office of Education and the College. Beginning in high school, the program leads to certificates, A. S. degrees, jobs, and transfer to four- year institutions. Victor Valley College is a member of the Inland Desert Tech Prep Consortium and, in cooperation with local high schools, offers opportunities for students enrolled in articulated high school Regional Occupational Program or Tech Prep classes. Each Tech Prep course (2+2) has an articulated curriculum between the high school and the College. Tech Prep allows students to transition from high school to the community college without having to duplicate classes. For more information, contact your high school guidance counselor, the Department Chair of the appropriate career discipline at the College, or the Vocational Education Office at Victor Valley College, (760) 245-4271, extension 2614.

Petitions Committee

The Petitions Committee, which meets as needed when classes are in session, considers special requests from students for exemptions from certain academic, student, and college policies. Typical requests include:

- To enroll in more than 18 units of course work during an academic semester, or more than 8 units during a summer or winter intersession.
- To drop classes after the "grade responsibility date" with a "W" grade.
- To repeat a course

Students who petition must have good reasons plus supporting documents and materials to support their request. The burden of proof is on the student who petitions for special consideration.

The Petitions Committee has the authority to approve, deny, modify, or take no action on particular petitions which are submitted for its consideration.

Petitions are available at the Admissions and Records Office.

Student Conduct

Each student has the right to pursue his or her education free of any undue infringement on his or her lawful rights.

Victor Valley College follows a "zero" tolerance philosophy when it comes to any behavior or incident that disrupts the learning environment. Student conduct issues are handled in a fair, just manner. In general, student misconduct shall constitute good cause for discipline, including but not limited to the removal, suspension or expulsion of a student. Due process for students conduct issues are fully explained in the Student Notification section of each class schedule. All students are expected to read and review this important information. In addition, copies are also available in the Dean of Student Services Office at no charge upon request.

Victor Valley College: Proscribed Student Conduct

Generally, Victor Valley College jurisdiction and discipline shall be limited to conduct which occurs on Victor Valley College premises or at official VVC off-campus activities except as noted.

Definition: The following samples of student conduct shall constitute good cause for discipline, including but not limited to the removal, suspension or expulsion of a student.

A. Student Conduct Code - Rules and Regulations

Any student found to have committed the following misconduct is subject to disciplinary sanctions. The Discipline Procedures are described in the following section of this publication and they are available in the Office of the Dean of Student Services and the Office of the Director of Campus Police and Public Safety. Normally, any student found guilty of misconduct or more specifically, violence or threats of violence against another will be suspended from the College for a least one semester.

1a. Open contempt for any of the following safety rules and regulations.

1b. Acts of dishonesty, including, but not limited to the following:
   a. Cheating, plagiarism, or other forms of academic dishonesty.
   b. Furnishing false information to any Victor Valley College official, faculty member or office.
   c. Forgery, alteration, or misuse of any Victor Valley College document, record or instrument of identification.
   d. Tampering with the election of any Victor Valley College recognized student organization.

2. Disruption or obstruction of teaching, research, administration, disciplinary proceedings, other Victor Valley activities, including its public-service functions on or off campus, or other authorized non-Victor Valley College activities, when the act occurs on Victor Valley College premises.

3. Physical abuse, verbal abuse, threats, intimidation, harassment, coercion, and/or other conduct which threatens or endangers the health and safety of any person.

4. Committing sexual harassing or discriminatory behavior based on race, sex, religion, age, national origin, disability, or any other status protected by law.

5. Attempted or actual theft of and/or damage to property of Victor Valley College or property of a member of the Victor Valley College community or other personal or public property.

6. Any fighting or challenging a fight, which threatens or endangers the health or safety of any person is immediate grounds for dismissal or removal from campus.

7. Hazing, defined as an act which endangers the mental or physical health or safety of a student or which destroys or removes public or private property for the purpose of initiation, admission into, affiliation with, or as a condition for continued membership in a group or organization.

8. Failure to comply with directions of Victor Valley College officials (including faculty) or law enforcement officers acting in performance of their duties and/or failure to identify oneself to one of these persons when requested to do so.

9. Unauthorized possession, duplication or use of keys to any Victor Valley College premises or unauthorized entry to or use of Victor Valley College premises.

10. Violation of published Victor Valley College policies, rules or regulations, including those concerning student organization and the use of college facilities or the time, place and manner of public expression or distribution of materials.

11. Violation of federal, state or local law on Victor Valley College premises or at Victor Valley College sponsored or supervised activities.

12. Use, possession or distribution of narcotic or other controlled substances or poison classified as such by Schedule D (Section 4160 of the Business and Professions Code) except as expressly permitted by law.

13. Use, possession or distribution of alcoholic beverages except as expressly permitted by law and Victor Valley College regulations, or public intoxication.

14. Illegal or unauthorized possession of firearms, explosives, other weapons or dangerous chemicals on Victor Valley College premises.

15. Possession of any article, not usually designated as a weapon, when used to threaten bodily harm on Victor Valley College premises.

16. Participation in a campus demonstration which disrupts the normal operations of Victor Valley College and infringes on the rights of other members of the Victor Valley College community; leading or inciting others to disrupt scheduled and/or normal activities within any campus building or area, intentional obstruction which unreasonably interferes with freedom of movement, either pedestrian or vehicular on campus. Obstruction of the free flow of pedestrian or vehicular traffic on Victor Valley College premises or at Victor Valley College sponsored or supervised functions.

17. Conduct which is disorderly, lewd, indecent, or obscene or expression which interferes with the college's primary educational responsibility or which adversely affects a student's standing as a member of the college community, breach of peace, or aiding, abetting, or procuring another person to breach the peace on Victor Valley College premises or at functions sponsored by, or participated in by, Victor Valley College.

18. Theft or other abuse of phones, electronic devices or computer time, including but not limited to:
    a. Unauthorized entry into a file to use, read, or change the contents, or for any other purpose.
    b. Unauthorized transfer of a file (not educational related).
    c. Unauthorized use of another individual's identification and password.
    d. Unauthorized use of electronic devices in the classroom including but not limited to head phones, cellular phones and pagers.
    e. Use of computing facilities to interfere with the work of another student, faculty member or Victor Valley College staff official.
    f. Use of computing facilities to download or view material deemed to be lewd, indecent and/or obscene matter that is not educational related.
    g. Use of computing facilities to send obscene or abusive threatening messages.
    h. Use of computing facilities to interfere with the normal operation of Victor Valley College computing systems.
19. Abuse of the Student Conduct System, including but not limited to:
    a. Failure to obey the summons of the Student Conduct Hearing Committee or Victor Valley College official.
    b. Falsification, distortion, or misrepresentation of information.
    c. Disruption or interference with the orderly conduct of a judicial proceeding or Student Conduct Hearing Committee.
    d. Institution of a judicial proceeding or Student Conduct Hearing Committee knowingly without cause.
    e. Attempting to discourage an individual's proper participation in, or use of, the Victor Valley College judicial system.
    f. Attempting to influence the impartiality of a member of a judicial body prior to, and/or during the course of, the judicial proceeding or Student Conduct Hearing Committee.
    g. Failure to comply with the sanctions imposed under the Student Code of Conduct and/or Education Code.
    h. Influencing or attempting to influence another person to commit an abuse of the judicial system.

Other Campus Regulations

1. Only officially registered students are allowed to attend classes. Minors or other students who are not registered or do not have permission to be in the class may not remain in the classroom.
2. Students are not permitted to eat or drink in classrooms.
3. Smoking is prohibited in all college buildings or within 20 feet of building entrance.
4. Card playing on Victor Valley College premises is prohibited except in a designated game or recreation area.
5. Animals, dogs (except trained service animals such as guide dogs for the visually impaired or previously authorized animals) and other pets are not allowed on Victor Valley College premises.
6. Printed materials that are not class-related to be distributed must be approved for distribution by the Office of Student Activities.
7. Students must be fully attired, including shoes, while in the classroom or on Victor Valley College premises.
8. Library books and materials must be returned promptly.
9. Use of audio equipment on Victor Valley College premises is restricted to personal headphones or preapproved authorized activities.
10. Children must be under the supervision of parents at all times.

C. Violation of Law and Victor Valley College Discipline

1. If a student is charged only with an off-campus violation of federal, state, or local laws, but not with any other violation of this Code, disciplinary action may be taken and sanctions imposed for grave misconduct which demonstrated flagrant disregard for the Victor Valley College community. In such cases, no sanctions may be imposed unless the student has been found guilty in a court of law or has declined to contest such charges, although not actually admitting guilt (e.g., "no contest" or "nolo contendere").

2. Victor Valley College disciplinary proceedings may be instituted against a student charged with violation of a law which is also a violation of this Student Code; for example, if both violations result from the same factual situation, without regard to the pendency of civil litigation in court or criminal arrest and prosecution. Proceedings under this Student Code may be carried out prior to, simultaneously with, or following civil or criminal proceedings off-campus.

3. When a student is charged by federal, state or local authorities with a violation of law, Victor Valley College will not request or agree to special consideration for that individual because of his or her status as a student. Victor Valley College will cooperate fully with law enforcement and other agencies in the enforcement of criminal law on campus and in the conditions imposed by criminal courts for the rehabilitation of student violators.

D. Cheating and Plagiarism Defined

The term "cheating" includes, but is not limited to:

- Use of any unauthorized assistance in taking quizzes, tests, or examinations;
- Dependence upon the aid of sources beyond those authorized by the instructor in writing papers, preparing reports, solving problems, or carrying out other assignments or - Acquisition, without permission, of tests or other academic material belonging to a member of the VVC faculty or staff.
- Cheating, plagiarism (including plagiarism in a student publication), or engaging in other academic dishonesty as defined below.

The term "plagiarism" includes, but is not limited to, the use, by paraphrase or direct quotation, of the published or unpublished work of another person without full and clear acknowledgment. It also includes the unacknowledged use of materials prepared by another person or agency engaged in the selling of term papers or other academic materials.

Probation and Dismissal Policies

VVC has specific policies governing probation, dismissal and readmission which apply to all enrolled students.

Probation

- **Academic Probation**. Students who have attempted 12 or more units at VVC are placed on **academic probation** if the cumulative G.P.A. (grade point average) falls below 2.0. Students are removed from academic probation at the end of the next semester in attendance at VVC (excluding summer session), if their cumulative G.P.A. is 2.0 or higher.

- **Progress Probation**. Students who have attempted twelve or more units at VVC are placed on **progress probation** when half or more of the units attempted consist of "W," "I" and/or "NC". Students are removed from progress probation at the end of the next semester in attendance at VVC (excluding summer session) when fewer than half of their cumulative units attempted consist of "W," "I" and/or "NC".

  VVC notifies students of their probation status by a letter encouraging students to see a counselor and/or to seek other support services.

Dismissal

- **Academic Dismissal**. Students who have been on academic probation are **Subject to Academic Dismissal** at the end of the second consecutive semester of enrollment (excluding summer session) when their cumulative G.P.A. continues to be below 2.0.

  VVC notifies students of their **subject to academic dismissal** status by a letter requiring the student to see a counselor during the current term.

  Students subject to academic dismissal at the end of the spring semester may be prohibited from registering for fall semester unless they filed a **Petition for Readmission**. As part of this petition process students ***must*** meet with a counselor and may be limited to a certain number of units, may be required to take specific classes, and/or may be required to seek specific support services.

  Continued enrollment at VVC will depend on whether students have followed the conditions specified in the Petition for Readmission and whether they have made progress academically. Students are responsible for satisfactorily completing the terms of their **Petition for Readmission**, and failure to do so may result in immediate dismissal from VVC. **In general, academic dismissal shall be for a minimum of one semester and a petition for Readmission must be filed to recover enrollment privileges.**

- **Progress Dismissal.** Students who have been on progress probation are **subject to progress dismissal** at the end of the second consecutive semester of enrollment (excluding summer session when half or more of the units attempted consist of "W," "I" and/or "NC".

VVC notifies students of their **subject to progress dismissa**l status by a letter strongly urging the student to see a counselor.

Students who do not meet progress standards for three consecutive semesters of enrollment may be prohibited from registering for the following semester unless they file a **Petition for Readmission**. As part of this petition process students ***must*** meet with a counselor and may be limited to a certain number of units, may be required to take specific classes, and/or may be required to seek specific support services.

Continued enrollment at VVC will depend on whether students have followed the conditions specified in the Petition for Readmission and whether they have made progress in reducing the percentage of "W," "I" and/or "NC". Students are responsible for satisfactorily completing the terms of their **Petition for Readmission,** and failure to do so may result in immediate dismissal from VVC. **In general, progress dismissal shall be for a minimum of one semester and a petition for Readmission must be filed to recover enrollment privileges.**

Student Grievances

A student may use the following process to file a grievance if they feel they have been unjustly treated academically or administratively:

Step 1: Initial Level - Meet and confer with the person with whom you have a grievance.

Step 2: Chairperson/Dean Level - If the grievance is not resolved in Step 1, you may then take the matter, in writing, to the appropriate department or program Chairperson/Director/Coordinator or Dean, if there is no chairperson, within 10 working days. The Chairperson or Dean will render a decision in writing within 10 working days.

Step 3: Dean/Vice President Level - If the problem is not resolved at Step 2, you may appeal in writing to the appropriate Dean (if the Dean was not involved in Step 2) or Vice President within 10 working days. The Dean/Vice President will render a decision in writing within 10 working days.

Step 4: Final Review - If the problem is not resolved at Step 3, you may appeal in writing to the appropriate Vice President (if the Vice President was not involved in Step 3) or the President within 10 working days, but only on the following grounds:

a. There was a significant lack of due process that deprived you of a fair and equitable result

b. The Step 3 decision is clearly unreasonable or arbitrary

c. There is significant newly discovered information which, in spite of reasonable diligence on your part, could not have been produced earlier

The decision will be rendered in writing within 10 working days and will be final.

Advanced Placement (AP) credit is currently awarded at Victor Valley College as follows:

Advanced Placement Test	Minimum Scores	Equivalent Victor Valley College Course	Semester Units	Department Approval
Biology	3, 4 or 5	Biology 100	4	11/1/93
Chemistry	3, 4 or 5	Chemistry 100	5	10/5/92
	4 or 5	Chemistry 201 and 202	10	
Computer Science				
Computer Science AB	3, 4 or 5	Elective credit only	3	
Economics				
Micro	3, 4 or 5	Economics 102	3	9/11/92
Macro	3, 4 or 5	Economics 101	3	
English				
Language & Composition	3, 4 or 5	English 101	4	5/22/92
Composition & Literature	3, 4 or 5	English 102	3	
French				
Language	3, 4 or 5	French 101and 102	10	9/17/92
Literature	3, 4 or 5	Prerequisite for French 103 or 104		-
Government and Politics				
American	4 or 5	Political Science 102	3	9/8/92
Comparative	4 or 5	Political Science 112	3	
History				
American	3, 4 or 5	History 117 and 118	6	9/28/92
European	3, 4 or 5	Before 1500: Elective credit only	3	
		After 1500: History 104	3	
Mathematics				
Calculus AB	3, 4 or 5	Mathematics 226	5	2/8/92
Calculus BC*	3, 4 or 5	Partial credit for 227	4	
Music				
Listening & Literature	3, 4 or 5	Music 100	3	9/10/92
Theory	3, 4 or 5	Elective credit only	3	
Psychology	3, 4 or 5	Psychology 101	3	10/19/92
Spanish				
Language	3, 4 or 5	Spanish 101 and 102	10	9/17/92
Literature	3, 4 or 5	Prerequisite for Spanish 103 or 104		

*Calculus BC: Partial credit of 4 units for Math 227 may be granted; do not enroll in Math 228 before you complete Math 227. You can receive credit for the missing 1 unit of 227 by taking it through Independent Study
Math Department 2-8-92.

NOTE: Consult with transfer institutions to determine how AP credits are applied.

VI.
FINANCING YOUR EDUCATION

“If you think education is expensive, try ignorance...”

-Derek Bok

INVESTING IN YOUR EDUCATION

A college education is one of the best investments in the future that many students will make. Some experts say a college degree has the potential of adding hundreds of thousands of dollars to an individual's lifetime earnings.

In a world that is daily becoming more complex, more and more occupations require specialized training and educational and learning skills.

As with any investment, there are financial considerations in earning a college degree.

VVC offers a number of financial aid programs, scholarships, special awards, and work-study programs to help students finance their educations.

Eligibility and Qualifications

Each financial aid program has specific requirements. However, the programs described in this section of the catalog share the following eligibility criteria:

- U.S. citizenship or permanent resident visa.
- Enrollment in courses in accordance with the VVC Educational Program Plan and regular attendance in VVC classes.
- Satisfactory academic progress (financial aid satisfactory progress policy will be given to you during the initial financial aid counseling).
- Financial need as determined by the information listed in the Free Application For Federal Student Aid (FAFSA).
- Ability to Benefit (refer to page 38).

Financial Aid

The Financial Aid Office assists students who are seeking financial help to pay for the costs of attending Victor Valley College. Money may be provided to cover the cost of tuition and/or enrollment fees, books, transportation, and partial living expenses. Students may be working and still qualify to receive financial aid. The Renewal Application and the FAFSA are the preferred forms used in applying for financial aid. Applying on time is critical.

You may begin the FAFSA application process anytime after January 1 for the upcoming year.

The processor will forward the Student Aid Report (SAR) to the student. Additional documentation may be required to support the data submitted on the application. It is important that all requested documentation be returned as soon as possible.

Financial Aid awards are not made until a student's file iscomplete.

The Financial Aid Office is available to help with the process. Students may find applying for aid difficult and confusing. Those needing help or advice are encouraged to contact the Financial Aid Office (760) 245-4271, extension 2277 or visit us on the Web at www.vvc.edu. We offer workshops to assist you.

TYPES OF FINANCIAL AID

Board of Governors Fee Waiver

This waiver is available to cover the additional cost due to fees initiated on July 1, 1985. Students must demonstrate financial need and complete the FAFSA or Board of Governors Fee Waiver Application. The maximum waiver covers the community college enrollment fee.

State Grants

California, through the Student Aid Commission, offers state-funded grants for undergraduate students. There are grants for both academic and vocational higher education programs, including the new entitlement program.

Cal Grant A, B or C applicants must have financial need, be legal California residents attending an eligible school in California, be in a program of study leading directly to an undergraduate degree or certificate, be enrolled at least half-time and not possess a baccalaureate degree prior to receiving an award. A student can accept only one Cal Grant. The Financial Aid Office has complete Cal Grant eligibility and application information.

Cal Grant A helps students with tuition/fee costs. The minimum eligible course length is two academic years and is held in a reserve status at the community college level.

Cal Grant B provides a living allowance for very low-income students. More than half of all new Cal Grant B recipients begin at a public community college. The Cal Grant B award for freshmen is usually limited to the nontuition costs of attending college such as living expenses, books and supplies, transportation, etc. When renewed by sophomores and above, a Cal Grant B may also cover all or part of tuition/fee costs. The minimum eligible course length is 12 months.

Cal Grant C helps vocational education students with tuition and training costs. Recipients must be enrolled in a vocational program at a community or independent college or a vocational school course of study from 4 to 24 months in length.

How to Apply for State Grants

To apply for a Cal Grant, complete the Free Application for Federal Student Aid (FAFSA) and file it between January 1 and the Cal Grant March 2 deadlines. Also complete any additional application requirements such as providing the Student Aid Commission with a verified grade point average or test scores. NOTE: Second chance; community college students have until September 2, 2005 to apply for a Cal Grant B award.

The Financial Aid Office has complete application materials and information.

Cal Grant B Entitlement Awards

Award Description:

- Provide grant funds for access costs for low-income students in an amount not to exceed $1551. This grant is to be used for living expenses and expenses related to transportation, supplies and books. Beginning with the second year of Cal Grant B benefits, Cal Grant B also helps pay for tuition/fees for California residents attending qualifying institutions offering undergraduate academic programs of not less than one academic year.

- Awards are guaranteed for those who meet the program eligibility criteria.

General Cal Grant Eligibility Requirements

All Cal Grant applicants must:

- Be California residents
- Be U.S. citizens or eligible non-citizens
- Meet U.S. Selective Service requirements
- Attend an eligible California qualifying postsecondary institution
- Be enrolled at least half-time
- Maintain satisfactory academic progress as defined at school of attendance
- Have family income and assets below the established ceilings
- **Not** be in default on any student loan
- **Not** owe any federal or state grant refund

Federal Pell Grant

This is the primary grant for eligible undergraduate students; it ranges from $400.00 for the academic award year.

Federal Supplemental Educational Opportunity Grant (FSEOG)

The FSEOG is available to assist undergraduate students. The standard award is $200 per year based upon the availability of funds. This grant is awarded to students who have a great financial need.

FFLEP Loans

Federal Family Education Loan Program allows students to borrow low interest loans to assist with educational and living expenses. Please inquire at the Financial Aid Office for more information.

Return of Title IV Funds

There is a federal law about repaying money back if you leave school. If you receive any TITLE IV Funds (Pell Grant, FSEOG, Direct Loans) you may owe money back to the Federal Programs.

Here is how it works: According to the day that you withdraw, the Financial Aid Office will calculate the part of the grant that you have earned and what you may owe. NOTE: If you withdraw after you have earned 60% of your Title IV Funds, you will not owe any repayment.

Federal Work Study Program (FWS)

FWS is a form of federally funded financial aid which provides paid work experience as part of the financial aid package. If interested, please check with a college representative in the Student Employment Office located in the Career Development Center, relative to the availability of FWS job positions, after you receive your award letter.

Bureau of Indian Affairs

The Bureau of Indian Affairs (BIA) funds a financial aid program for full-time students of American Indian descent who demonstrate financial need.

To be eligible for a BIA Grant, students must be at least 25 percent American Indian, Eskimo or Aleut by blood, as recognized by a tribal group.

Phone numbers to obtain applications are available from the Financial Aid Office.

Veterans' Benefits

Normally, for active duty veterans, active service of at least 181 days or more and an honorable discharge is required to receive Chapter 30, 32 or 34 GI Bill; you must also be within 10 years of your discharge date. You can call 1-888-442-4551 to verify your GI Bill eligibility with the Veterans Administration. Additionally, dependents of veterans who are 100% disabled (or deceased) from service-related causes may be eligible for Chapter 35 GI Bill benefits. Guard/Reserve six-year enlistees may also have access to the GI Bill through Chapter 1606.

Dependents of veterans with 0% or greater disability from the VA may be eligible for a tuition and fee waiter. Parents should contact the County VA office at (760) 843-2790 for further information and an application.

Active duty military may be eligible for tuition assistance from their respective branch of service. Contact your base/post education office for further information.

With few exceptions, the entire curriculum (including online classes) of the college is approved for GI Bill use. See the Veterans representative for further information.

GI Bill students assume full liability for overpayment of benefits. To avoid this, students must report to the Veterans representative when they drop classes.

As required by the VA, GI Bill students must have a current education plan on file by the end of the second semester of attendance. The education plan must show the student's declared program and must have all previous college work and military experience properly evaluated. The Veterans office can provide the necessary forms to order military transcripts.

GI Bill students must stop by the office at the start of each semester to inform the office of their enrollment and verify that their classes meet requirements.

Veterans may not receive benefits for repeating a course that was previously completed successfully. Grades necessary for "successful completion" are defined by a "D" for non-transfer or

non-prerequisite classes and by a "C" for transfer or prerequisite classes as outlined in this catalog.

To receive veteran's benefits, students must maintain a 2.0 or higher cumulative GPA (Grade Point Average) and show satisfactory progress in their program. For V.A. purposes, your GI Bill benefits will be terminated under either the following two conditions:

- You fail to maintain an overall (cumulative) 2.0 GPA for three consecutive semesters.
- You fail to complete more than half your attempted units for three consecutive semesters. (For example, if you've attempted 20 units but have withdrawn from 11.)

If you fall into either of the preceding categories, the V.A. will not allow further certifications for GI Bill until you again meet the standards. You must also meet with, and be approved for re-certification by your counselor.

For further assistance, please call (760) 245-4271, extension 2211.

Scholarships and Awards

A number of private/sponsored scholarships and awards are given each year to students at Victor Valley College.

The amounts of these awards vary, depending on the individual or organization giving the awards. Interested students are encouraged to print out an online application, available on the VVC website Financial Aid link and follow the provided instructions.

Eligibility requirements for these awards vary and may be based on academic excellence, financial need, or other criteria of the organizations which issue the scholarships.

Ability to Benefit

Effective July 1, 1991, federal regulations require students seeking Title IV student financial aid for the first time to have either a high school diploma or its equivalent, or demonstrate the **Ability to Benefit** from a college education. Non-high school graduates will be provided the opportunity to demonstrate the ability to benefit by scoring at or above designated scores on the Victor Valley College assessment tests. These scores are in compliance with the United States Department of Education guidelines. **Non-high school graduates scoring below the designated scores will be ineligible to receive Title IV student financial aid.** This includes, among others, the Federal Pell Grant, the FSEOG Federal Work Study, and the FFLEP Loans. Such students will be counseled into the appropriate remedial courses to improve their educational level. When the student is able to achieve satisfactory scores, he or she will meet the educational criteria for financial aid eligibility. **This policy does not pertain to eligibility for the Board of Governors fee waiver or the Extended Opportunity Programs and Services (EOPS).**

Part-Time Jobs For Students

In addition to financial aid programs, many Victor Valley College students find part-time jobs off campus with private employers.

A listing of jobs available to students may be found in the Student Employment Office, located in the Career Development Center.

TUITION AND FEES

Students are encouraged to plan their educational budget to cover basic college costs while attending Victor Valley College: tuition, fees, books, and supplies. Fees listed are subject to change.

Enrollment Fee

Enrollment fees for California residents are set by the California Legislature for all of the state community colleges. Refer to the current schedule of classes for enrollment fees.

Enrollment Fee Refunds

Excess enrollment fees resulting from program changes in regular classes may be refunded during the first two weeks of a semester. Refunds for short-term classes are prorated.

A student who is a member of an active or reserve United States military service and who has withdrawn from classes due to military orders may file a petition with the district requesting refund of enrollment fees. The district will refund the entire enrollment fee unless academic credit has been awarded.

A $10 processing fee for withdrawals is charged no more than once each term.

Student Center fee is refunded for students withdrawing from all their classes prior to the first day of the semester.

Parking fees are refunded in full after complete withdrawal from classes prior to the first day of the semester. After classes begin, no refund will be given.

A full refund will be given for ASB fees upon complete withdrawal and surrender of the ASB card prior to the first day of the semester.

Parking permits and ASB cards must be surrendered upon withdrawal from school in order in order to receive refunds.

Refunds are typically processed beginning after the deadline for refunds has passed. Students should allow 3-4 weeks after that deadline before refund checks are mailed.

NonResident Tuition

Students who are not considered residents of California pay all regular in-state fees plus a non-resident tuition fee, charged on the number of units taken. Refer to the current schedule of classes for more on charges.

AB 540 Nonresident Tuition Waiver

Any student other than a nonimmigrant alien, who meets all of the following requirements, shall be exempt for paying nonresident tuition at the California Community Colleges, the California State University and the University of California.

- The student must have attended a high school (public or private) in California for three or more years.
- The student must have graduated from a California high school or attained the equivalency in California prior to the start of the term.
- An alien student who is without lawful immigration status must file an affidavit with the college or university stating that he or she has filed an application to legalize his or her immigration status, or will file an application as soon as he or she is eligible to do so.
- Students eligible for this exemption who are transferring to another California public college or university must submit a new request (and documentation if required) to each college under consideration.
- Nonresident students meeting the criteria will be exempted from the payment of nonresident tuition, but they WILL NOT be classified as California residents. Therefore, students WILL NOT be eligible for any state supported financial aid such as the Board of Governors Waiver, CalGrant, etc.
- AB540 does not provide student financial eligibility for undocumented students. These students remain ineligible for state and federal financial aid.
- This exemption IS NOT available to students who are absent from California and taking distance education classes from California community colleges.

Please see Admission and Records for the Exemption Request form.

Nonresident Tuition Refunds

Nonresident tuition assessments will be refunded if the student is subsequently determined to be a California resident. Residency claims must be supported by documents that prove residency during the time that nonresident tuition was paid.

Nonresident tuition assessments may be refunded in part upon a student's withdrawal from school, or refunded in part when programs are reduced.

Nonresident tuition will be refunded in full prior to the beginning of classes. During the first week of classes, 75% will be refunded. During the second week, 50% of nonresident tuition will be refunded. During the third week, a 25% refund is allowed. No refunds of nonresident tuition are allowed after the third week of classes.

Full refunds of nonresident tuition are made prior to the beginning of class for winter/summer sessions. Refunds of 50% of nonresident tuition will be made until 20% of class sessions are held. No refunds are made after 20% of classes are held.

Students seeking a refund of nonresident tuition and fees must apply for a refund in writing.

Parking Fees/ASB Fees

Parking lots located around the campus are provided for students displaying valid parking permits.

Semester permits are available from the Bursar. The parking fee is $40 per vehicle, per semester, for the fall and spring semesters. The parking fee for Financial Aid students is $20 per vehicle per semester. Motorcycle permits are $5 in addition to the purchase of a vehicle permit. The parking fee for Summer/Winter is $20 per vehicle. Parking fees are subject to change. Permits are required Monday through Saturday.

Alternative Parking Options

In addition to semester parking permits, the College offers students and visitors two alternate parking options:

1. *Daily parking permits* are available for $2.00 per day (machines accept quarters only) through vending machines located on campus.

2. *Parking meters* are located in Lot #6. They are intended to meet short-term parking needs. The cost is 25 cents for each 15 minutes (meters accept quarters only). Student permits are not valid in metered stalls.

Student Center Fee

During the 1992 Spring Semester, the student body approved a Student Center Fee of $1 per semester unit, up to a maximum of $10 per year.

Student Representation Fee

Each student is charged $1.00 per semester (Fall/Spring). The student representation fee is authorized by Education Code Section 76060.5 and implementing Title V regulations commencing with Section 54801. Section 54805 requires a notice to be provided to students stating that: “the money collected pursuant to this article shall be expended to provide support for students or representatives who may be stating their positions and view points before city, county, and district government, and before offices and agencies of the state and federal government.”

Textbooks and Small Supplies

Students enrolled in classes will need textbooks and other supplies for most of the courses in which they are enrolled.

The cost of textbooks purchased by the student at the beginning of each course and supplies varies from course to course.

For financial planning purposes, a full-time student at Victor Valley College should plan on spending approximately $500 per year for books and small supplies such as notebooks, pens, and pencils.

Textbooks and supplies may be purchased at the college bookstore, located in the Student Activities Center (SAC) or purchased online at www.vvcRams.com.

Textbooks may be bought back by the college bookstore at the end of the semester. A book “buy-back” is held at the bookstore during Finals Week, the last week of each regular semester. Book buy-backs are conducted on the last two days of the 6-week summer sessions.

The bookstore’s refund policy is attached to every receipt at the time of purchase. Students should read the policy carefully to determine what may be refunded.

Fee Review

Fees are subject to review without notice due to budgetary considerations in the state legislature, the California Board of Governors, and/or the Victor Valley Community College District Board of Trustees.

Refund Policies

In the event of a withdrawal from classes, a portion of the fees paid may be refunded to the student.

Refunds for withdrawals from class(es) must be requested by the student using a **Request For Refund** form. A $10 processing fee will be charged for student-initiated refunds. Students not requesting refunds may apply their credit balance toward their student fees in the next semester provided the withdrawal deadlines are met.

Refunds resulting from class cancellations or class rescheduling by the District will also be refunded automatically.

VII.
MOVING ON

“Education is the best provision for old age.”

-Aristotle
384-322 B.C.

REQUIREMENTS FOR CERTIFICATES, DEGREES AND UNIVERSITY TRANSFER

There are three academic objectives you can complete at Victor Valley College. These include:

- Occupational certificates
- Graduation with an associate's degree
- Preparation for transfer to a university where you can complete a bachelor's degree

Many students elect to complete two or even all three of these goals *at the same time*—which you can do with careful planning.

This chapter of the catalog will tell you how to accomplish these three objectives.

Here's where to find this information:

ACADEMIC OBJECTIVE **Page**

Course Numbering System

Each college course has a number assigned to it, which tells you whether it applies to the associate's degree, transfers to a university, or doesn't apply to a degree.

Courses numbered 1 through 49 are not degree-applicable (NDA), and are not intended to transfer to universities.

Courses numbered 50 through 99 apply to the associate's degree, but typically do not transfer to universities.

Courses numbered 100 through 299 apply to the associate's degree and transfer to most universities.

At the end of each course description, courses that transfer to campuses of the University of California or the California State University Systems are indicated by "UC" and/or "CSU."

A. OCCUPATIONAL CERTIFICATES

We'll start by telling you how to complete a certificate. This is the simplest goal, because there's not a lot to figure out. Just turn to Section VIII "Programs of Study," which starts on page 81.

In this section, you'll find listed the most common areas of study that people are interested in—whether VVC offers a program in that field or not. If we don't have a particular program, at least you'll probably find information about some of the institutions that do.

Under each area of study, VVC may offer a **Certificate of Achievement (CA)** which is a sequence of courses of 18 semester units or more and is awarded to students who successfully complete all the requirements for a defined program of study approved by the Victor Valley Community College Board of Trustees as well as the Chancellor's Office for California Community Colleges. Certificates of Achievement are recorded on students' official transcripts.

Also, VVC may offer a **Certificate of Career Preparation (CP)** which is a sequence of courses fewer than 18 units and is awarded to students who successfully complete all the requirements for a defined program of study approved by the Victor Valley Community College Board of Trustees. Students who earn a Certificate of Career Preparation are presented with a paper award but the college does not record the award on students' transcripts.

As a practical matter, if your academic skills—English, reading and math—need some refreshing, you should take courses in those areas before or along with your other courses. Refer to your Assessment printout for an idea of which courses to choose. Employers of all kinds and at all levels want employees who can think well, speak well, write well, and get along with others. You can take courses at VVC in all those areas.

What many people do is complete a certificate program, then sometime later (yes, even years later!) come back to school and use those courses again as the major and often the electives for an associate's degree—or even as preparation for transfer. Other people work on certificates and the requirements for a degree at the same time.

It's all up to you. Just remember: once a completed course is on your transcript, we can often use it to satisfy requirements for a second or even a third objective.

B. REQUIREMENTS FOR GRADUATION WITH AN ASSOCIATE'S DEGREE

Catalog Rights for Associate Degree, Certificate, or Transfer Requirements

The term "catalog rights" refers to the requirements, rules and regulations found in the Victor Valley College Catalog for a specific academic year defining specific requirements, as established in the catalog, which the student must satisfy to qualify for an associate degree, a certificate, or transfer. Catalog rights apply for a maximum of six years prior to graduation.

Continuous Enrollment

Degree, certificate, and/or transfer requirements may change from on e catalog year to the next. Students have the right to complete requirements under the terms of any catalogs that are published while in continuous enrollment. Continuous enrollment is defined as enrollment in at least one transcripted, credit course in at least one semester, Fall or Spring, during an academic year.

Students who initially enroll or re-enroll during summer session may choose to have catalog rights for the previous academic year.

Students who do not meet the **continuous enrollment** condition specified above and who re-enter the college will fall under the catalog requirements for the academic year when re-entering VVC. Consequences of not being continuously enrolled will include loss of priority registration. Possible additional consequences may include:

- Changes in requirements for a certificate
- Changes in requirements for an Associate Degree
- Possible discontinuance of certificates and/or programs
- Changes in admission and general education requirements for transfer to a University.

Continuing and Returning Student Status

Please note, for admissions ***and*** registration purposes, a student is considered to be in **continuous attendance** when he or she was enrolled in at least one trasncripted, credit course the previous semester. Such students are "Continuing Students." Students who return to VVC after an absence of at least one semester (excluding summer and winter sessions) are "Returning Students." Returning Students must re-apply to VVC and do not have the same registration priority as Continuing Students.

Graduation generally requires the equivalent of two to three years of full-time study which leads to an Associate in Science (A.S.) or Associate in Arts (A.A.) degree. For a quick listing of degrees, see the inside front cover of this catalog. For more extensive coverage of programs available, turn to Section VIII, "Programs of Study."

The college's graduation requirements allow students to earn an associate's degree and, with careful planning, simultaneously meet requirements either for an occupational certificate or for some or all of the requirements for transfer to a four-year college or university, or both.

Students who wish to transfer should check with their intended institution regarding which courses meet that school's requirements.

The following discussion corresponds to the form on the next two pages.

General Requirements (Section A)

On the following page is a summary of the requirements for the associate's degree at VVC. This listing is also available as a worksheet at the front desk in Counseling.

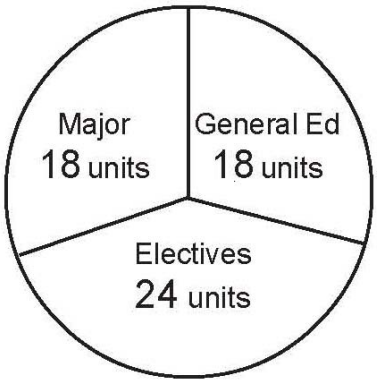
Note: If you're planning to transfer to a university, the key idea to keep in mind when you plan your courses for your VVC major and general education requirements is that you want to fit your transfer university's course requirements into VVC's graduation requirements; that is, use *their* required courses to meet *VVC's* degree requirements. (You'll find more on that in the **Transfer** part of this chapter.)

Courses for Your Major (Section B)

At least 18 units are required for a VVC major. Select your courses from those listed under your major in the grey-shaded section of this catalog, Section VIII, "Programs of Study," which starts on page 75.

General Education (GE) Requirements (Section C)

Minimum proficiencies in English, Reading, Math, and Information Competency are met by completing the GE requirements. At least 18 units are required for your GE. The list on the following page shows each course that can be used to satisfy GE requirements. It's a good idea to make your selections with an eye to your transfer requirements (see lists of transfer requirements later in this chapter).



Distribution of units for the AA/AS Degree

VICTOR VALLEY COLLEGE ASSOCIATE DEGREE GRADUATION REQUIREMENTS 2008-2009

A. General Requirements for Graduation.....minimum 60 units

__ 1. Complete 60 degree-applicable units (courses numbered 50 and above), not to include more than 4 units of physical education activity.
__ 2. Earn a cumulative GPA of 2.0 or higher in all degree-applicable units including all units from other colleges attended if applicable.
__ 3. Complete at least 12 units at Victor Valley College.
__ 4. Complete an application for graduation before the deadline. Deadlines are published each year in the VVC catalog. Applications for degrees and certificates are available in Admissions and Records and in Counseling.
__ 5. Have official transcripts from other colleges attended and/or Advanced Placement scores sent to VVC. Students are responsible for furnishing official transcripts. Final evaluation and acceptance of transfer courses taken at other accredited colleges will be determined by the Registrar's Office at the time the student's graduation application is evaluated. VVC may not accept credits from all institutions of higher education.
__ 6. Minimum proficiencies in English, Reading, Math, and Information Competency are met by completing the general education requirements.

B. Major.....minimum 18 units

SEE REVERSE SIDE FOR A COMPLETE LIST OF ASSOCIATE DEGREE MAJORS.

Major course	C	IP	N	Major course	C	IP	N	Major course	C	IP	N

C. General Education.....minimum 18 units

A course may not fulfill more than one area. Legend: **C** = COMPLETED units **IP** = IN PROGRESS units **N** = NEEDED units

	C	IP	N
Category I: Natural Science.....minimum 3 units **ANTH** 101, 101L; **ASTR** 101; **BIOL** 100, 104, 107, 109, 114, 118, 121, 201, 202, 203, 211, 212, 221, 231, 232; **CHEM** 100, H100, 114, 201, 202, 206, H206, 207, H207, 255, 281, 282; **GEOG** 101, 101L; **GEOL** 101, 102, 103, 110; **HLTH** 102; **OCEA** 101; **PSCI** 101, 114, 115; **PHYS** 100, 201, 202, 203, H204, 221, 222			
Category II: Social and Behavioral Science.....minimum 3 units **AJ** 101; **ANTH** 101, 102, 103, 105, 106; **CHDV** 106, 146; **CMST** 105 (Intercultural); **ECON** 101, 102; **GEOG** 101, 102; **GUID** 105*; **HIST** 103, 104, 115, 117, H117, 118, H118, 119, 120, 121, 124, 125, 127, 130, 131, 135, 150, 153, 155, 157; **POLS** 101, 102, H102, 103, 110, 111, 112, 113; **PSYC** 101, H101, 103, 105*, 110, H110, 111, 116, 121, 125, 130, 133, 204, 213; **RLST** 105, 106, 110, 113, 115; **SOC** 101, 102, 103, 107			
Category III: Humanities.....minimum 3 units **ANTH** 106; **ART** 101, 102, 104, 105, 106, 107, 108, 109, 112, 113, 114, 120, 122, 125, 150; **CMST** 105 (Intercultural); **ENGL** 102, H102, 109, 116*, 162, 210, 211, 220, 225, 230, 231, 232, 233, 235, 240, 241, 245, 246, 247; **HIST** 103, 104, 115, 117, H117, 118, H118, 119, 120, 121, 124, 125, 127, 130, 131, 135, 150, 153, 155, 157; **MUSC** 100, 101, 102, 103, 112, 113, 115, 116, 117, 118, 131, 202, 204; **PHIL** 101, 108, 117, 120, 121; **PE** 103; **RLST** 101, 105, 106, 110, 111, 115, 117; **TA** 101, 102, 104, 107, 110, 116* **Foreign Languages: CMST** (ASL) 122, 123, 124, 125; **FREN** 101, 102, 103, 104; **GERM** 101, 102, 103, 104; **LATN** 101, 102; **SPAN** 101, 101A, 101B, 102, 103, 104			
Category IV: Language & Rationality *Note: Courses in Category IV must be completed with grade of "C" or better.* **a. English Composition.....minimum 3 units** **ENGL** 101, H101 ***Note:*** VVC's English 101 satisfies the Information Competency requirement. If you took English Composition at another college, you will need to complete the Info Competency assessment given at the VVC Library. See a counselor or librarian for more information. ❑ Information Competency requirement satisfied.			
b. Communication & Analytical Thinking.....minimum 3 units **ENGL** 102, H102, 104, H104; **PHIL** 109, 207*; **RLST** 207*; **CMST** 106, 107, 108, 109			
Category V: Mathematics *Note: Course in Category V must be completed with grade of "C" or better.*.....**minimum 3 units** **MATH** 90, 104, 105, H105, 119, 120, H120, 132, 226, 227, 228, 231, 270			
*__GUID__ 105 and __PSYC__ 105 are the same course. __*ENGL__ 116 and __TA__ 116 are the same course. *__PHIL__ 207 and __RLST__ 207 are the same course. **Total units**			

D. Physical Education.....minimum one course

Any activity or non-activity (lecture) PE course of 1 unit or more will fulfill this requirement. Completion of military basic training fulfills this requirement. Health 102 (Category I) or PE 103 (Category III) can simultaneously satisfy the PE requirement. Athletics courses *are not* used to fulfill the PE requirement.

E. Electives... List courses taken to complete the graduation requirement of 60 units which have not been used to fulfill any other requirement above:

Elective course	C	IP	N	Elective course	C	IP	N	Elective course	C	IP	N

Liberal Arts Major, A. A. .....minimum 18 units

Complete a minimum of 18 units from ONE Area of Emphasis, and at least TWO courses in ONE discipline.

CHOOSE EITHER:

Mathematics and Science Emphasis ..... ***Complete at least one course in Math and one course in Science ….....***

ANTH 101, 101L; ASTR 101; BIOL 100, 104, 107, 109, **118,** 121**, 201, 202, 203, 211, 212, 221, 231, 232; CHEM 100, H100, 114, 201, 202, 206, H206, 207,** H207, **255, 281, 282; GEOG 101, 101L; GEOL 101, 102, 103, 110; MATH** 104**, 105, H105, 119, 120, H120, 132, 226, 227, 228, 231, 270; OCEA 101; PSCI 101, 114,** 115**; PHYS 100, 201, 202, 203, H204, 221, 222**

OR

Arts/Humanities Emphasis .....

ANTH 106; ART 101, 102, 104, 105, 106, 107, 108, 109, 112, 113, 114**, 120,** 122**,** 125, 150**; CMST 105 (Intercultural); ENGL 102, H102, 116*, 162,** 210, 211, **220, 225, 230, 231, 232, 235, 240, 241, 245, 246, 247; HIST 103, 104,** 115**, 117, H117, 118, H118, 119, 120, 121, 124, 125, 130, 131, 135, 150, 153, 155, 157; MUSC 100, 101, 102, 103, 115, 116, 117, 118,** 131**, 202, 204; PHIL 101, 108, 117, 120, 121; PE 103 (Dance); RLST 101, 105, 106, 110, 111, 115, 117; TA 101, 102,** 104**,** 107, 110, **116*,** 117

Foreign Languages: CMST (ASL) 122, 123, 124, 125; FREN 101, 102, 103, 104; GERM 101, 102, 103, 104; LATN 101, 102; SPAN 101, 102, 103, 104

OR

Social/Behavioral Science Emphasis .....

AJ 101**; ANTH 101, 102, 103, 105, 106; CHDV 106,** 146**; CMST 105 (Intercultural); ECON 101, 102; GEOG** 101**, 102, 103; HIST 103, 104, 115, 117, H117, 118, H118,** 119**, 120, 121, 124, 125, 127, 130, 131,** 135, 150, 153**, 155,** 157**; POLS 101, 102,** H102, 103**, 110,** H110, **111, 112, 113; PSYC 101, H101, 103, 110, H110, 111, 116, 121,** 130**, 204, 213; RLST** 105, 106, 110, **113, 115; SOC 101, 102,** 103**, 107**

Fine Arts Major, A. A. .....minimum 18 units

ANTH 151; ART 101, 102, 104, 105, 106, 107, 108, 109, 112, 113, 114, 115, 120, 121, 122, 123, 124, 125, 126, 128, 129, 130, 131, 132, **133, 141, 142, 150, 151; ENGL 116*; MUSC 100, 101, 102, 103, 104, 105, 108, 110, 111**, 112, 113, **115, 116, 117, 118, 120A-J, 122, 123, 124, 125, 126, 128, 129, 130, 131, 132, 134, 136, 137, 139, 140, 141, 143,** 144, **145, 146, 147, 202, 203, 204, 205, 210, 211**; **PHOT** 52, 53, 54, **100, 101**, 102, 103, 104, 105, **128, 129; PE 103, 128; PEDA 101, 150, 151, 152**, 153, **160, 161, 162, 163, 164, 165, 166, 167, 169, 170, 171, 174, 175**, 176, 177, **266, 267, 270, 271, 274, 275**, 276, 277; **TA 101, 102, 104, 106, 107, 109, 110, 111**, 113, **115, 116*, 117, 120, 125ABC, 128, 129, 160, 161, 166, 167, 170, 171, 174, 175, 266, 267, 270, 271, 274, 275** *Note: PE/PEDA activity classes: 4 units maximum.*

Math/Science Major, A. S. .....minimum 18 units

ANTH 101, 101L; **ASTR 101**; **BIOL** 70, **100, 104**, 107, 109, 113, **114, 118**, 120, **121**, 126, 127, 128, 129, **149, 201, 202, 203, 211, 212**, 215A, 215B, 215C, **221, 231, 232**; **CHEM** 55, **100, H100, 114**, 120*, **128, 129**, 201, **202, 206, H206, H207, 207**, 255, **281, 282**; **ELCT** 57, 58, 59, 60; **GEOG 101, 101L, 103**; **GEOL 101, 102, 103**, 109, **110**, 112, **128, 129**; **HLTH 102**; **MATH** 104, **105, H105**, 119, **120**, H120, **128, 129, 132, 226, H226, 227, H227, 228, H228, 231, 270**; **OCEA 101**; **PSCI 101, 114**, 115, **128**; **PHYS 100, 128, 129, 201, 202, 203, H204, 221, 222**; **RMGT** 120*

All courses numbered 100 and above transfer to California State University (CSU); courses in **bold** transfer both to CSU and to the University of California (UC).

*** ENGL** 116 and **TA** 116 are the same course.

Victor Valley College Degrees

All majors require at least 18 units; some have specific course requirements. Courses numbered 138 (e.g., AUTO 138) only apply as electives, not in a major.

Administration of Justice, A.S.
Agriculture and Natural Resources, A.S.
Automotive Technology, A.S.
Business, A.S.
Business Administration, A.S.
Business Education Technologies, A.S.
Business Real Estate and Escrow, A.S.
Child Development, A.S. *
Computer Information Systems, A.S.
Computer Integrated Design and Graphics, A.S.
Construction and Manufacturing Technology, A.S. *
Electronics and Computer Technology, A.S.
Electronics Engineering Technology, A.S. *
Fine Arts, A.A. (see above)
Fire Technology, A.S.
Liberal Arts, A.A. (see above)
Math/Science, A.S. (see above)
Medical Assistant, A.S. *
Nursing, A.S. *+
Paramedic, A.S. *+
Respiratory Therapy, A.S. *+
Restaurant Management, A.S.
Welding, A.S. *

* Requires specific courses and more than 18 units to fulfill major. See College Catalog for more information.
\+ Requires application and admission to the program.

To earn a second Associate Degree, the General Education courses stay the same, but you must complete 18 units in the new major, paying attention to any specific requirements for that major.

Tip: To transfer to a university for a Bachelor's Degree, choose courses for your Associate's Degree that simultaneously satisfy your university's lower division requirements. Visit www.assist.org and see a counselor for more information.

For a current list of occupational certificates offered, see the Catalog or visit www.vvc.edu.

Physical Education (PE) (Section D)
At least one unit in an activity or non-activity (lecture) course in Physical Education is required of all students who wish to earn the associate's degree. A maximum of 4 units of PE activity courses will count toward the degree. Courses listed under Athletics do not satisfy the requirement. Having completed military basic training usually fulfills this requirement; a copy of the student's form DD214 or other documentation must be on file with the Office of Admissions.

Electives (Section E)
The remaining units for the degree—approximately 24—are called electives, because after satisfying your major and GE requirements, you may elect to take whatever you like, with some restrictions and recommendations. For example, you might want to complete courses towards an occupational certificate or towards possible transfer objectives.

Application for Graduation
Graduation ceremonies are held once a year in June. The graduating student is responsible for filing with the Office of Admissions an application for graduation, which includes submitting all transcripts from other colleges and all other documents verifying completion of any requirements. Late applicants will be evaluated for the following graduation date. Deadlines are as follows:

Graduation	Deadline to Apply
December 2008	Monday, September 29, 2008
June 2009	Monday, March 2, 2009
August 2009	Monday, June 1, 2009

Second Degree or Additional Degrees
To earn more than one Associate Degree, the following apply:

1. *Students must complete an additional 18 units from an approved departmental major for each additional degree*

2. *No course used to fulfill MAJOR requirements for the first degree may be used to fulfill MAJOR requirements for a subsequent degree.*

3. *The general education requirements used for the first degree remain as the general education requirements for subsequent degrees.*

C. TRANSFERRING TO A FOUR-YEAR COLLEGE OR UNIVERSITY

VVC transfers about 250 students annually to campuses of the University of California, California State University, and various private schools. These students traditionally do as well as or better than students who began as freshmen at the four-year college.

Students can generally complete the first two years' worth of a four-year bachelor's degree at a community college, like VVC, while simultaneously earning an associate's degree. To determine the exact courses you need to take here in order to satisfy requirements at your intended transfer institution, find your major in the grey-shaded section of this catalog, Section VIII, "Programs of Study," starting on page 81. If your school (or major) is not listed, you will need to make further inquiries. Consult with a counselor, with VVC's Transfer Center and, of course, with the transfer institution itself. If you have access to the World Wide Web, you can find out more specific information about transferring at: www.assist.org.

There are four major types of universities or four-year schools to which community college students transfer: The University of California (UC) system, the California State University (CSU) system, private institutions, and out-of-state institutions.

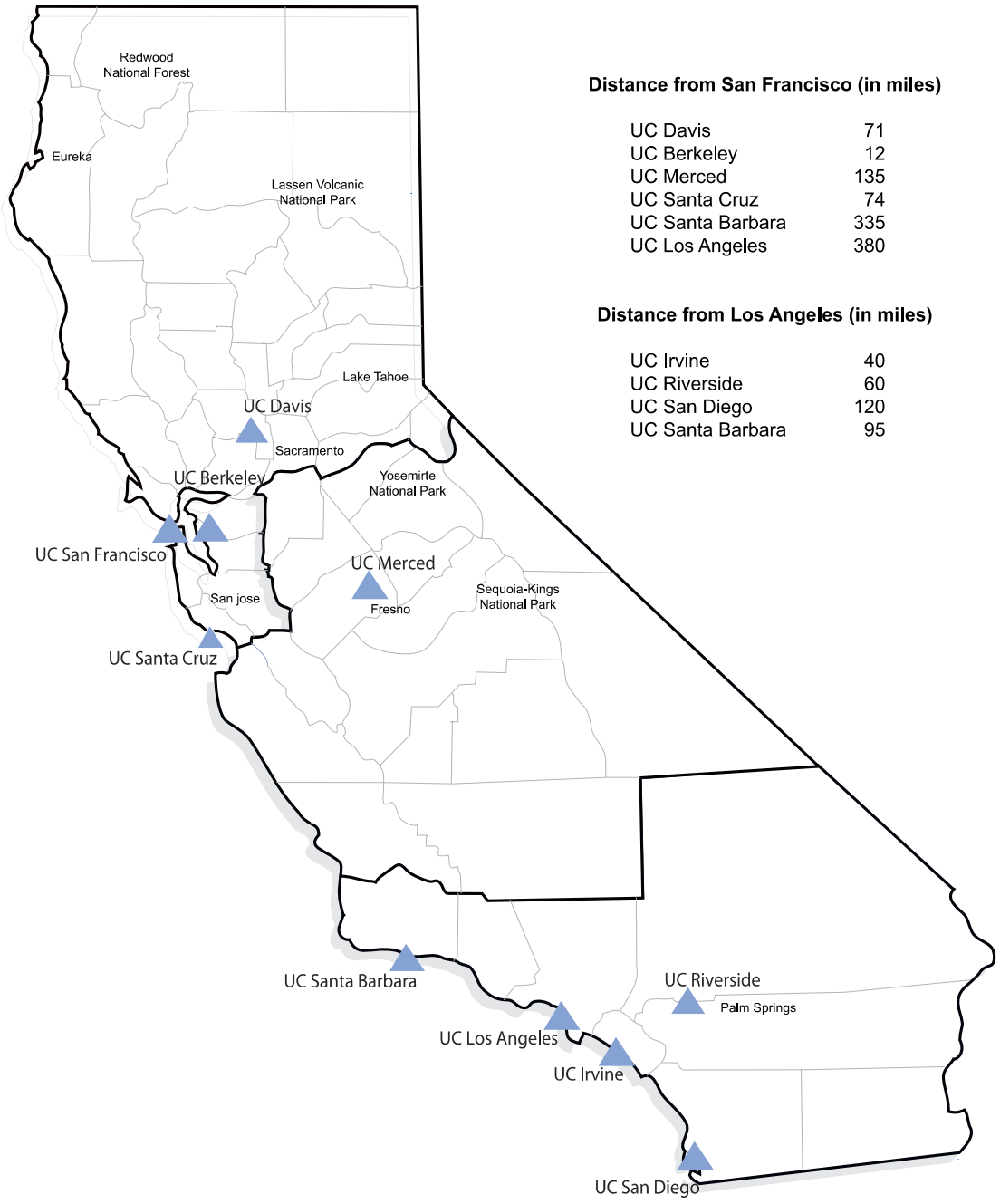
■ University of California (UC)
The UC system is world-renowned for its excellence in teaching and, in particular, research into what makes the world the way it is. Each of the ten campuses statewide (nine undergraduate) has its own distinct academic and social character, but all offer intellectually challenging bachelor's, master's and doctoral programs in an academically rigorous environment. The next four pages (59-62) have more information on the UC system.

■ California State University (CSU)
The twenty-two campuses of the CSU system offer a wide variety of innovative and exciting bachelor's and graduate-level programs whose goal is to prepare citizens for effective participation in society. As with the UC system, each campus has its own "flavor," but all offer well-regarded programs, many of which are internationally prominent. See pages 63-66.

■ Private and Out-of-State Institutions
Private schools such as the University of Southern California (USC) or Pepperdine, and out-of-state institutions, such as University of Nevada at Las Vegas (UNLV) or the University of Arizona, are some of those to which VVC students transfer. Such institutions are geographically and figuratively "all over the map," and students are advised to consult them directly. Visit the Transfer Center for more information.

■ Nontraditional Degree Programs
A number of nontraditional bachelors and graduate-level programs are offered by accredited institutions. These programs are designed for people whose distance, work or family situations prevent them from regular attendance in more traditional programs. See pages 72-79 for more information.

The University of California
10 campuses



Distance from San Francisco (in miles)

UC Davis	71
UC Berkeley	12
UC Merced	135
UC Santa Cruz	74
UC Santa Barbara	335
UC Los Angeles	380

Distance from Los Angeles (in miles)

UC Irvine	40
UC Riverside	60
UC San Diego	120
UC Santa Barbara	95

TRANSFERRING TO THE UNIVERSITY OF CALIFORNIA (UC)

Regular Transfer (as a Junior)

If you wish to transfer as a junior to any of the campuses of the University of California, you should generally plan to compete at least 60 *transferable* units with at least a 2.4 minimum GPA at VVC, including those required in your major and those needed for completion of the general education requirements.

For most students, this means you should follow the listings under the Intersegmental General Education Transfer Curriculum (IGETC), shown on the following pages.

There are some exceptions to the general recommendation to follow IGETC, most commonly for those students wishing to transfer to high-unit programs in engineering or in the sciences. For these majors, it is usually recommended that students follow the general education pattern of the specific campus they plan to attend. See the section on IGETC on this page.

Guaranteed Transfer to UCR

UC Riverside and VVC have established a Transfer Admissions Guarantee (TAG) program to encourage students to transfer to UCR and to facilitate that process. A UCR representative visits the Transfer Center regularly to answer questions about programs, majors, and alternative admissions programs. Stop by the Transfer Center to schedule an appointment.

The Intersegmental General Education Transfer Curriculum (IGETC)

IGETC (usually pronounced "eye-GET-see") was developed in concert with the UC and CSU systems to create a set of general education courses that would be accepted at both institutions ("segments," hence "*inter*segmental"), so that students who have not made a final decision about where to transfer would be able to have one list of courses to follow, instead of two.

Completing the IGETC therefore fulfills the lower division general education requirements for both the UC and the CSU systems without the need, after transfer, to complete any further lower division GE coursework.

It should be noted that completing the IGETC is neither a requirement for admission to UC or CSU, nor is it the only way to fulfill lower-division GE requirements.

■ Certification

When you have completed all the courses to be used for the IGETC, VVC can, at your request, *certify* to the UC or CSU campus you plan to attend that you have fulfilled all the lower division GE requirements. As a general rule, community colleges can certify the IGETC for transfer students who have also completed transfer units at a CSU, UC, or independent college, provided that the student has completed most of the transfer units at one or more California community colleges. Students who have been registered at a UC campus during a regular term (not summer or Extension) and wish to return to that campus are *not* eligible to use IGETC. Visit the Counseling Department to request certification.

■ Limitations

All courses used for IGETC must be passed with a minimum grade of C (a C-minus is not acceptable). *Credit* or *pass* grades are acceptable, providing they are equivalent to the grade of C.

■ Restrictions

IGETC is not used for transfer to UC Berkeley's Haas School of Business or UC San Diego's Revelle or Roosevelt Colleges. It is also not recommended for transfer into majors requiring extensive lower-division preparation, such as engineering, biology, chemistry, and others. Students in these programs should follow the general education pattern of the specific campus they plan to attend. Visit the Transfer Center or see a transfer counselor for thorough planning.

Transferring with Fewer Than 60 Units

If you wish to transfer to the UC system with fewer than 60 transferable units, you will need to do the following:

■ **Take the ACT or SAT**. You will need to take either the American College Test (ACT) or the Scholastic Aptitude Test (SAT) to determine whether you will be admitted as a freshman or as a sophomore. These tests are given several times per year; schedules and application forms are available in the Transfer Center.

■ **Clear the "a-g" Subject Requirements.** If you did not complete the a-g requirements in high school, you can take equivalent courses at VVC to clear any deficiencies. Visit the Transfer Center or see a counselor for more information.

Planning to Transfer?

www.assist.org

assist

Your official source for California articulation and student transfer information.

Visit www.universityofcalifornia.edu/admissions for online undergraduate admissions information and applications for U.C.

IGETC VICTOR VALLEY COLLEGE 2008-2009
INTERSEGMENTAL GENERAL EDUCATION TRANSFER CURRICULUM (IGETC)

Student's Name_____ **Social Security #**_____ **Birthdate**_____
Last First Middle Month Day Year

For information on preparing for your major, visit www.assist.org

OBJECTIVE: 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 California State University or the University of California system without the need, after transfer, to take additional lower-division general education courses to satisfy campus general education requirements.

EXCEPTIONS: All campuses will accept IGETC except UC Berkeley's Haas School of Business and UC San Diego's Roosevelt and Revelle Colleges. Also, IGETC is not recommended for science, engineering, or other high unit majors at most campuses. These students should follow the general education pattern of the specific campus which they plan to attend. Visit assist.org for more information.

CERTIFICATION: All areas of the IGETC should be certified prior to transfer. Partial certification may be awarded if all but two (2) courses in any areas except Group 1 and 2 are completed. Students are responsible for requesting IGETC certification by completing the REQUEST FOR CERTIFICATION OF TRANSFER GENERAL EDUCATION REQUIREMENTS form from Counseling.

Each course must be completed with a grade of "C" or better.

Legend: C = Units Completed IP = Units In Progress N = Units Needed

AREA 1 - ENGLISH COMMUNICATION **CSU**: Three courses required, one from Group1A, one from Group 1B, and one from Group 1C. **UC**: Two courses required, one from Group 1A and one from Group1B.	C	IP	N
Group 1A: ENGLISH COMPOSITION (Choose one course, 3 semester units minimum.) ENGL 101, ENGL H101 Course from Other College:_____ Advanced Placement_____ (Test Name and Score)			
Group 1B: CRITICAL THINKING AND ENGLISH COMPOSITION (Choose one course, 3 semester units minimum.) ENGL 104, H104; PHIL 207*, RLST 207* Course(s) from Other College:_____			
Group 1C: ORAL COMMUNICATION - CSU requirement only (Choose one course, 3 semester units minimum.) CMST 106, 108, 109 Course from Other College:_____			

AREA 2 - MATHEMATICAL CONCEPTS AND QUANTITATIVE REASONING Choose one course, 3 semester units minimum.			
MATH 105, H105, 119, 120, H120, 132, 226, 227, 228, 231, 270 Course from Other College:_____ Advanced Placement_____ (Test Name and Score)			

AREA 3 - ARTS AND HUMANITIES Choose three courses to include one from **Group 3A: Arts** and one from **Group 3B: Humanities**, 9 semester units minimum.			
Group 3A: ARTS ART 101, 102, 104, 105, 106, 107, 108; ENGL 116*; MUSC 100, 101, 102, 103, 115, 116, 117, 118, 202, 204; PE103 (Dance); TA 101, 102, 116* Course(s) from Other College:_____ Advanced Placement_____ (Test Name and Score)			
Group 3B: HUMANITIES ANTH 106; ENGL 102, ENGL H102, 162, 220, 225, 230, 231, 232, 233, 240, 241, 245, 246, 247; French 103, 104; GERM 103, 104; HIST 103, 104, 117, H117, 118, H118, 119, 120, 121, 124, 125, 130, 131, 135, 150, 153, 155, 157; PHIL 101, 108, 117, 120, 121; RLST 101, 105, 106, 110, 111, 115, 117: SPAN 103, 104; CMST 105 (Intercultural), 124 (ASL), 125 Course(s) from Other College:_____ Advanced Placement_____ (Test Name and Score)			
Group 3: One additional course from any of the above courses listed under 3A or 3B Course(s) from Other College:_____ Advanced Placement_____ (Test Name and Score)			

*Cross-listed courses are the same course listed under different departments. PHIL 207 is the same as RLST 207. ENGL 116 is the same as TA 116.

Legend: C = Units Completed IP = Units In Progress N = Units Needed

AREA 4 - SOCIAL AND BEHAVIORAL SCIENCES Choose three courses from at least two different disciplines, 9 semester units minimum.	**C**	**IP**	**N**
ANTH 101, 102, 103, 105, 106; CHDV 106; CMST 105 (Intercultural); ECON 101, 102; GEOG 102; HIST 103, 104, 115, 117, H117, 118, H118, 120, 121, 124, 125, 127, 130, 131, 155; POLS 101, 102, 110, 111, 112, 113; PSYC 101, H101, 110, H110, 111, 116, 121, 204, 213; RLST 113, 115; SOC 101, 102, 107 Course(s) from Other College:_____ Advanced Placement_____ (Test Name and Score) *No credit for PSYC 110 if taken after 111, 116 or 130. PSYC 110, 111, 116 and 130 combined: maximum credit, three courses.*			

AREA 5 - PHYSICAL AND BIOLOGICAL SCIENCES Choose at least two courses, one from **5A: Physical Sciences** and one from **5B: Biological Sciences**, 7 semester units minimum. At least one course must include a laboratory, indicated by (L).			
Group 5A: PHYSICAL SCIENCES ASTR 101; CHEM 100(L), H100(L), 114, 201(L), 202(L), 206(L), H206, 207(L) 255, 281, 282; GEOG 101, 101L(L); GEOL 101(L),102(L), 103, 110(L); OCEA 101; PSCI 101; 114 PHYS 100(L), 201(L), 202(L), 203(L), H204(L), 221(L), 222(L) Course from Other College:_____ Advanced Placement_____ (Test Name and Score) *NOTE: No credit for CHEM 100 or H100 if taken after CHEM 201. No credit for PSCI 101 if taken after a college course in astronomy, chemistry, geology, meteorology, oceanography or physics. No credit for PHYS 100 if taken after PHYS 201 or 221. PHYS 221, 222 and 201, 202, 203, H204 combined: maximum credit, one series.*			
Group 5B: BIOLOGICAL SCIENCES BIOL 100(L), 104(L), 114, 118, 201(L), 202(L), 203(L), 211(L), 212(L), 221(L), 231(L), 232(L); ANTH 101, 101L(L) Course From Other College:_____ Advanced Placement_____ (Test Name and Score) *NOTE: BIOL 211 and 212 combined: maximum credit, one course. No credit for BIOL 100 if taken after BIOL 201, 202 or 203. BIOL 231 and 232 combined: maximum credit, one course.*			

LANGUAGE OTHER THAN ENGLISH - UC Requirement for IGETC Certification May be fulfilled in one of the following ways:			
____ Complete 2 years of the same foreign language in high school with a grade of "C" or better. *Submit official high school transcript to VVC Admissions and Records Office.* **OR** ____ Complete one of the following Victor Valley College foreign language courses or equivalent course at another college: CMST 123 (ASL); FREN 102; GERM 102; LATN 102; SPAN 102 **OR** ____ Complete two years of formal schooling at the 6th grade level or above at an institution where English is not the language of instruction. *Submit official translation of transcript to VVC Admissions and Records Office.* **OR** ____ Score of 3 or higher on Foreign Language Advanced Placement test, or a score of 550 or higher on the College Board Achievement Test in Foreign Language. *Submit official transcript to VVC Admissions and Records Office.* Test Name_____ Score_____ Date taken_____			

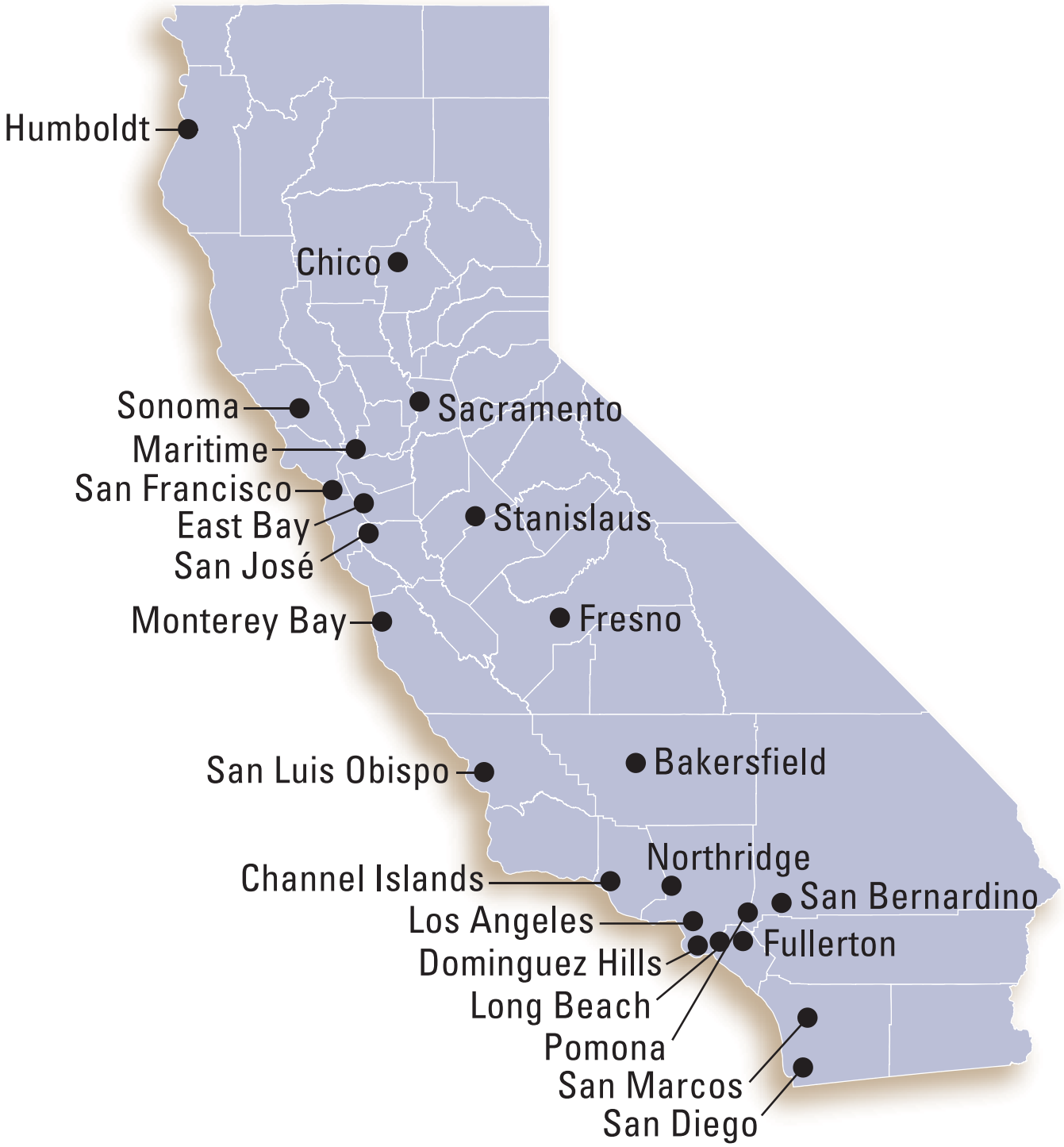
U.S. HISTORY, CONSTITUTION AND AMERICAN IDEALS **CSU Graduation Requirement Only** Not part of certification of IGETC, but highly recommended to be completed prior to transfer. One course from Group 1 and one course from Group 2; 6 semester units minimum.			
Group 1: POLS 102 **Group 2:** HIST 117 OR 118 *NOTE: Courses used to meet this requirement DO NOT count toward fulfilling requirements in Areas 3 or 4 of IGETC* for CSU.			

A course may not be used to fulfill more than one requirement even though it may be listed in more than one area. Credit will be given for either the honors or non-honors version of a course, not both. For example, 4 units for Math 105 or Math H105, not both.

CERTIFICATION: ☐ CSU graduation requirement in U.S. History, Constitution, and American Ideals fulfilled
FULL IGETC CERTIFICATION for the following university system(s): ☐ University of California ☐ California State University
PARTIAL CERTIFICATION for ☐ UC ☐ CSU – The following have been completed: ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ Foreign Lang

College evaluator_____ **Title**_____ **Date**_____

THE 23 CAMPUSES OF THE CSU



TRANSFERRING TO CALIFORNIA STATE UNIVERSITY (CSU)

Regular Transfer (as a Junior)

Students who have completed at least 60 *transferable* units with a grade point average of 2.0 or higher are eligible to apply for transfer to the CSU system. It is usually to your advantage to complete 60 units, rather than 56, since doing so means you can transfer in as a junior, rather than as a sophomore, which often confers privileges such as earlier registration.

CSU General Education Breadth Certification

Students planning to graduate from any of the 23 campuses of CSU should complete the CSU GE Breadth requirements prior to transfer if possible. This list, found on the following pages, covers five general subject areas, A-E. On completion, and at the student's request, VVC can *certify* to the transfer campus that the student has fulfilled all lower-division GE requirements. It is to your advantage to complete the entire pattern before transfer; however, VVC can provide partial certifications, leaving you to fulfill uncompleted areas at the transfer campus—according to their requirements, which may differ considerably. Visit the Counseling Department to request certification.

Intersegmental General Education Transfer Curriculum (IGETC)

For students who have not yet decided whether to transfer to a CSU or to a UC campus, an alternative to the CSU's GE Breadth pattern for satisfying general education requirements is the IGETC, which will satisfy both CSU and UC. However, not all aspects of following it are necessarily better for all students. For more information, please see pages 53-54.

Guaranteed Transfer To Cal State San Bernardino (CSUSB)

Many students elect to transfer to California State University at San Bernardino, which offers a special "guaranteed admission" contract to our students. This agreement guarantees that, on completion of specified coursework at VVC, the student will be admitted to CSUSB with full junior status. To develop such a contract, visit the Transfer Center to make an appointment with the CSUSB representative, who comes to VVC on a regular basis.

Transferring with Fewer Than 60 Units

If you wish to transfer to the CSU system with fewer than 60 transferable units, you will need to do the following:

- **Take the ACT or SAT.** You will need to take either the American College Test (ACT) or the Scholastic Aptitude Test (SAT) to determine whether you will be admitted as a freshman or as a sophomore. These tests are given several times per year; schedules and application forms are available in the Transfer Center.
- **Clear any missing college preparatory requirements.** If you did not complete the appropriate subject requirements in high school, you can take equivalent courses at VVC (or in adult school or in high school summer sessions; minimum grade of C required) to clear any deficiencies, or earn acceptable scores on specified examinations. Visit the Transfer Center or see a counselor for more information.

Planning to Transfer?

www.assist.org

assist

Your official source for California articulation and student transfer information.

Visit www.universityofcalifornia.edu/admissions for online undergraduate admissions information and applications for U.C.

CSU **Victor Valley College** **2008-2009**

California State University (CSU)
General Education Requirements for Transfer Certification

Student's Name_____ **Social Security #**_____ - _____ - _____ **Birthdate**____/____/____
Last First Middle Month Day Year

For information on preparing for your major, visit www.assist.org

Certification:
1. If possible, complete the following lower-division general education requirements in Areas A-E before transferring to any of the 23 campuses of the CSU system.
2. Victor Valley College awards a student full or partial certification by subject area for completion of the following lower-division general education transfer requirements.
3. In accordance with Executive Order 595, students admitted to any CSU with full or partial certification will not be held to any additional lower-division general education requirements in the areas certified. Students may be held to other lower division graduation requirements.
4. Full Certification - All areas completed with a minimum of 39 units.
5. Partial Subject Area Certification - Areas A,B,C, and D completed with a minimum of 9 units in each area and Area E completed with a minimum of 3 units.
6. If not fully certified, students may be held responsible for completing the general education pattern of the specific college to which they transfer.

Important Points:
1. A minimum of 9 additional semester units of upper-division general education must be completed at the CSU campus.
2. If a student completes a course in a year it did not appear on the CSU General Education course list, it cannot be used for GE certification.
3. A minimum of 60 units of transferable courses must be completed to transfer as a junior.
4. Credit is awarded for either an honors or non-honors course, not both. For example, students may receive credit for Math 105 or Math H105, not both.
5. A single course may not fulfill more than one general education requirement even though it may be listed in more than one area.

DIRECTIONS: Circle courses and tally units in appropriate columns.

Legend: C = Units Completed IP = Units In Progress N = Units Needed

AREA A. COMMUNICATION IN THE ENGLISH LANGUAGE AND CRITICAL THINKING.....minimum 9 units *Choose one course from each of the three areas below. Each course from Area A must be completed with a "C" grade or better.*	**C**	**IP**	**N**
A1 COMMUNICATION CMST 106, 107, 108, 109 Course from other college:			
A2 WRITTEN COMMUNICATION ENGL 101, H101 Course from other college:			
A3 CRITICAL THINKING ENGL 104, H104, PHIL 109, 207*, RLST 207* Course from other college:			
AREA B. PHYSICAL UNIVERSE AND ITS LIFE FORMS.....minimum 9 units *Choose at least one course from B1 Physical Sciences, one course from B2 Life Sciences, and one course from B4 Mathematics. At least one science course must include a laboratory to fulfill B3.*			
B1 PHYSICAL SCIENCE *Courses which include a laboratory:* CHEM 100, H100, 201, 202, 206, H206, 207, H207, 255, 281, 282 GEOG 101+101L GEOL 101, 102, 110 PHYS 100, 201, 202, 203, H204, 221, 222 *Courses which do NOT include a laboratory:* ASTR 101; CHEM 114 GEOG 101; GEOL 103 OCEA 101 PSCI 101, 114, 115 Course from other college:			
B2 LIFE SCIENCE *Courses which include a laboratory:* ANTH 101 + 101L BIOL 100, 104, 107, 109, 121, 201, 202, 203, 211, 212, 221, 231, 232 *Courses which do NOT include a laboratory:* ANTH 101 BIOL 114, 118 Course from other college:			
B3 LABORATORY ACTIVITY *Any science course in Area B1 or B2 which includes a lab fulfills this requirement. Check appropriate box.*			
B4 MATHEMATICS *The course used to fulfill B4 must be completed with a "C" grade or better.* MATH 104, 105, H105, 119, 120, H120, 132, 226, 227, 228, 231, 270 Course from other college:			

*Cross-listed courses are the same course listed under different departments. PHIL 207 is the same course as RLST 207.

AREA C. ARTS, LITERATURE, PHILOSOPHY AND FOREIGN LANGUAGE.....minimum 9 units *Choose at least one course from the ARTS and one course from the HUMANITIES.*	C	IP	N
C1 ARTS ART 101, 102, 104, 105, 106, 107, 108, 109, 112, 113, 114, 120, 122, 125, 150 PE 103 (Dance) ENGL 116* MUSC 100, 101, 102, 103, 115, 116, 117, 118, 131, 202, 204 TA 101, 102, 107, 110, 116* Course from other college:			
C2 HUMANITIES ANTH 106 CMST 105 (Intercultural) ENGL 102, H102, 116*, 162, 210, 211, 220, 225, 230, 231, 232, 233, 235, 240, 241, 245, 246, 247 Foreign Language: CMST (ASL) 122, 123, 124, 125; FREN 101, 102, 103, 104; GERM 101, 102, 103, 104; LATN 101, 102; SPAN 101, 102, 103, 104 HIST 103, 104, 115, 117, H117, 118, H118, 119, 120, 121, 124, 125, 127, 130, 131, 135, 150, 153, 155, 157 PHIL 101, 108, 117, 120, 121 RLST 101, 105, 106, 110, 111, 115, 117 TA 104, 116* Course from other college:			
C ONE ADDITIONAL COURSE FROM ANY OF THE ABOVE COURSES LISTED UNDER C1 OR C2 Course used from above: Course from other college:			
AREA D. SOCIAL, POLITICAL AND ECONOMIC INSTITUTIONS AND BEHAVIOR.....minimum 9 units *Choose courses from at least **TWO** different subject areas in AREA D.*			
UNITED STATES HISTORY REQUIREMENT FOR CSU GRADUATION HIST 117, H117, 118, or H118 Course from other college:			
UNITED STATES CONSTITUTION AND AMERICAN IDEALS REQUIREMENT FOR CSU GRADUATION POLS 102 or H102 Course from other college:			
ONE ADDITIONAL COURSE FROM AREA D *Choose one additional course not used above from the following:* AJ 101 ANTH 101, 102, 103, 105, 106 CHDV 106, 146 CMST 105 (Intercultural) ECON 101, 102 GEOG 101, 102, 103 HIST 103, 104, 115, 117, H117, 118, H118, 119, 120, 121, 124, 125, 127, 130, 131, 135, 150, 153, 155, 157 POLS 101, 102, H102, 103, 110, 111, 112, 113 PSYC 101, H101, 103, 110, H110, 111, 116, 121, 130, 204, 213 RLST 105, 106, 110, 113, 115 SOC 101, 102, 103, 107 Course(s) from other college: *NOTE: Students may use any 9 units from this section to fulfill certification requirements for Area D, but they are encouraged to complete the above U.S. History, Constitution and American Ideals requirement as part of Area D. All CSU campuses, except Chico State, permit these courses to also satisfy Area D requirement.*			
AREA E. LIFELONG UNDERSTANDING AND SELF-DEVELOPMENT.....minimum 3 units			
ALDH 125 CHDV 146 GUID 105* HLTH 102 PSYC 101, H101, 103, 105*, 110, H110, 121, 125, 130, 133 SOC 103 PE 104 ***OR*** PE 150 (taken as a 2-unit course) ***AND*** 1 unit from APE 160; PE 160, 161, 162, 163, or 164 Course(s) from other college:			
*Cross-listed courses are the same course listed under different departments. GUID 105 and PSYC 105 are the same course. ENGL 116 and TA 116 are the same course. **TOTAL**			

CERTIFICATION

The student has fulfilled the following California State University requirements in U.S. History, Constitution and American Ideals:

☐ **U.S. HISTORY:**
HIST 117, H117, 118 or H118
Course from other college:_____

☐ **U.S. CONSTITUTION AND AMERICAN IDEALS:**
POLS 102 or H102
Course from other college:_____

The student has fulfilled the following lower division requirements for general education certification:

FULL CERTIFICATION ☐ **OR** **PARTIAL CERTIFICATION: Subject Areas Certified** **A** ☐ **B** ☐ **C** ☐ **D** ☐ **E** ☐

College Evaluator_____ **Title**_____ **Date**_____

GENERAL INFORMATION ABOUT TRANSFERRING

Transferring to Independent or Out-of-State Colleges

In addition to state-funded institutions, California boasts many accredited independent colleges and universities. Other states similarly have a huge variety of schools from which to choose. Generally, in-state public school tuition costs are the lowest, but financial aid packages can sometimes absorb much of the difference. For information about private and out-of-state institutions, whose requirements vary considerably, contact the Transfer Center.

Transfer Center

It's a good idea to begin thinking about your transfer goals fairly early in your studies, so that you can be taking a well-planned program of courses towards your objectives. The Transfer Center, located in the Student Services Building, is the place to go to find out about careers, majors, universities and colleges.

■ **Catalogs.** In the Transfer Center you'll find catalogs from colleges and universities all over California which, like this catalog in your hands, show programs of study, course descriptions, photographs of the campus, requirements for degrees, and much more. For out-of state institutions where we don't have an actual catalog, you can usually find information on a CD-ROM. Other continuously updated programs offer you similar opportunities to research your options.

■ **College Representatives.** Representatives from public and private four-year institutions are available to meet with prospective students at the Transfer Center. Representatives are available to discuss majors, admission requirements, applications, etc. Please contact the Transfer Center to schedule an appointment.

Counseling Resources

Counselors are available to all students for help in identifying personal and educational goals, selecting a major, planning courses to meet their objectives, and in dealing confidentially with personal situations that affect their education. We strongly recommend that all students planning to transfer meet with a VVC counselor to ensure that their courses are in line with their goals and requirements.

Career planning classes (look under "Guidance"), an annual career options conference, and other resources such as career testing are available to help students explore their alternatives.

Campus Visits

In addition to reviewing catalogs and other written materials on the campuses you are considering, it is a good idea, if at all possible, to personally visit those institutions.

Check out not only the campus itself, but also the surrounding areas. Do you want to be in an urban setting? Rural? Desert? Coastal? What is the "flavor" of the place and would you feel comfortable there? Visit the libraries, shopping areas, recreation facilities, cafes, bookstores, movie houses and other components that make up a student's life. To explore living situations, visit the university's housing office; also, look at the want ads in the local newspaper.

Transcripts of Records

At the request of a student and in the absence of any outstanding obligation to the college (financial, library, parking, security, bookstore, Counseling Resource Center), official transcripts of record bearing the seal of the college will be forwarded to designated institutions or individuals.

Requests to have official Victor Valley College transcripts sent to other colleges and universities must be made in writing to the Office of Admissions and Records. Completed request forms may be submitted by mail or hand delivered. Visit Admissions and Records at www.vvc.edu.

Official transcripts issued to students will be provided in a sealed envelope with "OFFICIAL IF SEALED" stamped on the envelope.

There is a fee for each transcript processed after two have been issued. The Transcript Request form and fees may be accessed at www.vvc.edu/Admissions and Records. The number for transcript information is (760) 245-4271, extension 2272.

Applying for Admission

The University of California (UC system) and the California State University (CSU system) are different and distinct branches of public higher education in California and have different requirements for admission.

To apply to the University of California or the California State University systems, students should plan to complete and mail all required forms within the application filing period listed in the application packets, available in the Transfer Center.

Contact other institutions directly for information about applications.

Application Deadlines

To better their chances for acceptance, students should apply to every university for which they want to be considered during the initial or priority application filing period. Students planning to apply to a private university need to research what the initial or priority application filing period is for each specific private university. Certain impacted or highly competitive majors may require earlier deadlines. It is the student's responsibility to research what these deadlines are.

Each individual campus closes application filing periods at different times according to how many students apply. A student who is filing an application late (one month after initial filing period) should contact the Admissions Department of the specific college for which he is applying to inquire if applications are still being accepted.

Application deadlines vary by campus. For information on the University of California system, visit www.universityofcalifornia.edu/admissions. For information on the California State University system, go to www.csumentor.edu. Note that deadlines are usually quite far in advance, for example, October of one year for admission in the Fall term of the following year.

Impacted Majors

At some UC and CSU campuses, more students may seek admission to popular areas of study such as engineering, computer science, and business than can be accommodated. Occasionally, more applications are received during the first month of the filing period than can possibly be accepted at the particular school. When this happens at a UC or CSU campus, certain majors are declared "impacted," and these schools may permit only limited enrollment. Students who apply to impacted majors may also be directed to alternate campuses. Applicants to impacted majors are subject to supplementary admission criteria.

Students who seek to transfer into majors which are impacted should complete all courses designated as required lower division preparation for the major prior to transfer.

At some schools, completion of specific courses with minimum grades is required before transfer as a condition of acceptance into an impacted major.

Maximum Transferable Credit

A maximum of 70 semester or 105 quarter units earned in California community colleges may be applied toward the baccalaureate degree at either a UC or CSU campus.

Notice of Responsibility:

*Students should always study the catalog and website of the school to which they plan to transfer, and are responsible for directly contacting that institution's admissions office for the most current, up-to-date information. No matter how much help you may receive from various sources, it is ultimately **your** responsibility to ensure that all transfer requirements and deadlines are met.*

For more information about transferring, visit these websites:

www.californiacolleges.edu/
CaliforniaColleges.edu covers UC, CSU and independent colleges, and provides virtual campus tours, student-campus matching assistance, information on financial aid, and admissions planners for first-year and transfer students.

www.ucop.edu
The University of California, Office of the President, offers this site for information about UC. It also provides links to each of the ten UC campuses.

www.calstate.edu
This site provides information about California State University's educational programs, system wide policies and initiatives, historical and general information, admission requirements and procedures. The site also provides access to links for all 23 CSU campuses.

www.csumentor.edu
Provides outreach, financial aid, and admission information abut the CSU system. Here, you can take virtual campus tours, develop a comparative view of different campuses, establish e-mail connections with campus personnel, and apply electronically.

www.assist.org
The ASSIST site lists courses required for various majors at both UC and CSU campuses, and shows VVC's equivalent courses. WE have formal, course-to-course equivalency agreements with many of the UC and CSU campuses.

www.aiccumentor.org
This is the official web site of the Association of Independent California Colleges and Universities. Visit this site for information on independent (non-UC or CSU) schools.

California State University (CSU) &
University of California (UC)
Transferable Courses

AJ **101**, 102, **103**, 104, 123, 124, 126, 127, 130, 132, 133, 134, 135. 138, 140, 148, 149
AGNR **100**, 101, **102**, 120, 121, 122, 129, **131**, 138, 140, **141**, 148, 149, 150, 151, 152, 153, 154, 160, 161
ALDH **125**, 138, 139, 141, 142, 148, 149,
ANTH **101**, **101L**, **102**, **103**, 104, **105**, **128, 129**, **151**
ART **101**, **102**, **104**, **105**, **106**, **107**, **108**, **109, 112**, **113**, **114**, **115**, **120**, **121**, **122**, **123**, **124**, **125**, **126**, **128**, 129, 130, 131, 132, **133**, 138, **141**, **142**, **150**, **151**
ASTR 101
ATHL **120**, 120P, **121**, 121P, **122**, 122P, **123**, 123P, **124**, 124P, **125**, 125P, **126**, 126P, **127**, 127P, **128**, 128P, **129**, 129P, **130**, 130P, **131**, **132**, 132P, **133**, 133P, **134**, 134P, **135**, 135P, **140**, 140P
AUTO 138
BIOL **100**, **104**, 107, 109, 113, **114**, **118**, 120, **121**, 126, 127, 128, 129, 138, 148A/B, 149, 201, 202, **203**, **211**, **212**, 215A, 215B, 215C, **221**, **231**, **232**
BADM **100**, **101**, **102**, **103**, **104**, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 116, **117**, **118,** 122, 138, 142, 144, 148, 149
BET 101, 103, 103A, 103B, 103C, 103D, 104, 104A, 104B, 104C, 104D, 107, 107A, 107B, 107C, 111A, 111B, 111C, 112, 112A, 112B, 112C, 114A, 114B, 114C, 117A, 117B, 117C, 118, 118A, 118B, 118C, 122, 122A, 122B, 122C, 123L, 123M, 123T, 124, 125, 127, 130, 131, 131A, 131B, 131C, 134, 135, 136, 138,
BET 139A, 139B, 139C, 141A, 141B, 141C, 142, 143, 145, 148, 149
BESC 138, 141, 142, 143, 148, 149
BRE 100, 101, 110, 111, 120, 121, 125, 126, 127, 138, 139, 140, 142, 148, 149
CHEM **100**, **H100**, **114**, 120, **128**, **129**, 138, 150, **201**, **202**, **206**, **H206**, **207**, **H207**, **255**, **281**, **282**
CHDV **100**, **106**, 110, 111, 115, 127A, 127B, 132, 133, 134, 137, 138, 141, 142, 143, 144, 145, **146**, 147, 148, 149, 220, 239, 240
CIS **101**, 102, 103, 105, 106, 107, **108**, 111, 123, 124, 125, 127, 136, 137, 138, 139, 200, **201**, **202**, **203**, 205, 206A, 206B, 210, 211A, 211B, 211C, 240A, 240B, 252, 261, 262, 280, 281, 287A, 287B, 288A, 288B, 290A, 290B
CIDG 101, 103, 104, 108, 110, 120, 138, 148, 153, 160, 210, 230, 231, 250, 251, 260, 261, 280, 281
CMST **105**, **106**, 107, **108**, **109**, **115**, 121, **122**, **123**, **124**, **125**, **128**, 129
CT 101, 103, 104, 105, 106, 107, 108, 109, 110, 111A, 111B, 112, 113, 114, 115, 116, 119, 120A, 120B, 121, 122A, 122B, 123, 124, 125, 126, 127, 130, 131, 132, 133, 136, 137, 138, 140, 141, 148, 160ABCD
CTMF 126A, 126B, 127, 129A, 130A, 130B, 131A, 131B, 140, 141
CTMT 120, 121, 122, 123, 129
CTPB 111, 112, 113, 114, 115, 116A, 117, 118, 119
ECON **101**, **102**, 118, **128**, 129
EDUC **101**, 138
ETEC 106, 107
ELCT 110, 131, 132, 133, 134, 138, 148

NOTE: All courses listed here transfer to the CSU system. Courses in **boldface** transfer both to CSU and to the UC system. Be aware that, although a course may transfer, that does not necessarily mean it will satisfy any particular requirement. For the latest information about course requirements for transferring to a CSU or UC campus, visit www.assist.org. Independent (private) colleges make their own determination regarding transferability; contact your intended school for the most up-to-date information.

California State University (CSU) &
University of California (UC)
Transferable Courses

ENGL **101**, **H101**, **102**, **H102**, **104**, **H104**, **109**, 112, **116**, **128**, 129, 138, 149, **162**, **210**, **211**, **220**, **225**, **230**, **231**, **232**, **233**, 235, **240**, **241**, **245**, **246**, **247**
FIRE 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 121, 138, 148, 149
FREN **101**, **102**, **103, 104**, 125, **128**, 129
GEOG **101**, **101L**, **102**, **103**, **128**
GEOL **101**, **102**, **103**, 109, **110**, 112, **128**, 129
GERM **101**, **102**, **103**, **104**, 125, **128**, 129
GUID 100, 105, 107
HIST **103**, **104**, **115**, **117**, **H117**, **118**, **H118**, **119**, **120**, **121**, **124**, **125**, **127**, **128**, 129, **130**, **131**, **135**, 145, **150**, **153**, **155**, **157**
HLTH **102**,
HVAC 122A, 122B, 122C, 136
JOUR 106, 108, 108L, 128, 129, 138
LATN **101**, **102**
MATH 104, **105**, **H105**, **120**, **H120**, **128**, **129**, **132**, 138, **216**, **226**, **H226**, **227**, **H227**, **228**, **H228**, **231**, **270**
MUSC **100**, **101**, **102**, **103**, **104, 105**, **108**, **110**, **111**, 112, 113, **115**, **116**, **117**, **118**, **120A**, **120B**, **120C**, **120D**, **120E**, **120F**, **120G**, **120H**, **120I**, **120J**, **122**, **123**, **124**, **125**, **126**, **128**, 129, **130**, **131**, **132**, **134**, 135, **136**, **137**, 138, **139**, **140**, **141**, **143**, 144, **145**, **146**, **147**, **202**, **203**, **204**, **205**, **210**, **211**
NURS 138, 148, 149, 220, 221, 222, 223, 224, 225, 226, 245, 246
OCEA **101**
PHIL **101**, **108**, **109**, **117**, **120**, **121**, **128**, 129, **207**
PHOT **100**, **101**, 102, 103, 104, 105, 106, **128**, 129, 138
PE **101**, **102**, **103**, 104, 105, **120**, **121**, **122**, **123**, **124**, **125**, **126**, **128**, **140**, **141**, **142**, 150, 151, **160**, **161**, **162**, **163**, **164**, **165**, **166**, **168**, **176**, **177**, **180**, **181**, **182**, **183**, **184**, **185**, **186**, **187**, **188**, **266, 276, 277**
APE **160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 180, 181, 182, 183, 184, 185, 186**
PEDA **101, 150, 151, 152, 153, 160, 161, 162, 163, 164, 165, 166, 167**, 169, 170**, 171, 174, 175, 176, 177, 266, 267, 270, 271, 274, 275, 276, 277**
PSCI **101, 114**, 115, **128**, 138
PHYS **100**, **128**, 129, 138, **201**, **202**, **203**, **H204**, **221**, **222**
POLS **101**, **102**, **H102**, 103, **110**, **111**, **112**, **113**, 120, **128**, 129, 130, 131, 132, 133, 134, 135, 138
PSYC **101**, **H101**, **102**, 103, 105, 108, 109, **110**, **H110**, **111**, 112, **116**, **121**, 125, **128**, 129, **130**, **133**, 138, 139, 143, **204**, **213**
RLST **101, 105, 106, 110, 113, 115, 117, 128,** 129, **207**
RSPT 138, 148, 149, 230, 231, 232, 233, 234, 239, 241, 242, 243
RMGT 120, 138
SOC **101**, **102**, 103, **107**, **128**, 129, 138
SPAN **101**, **101A**, **101B**, **102**, **103**, **104**, 110, 125, **128**, 129, 130, 131, 135
TA **101, 102, 104, 106, 107**, 108, **109, 110, 111**, 113, **115, 116, 117, 120, 125ABC, 128**, 129, 138, **160, 161, 166, 167, 170, 171, 174, 175, 266, 267, 270, 271, 274, 275**

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VICTOR VALLEY COLLEGE CAN SYSTEM

California Articulation Numbering System (CAN)

The California Articulation Numbering (CAN) System is a cross-referenced course numbering system which identifies some of the transferable, lower-division, introductory courses taught on California college campuses.

When a California Articulation Number (CAN) appears in a college catalog or class schedule description, it means that this lower division introductory course corresponds to a course taught in other participating public and independent colleges in California. Credit for a course with a specific CAN may be transferred to a participating college or university and used in place of a course with the same CAN at that college. For example, Chemistry 201 is identified as CAN CHEM 2 in the Victor Valley College course description. This signifies that all schools that participate in the CAN system will accept VVC's Chemistry 201 in place of the particular Chemistry course on their campus that has also been identified as CAN CHEM 2. The CAN system makes identification of comparable courses easier and gives students the benefit of articulation with many campuses statewide. A CAN qualified course will be used by a receiving campus for any purposes its own CAN qualified course is used, effective with the CAN catalog edition.

The CAN program is being phased out; a new program, the Lower division Transfer Pattern (LDTP) Project, is being implemented. For an interim period some CAN designated courses are accepted as meeting the associated statewide LDTP requirements. The interim articulation will be superseded by full articulation once course outlines have been approved through the LDTP submission and review process. Courses having interim approval reflect both TCSU and CAN designations. Students are encouraged to check with the Counseling department and/or at the CSU campus to which they intend to transfer to obtain more current information.

CAN AJ 2	AJ 101
CAN AJ 4	AJ 103
CAN AJ 6	AJ 104
CAN ANTH 2	ANTH 101
CAN ANTH 4	ANTH 102
CAN ANTH 6	ANTH 103
CAN ART 2	ART 101
CAN ART 4	ART 102
CAN ART 10	ART 120
CAN ART 14	ART 112
CAN ART 16	ART 114
CAN ART 18	PHOT 100
CAN ART 24	ART 122
CAN ART SEQ A	ART 101 + 102
CAN BIOL 2	BIOL 201
CAN BIOL 4	BIOL 202
CAN BIOL 12	BIOL 231
CAN BIOL 14	BIOL 221
CAN BIOL SEQ A	BIOL 201 + 202 + 203
CAN BUS 2	BADM 101; or BADM 103
CAN BUS 4	BADM 102; or BADM 104
CAN BUS SEQ A	BADM 101 + 102; or BADM 103 + 104
CAN CHEM 2	CHEM 201
CAN CHEM 4	CHEM 202
CAN CHEM 6	CHEM 100; or CHEM H100
CAN CHEM 12	CHEM 255
CAN CHEM SEQ A	CHEM 201 + 202
CAN CSCI 2	CIS 101
CAN CSCI 10	CIS 108
CAN DRAM 8	TA 106
CAN DRAM 12	TA 115
CAN DRAM 18	TA 101
CAN ECON 2	ECON 101
CAN ECON 4	ECON 102
CAN ENGL 2	ENGL 101
CAN ENGL 4	ENGL 102
CAN ENGL 6	ENGL 109
CAN ENGL 8	ENGL 245
CAN ENGL 10	ENGL 246
CAN ENGL 14	ENGL 230
CAN ENGL SEQ A	ENGL 101 + 102
CAN ENGL SEQ B	ENGL 245 + 246
CAN FREN 2	FREN 101
CAN FREN SEQ B	FREN 103 + 104
CAN GEOG 2	GEOG 101
CAN GEOG 4	GEOG 102
CAN GEOG 6	GEOG 101 + 101L
CAN GEOL 2	GEOL 101
CAN GOVT 2	POLS 102; or POLS H102
CAN HIST 8	HIST 117; or HIST H117
CAN HIST 10	HIST 118: or HIST H118
CAN HIST 14	HIST 103
CAN HIST 16	HIST 104
CAN MATH 2	MATH 132
CAN MATH 8	MATH 104
CAN MATH 18	MATH 226
CAN MATH 20	MATH 227
CAN MATH 22	MATH 228
CAN MATH 24	MATH 270
CAN MATH SEQ B	MATH 226 + 227
CAN MATH SEQ C	MATH 226 + 227 + 228
CAN PHIL 2	PHIL 101
CAN PHIL 4	PHIL 108
CAN PHIL 6	PHIL 109
CAN PHYS 2	PHYS 221
CAN PHYS 4	PHYS 222
CAN PHYS 12	PHYS 203
CAN PHYS SEQ A	PHYS 221 + 222
CAN PHYS SEQ B	PHYS 201 + 202 + 203 + H204
CAN PSY 2	PSYC 101
CAN SOC 2	SOC 101
CAN SOC 4	SOC 102
CAN SPAN 8	SPAN 103
CAN SPAN SEQ A	SPAN 101 + 102
CAN SPAN SEQ B	SPAN 103 + 104
CAN SPCH 4	CMST 109
CAN SPCH 10	CMST 108
CAN STAT 2	MATH 120

VVC Courses to Take in Preparation for the **Liberal Studies Major** at **California State University, San Bernardino**

Usually intended for students who wish to become K-6 teachers, this program includes most of the classes you would need for both your A.A. in Liberal Arts at VVC, and to transfer to Cal State as a junior in the Liberal Studies major.

Three tracks are available:
General – Includes only the subject matter needed to pass the CBEST exam and enter the Multiple Subject (K-8) credential program *after completion of the BA degree*.
Integrated – Includes the General Track, plus the Multiple Subject (K-8) credential program *as part of the BA degree*.
Spanish Studies – Similar to the General Track, but requires a higher level of Spanish competency and a concentration on Latino language and culture.
For additional details of the content, uses, and requirements of the three tracks, visit http://www.csusb.edu/liberal/.

❑ **Freshman Composition**
(Grade of "C" or higher required)
ENGL 101 or H101

❑ **Oral Communication** (choose one)
(Grade of "C" or higher required)
CMST 109 (preferred)
CMST 106, 107, 108

❑ **Literature** (choose one)
ENGL 102, H102, 116, 240, 241
TA 104, 116

❑ **World Civilization**
HIST 103

❑ **American Civilization**
HIST 117 or H117

❑ **American Government**
POLS 102 or H102

❑ **California History**
HIST 115

❑ **Ideas of Mathematics**
(Grade of "C" or higher required)
MATH 132

❑ **Life Sciences**
BIOL 100

❑ **Chemistry**
CHEM 100 or H100

❑ **Physics**
PHYS 100

❑ **Computer Technology**
CIS 106 or ETEC 106

❑ **Art Appreciation** (choose one)
ART 101, 102, 105, 106
MUSC 100
TA 101

❑ **Physical Education** (choose one from any of the following)
APE 160 – 186
PE 160 – 266
PEDA 160 – 277
TA 160 – 275

❑ **Physical Fitness and Health**
HLTH 102

❑ **Child Development**
CHDV 100 (formerly 146) or PSYC 111

❑ **Critical Thinking** (choose one)
(Grade of "C" or higher required)
ENGL 104 or H104
PHIL 109 or 207
RLST 207

❑ **Philosophy** (choose one)
PHIL 101,108, 117, 120, 121
RLST 101, 105, 106, 117

❑ **Foreign Language** at least through second semester (choose one)
FREN 102, 103, 104
GERM 102, 103, 104
LATN 102
SPAN 102, 103, 104
CMST (ASL) 123

Note: Other requirements, including Assessment, Classroom Experiences, and Observations and Methods, must be completed at Cal State.

VVC Courses to Take in Preparation for the **Human Development Major – School Age Track** at **California State University, San Bernardino**

Usually intended for students who wish to become K-6 teachers, this program includes most of the classes you would need for both your A.A. in Liberal Arts at VVC, and to transfer to Cal State as a junior in the Human Development major.

❑ **Freshman Composition**
(Grade of "C" or higher required)
ENGL 101 or H101

❑ **Oral Communication** (choose one)
(Grade of "C" or higher required)
CMST 109 (preferred)
CMST 106, 107, 108

❑ **Literature** (choose one)
ENGL 102, H102, 116, 240, 241
TA 104, 116

❑ **World Civilization**
HIST 103

❑ **American Civilization** (choose one)
HIST 117, H117, 118, H118

❑ **American Government**
POLS 102 or H102

❑ **California History**
HIST 115

❑ **Ideas of Mathematics**
(Grade of "C" or higher required)
MATH 105, H105, 132, 226

❑ **Life Sciences**
BIOL 100

❑ **Chemistry**
CHEM 100 or H100

❑ **Physics**
PHYS 100

❑ **Computer Technology**
CIS 106 or ETEC 106

❑ **Visual & Performing Arts**
(choose one)
ART 105, MUSC 100, or TA 101

❑ **Physical Education** (choose one from any of the following)
APE 160 – 186
PE 160 – 266
PEDA 160 – 277
TA 160 – 275

❑ **Physical Fitness and Health**
HLTH 102

❑ **Child Development** (three courses)
CHDV 110 *and* 210 (formerly 127A + B);
and CHDV 100 (formerly 146) *or* PSYC 111

❑ **Critical Thinking** (choose one)
(Grade of "C" or higher required)
ENGL 104 or H104
PHIL 109 or 207
RLST 207

❑ **Philosophy** (choose one)
PHIL 101,108, 117
RLST 117

❑ **Foreign Language** at least through second semester (choose one)
CMST (ASL) 123
FREN 102, 103, 104
GERM 102, 103, 104
LATN 102
SPAN 102, 103, 104

Other requirements, including Assessment, Classroom Experiences, and Observations and Methods in Child Development, must be completed at Cal State.

Preparation for Transfer to **Azusa Pacific University's** High Desert Center

Accelerated Bachelor of Arts Degree in Human Development

Leading to the Multiple Subjects (K-12) and/or Special Education Teaching Credential (K-12)

APU's accelerated bachelor's degree in Human Development meets the California Commission on Teacher Credentialing (CCTC) subject-matter preparation requirements for the K-12 multiple subject and/or special education programs. It can be completed by attending classes one night per week for 19 months. Upon completion of the B.A., graduates can seamlessly transition into one of APU's credentialing programs, many of which include a master's degree (M.A.). These programs are all offered at the High Desert Regional Center, located on VVC's lower campus. Feel free to contact APU's High Desert Campus at 760.952.1765, APU's main campus at 626.815.5301, or you can find them on the web at www.apu.edu/caps.

Requirements for admission include:

- 60 - 70 UC- or CSU- transferable semester units, including those below, completed with a "C-" grade or better.
- A grade-point average of 2.0 or above (on a 4.0 scale).
- Minimum of 22 years of age with relevant work experience.

NOTE: Students who have completed at least seven of the areas listed below, and have at least 60 transferable units, are eligible to begin the program.

REQUIRED COURSES
(completed at VVC or elsewhere)

❑ **English Composition**
ENGL 101

❑ **Composition/Speech**
Choose One
ENGL 104; CMST 106, 108, 109

❑ **Fine Arts**
Choose One
ART 101, 102, 105, 106; MUSIC 100, 101, 115, 116, 117; TA 101, 102

❑ **History/Government**
Choose One
HIST 103, 104, 117, 118; POLS 101, 102

❑ **Psychology/Sociology**
Choose One
ANTHRO 102; PSYCH 101, 103, 110; SOC 101

❑ **Literature**
Choose One
ENGL 102, 230, 231, 232, 245, 246

❑ **Math**
Choose one
MATH 105 (preferred), 132 (acceptable)

❑ **Science with Lab**
Choose One
ANTHRO 101 *and* 101L; BIOL 100, 107, 109, 211; CHEM 100, 201; GEOG 101 *and* 101L; GEOL 101, 102; PHYSICS 100

❑ **Foreign Language**
Choose One
FRENCH 101, 102, 103, 104; GERMAN 101, 102, 103, 104; SPANISH 101, 101A, 102, 103, 104, 110; CMST (ASL) 122, 123, 124, 125

❑ **Bible Survey**
Choose One
RLST 105, 106

Preparation for Transfer to **Azusa Pacific University's** High Desert Center

Accelerated Bachelor of Science Degree in Organizational Leadership

The Bachelor of Science in Organizational Leadership (BSOL) is for working professionals who want to develop the skills needed to be an agent of change in the 21st century workplace. Specifically designed for the adult learner, the program features flexible class scheduling, accelerated curricula, and a simplified registration process. Perhaps the most distinctive element of these programs is "reality-based learning," which integrates textbook theory with the student's work and life experience. Classes meet one night a week for 15 months at APU's High Desert Regional Center, located on VVC's lower campus. You may contact the High Desert Center at 760.952.1765, APU's main campus at 626.815.5301, or you can find them on the web at www.apu.edu/caps.

Note: Neither a foreign language nor higher math is required in this program.

Requirements for admission include:

- 60 - 70 UC- or CSU-transferable units, including those below, all with a "C-" or better.
- A grade-point average of 2.0 or above (on a 4.0 scale).
- Minimum of 25 years old with five years of general work experience.

NOTE: Students who have completed at least five of the areas listed below, and have at least 60 transferable units, are eligible to begin the program.

REQUIRED COURSES
(completed at VVC or elsewhere)

❑ **English Composition**
ENGL 101

❑ **Composition/Speech**
Choose One
ENGL 104; CMST 106, 108, 109

❑ **Fine Arts**
Choose One
ART 101, 102, 105, 106; MUSIC 100, 101, 115, 116, 117; TA 101, 102

❑ **History/Government**
Choose One
HIST 103, 104, 117, 118; POLS 101, 102

❑ **Psychology/Sociology**
Choose One
ANTHRO 102; PSYCH 101, 103, 110; SOC 101

❑ **Literature**
Choose One
ENGL 102, 230, 231, 232, 245, 246

❑ **Science with lab**
Choose One
ANTHRO 101 *and* 101L; BIOL 100, 107, 109, 211; CHEM 100, 201; GEOG 101 *and* 101L; GEOL 101, 102; PHYSICS 100

❑ **Bible Survey**
Choose One
RLST 105, 106

WHAT COURSES WILL I TAKE AT APU?

Term One

- Dynamics of Group Behavior
- Adult Development & Learning Assessment
- Organizational Analysis
- Intro to Research Methodology
- Applied Research Project I

Term Two

- Managing Interpersonal Communication
- Bible and Business Ethics
- Applied Research Project II
- Managerial Communication
- Intro to Data Analysis and Presentation

Term Three

- Cultural Influences in the Workplace
- Applied Research Project III
- Christian Worldview and the Profession
- Principles of Mgmt and Supervision
- Integrating Managerial Principles
- Case Study – Project IV

Preparation for Transfer to

Chapman University College's

Accelerated Bachelor's Degree Programs in the High Desert

Chapman offers B.A. degrees and teaching credential programs at their location near VVC. To transfer, complete the CSU GE (what we call "the pink sheet"), or IGETC ("the blue sheet"), plus any pre-major courses indicated below. Request GE Certification prior to transfer. Since Chapman requires only 36 upper division units, you could bring in up to 88 transferable units (note that Chapman may differ from CSU in what they accept). It is likely to your advantage to complete your Associate's degree at VVC, within which you satisfy all GE and pre-major requirements for transfer, while maintaining a GPA of at least 2.0. ***For the most up-to-date information, please contact Chapman directly, at (760)*** **955-7555.** *Their website is www.chapman.edu; select "Quick Links," then "University College."*

B.A. in Applied Studies

Topics including organizational strategies, information technologies, leadership, cultural business perspectives, and sociological development.

B.A. in Criminal Justice

Theoretical and applied knowledge in administration, methods of research, and analysis of various social, legal and penal systems, institutions and issues. Graduates often go on to further study in criminal justice, law school, or may enter the job market in areas such as law enforcement, court and paralegal occupations, corrections, and security.

VVC Preparation: *AJ 101, 103, 132, SOC 101; plus 6 units chosen from AJ 102, 104, 123, 127, 135, 145.*

B.A. in Early Childhood Development

Cross-disciplinary exploration of human development, education and early childhood. Examines cultural and social influences of the family and the community in the holistic development of young children.

VVC Preparation: *Psych 101, 110; CHDV 100; CMST 105; 6 units from CHDV 133, 134, 144, 145, ENGL 235.*

B.A. in Legal Studies

Prepares students for careers in law, public administration, and civic and organizational management. Includes research, critical thinking and argumentation; relationships between law, power, democracy, punishment, rights and citizenship; historical foundations of the American legal order; understanding major Supreme Court decisions and the role social movements have played in the American legal order.

VVC Preparation: *Pols 102; Soc 101.*

B.A. in Organizational Leadership

Prepares students to become innovative members of the workforce and assume leadership roles within their chosen organization. Students learn how to diagnose organizational problems; develop critical judgment and interpersonal skills for group decision-making, creative problem-solving, and conflict resolution. Two emphases in the major: administration and communication.

***VVC Preparation*:** *9 units chosen from BADM 100, 101/103, 102/104, 105, 108, 109, 110, 111, 112, 116, 117, 118, 122, CHDV 239, 240, CMST 105, 108, ECON 101, 102, PSYC 204.*

B.A. in Psychology

Valuable for a student's growth as a person, as preparation for entering a career in one of the human services areas, or for pursuing graduate study. Each student's major is individually designed, and includes a core of courses covering human development; history and theories of psychology; and statistics and research design.

VVC Preparation: *PSYC 101, 109, MATH 120, plus 2 of: PSYC 110, 111, 116, 121, 125, 130, 204, 213.*

B.A. in Social Sciences

Designed both for the prospective teacher and for those who wish to pursue careers in a variety of policy-making areas, the Social Sciences major requires students to choose three areas of concentration.

VVC Preparation: *PSYC 101, SOC 101.*

B.A. in Sociology

Sociology is the study of humanity's diverse ways of interacting, and the kinds of social systems and institutions we build. Causes, characteristics, and consequences of group life, culture, community life, family patterns and relationships, social change, gender and ethnic relations, social class, mass media, and social movements. Sociology graduates typically move on to post-graduate degrees in sociology or social work, or seek employment in such areas as human resources, law enforcement, social work, youth work, urban planning, and others.

VVC Preparation: *SOC 101, MATH 120, PSYC 204, plus one course from ANTH 102, SOC 102, 103, 107.*
For the Social Work emphasis, add one course from: PSYC 111, 116, SOC 102, 103.

Preparation for Transfer to

University of La Verne's

Accelerated Bachelor's Degree Programs

in Victorville

The University of La Verne offers several bachelor's degree programs at their High Desert Campus. To prepare for them, complete either their specific General Education requirements, ***or*** *the CSU general education requirements (what we call the "pink sheet"),* ***or*** *the IGETC requirements ("blue sheet"). Some of these programs also require specific pre-major preparation, as indicated below. Since ULV accepts up to 84 transferable units, it is probably to your advantage to complete your Associate's degree, within which you satisfy all GE and pre-major requirements, before you transfer.*

Note that the math requirement can be fulfilled by taking ULV's Mgmt 388 (Statistics), the preparation for which is VVC's Math 50; VVC's Math 90 or higher is not required (although Math 90 is required for VVC graduation).

For more information, and to learn of any updates to this sheet, please call the university at (760) 843-0086. ULV's website is: www.ulv.edu. Select "Quick Links," then "High Desert Campus."

B.A., Business Administration

This program offers a broad exposure to the traditional areas of economics, marketing, management, and the financial disciplines.
VVC preparation: BADM 101 or 103, and BADM 102 or 104; ECON 101 and 102.
Recommended: Math 105 (preferred) or 120

B.S., Child Development

This major is designed for students planning careers in early childhood education, in public or private schools (Pre-K), and/or in social service agencies. Note: This program does not specifically prepare students to take the CSET-MS, required of all elementary school teachers, as does the Liberal Studies program (see below).
VVC preparation: CHDV 106, 146, 239, and one of the following: CHDV 127A, 127B, or 138 (3 units); and one of the following: CHDV 110, 132, 133, 134, 137, 143, 144, 145; or 147 and 10 combined. Suggested electives: CHDV 142, 220, 111.

B.S., Health Administration

This non-clinical program prepares healthcare professionals to apply management, accounting, forecasting, and resource allocation techniques, and implement effective change management strategies in health-related organizations.

B.A., Liberal Studies

Designed to prepare K-6 teachers for elementary schools. You may follow the UC or CSU general education requirements, but to better prepare you for the CSET exam required of all teachers, ULV recommends that you follow their General Education requirements list instead (see Table 7).

B.S., Organizational Management

Designed primarily for the working adult, this major focuses on enhancing management skills. *Also available online.*

B.S., Public Administration

Developed for current and aspiring managers and administrators, this program focuses on theories, operations and procedures of public management. *Also available online.*

General Education Requirements for University of La Verne's Accelerated Bachelor's Degree Programs

in the High Desert

*ULV allows you to use either the CSU general education requirements (what we call "the pink sheet"), **or** the IGETC (what we call "the blue sheet"), **or** the list on this page, to prepare for their programs. If you are majoring in Liberal Studies and are planning to become an elementary (K-6) school teacher, it is highly recommended that you follow the program below, in order to be better prepared to pass the California Subject Examinations for Teachers (CSET).*

Note: These requirements are subject to change. For further information, contact the university at (760) 843-0086.

ENGLISH LANGUAGE SKILLS:

*(**one** course from **each** area)*

- ❑ **English Composition I**
  Choose one
  ENGL 101* or ENGL H101
- ❑ **English Composition II**
  Choose one
  ENGL 102* or H102,
  ENGL 104 or H104
- ❑ **Spoken English**
  CMST 109*

HUMANITIES:

*(**one** course from **each** area)*

- ❑ **Literature**
  Choose one
  ENGL 102, H102, 116, 162, 220, 225, 230*, 231*, 232, 233, 240*, 241*, 245 or 246
- ❑ **Philosophy or Religion**
  (Excluding Logic or Critical Thinking)
  Choose one
  PHIL 101, 108, 120, 121;
  RLST 101, 110, 115

FINE ARTS:

*(**one** course from **one** area)*

- ❑ **Appreciation or History of Art, Music, Theater, or Film**
  Choose one
  ART 101*, 102*, 104, 105, 106, 107, 108; MUSC 100, 115, 116, 117

  OR
- ❑ **Experiential**
  Choose one
  Art, Music, Theater, Photography or ENGL 109 (Creative Writing), ***or*** two (2) semester units of approved dance, choral or instrumental lessons.

MATH:

- ❑ **Math**
  Choose one
  MATH 105* or 120

NATURAL SCIENCES:

(***One*** *course from **each** area – of which **one** must have a **lab**, indicated here by an L)*

- ❑ **Life Science**
  Choose one
  BIOL 100L*, 104L, 107L, 114
- ❑ **Physical Science**
  Choose one
  ASTR 101; CHEM 100L, 114; GEOL 101L, 103; PSCI 101*, 114; PHYS 100L

CALIFORNIA HISTORY

- ❑ HIST 115*

SOCIAL SCIENCES:

*(**two** courses from **two** different areas)*

- ❑ **Behavioral Science**
  Choose one
  ANTH 102*, PSYC 101, 103, 204; SOC 101*
- ❑ **U.S. History or Political Science**
  Choose one
  HIST 117*, 118; POLS 102*
- ❑ **Economics**
  Choose one
  ECON 101 or 102

***** Liberal Studies majors are strongly encouraged to select courses that have an asterisk (*), in order to better aid in CSET preparation.

Preparation for Transfer to

Southern Illinois University's

B.S. Degree in Workforce Education and Development

1650 Seventh St, Riverside 92507

*Southern Illinois University (SIU) offers a bachelor's degree that can be completed by attending courses in Riverside **every other weekend** (Saturday and Sunday, 8:00 am to 4:00 pm) **for about one year**. The program is particularly suited for currently employed professionals. Visit* www.wed.siu.edu/Public/OCDP/Base.php?Location=105 *or email siuriverside@earthlink.NET, or call (951) 682-5552 for more information.*

Requirements for the B.S. include completing (1) your general education – which can be accomplished at a community college, like VVC; (2) your electives; and (3) the WED major.

General Education

The simplest way to fulfill your GE requirements for SIU is to complete your associate's degree, within which you **satisfy the GE-Breadth certification requirements for transfer to the California State University (CSU) system** (see VVC's "pink sheet"), since SIU accepts CSU GE certification as completing their core curriculum requirement. Stop by VVC's Counseling Department to arrange for certification.

Electives

Up to 44 units of elective credit may be granted – at no cost – for certain prior work, military, and professional training experiences, so that if you have been in the work force for four or more years, you may only have to complete your GE, then transfer to SIU to take the required courses for the major to earn your B.S. degree. Talk with SIU to find out what applies in your situation.

Courses in the Workforce Education and Development major that are required during your year at SIU include:

WED 460 – Occupational Analysis and Curriculum Development
A systems approach to curriculum development

WED 462 – Instructional Methods and Materials
A systems approach to instructional methods in occupational training

WED 486 – Adult Learning
Planning and preparing adult and workforce programs

WED 463 – Assessment of Learner Performance
Development and use of assessment instruments

WED 466 – Foundations of Work Education
Role of education and development in preparing people for the workforce

WED 469 – Training Systems Management
Principles and techniques for managing training in organizations

***Independent Study* courses and *internship hours* round out the program.**

VIII.
PROGRAMS OF STUDY

“Education is not preparation for life: education is life itself.”

-John Dewey
1859-1952.

ADMINISTRATION OF JUSTICE

All areas of Administration of Justice require that individuals possess the personal and physical qualities essential to effective peace officers. Many employment opportunities currently exist for individuals desiring entrance into law enforcement or related fields at various governmental levels. Security and corrections are fast-growing professions. Individuals interested in these professions should understand that the work is demanding, requiring a combination of training, education, and experience, along with mental and physical stamina.

The Administration of Justice program is designed to develop a student's understanding of the various operational functions within the criminal justice system. The educational emphasis will be the examination of crime causation, functions of law enforcement, criminal court system, and corrections. Students majoring in this subject area can prepare themselves for careers in law enforcement, corrections, and security at both the operational and administrative levels. For course descriptions, see Section IX of this catalog.

Careers in the criminal justice field are found at the federal, state, county, and city levels.

For employment at the federal level in such agencies as the Bureau of Alcohol, Tobacco and Firearms (ATF), the Drug Enforcement Agency (DEA), or the Federal Bureau of Investigation (FBI), a bachelor's degree in accounting, computer information systems, or the physical sciences is preferred.

Careers at the state, county, or city level usually require a high school diploma, but an associate's degree is preferable. Careers in law enforcement usually start with Police Academy Training. This modulated academy provides the opportunity to become a reserve officer while completing Levels II and III of training. A Level I graduate may elect to become a reserve officer or may apply for a full-time position with a law enforcement agency in California.

Careers in Forensics - the application of science and technology to the analysis of physical evidence - may be entered through the Field Evidence Technician course (AJ 67) and the Fingerprint Recognition and Classification course (AJ 111). Courses in Forensic Biology and Forensic Chemistry offer preparation for students planning to transfer to bachelor's level programs, such as those at the following CSU campuses: Fullerton, Long Beach, Sacramento, and Stanislaus. Candidates with master's degrees in this field are being offered salaries of around $70,000.

Career Opportunities

Communication Technician
Correctional Officer
Criminologist
Deputy Sheriff
Forensic Chemistry
Forensic Technician
Juvenile Correctional Office
Police Officer
Probation Officer
Security Manager
Security Officer
Special Agent/Investigator

Faculty

Full Time
Ron Fields
Michael Visser

Degrees and Certificates Awarded

Associate in Science, Administration of Justice
Administration of Justice Certificate
Autopsy Assistant Certificate
Correctional Science Certificate
Corrections Certificate
Fingerprint Recognition and Classification Certificate
Forensic Specialist Certificate
Juvenile Counselor Course Certificate
Law Enforcement Modulated Course Level II Certificate
Law Enforcement Modulated Course Level III Certificate
Module A Reserve Academy Firearms Only Certificate
PC 832 Law Enforcement Course Certificate
Police Technician Specialist Certificate
School Police Course: PC 832.3 Certificate

Certificate Programs

ADMINISTRATION OF JUSTICE CERTIFICATE

Prepares the student for a variety of employment opportunities within the Criminal Justice System. Employment opportunities include Corrections, Law Enforcement, Traffic Enforcement, Probation, Parole, Security, Prevention Loss officer, and related Social Worker positions.

24.0 units

All of the following must be completed:		**Units**
AJ 101	Introduction to Administration of Justice	3.0
AJ 102	Criminal Procedures	3.0
AJ 103	Criminal Law	3.0
AJ 104	Legal Aspects of Evidence	3.0
AJ 126	Traffic Enforcement and Investigation	3.0
AJ 127	Crime and Delinquency	3.0
AJ 133	Writing for Criminal Justice	3.0
AJ 74	Multicultural Issues in Public Safety	3.0

AUTOPSY ASSISTANT CERTIFICATE

20.5 units

***Pending Chancellor Office Approval**

This Certificate prepares the student for employment with the Sheriff/Coroner as an Autopsy Assistant.

All of the following must be completed:		**Units**
ALDH 139	Medical Terminology	3.0
AJ 67	Crime Scene Investigation	3.5
PHOT 101	Intermediate Photo	3.0
AJ 145	Introduction to Criminal Investigation	3.0
AJ 133	Writing for Criminal Justice	3.0
BIOL 211	Human Anatomy	5.0

CORRECTIONAL SCIENCE CERTIFICATE

18.0 units

***Pending Chancellor Office Approval**

All of the following must be completed with a grade of "C" or better.

		Units
AJ 103	Criminal Law	3.0
AJ 127	Crime and Delinquency	3.0
AJ 201	Multicultural Issues in Public Safety	3.0
AJ 132	Introduction to Corrections	3.0
AJ 73	Legal Aspects of Corrections	3.0
AJ 133	Writing for Criminal Justice	3.0

CORRECTIONS CERTIFICATE

8.0 units

Prepares the student to meet the legal requirements established by Correction Standards and Training (STC), in order to be employed as a city or county correctional officer.

		Units
AJ 64	Basic Corrections Officer Academy	8.0

FINGERPRINT RECOGNITION AND CLASSIFICATION CERTIFICATE

2.5 units

		Units
AJ 31	Fingerprint Recognition and Classification	2.5

FORENSIC SPECIALIST CERTIFICATE

3.5 units

This certificate meets the standards required of a Forensic Specialist whose duties include processing evidence at crime scenes, packaging and transporting evidence to a crime lab, and testifying in court. The certificate requirements meet the standards set by the Commission on Peace Officer Standards and Training and the College Advisory Committee.

		Units
AJ 67	Crime Scene Investigation	3.5

JUVENILE COUNSELOR COURSE CERTIFICATE

6.0 units

The Juvenile Counselor Course is required for all Probation Officers working in a Juvenile Intake Center

		Units
AJ 75	Juvenile Counselor Course	6.0

LAW ENFORCEMENT MODULAR COURSE LEVEL III CERTIFICATE

6.5 units

The following certificate will be awarded to students who have successfully completed the Level III Modulated Course. This course is certified by the Commission on Peace Officer Standards and Training.

		Units
AJ 80	Level III Modulated Basic Course	6.5

MODULE A RESERVE ACADEMY FIREARMS ONLY CERTIFICATE

0.5 unit

		Units
AJ 30	Firearms Training	0.5

LAW ENFORCEMENT MODULAR COURSE - LEVEL II CERTIFICATE

The following certificate will be awarded to students who have successfully completed the Level II Modulated Course. This course is certified by the Commission on Peace Officer Standards and Training.

15.5 units

		Units
AJ 80	Level III Modulated Basic Course	6.5
AJ81	Level II Modulated Basic Course	9.0

PC 832 LAW ENFORCEMENT COURSE CERTIFICATE

Prepares the student to meet the minimum requirements as a non-designated Level III Reserve Peace Officer, or, as a designated limited-duty peace officer. This certificate program complies with the Commission on Peace Officer Standards and Training.

3.0 units

		Units
AJ 58	PC 832 Law Enforcement Course	3.0

SCHOOL POLICE COURSE: PC 832.3 CERTIFICATE

2.0 units

		Units
AJ 8	PC 832.3 Campus Law Enforcement	2.0

POLICE TECHNICIAN SPECIALIST CERTIFICATE

Prepares the student for a variety of employment opportunities with any Law Enforcement Agency, in a civilian capacity, as a Forensic Specialist or as an Evidence Technician.

Requirements 15.5 units minimum

All of the following must be completed:

		Units
AJ 103	Criminal Law	3.0
AJ 126	Traffic Enforcement and Investigation	3.0
AJ 133	Writing for Criminal Justice	3.0
AJ 140	Communication Skills for Interviewing and Interrogation	3.0
AJ 67	Crime Scene Investigation	3.5

Associate Degree

To earn an Associate in Science degree with a major in Administration of Justice, complete a minimum of 18 units from any of the certificate requirements above or from any Administration of Justice courses and meet all Victor Valley College graduation requirements. AJ 138 (Cooperative Education) may be used as elective credit but may not be used to fulfill major requirements.

Transfer

To pursue a bachelor's degree, complete the following courses prior to transfer if possible:

California State University, San Bernardino
Criminal Justice major

AJ 101, 103
Optional: Select one course from the following:
MATH 105, H105, or 132
CSU General Education-Breadth Requirements

Chapman University, Victorville Criminal Justice major
(See T**able 5 i**n Section VII of this catalog.)

University of LaVerne, Victorville
Criminal Justice major (online)
(See **Table 6** in Section VII of this catalog.)

Business Administration is also a highly recommended bachelor's degree major for people in this field who are seeking advancement. See Business Administration for requirements for this major.

AGRICULTURE AND NATURAL RESOURCES

California and the United States are rapidly reaching a crisis situation in the management and preservation of natural resources. The recent crisis with energy in California bears witness to this fact. The most important issues concern the critical resources of food, energy, water, air, wildland and wildlife. It is essential that our society be taught a greater awareness of the need to conserve and wisely manage these resources. Careers and the public and private entities that manage and use these resources are expanding rapidly as the critical nature of these issues become more apparent. Individuals that are trained in agricultural and natural resource principles and issues are perfectly positioned to take advantage of these exciting opportunities.

The Agriculture and Natural Resource Department is intent on providing students with the training and resources needed to compete in this rapidly expanding career field and the skills needed to continue their studies in this arena. The department has designed its educational programs on the following premises:

1. A focus on the underlying scientific principles and math skills that support the disciplines of agriculture and natural resource management.

2. Application of advanced technologies that include the management of data with sophisticated computer software, Geographic Information Systems (GIS), Global Positioning Systems (GPS) and Remote Imaging Technology.

3. A focus on "Complete Ecosystem Management," that balances the need to preserve natural ecological relationships with the social and economic needs of the humans that use a particular ecosystem or region.

4. Provide increased "hands-on" learning and field experiences. The skills needed to be successful in these areas are best taught through actual experience via laboratories, investigative field experiences, internships, field trips and simulated case studies.

The department currently focuses on training students in fields of Environmental Horticulture, Landscape Design and Management, Landscape Irrigation, Floral Design, Natural Resource Management, Geographic Information Science, Water Resource Management, and Equine and Animal Science.

Career Opportunities

Agriculture and Conservation Extension Officer
Agricultural and Food Inspectors
Agriculture and Natural Resource Educators
Arborists and Tree Pruning Technicians
Cartographic Technicians
Environmental and Natural Resource Planner
Farm, Ranch Hands and Managers
Field Biologists
Floral Design Technicians and Floral Shop Managers
GIS Analysts
Horticulture, Irrigation and Fertilizer Industry Sales Representatives
Irrigation Specialists
Landscape Architects and Designers
Landscape Construction/Installation Contractors
Landscape Maintenance Technicians
Natural Resource Research Technicians
Nursery Technicians and Managers
Park and Wildlife Managers
Plant Breeders, Propagators and Growers
Turf Grass Managers
Water, Soils and Biotechnology Lab Technicians
Water Use, Education and Conservation Technicians
Zoo, City, Country Club and Botanic Garden Horticulturists

Faculty

Full-time
Neville Slade

Degrees and Certificates Awarded

Associate in Science, Environmental Horticulture
Animal Science Technician Certificate
Ecological Restoration Technician Certificate
Environmental Field Studies Technician
Equine Science Specialist Certificate
Floral Design Certificate
Geospatial Technician Certificate
Horticulture and Landscape Technician Certificate
Horticulture Specialist Certificate
Landscape Specialist Certificate
Landscape Irrigation Certificate
Mojave Desert Master Gardner Certificate
Natural Resource Management Technician Certificate

Certificate Programs

ANIMAL SCIENCE TECHNICIAN CERTIFICATE

11.0 or 12.0 units

Group I - All of the following must be completed:

		Units
AGNR 55	Animal Management Lab	2.0
AGNR 100	General Animal Science	3.0
AGNR 101	Animal Nutrition	3.0

Group II - One of the following must be completed:

AGNR 50	Equine Health	3.0
BIOL 100	General Biology	4.0
AGNR 102	Equine Science	4.0

ECOLOGICAL RESTORATION TECHNICIAN CERTIFICATE

15.0, 16.0, OR 17.0 units

Group I - All of the following must be completed: 13 units

		Units
AGNR 170	Environmental Science	4.0
AGNR 171	Introduction to GIS	3.0
AGNR 123	Introduction to Plant Science	3.0
AGNR 74B	Biodiversity Management and Conservation Tech	1.0
AGNR 74C	Water and Soils Resources and Management	1.0
AGNR 74D	Ecological Restoration	1.0

Group II - One of the following must be completed: 2, 3, 4 units

AGNR 60	Environmental Horticulture Lab	2.0, 3.0, or 4.0
AGNR 72	Geospatial Technology I	4.0
AGNR 73	Water Science	3.0
AGNR 75	Conservation Research Lab	2.0, 3.0, or 4.0
AGNR 120	Pest Management in Environmental Horticulture	3.0
AGNR 121	Fundamentals of Environmental Horticulture	3.0
AGNR 122	Plant Propagation & Production	3.0
AGNR 129	Water Efficient Landscaping	3.0
AGNR 131	Soil Science	3.0
AGNR 140	Plant Materials Usage I	3.0
AGNR 141	Plant Materials Usage II	3.0
AGNR 148	Special Topics	2.0
AGNR 151	Landscape Construction	3.0
AGNR 152	Landscape Irrigation	3.0

BIOL 71	Introduction to Lab Tech	3.0
BIOL 104	General Botany	4.0
BIOL 109	Field Biology	4.0
BIOL 127	ID/Study of Amphibians/Reptiles of Mojave Desert	3.0
BIOL 128	ID/Study of Amphibians/Reptiles of Mojave Desert	3.0
BIOL 129	ID/Study of Mammals of Mojave Desert	3.0
CHEM 114	Environmental Chemistry	3.0
GEOG 103	Geography of California	3.0
GEOL 103	Geology of California	3.0
FIRE 65	Basic Wildland Fire Control	2.0
PSCI 114	Environment and Energy	3.0

ENVIRONMENTAL FIELD STUDIES CERTIFICATE

The purpose of this certificate is to teach the state-of-the-art technologies and science of natural resource management. Engage students with their environment through community conservation projects, field studies and applied environmental research. Highlight the diversity and depth of career opportunities and advanced study. Promote linkage with local businesses, government agencies and community groups via partnerships, joint projects, internships, guest speakers and workshops.

10.0 units

All of the following must be completed:

		Units
AGNR 74	Conversation and Sustainability Practices	6.0
AGNR 170	Environmental Science	4.0

EQUINE SCIENCE SPECIALIST CERTIFICATE

Introduces students to the diverse and exciting horse industry in California. Provides the scientific basis to continue studies in this field.

7.0 units

All of the following must be completed:

		Units
AGNR 100	General Animal Science	3.0
AGNR 102	Equine Science	4.0

FLORAL DESIGN CERTIFICATE

The core of the specialized courses in the Floral Design Certificate have been selected to prepare the student for employment in a commercial flower shop as a designer or assistant to the manager. These classes are taught by professionals in the industry and opportunities for success as a florist are unlimited. Whether for fun or profit, floral design is rapidly becoming a growing industry. Anyone desiring a career as a florist can be assured of advancement by acquiring this state-of-the-art certificate.

14.0 units

Group I - All of the following must be completed:

		Units
AGNR 121	Fundamentals of Environmental Horticulture	3.0
AGNR 160	Beginning Floral Design	3.0
AGNR 161	Floral Design II	2.0
AGNR 140	Plant Materials & Usage I	3.0

Group II - One of the following must be completed:

AGNR 122	Plant Propagation and Production	3.0
AGNR 153	Landscape Maintenance	3.0
AGNR 152	Landscape Irrigation	3.0
AGNR 150	Landscape Design	3.0
AGNR 154	Landscape and Nursery Management	3.0
AGNR 129	Water Efficient Landscaping	3.0
AGNR 170	Environmental Science	4.0
AGNR 141	Plant Materials and Usage II	3.0
AGNR 60	Environmental Horticulture Lab	3.0
CMST 109	Public Speaking	3.0
BIOL 104	Botany	4.0
BIOL 71	Introduction to Lab Technique	4.0
CT 107	Technical Mathematics	3.0
CT 131	Microcomputers in Construction	4.0
AGNR 138	Cooperative Education	3.0

GEOSPATIAL TECHNICIAN CERTIFICATE

Geospatial Information Systems Science is one of the fastest growing industries in the world today. While the rest of the technology sector has been working to recover from economic hardships, the GIS industry has grown to a $30 billion per year enterprise and whose influence and utility is creating a symbiotic relationship and integration throughout industry, business, and government. This certificate is designed to introduce the students to various scientific theoretical aspects associated with this field and prepare them to enter this exciting field as a technician. There is also a “hands on” component where the students are introduced to the highly sophisticated software packages through real-world conservation projects with local agencies and businesses.

13.0, 14.0, or 15.0 units

Group I - All of the following must be completed:

		Units
AGNR 72	Geospatial Technology I	4.0
AGNR 170	Environmental Science	4.0
AGNR 171	Introduction to Geographic Information Science	3.0

Group II - One of the following must be completed:

AGNR 60	Environmental Horticulture Lab	3.0
AGNR 73	Water Science	3.0
AGNR 75	Conservation Research Lab	3.0
AGNR 120	Pest Management in Environmental Horticulture	3.0
AGNR 121	Fundamentals of Environmental Horticulture	3.0
AGNR 122	Plant Propagation	3.0
AGNR 131	Soil Science	3.0
AGNR 141	Plant Materials and Usage II	3.0
AGNR 148	Special Topics	2.0
ANTH 6	Introduction to GIS for the Social Sciences	3.0
BIOL 109	Field Biology	4.0
CIS 96A	Structured Query Language A Using MySQL	2.0
CIS 280	Fundamentals of Database Management Systems	3.0
CIDG 280	Geographical Information Systems I	3.0
CIDG 281	Geographical Information Systems II	3.0
GEOG 101	Physical Geography	3.0
GEOL 103	California Geology	3.0

LANDSCAPE SPECIALIST CERTIFICATE

The Landscape Specialist Certificate prepares the student to design, install and maintain landscapes. Focuses on the special challenges of drought tolerant and cold hard landscapes.

20.0 units minimum

Group I - All of the following must be completed:

		Units
AGNR 121	Fundamentals of Environmental Horticulture	3.0
AGNR 152	Landscape Irrigation	3.0
AGNR 150	Landscape Design	3.0
AGNR 154	Landscape and Nursery Management	3.0
AGNR 140	Plant Materials and Usage I	3.0

Group II - Two of the following must be completed:

AGNR 151	Landscape Construction	3.0
AGNR 120	Pest Management in Environmental Horticulture	3.0
AGNR 153	Landscape Maintenance Fundamentals	2.0
AGNR 129	Water Efficient Landscaping	3.0
AGNR 141	Plant Materials Usage II	3.0
AGNR 122	Plant Propagation & Production	3.0

AGNR 171	Introduction to Geographic Information Science	3.0
AGNR 170	Environmental Science	4.0
AGNR 131	Soil Science	3.0
AGNR 60	Horticulture Lab	4.0
CMST 109	Public Speaking	3.0
BIOL 109	Field Biology	4.0
BIOL 104	General Botany	4.0
CT 107	Technical Math	3.0
CT 131	Microcomputers in Construction	4.0
AGNR 138	Cooperative Education	2.0 or 3.0

LANDSCAPE IRRIGATION CERTIFICATE

The Landscape Irrigation Certificate prepares the student to design, install and maintain irrigation systems.

11.0 units

Group I - All of the following must be completed:

		Units
AGNR 152	Landscape Irrigation	3.0
AGNR 140	Plant Materials and Usage I	3.0
AGNR 129	Water Efficient Landscaping	3.0

Group II - One of the following must be completed:

AGNR 120	Pest Management in Environmental Horticulture	3.0
AGNR 151	Landscape Construction	3.0
AGNR 121	Fundamentals of Environmental Horticulture	3.0
AGNR 122	Plant Propagation & Production	3.0
AGNR 150	Landscape Design	3.0
AGNR 153	Landscape Maintenance Fundamentals	2.0
AGNR 170	Environmental Science	4.0
AGNR 171	Introduction to Geographic Information Science	3.0
AGNR 131	Soil Science	3.0
AGNR 141	Plant Materials Usage II	3.0
AGNR 60	Horticulture Lab	2.0, 3.0 or 4.0
AGNR 73	Water Science	3.0

HORTICULTURE SPECIALIST CERTIFICATE

The Horticulture Specialist Certificate prepares the student with the basics of establishing and/or managing a horticulture business and a wholesale or retail nursery. This certificate serves as a good crossover for students wishing to enter a natural resource management career.

23.0 units

Group I - All of the following must be completed:

		Units
AGNR 120	Pest Management in Environmental Horticulture	3.0
AGNR 121	Fundamentals of Environmental Horticulture	3.0
AGNR 122	Plant Propagation & Production	3.0
AGNR 140	Plant Materials and Usage I	3.0
AGNR 131	Soil Science	3.0
AGNR 141	Plant Materials Usage II	3.0

Group II - Two of the following must be completed:

AGNR 151	Landscape Construction	3.0
AGNR 160	Basic Floral Design	3.0
AGNR 152	Landscape Irrigation	3.0
AGNR 153	Landscape Maintenance Fundamentals	2.0
AGNR 150	Landscape Design	3.0
AGNR 154	Landscape and Nursery Management	3.0
AGNR 129	Water Efficient Landscaping	3.0
AGNR 170	Environmental Science	4.0
AGNR 171	Introduction to GIS	3.0
AGNR 60	Horticulture Lab	2.0 or 3.0 or 4.0
CMST 109	Public Speaking	3.0
BIOL 71	Introduction to Lab Tech	3.0
BIOL 109	Field Biology	4.0
BIOL 104	General Botany	4.0
CT 107	Technical Math	3.0
CT 140	Microcomputers in Construction	4.0
AGNR 138	Cooperative Education	2.0 or 3.0

HORTICULTURE AND LANDSCAPE TECHNICIAN CERTIFICATE

The Horticulture and Landscape Technician Certificate prepares the student for entry level positions within the nursery and landscaping industries.

11.0 units

Group I - All of the following must be completed:

		Units
AGNR 121	Fundamentals of Environmental Horticulture	3.0
AGNR 122	Plant Propagation & Production	3.0
AGNR 140	Plant Materials and Usage I	3.0

Group II - One of the following must be completed:

AGNR 151	Landscape Construction	3.0
AGNR 120	Pest Management in Environmental Horticulture	3.0
AGNR 122	Plant Propagation & Production	3.0
AGNR 160	Basic Floral Design	3.0
AGNR 152	Landscape Irrigation	3.0
AGNR 150	Landscape Design	3.0
AGNR 154	Landscape and Nursery Management	3.0
AGNR 129	Water Efficient Landscaping	3.0
AGNR 141	Plant Materials Usage II	3.0

MOJAVE DESERT MASTER GARDENER CERTIFICATE

2.0 units

		Units
AGNR 80	Master Gardner	2.0

NATURAL RESOURCE MANAGEMENT CERTIFICATE

15.0 or 17.0 units

Group I - All of the following must be completed:

		Units
AGNR 123	Introduce to Plant Science	3.0
AGNR 131	Soil Science	3.0
AGNR 170	Environmental Science	4.0
AGNR 171	Introduction to Geographic Information Science	3.0

Group II - One of the following must be completed: 2, 3, 4 units

AGNR 60	Environmental Horticulture Lab	2.0, 3.0, or 4.0
AGNR 72	Geospatial Technology I	4.0
AGNR 73	Water Science	3.0
AGNR 75	Conservation Research Lab	2.0, 3.0, or 4.0
AGNR 120	Pest Management in Environmental Horticulture	3.0
AGNR 121	Fundamentals of Environmental Horticulture	3.0
AGNR 122	Plant Propagation & Production	3.0
AGNR 129	Water Efficient Landscaping	3.0
AGNR 140	Plant Materials Usage I	3.0
AGNR 141	Plant Materials Usage II	3.0
AGNR 148	Special Topics	2.0
AGNR 151	Landscape Construction	3.0
AGNR 152	Landscape Irrigation	3.0
BIOL 71	Introduction to Lab Tech	3.0
BIOL 104	General Botany	4.0
BIOL 109	Field Biology	4.0
BIOL 127	ID/Study of Amphibians/Reptiles of Mojave Desert	3.0
BIOL 129	ID/Study of Mammals of Mojave Desert	3.0
CHEM 114	Environmental Chemistry	3.0
GEOG 103	Geography of California	3.0
GEOL 103	California Geology	3.0
FIRE 65	Basic Wildland Fire Control	2.0
PSCI 114	Environment and Energy	3.0

Associate Degree

To earn an Associate in Science degree with a major in Environmental Horticulture complete 18 units from any of the certificate requirements above or from any Environmental Horticulture courses and meet all Victor Valley College graduation requirements. AGNR 138 (Cooperative Education) may be used as elective credit, but may not be used to fulfill major requirements.

Transfer

Campuses that offer Environmental Horticulture and Animal Science majors or concentrations include: CSU-Chico, Fresno, Pomona, & CSU - Stanislaus.

Refer to ASSIST at www.assist.org for major preparation requirements.

University of California, Riverside
Botany and Plant Sciences major

University of California, Davis
Plant Science
Animal Science

IGETC not recommended. However, students who have completed IGETC can apply courses to the UCR breadth pattern as appropriate, but additional breadth course work may be required.

Refer to the major preparation agreements on ASSIST, at www.assist.org. Students can also contact a UCR transfer outreach counselor for information at (909) 787-4531.

ALCOHOL AND DRUG STUDIES

Programs in Alcohol and Drug Studies are usually offered at community colleges and focus on aspects of alcohol and drug abuse and techniques in counseling those who have a substance abuse problem. At this time, Victor Valley College does not offer a certificate in Alcohol and Drug Studies, but the following courses fulfill some requirements for the Alcohol/Drug Studies Certificate at San Bernardino Valley College:
ALDH 125, ENGL 101, PSYC 101, 108, 125, 133, SOC 101, CMST 109.

Students should fulfill the general education requirements for San Bernardino Valley College if they plan to earn an associate degree. San Bernardino Valley College requires 6 units of humanities, 4 units natural science with lab, and 2 units of physical education in addition to the certificate requirements to earn an associate degree. Contact SBVCC for updated information: (909) 888-6511.

ALLIED HEALTH

The Allied Health department offers a variety of independent, non-program classes in health interest areas. Some may enable students to work by completing only one class, such as Medical Insurance, Certified Nursing Assistant, EMT, or Basic Arrhythmias. Others support various medical and secretarial programs or meet general interest needs.

The Paramedic and Medical Assistant programs are also in the Allied Health Department but are described in separate sections. For course descriptions, see Section IX of this catalog.

Career Opportunities

Insurance Biller
Monitor Technician
Nursing Assistant
Phlebotomist

Faculty

Full Time
John Doyle
Robert Flome

Degrees and Certificates Awarded

Nursing Assistant/Home Health Aide Certificate
Certified Phlebotomy Technician IA
Certified Phlebotomy Technician IB
Certified Phlebotomy Technician IC

Certificate Program

CERTIFIED PHLEBOTOMY TECHNICIAN 1A CERTIFICATE

This certificate prepares the student to take the state certification exam and to be employed as a phlebotomist in a doctor's office, hospital or independent clinical laboratory.

5.0 units

All of the following must be completed with a grade of "C" or better.

		Units
ALDH 90A	Certified Phlebotomy Technician IA	5.0

CERTIFIED PHLEBOTOMY TECHNICIAN 1B CERTIFICATE

3.0 units

All of the following must be completed with a grade of "C" or better.

		Units
ALDH 90B	Certified Phlebotomy Technician IB	3.0

CERTIFIED PHLEBOTOMY TECHNICIAN 1C CERTIFICATE

1.5 unit

All of the following must be completed with a grade of "C" or better.

		Units
ALDH 90C	Certified Phlebotomy Technician IC	1.5

NURSING ASSISTANT/ HOME HEALTH AIDE CERTIFICATE

This certificate prepares the student to take the state certification exam for nursing assistant and a job in a skilled nursing facility, long term care or home care.

6.0 units

ALDH 60	Nursing Assistant	4.5
ALDH 61	Home Health Aide	1.5

Associate Degree

No associate degree is awarded with a major in Allied Health. Allied Health courses fulfill requirements for certificates and majors in Business Education Technologies, Medical Assistant, and Paramedic. See specific programs for certificate and degree requirements. ALDH 138 (Cooperative Education) may be used as elective credit but may not be used to fulfill major requirements.

Transfer

Not a transfer major. Some Allied Health courses transfer as electives or fulfill subject credit requirements.

ANIMATION

See **Media Arts** and **Computer Integrated Design and Graphics**.

ANTHROPOLOGY

Training in anthropology will prepare one for any career that involves working on the interface between cultures. Specialized preparation in this subject can lead to some of the world's most interesting work - the study of existing lifeways, archaeological excavation and interpretation, primate behavior, and social research into economics, politics, law, religion, art, and music. For course descriptions, see Section IX of this catalog.

Career Opportunities

Careers in anthropology are diverse, specialized, and related to the various areas of concentration which are offered at four-year college and universities: Listed below are just a few examples:

Archaeologist - Federal/State/Private
Cultural Resource Management
Environmental Impact Analyst
Expedition Guide
Forensic Anthropologist
Health Researcher
Museum Curator/Exhibit Designer
Population Analyst
Urban Planner Analyst

Faculty

Full Time
Richard Cerreto

Degrees and Certificates Awarded

Associate in Arts, Liberal Arts
GIS For The Social Sciences Certificate

Certificate Program

GIS FOR THE SOCIAL SCIENCES CERTIFICATE

12.0 unit

All of the following must be completed:

		Units
ANTH 6	Introduction to GIS for the Social Sciences	3.0
ANTH 7	Intermediate GIS for the Social Sciences	3.0
ANTH 8	Advanced GIS for the Social Sciences	3.0
ANTH 9	Field Applications in GIS for the Social Sciences	3.0

Associate Degree

No associate degree awarded with a major in Anthropology. Anthropology courses may be used to fulfill requirements for an Associate in Arts degree with a major in Liberal Arts. See Liberal Arts for degree requirements.

Transfer

To pursue a bachelor's degree, complete the following courses prior to transfer if possible:

California State University, San Bernardino
Anthropology major
ANTH 101, 102, 101L
CSU General Education-Breadth Requirements

University of California, Riverside
Anthropology major
Refer to the major preparation agreements on ASSIST, at www.assist.org. Students can also contact a UCR transfer outreach counselor for information (909) 787-4531.
Completion of IGETC recommended.

ARCHITECTURE

Victor Valley College does not offer an Architecture program but does offer preparatory courses for transfer into Architecture.

An architect develops concepts for design projects which range from single objects such as a piece of furniture to complex, high-rise office buildings. The Architecture program is centered on the design laboratory experience with students progressing toward comprehensive architectural projects.

Architecture is an impacted major at some universities. As a result, students need to maintain a high GPA, complete as many course requirements as possible before applying for admission, and research all additional program requirements for specific colleges to which they will be applying.

A portfolio of each prospective student's work is usually required with the application. Therefore, students need to contact the college of choice early in their education to assure proper presentation of their work.

Transfer

Campuses that offer Architecture include:
CSU-Pomona & San Luis Obispo

ART AND DESIGN

Art and design are an integral part of our daily lives as creative expression and as commercial applications. Humankind is reflected in great works of art throughout time, depicting our deeds and actualization. A study in art and design will lead to the development of a diverse range of career possibilities that span from self-expression to commercial design.

Students may choose a program leading to an AA degree, and courses in art are transferable to four-year colleges. Consult with the department chairperson for specialized areas of interest. For course descriptions, see Section IX of this catalog.

Career Opportunities

Advertising
Architectural Designer
Commercial Artist/Graphic Designer
Computer Graphics/Imaging/Animation
Film Maker
Interior Designer
Medical Illustrator
Photographer/Fine-Art, Commercial
Theatre Set Designer
Video Director

Faculty

Full time
Frank Foster
Richard Ripley
Brent Wood

Degrees and Certificates Awarded
Associate in Arts, Fine Arts
Associate in Arts, Liberal Arts

Certificate Program
No certificates awarded.

Associate Degree
No associate degree awarded with a major in Art. Art courses may be used to fulfill requirements for an Associate of Arts degree with a major in Fine Arts or Liberal Arts. See Fine Arts or Liberal Arts for degree requirements for these majors. ART 138 (Cooperative Education) may be used as elective credit, but may not be used to fulfill major requirements.

Transfer
To pursue a bachelor's degree, complete the following courses prior to transfer if possible:

California State University, San Bernardino
Art major
Plans I, II: ART 101, 102, 112, 113, 114, 125, 133, 141, PHOT 100
Plan III: Add any foreign language 1 and 2 or equivalent proficiency French or German preferred.
CSU General Education-Breadth Requirements
Plan IV: ART 101, 102, 112, 113/114, 125, 133
Plan V: BADM 101/103, ART 101, 102, 112

University of California, Riverside
Art major
Refer to the major preparation agreements on ASSIST, at www.assist.org. Students can also contact a UCR transfer outreach counselor for information at (909) 787-4531. Completion of IGETC recommended.

ATHLETICS

In keeping with the philosophy of providing programs to meet the diverse needs of students so that they may continue to develop physically, mentally, and emotionally throughout their lifetime, Victor Valley College supports and encourages students to participate in its athletic programs.

To meet this philosophic commitment, Victor Valley College athletic offerings include football, softball, men's and women's tennis, women's volleyball, men's and women's basketball, wrestling, golf, men's and women's soccer, men's and women's cross country, men's and women's track and field, and baseball.

Victor Valley College is a member of the Foothill Athletic Conference and also competes with other community college conferences, California State and University junior varsity teams, private colleges, and service teams. A student must be enrolled in 12 units to participate in the intercollegiate athletic program. Student athletes are granted up to two years of eligibility per sport but must complete 24 units between seasons of competition with a "C" or better grade average in order to be eligible for the second year.

There are other factors that are essential in determining eligibility, and athletes should consult with the Eligibility Evaluator regarding eligibility matters. All varsity athletic classes meet 10 laboratory hours per week for 3 units. CSU, UC (UC credit limitation). For course descriptions, see Section IX of this catalog.

SEASON OF SPORT

Fall	Spring
Basketball (M-W)	Basketball (M-W)
Cross Country (M-W)	Baseball (M)
Football (M)	Golf (M)
Soccer (M-W)	Softball (W)
Volleyball (W)	Tennis (M-W)
Wrestling (M)	Track and Field (M-W)

AUTOMOTIVE TECHNOLOGY

Mission Statement
It is the mission of the Automotive Department of Victor Valley Community College to provide quality automotive instruction to a diverse community of students; the array of courses offered shall serve the educational needs of the beginning student as well as the employed professional. Through industry input the department shall strive to create an maintain the most up to date curriculum based on current industry trends. The department will acquire and maintain the appropriate equipment that will augment the current course curriculum.

Each year the Bureau of Labor Statistics lists the need for Automotive Technicians as one of the nation's highest. This shortage of well-trained technicians has been created by the technological advances caused by the addition of the computerized engine controls and the need to control automotive pollution.

Victor Valley College's automotive program is designed to give the student a thorough and complete knowledge of the basics of the modern automobile. The program is capable of training the student to entry-level performance on the latest industry approved equipment.

Career Opportunities
Federally recognized ASE certification in eight (8) categories
Parts Salesperson
Repair Shop Owner or Operator
State Certified Pollution Control Technician
Tune-up Technician

Faculty
Full time
Lee Bennett
Dan Rowland
John Sweet

Degrees and Certificates Awarded
Associate in Science, Automotive Technology
Automotive Brake and Suspension Specialist Certificate
Automotive Drivability Specialist Certificate
Automotive Inspection and Maintenance Technician Certificate
Automotive Repair Shop Manager Certificate
Automotive Specialist I Certificate
Automotive Specialist II Certificate
Automotive Technician Certificate
Automotive Transmission Specialist Certificate
Automotive Window Tinting Technician Certificate
Basic Inspection Area Smog Certificate
Collision Repair Technician Certificate
Engine Machinist Specialist Certificate
Enhanced Inspection Area Smog Technician Certificate
Heavy Duty Diesel Truck Lubrication and Inspection Specialist Certificate
Heavy Duty Truck Brake Repair Specialist Certificate
Motorcycle Technician Repair Certificate
Recreational Vehicle Service and Repair Technician Certificate
Small Engine Repair Specialist Certificate

Certificate Programs

AUTOMOTIVE BRAKE AND SUSPENSION SPECIALIST CERTIFICATE

8.0 units

All of the following must be completed with a grade of "B" or better:

These classes can be taken in any order.		**Units**
AUTO 61	Automotive Brakes	4.0
AUTO 60	Automotive Suspension and Alignment	4.0

AUTOMOTIVE DRIVEABILITY SPECIALIST CERTIFICATE

8.0 units

All of the following must be completed with a grade of "B" or better:

These classes should be taken in the following order.		**Units**
AUTO 79B	Trouble Shooting and Repair of Ignition and Fuel Systems	4.0
AUTO 80A	Automotive Computers, Electronics, and Electrical Systems	4.0

AUTOMOTIVE INSPECTION AND MAINTENANCE TECHNICIAN CERTIFICATE

6.0 units

All of the following must be completed with a grade of "B" or better:

These classes can be taken in any order.		**Units**
AUTO 79A	Basic Tune Up	2.0
AUTO 58	Automotive Lubrication Technician	2.0
AUTO 59	Automotive Tire Technician	2.0

AUTOMOTIVE REPAIR SHOP MANAGER CERTIFICATE

11.0 units

All of the following must be completed with a grade of "B" or better:

These classes should be taken in the following order.		**Units**
AUTO 50	Introduction to Automotive Technology	4.0
AUTO 77.0	Automotive Service Writer and Shop Management or concurrently with AUTO 50	2.0
AUTO 77L*	Automotive Service Writer and Shop Management Lab (2 times) or concurrently with AUTO 77	4.0
BET101	Beginning Keyboarding/Typing can be taken anytime during the program	1.0

*Note: AUTO 77L must be completed two times

AUTOMOTIVE SPECIALIST I CERTIFICATE (ENGINE REPAIR, DRIVE TRAIN, CHASSIS)

The certificate program in Engine Repair, Drive Train and Chassis will enable the student to obtain employment in any entry-level position in those related fields.

24.0 units minimum

All of the following must be completed with a grade of "B" or better:

These classes can be taken in any order.		**Units**
AUTO 51	Automotive Engines and Drive Trains	12.0
AUTO 57	Brakes, Wheel Alignment, and Suspension	12.0

AUTOMOTIVE SPECIALIST II CERTIFICATE (ENGINE PERFORMANCE, ELECTRONICS [AUTO], POLLUTION CONTROL)

The certificate program in Engine Performance, Electronics [Auto], and Pollution Control will enable the student to obtain employment in any entry-level position in those related fields.

24.0 units

All of the following must be completed with a grade of "B" or better:

These classes should be taken in the following order:		**Units**
AUTO 79	Tune-up, Pollution Control, and Fuel Systems	12.0
AUTO 80	Automotive Computers, Electronics, and Electrical Systems	12.0

AUTOMOTIVE TECHNICIAN CERTIFICATE (ENGINE PERFORMANCE, ENGINE REPAIR, ELECTRONICS [AUTO], DRIVE TRAIN, POLLUTION CONTROL, CHASSIS)

This certificate is obtained upon successful completion of Automotive Specialist I and II and provides the student excellent entry-level skills in a wide range of automotive repair fields.

48.0 units

(Successful completion of Specialist I and II)

All of the following must be completed:

These classes should be taken in the following order		**Units**
AUTO 51	Automotive Engines and Drive Trains	12.0
AUTO 57	Brakes, Wheel Alignment, and Suspension	12.0
AUTO 79	Tune-up, Pollution Control, and Fuel Systems	12.0
AUTO 80	Automotive Computers, Electronics, and Electrical Systems	12.0

AUTOMOTIVE TRANSMISSION SPECIALIST CERTIFICATE

12.0 units

All of the following must be completed with a grade of "B" or better:

These classes should be taken in the following order		**Units**
AUTO 55	Manual Transmission Overhaul	5.0
AUTO 56A	Electronic Computer Transmission Controls	2.0
AUTO 56	Automatic Transmission Overhaul	5.0

AUTOMOTIVE WINDOW TINTING TECHNICIAN CERTIFICATE

8.0 units

All of the following must be completed with a grade of "B" or better:

These classes should be taken in the following order		**Units**
AUTO 94A	Automotive Window Tinting I	4.0
AUTO 94B	Automotive Window Tinting II	4.0

BASIC INSPECTION AREA SMOG TECHNICIAN CERTIFICATE

16.0 units

All of the following must be completed with a grade of "B" or better:

These classes can be taken in any order		**Units**
AUTO 80	Automotive Computers, Electronics, and Electrical Systems	12.0
AUTO 83D	Basic Area California Clean Air Car Course	4.0

COLLISION REPAIR TECHNICIAN CERTIFICATE

14.0 units

All of the following must be completed with a grade of "B" or better:

These classes should be taken in the following order		**Units**
AUTO 91A	Auto Body Repair I	4.0
AUTO 91B	Auto Body Repair II	5.0
AUTO 92	Auto body Damage Estimating I	1.0
AUTO 91L*	Automotive Auto Body Laboratory	2.0
WELD 58A	Gas Metal Arc Welding any time after AUTO 91A	2.0

*Note: AUTO 91L must be completed two times.

ENGINE MACHINIST SPECIALIST CERTIFICATE

12.0 units

All of the following must be completed with a grade of "B" or better:

These classes should be taken in the following order

		Units
AUTO 52	Cylinder Head Specialist	4.0
AUTO 53	Cylinder Block Specialist	4.0
AUTO 54	Cylinder Assembly Specialist	4.0

ENHANCED INSPECTION AREA SMOG TECHNICIAN CERTIFICATE

13.5 units

All of the following must be completed with a grade of "B" or better:

These classes can be taken in any order

		Units
AUTO 80	Automotive Computers, Electronics and Electrical Systems	12.0
AUTO 84	Advanced California Clean Air Car Course	1.5

HEAVY DUTY DIESEL TRUCK LUBRICATION AND INSPECTION SPECIALIST CERTIFICATE

4.0 units

All of the following must be completed with a grade of "B" or better:

		Units
AUTO 65	Heavy Duty Diesel Truck Lubrication and Inspection Technician	4.0

HEAVY DUTY TRUCK BRAKE REPAIR SPECIALIST CERTIFICATE

10.0 units

All of the following must be completed with a grade of "B" or better:

		Units
AUTO 67	Heavy Duty Truck Air Brakes	4.0
AUTO 68	Heavy Duty Truck Hydraulic	6.0

IMPORT SPORT TUNING AND CUSTOMIZATION CERTIFICATE

16.0 units

All of the following must be completed with a grade of "B" or better:

		Units
AUTO 86.1	Import Sport Tuning Engine Performance	4.0
AUTO 86.2	Import Suspension Sport Tuning	4.0
AUTO 86.4	Aftermarket Electrical Accessories	4.0
AUTO 86.5	Import Body Customizing	4.0

MOTORCYCLE REPAIR TECHNICIAN CERTIFICATE

16.0 units

All of the following must be completed with a grade of "B" or better:

These classes should be taken in the following order

		Units
AUTO 71	Motorcycle Engine Repair	4.0
AUTO 73	Motorcycle Tune Up and Maintenance	4.0
AUTO 75	Motorcycle Electrical and Ignition System Repair	4.0
AUTO 74	Motorcycle Fuel and Emission System Repair	4.0

RECREATIONAL VEHICLE SERVICE AND REPAIR TECHNICIAN CERTIFICATE

17.0 units

All of the following must be completed with a grade of "B" or better:

These classes should be taken in the following order

		Units
AUTO 91A	Auto Body Repair I	4.0
AUTO 85B	Automotive Electrical/Electronic Systems	1.0
CTMF 126A	Woodworking any time after AUTO 91A	3.0
CT 122A	Heating and Air Conditioning any time after AUTO 91A	4.0
CTMT 122	Electrical Repair	3.0
WELD 50	Introduction to Welding any time after AUTO 91A	2.0

SMALL ENGINE REPAIR SPECIALIST CERTIFICATE

3.0 units

All of the following must be completed with a grade of "B" or better:

		Units
AUTO 70	Small Engine Repair	3.0

Associate Degree

To earn an Associate in Science degree with a major in Automotive Technology, complete a minimum of 18 units from any of the above certificates or from any Automotive Technology courses and meet all Victor Valley College graduation requirements. AUTO 138 (Cooperative Education) may be used as Elective credit, but may not be used to fulfill major requirements.

Transfer

Not a transfer major.

AVIATION

Degrees and Certificates Awarded

General Aviation Maintenance Technology Certificate
Airframe - Aviation Maintenance Technology Certificate
Powerplant - Aviation Maintenance Technology Certificate

Certificate Programs

GENERAL AVIATION MAINTENANCE TECHNOLOGY CERTIFICATE

14.0 units

		Units
AVA 51	General Aviation I	7.0
AVA 52	General Aviation II	7.0

AIRFRAME - AVIATION MAINTENANCE TECHNOLOGY CERTIFICATE

21.0 units

		Units
AVA 61	Airframe I	7.0
AVA 62	Airframe II	7.0
AVA 63	Airframe III	7.0

POWERPLANT - AVIATION MAINTENANCE TECHNOLOGY CERTIFICATE

21.0 units

		Units
AVA 71	Powerplant I	7.0
AVA 72	Powerplant II	7.0
AVA 73	Powerplant III	7.0

BASIC SKILLS

The Basic Skills program consists of several English and Math courses designed to prepare students for English 6 and Math 10 and to allow more advanced students to review core English and Math skills.

Students enroll in courses that combine lecture and lab, which allow students to receive direct instruction in a classroom setting while practicing their skills at their own pace.

To prepare for English 6, students should enroll in BSKL 1 Reading and Writing One (2 units) and then BSKL 2 Reading and Writing 2 (2 units). Student who place in English 6 or English 50 and are interested in reviewing their grammar skills should enroll in BSKL 5 Beginning English Grammar (2units).

Students who want to move more gradually towards English 6 should begin with BSKl 1-A Reading and Writing One-A and then take BSKL 1-B Reading and Writing One-B. They should then take BSKL 2-A Reading and Writing Two-A and then BSKL 2-B Reading and Writing Two-B.

To prepare for Math 10, students should enroll in BSKL 6 Math Operations with Whole Numbers (1 unit) and then BSKL 7 Math Operations with Rational Numbers (1 unit). Student who place in Math 50 and are interested in a review should enroll in BSKL 9 Fractions, Decimals and Percentages (1 unit).

BIOLOGICAL SCIENCE

The biological science courses are designed to meet a variety of student requirements. Some courses are designed to fulfill the laboratory general education requirement.

Biology and preprofessional majors will find rigorous, comprehensive classes. Other classes, including non-laboratory, are offered for non-majors and those with special interest areas. A certificate in Biotechnology is also offered. For course descriptions, see Section IX of this catalog.

Career Opportunities

(May require advanced degree)
Environmental Analyst
Forestry
Laboratory Technician
Range Management

Faculty

Full Time
David Gibbs
Jessica Gibbs
Lisa Harvey
Hinrich Kaiser
Pam MacKay

Degrees and Certificates Awarded

Associate in Arts, Liberal Arts
Associate in Science, Math/Science
Certificate in Biotechnology

Certificate Program

CERTIFICATE IN BIOTECHNOLOGY

The certificate in Biotechnology is geared towards students interested in gaining entry level jobs in the laboratory, and can apply to the many different areas within the biotechnology industry such as clinical, forensic, or agricultural applications. Students pursuing this certificate will gain a basic biological foundation (BIOL 100 or 107), followed by an overview of the Biotechnology profession (BIOL 70) along with classes instructing technique (BIOL 71) and application of skills.

16.0 units

Group 1 - All of the following must be completed:

		Units
BIOL 100 or 107	General or Human Biology	4.0
BIOL 70	Introduction to Biotechnology	5.0
BIOL 71	Introduction to Laboratory Technique	4.0
AND		
Group II - Complete 3.0 units from courses below:		
BIOL 72/ CHEM 72	Biomolecular Science	3.0
BIOL 52	Forensic Entomology	3.0
BIOL 54	Forensic Pathology	3.0
ANTH 53	Forensic Anthropology	3.0
AGNR 122	Plant Propagation	3.0
AGNR 71	GIS in Natural Resources	3.0
BIOL 129	Independent Study in Biology	1.0-3.0
BIOL 98	Projects in Biology	1.0-3.0

Associate Degree

No associate degree offered with a major in Biological Science. Biology courses may be used to fulfill requirements for an Associate in Science degree with a major in Math/Science. Biology courses may also be used to fulfill requirements for an Associate in Arts degree with a major in Liberal Arts. See Math/Science or Liberal Arts for degree requirements for these majors. BIOL 138 (Cooperative Education) may be used as Elective credit but may not be used to fulfill major requirements.

Transfer

To pursue a bachelor's degree, complete the following courses prior to transfer if possible:

California State University, San Bernardino
Biology major
BIOL 201, 202, 203, CHEM 201, 202, 281+282, MATH 226/H226
One group from following:
PHYS 221 + 222 or PHYS 201, 202, 203 + H204
CSU General Education-Breadth Requirements

University of California, Riverside
Biology major
Refer to the major preparation agreements on ASSIST, at www.assist.org. Students can also contact a UCR transfer outreach counselor for information
IGETC not recommended. However, students who have completed IGETC can apply courses to the UCR breadth pattern as appropriate, but additional breadth course work may be required. See counselor for general education requirements for College of Natural and Agricultural Sciences.

BUSINESS

Degrees and Certificates Awarded
Associate in Science, Business

Associate Degree
Students may earn an Associate in Science degree with a major in general Business by completing a minimum of 18 units from any certificate offered in the departments of Business Administration, Business Education Technologies, and Business Real Estate and Escrow or from a blend of courses from any of these departments or certificates.

The minimum 18 units for the general Business major may come from the following:

ALDH 139, 80, 81, 82
CIS 101, 52, 61
ECON l01, l02
MATH 105, 120
Any Business Administration course, except BADM 138
Any Business Education Technology course, except BET 138
Any Business Escrow course, except BESC 138
Any Business Real Estate course, except BRE 138

Students are encouraged to major in Business Administration, Business Education Technologies, or Business Real Estate and Escrow rather than general Business when possible to assure a stronger curriculum base.

Transfer
See Business Administration or Business Education Technologies for transfer requirements.

BUSINESS ADMINISTRATION

The Business Administration Department offers a variety of courses in business which allows a student to comply with the lower-division requirements for transfer to university level programs. Courses are also offered which allow the student to prepare for career entry-level positions and for upgrading of job skills for the already career-oriented student.

The department offers two certificates: a Management Certificate and Bookkeeping I Certificate. The Certificates are designed for those students interested in entering the field of business or for those who are currently working and would like to upgrade their business skills. Students completing the Management Certificate will have entry-level management knowledge and skills. Students completing the Bookkeeping I Certificate will have entry-level bookkeeping/accounting clerk skills. These certificates will also indicate that the student has completed a series of courses for skill upgrading for those already employed.

In addition to the certificates, students may also earn an Associate of Science Degree in Business Administration. Many of the Business Administration Department courses are offered online via the Internet, allowing a student to earn the Management Certificate and/or the AS Degree through distance education. See the current Schedule of Classes for a listing of online classes.

Those students planning to transfer to an upper-division institution should select their courses with the assistance of a counselor since each transfer institution has unique requirements. For course descriptions, see Section IX of this catalog.

Career Opportunities
Positions from entry-level to mid-management may be reasonable expectations upon completion of either the Degree or the Certificate programs in the fields of retailing, merchandising, service-related businesses, bookkeeping, and manufacturing firms. Some possible position titles include:

Accounting Clerk/Bookkeeper
Administrative Assistant
Department Manager
Human Resource Manager
Marketing Manager
Merchandise Buyer
Merchandise Manager
Office Manager
Purchasing Management
Salesperson
Store Manager

Faculty
Full Time
Peter Allan
David Hollomon
O. Odell Moon
Henry Young

Degrees and Certificates Awarded
Associate in Science, Business Administration
Bookkeeping I Certificate
Management Certificate

Certificate Programs

BOOKKEEPING I CERTIFICATE
The Bookkeeping I Certificate is designed to give the student entry-level skills as an accounting clerk or bookkeeper. These skills include the ability to sort, record, and file accounting data, as well as perform general accounting tasks and assist in the processes of summarizing and analyzing accounting information, both manually and using a computerized accounting program.

16.0 units

All of the following must be completed:

		Units
BADM 106	Accounting on Microcomputers I	2.0
BADM 107	Accounting on Microcomputers II	2.0
BADM 100	Introduction to Business Organization	3.0
BADM 142	Business Mathematics	3.0
BADM 50	Applied Accounting I	3.0
BADM 51	Applied Accounting II	3.0

MANAGEMENT CERTIFICATE
Upon completion, the Management Certificate will give the student basic skills and education to become an entry-level manager in retailing, merchandising, service-related businesses, and manufacturing firms.

31.0 units minimum

Group I - All of the following must be completed:

		Units
BADM l01	Elementary Accounting	4.0
OR		
BADM 103	Financial Accounting	3.0
BADM 110	Principles of Management	3.0
BADM 117	Legal Environment of Business	3.0
BADM 100	Introduction to Business Organizations	3.0
BADM 142	Business Mathematics	3.0
BADM 144	Business Communications	3.0
CIS 101	Computer Literacy	4.0

Group II - One of the following must be completed:

BADM 112	Introduction to Marketing	3.0
BADM 122	Small Business Management	3.0

Group III - One of the following must be completed:

ECON 101	Principles of Economics [Macro]	3.0
ECON 102	Principles of Economics [Micro]	3.0

Group IV - One of the following must be completed:

BADM 109	Human Resource Management	3.0
BADM 111	Introduction to Public Administration	3.0
BADM 116	Human Relations in Business	3.0
BADM 52	Elements of Supervision	3.0

Associate Degree

To earn an Associate in Science degree with a major in Business Administration, complete a minimum of 18 units from any of the certificate requirements above or from any Business Administration courses and meet all Victor Valley College graduation requirements. BADM 38 (Cooperative Education) may be used as Elective credit but may not be used to fulfill major requirements.

Transfer

To pursue a bachelor's degree, complete the following courses prior to transfer if possible:

California State University, San Bernardino
Administration major

BADM l01or 103 + 102 or 104, 117, ECON l01, 102, CIS 101, MATH 120

Contact a counselor for information on additional major coursework required in various concentrations.

University of California, Riverside
Business Administration major

Refer to the major preparation agreements on ASSIST, at www.assist.org. Students can also contact a UCR transfer outreach counselor for information at (909) 787-4531.
Completion of IGETC recommended.

Azusa Pacific University, Victorville
Organizational Leadership major

(See **Table 4** in Section VII of this catalog.)

Chapman University, Victorville
Organizational Leadership major

(See **Table 5** in Section VII of this catalog.)

University of LaVerne, Victorville
Three related majors

(See **Table 6** in Section VII of this catalog.)

Southern Illinois University, Riverside
Workforce Education and Development
Corporate Training major

(See **Table 8** in Section VII of this catalog.)

BUSINESS EDUCATION TECHNOLOGIES

The study of Business Education Technologies is designed to prepare students for a variety of careers in high-tech business offices. Transfer level courses are available for students preparing for a bachelor's degree. Certificates of Achievement and the Associate in Science degree are awarded.

Career Opportunities

Administrative Assistant
Data Entry
Desktop Publishing
Executive Secretary
General Clerk
Office Manager
Receptionist
Stenographer
Teacher
Typist
Transcription Machine Operator

Faculty

Full Time

Barbara Becker
Becky Palmer

Degrees and Certificates Awarded

Associate in Science, Business Education Technologies
Administrative Assistant Certificate
Computer Systems I Certificate
Computer Systems II Certificate
Data Typist Certificate
Legal Office Certificate
Medical Office Certificate
Office Services Certificate
Spreadsheet Processor Certificate
Word Processor Certificate

Certificate Programs

ADMINISTRATIVE ASSISTANT CERTIFICATE

This curriculum is designed to prepare students for employment in business/industry/government for higher-level executives. Duties include office supervision, word processing, maintaining office records and accounts.

34.0 units

(Group I: 28 units, Group II: 6 units)

Group I - *All of the following must be completed (19 units):*

		Units
BADM 106	Accounting on Microcomputers (2.0)	2.0
BET 100	Introduction to Computers (2.0)	2.0
BET 107	Internet Level I (1.0)	1.0
BET 124	Records Management (2.0)	2.0
BET 136	Career Applications for Word Processing (3.0)	3.0
BET 141A	Operating System: Windows (1.0)	1.0
BET 142	Office Technologies and Procedures (3.0)	3.0
BET 74	Office Machine Calculations (2.0)	2.0
BET 112	Spreadsheet: Excel for Windows (3.0)	3.0

*3 units must be chosen from **one** of the following:*

BET 103A/B/C	Beginning Word Processing/Typing WordPerfect for Windows (3.0)	3.0
BET 104A/B/C	Beginning Word Processing/Typing Word for Windows (3.0)	3.0

*3 units must be chosen from **one** of the following:*

BET 65	Speedwriting (3.0)	3.0
BET 66	Speedwritng\Shorthand Development and Review (3.0)	3.0

*3 units must be chosen from **one** of the following:*

BET 143	Business English (3.0)	3.0
BET 68	Proofreading A/B/C (3.0)	3.0

Group II - *6 units of the following must be completed:*

ECON 101	Principles of Economics: Macro (3.0)	3.0
BADM 110	Business Management (3.0)	3.0
BET 135	Desktop Publishing: PageMaker (2.0)	2.0
BET 141B/C	Operating System: Windows (1.0-2.0)	1.0-2.0
BET 77	Speed and Accuracy Development (2.0)	2.0
BET 131A/B/C	Powerpoint I/II/III (1.0-3.0)	1.0-3.0
BET 137A/B/C	Desktop Publishing: Microsoft Publisher (1.0-3.0)	1.0-3.0
BET 123T	Machine Transcription (1.0)	1.0
BET 145	Communications for Business (3.0)	3.0
BET 134	Condensed Word Processing (1.0)	1.0
BET 122	Intermediate Keyboarding/Typing A/B/C	3.0
BET 118	Database: Access A/B/C (1.0-3.0)	1.0-3.0

COMPUTER SYSTEMS I CERTIFICATE

This curriculum is designed to prepare students for entry-level word processing or data entry positions.

10.0 units

(Group I: 3 units, Group II: 7 units)

Group I - *3 units from <u>one</u> of the following must be completed:*

		Units
BET 103A/B/C	Beginning Word Processing/Typing: WordPerfect for Windows (3.0)	3.0
BET 104A/B/C	Beginning Word Processing/Typing: Word for Windows (3.0)	3.0

Group II - *7 units of the following must be completed:*

BET 107	Internet Level I (1.0)	1.0
BET 123T	Machine Transcription (1.0)	1.0
BET 112A/B/C	Spreadsheet: Excel for Windows (1.0-3.0)	1.0-3.0
BET 136	Career Applications for Word Processing (3.0)	3.0
BET 143	Business English (3.0)	3.0
BET 68	Proofreading A/B/C (3.0)	3.0
BET 131A/B/C	Powerpoint I/II/III (1.0-3.0)	1.0-3.0
BET 100	Introduction to Computers (2.0)	2.0
BET 137A/B/C	Desktop Publishing: Microsoft Publisher (1.0-3.0)	1.0-3.0

COMPUTER SYSTEMS II CERTIFICATE

This curriculum is designed to prepare students for the modern computer office. It includes instruction in the most popular business software.

20.0 units

All of the following must be completed:

		Units
BET 107A	Internet Level I (1.0)	1.0
BET 112A/B/C	Spreadsheet: Excel for Windows (3.0)	3.0
BET 136	Career Applications for Word Processing (3.0)	3.0
BET 141A	Operating System: Windows (1.0)	1.0

*3 units must be chosen from **<u>one</u>** of the following:*

BET 103A/B/C	Beginning Word Processing/Typing: WordPerfect for Windows (3.0)	3.0
BET 104A/B/C	Beginning Word Processing/Typing: Word for Windows (3.0)	3.0

6 units must be chosen from the following:

BET 118A/B/C	DataBase: Access (1.0-3.0)	1.0-3.0
CIS 280	Fundamentals of Database Management Systems (3.0)	3.0
BET 131A/B/C	Powerpoint I/II/III (1.0-3.0)	1.0-3.0
BET 100	Introduction to Computers (2.0)	2.0
BET 137A/B/C	Desktop Publishing: Microsoft Publisher (1.0-3.0)	1.0-3.0

*3 units must be chosen from **<u>one</u>** of the following:*

BET 143	Business English (3.0)	3.0
BET 68	Proofreading A/B/C (3.0)	3.0

DATA TYPIST CERTIFICATE

This curriculum is designed to prepare students for entry-level positions as a data entry operator. Duties for this position include general clerical tasks, data entry, and word processing.

16.0 units

(Group I: 9 units, Group II: 7 units)

Group I - *All of the following must be completed:*

		Units
BET 136	Career Applications for Word Processing	3.0
BET 68A	Proofreading	1.0
BET 74	Office Machine Calculations	2.0

*3 units must be chosen from **<u>one</u>** of the following:*

BET 103A/B/C	Beginning Word Processing/Typing: WordPerfect for Windows (3.0)	3.0
BET 104A/B/C	Beginning Word Processing/Typing: Word for Windows (3.0)	3.0

Group II - *7 units of the following must be completed:*

BET 107	Internet Level I (1.0)	1.0
BET 123T	Machine Transcription (1.0)	1.0
BET 134	Condensed Word Processing (1.0)	1.0
BET 135	Desktop Publishing: PageMaker (2.0)	2.0
BET 137A/B/C	Desktop Publishing: Microsoft Publisher (1.0-3.0)	1.0-3.0
BET 141A	Operating System: Windows (1.0)	1.0
BET 77	Speed and Accuracy Development (2.0)	2.0
BET 112A	Spreadsheet: Excel for Windows (1.0)	1.0
BET 145	Communications for Business (3.0)	3.0
BET 143	Business English (3.0)	3.0
BET 68	Proofreading A/B/C (1.0-3.0)	1.0-3.0
BET 118A/B/C	DataBase: Access (1.0-3.0)	1.0-3.0
BET 122	Intermediate Keyboarding/Typing A/B/C	3.0
CIS 280	Fundamentals of Database Management Systems (3.0)	3.0

LEGAL OFFICE CERTIFICATE

This curriculum is designed to prepare students to become a productive secretary in a modern legal office. Duties include maintaining records, word processing, transcription, and general legal office tasks.

28.0 units

All of the following must be completed:

		Units
BADM 117	Legal Environment of Business (3.0)	3.0
BET 123L	Machine Transcription-Legal (3.0)	3.0
BET 124	Records Management (2.0)	2.0
BET 136	Career Applications for Word Processing (3.0)	3.0
BET 142	Office Technologies and Procedures (3.0)	3.0
BET 74	Office Machine Calculations (2.0)	2.0

*3 units must be chosen from **<u>one</u>** of the following:*

BET 103A/B/C	Beginning Word Processing/Typing: WordPerfect for Windows (3.0)	3.0
BET 104A/B/C	Beginning Word Processing/Typing: Word for Windows (3.0)	3.0

*3 units must be chosen from **<u>one</u>** of the following:*

BET 65	Speedwriting (3.0)	3.0
BET 66	Speedwriting/Shorthand Development and Review (3.0)	3.0

*3 units must be chosen from **<u>one</u>** of the following:*

BET 143	Business English (3.0)	3.0
BET 68	Proofreading A/B/C (3.0)	3.0

*3 units must be chosen from **one** of the following:*

BET 145	Communications for Business (3.0)	3.0
BET 141A	Operating System: Windows (1.0)	1.0
BET 118A/B/C	DataBase: Access (1.0-3.0)	1.0-3.0
BET 131A/B/C	Powerpoint I/II/III (1.0-3.0)	1.0-3.0
BET 100	Introduction to Computers (2.0)	2.0
BET 112A/B/C	Spreadsheet: Excel for Windows (3.0)	3.0

MEDICAL OFFICE CERTIFICATE

This curriculum is designed to prepare students to effectively carry out front medical office functions. Administrative duties include scheduling and receiving patients, maintaining medical records, office accounts, insurance forms, and transcription. See *Medical Assistant* for a program which includes both front and back office preparation and a clinical component.

30.0 units

All of the following must be completed:

		Units
BET 123M	Machine Transcription-Medical	3.0
BET 124	Records Management	2.0
BET 136	Career Applications for Word Processing	3.0
BET 142	Office Technologies and Procedures (3.0)	3.0
ALDH 139	Medical Terminology	3.0
ALDH 80	Pharmacology	3.0
ALDH 81	Medical Insurance	3.0
ALDH 82	Medical Office Procedures	3.0

*3 units must be chosen from **one** of the following:*

BET 103A/B/C	Beginning Word Processing/Typing: WordPerfect for Windows (3.0)	3.0
BET 104A/B/C	Beginning Word Processing/Typing: Word for Windows (3.0)	3.0

*1 unit must be chosen from **one** of the following:* 3.0

BET 141A	Operating System: Windows (1.0)	1.0
BET 118A/B/C	DataBase: Access (1.0-3.0)	1.0-3.0
BET 131A/B/C	Powerpoint I/II/III (1.0-3.0)	1.0-3.0
BET 100	Introduction to Computers (2.0)	2.0
BET 112A/B/C	Spreadsheet: Excel for Windows (3.0)	3.0

OFFICE SERVICES CERTIFICATE

This curriculum is designed to prepare students for entry-level positions in the clerical field and as a receptionist. Entry-level duties include general clerical tasks, filing, and word processing.

11.0 units

(Group I: 5 units, Group II: 6 units)

Units

Group I - *5 units of the following must be completed:*

2 units may be chosen from:

BET 124	Records Management (2.0)	2.0
BET 136	Career Applications for Word Processing (3.0)	3.0

*3 units must be chosen from **one** of the following:*

BET 103A/B/C	Beginning Word Processing/Typing: WordPerfect for Windows (3.0)	3.0
BET 104A/B/C	Beginning Word Processing/Typing: Word for Windows (3.0)	3.0

Group II - *6 units of the following must be completed:*

BET 123T	Machine Transcription (1.0)	1.0
BET 142	Office Technologies and Procedures (3.0)	3.0
BET 74	Office Machine Calculations (2.0)	2.0
BET 131A/B/C	Powerpoint I/II/III (1.0-3.0)	1.0-3.0
BET 137A/B/C	Desktop Publishing: Microsoft Publisher (1.0-3.0)	
BET 112A/B/C	Spreadsheet: Excel for Windows (3.0)	3.0
BET 118A/B/C	DataBase: Access (1.0-3.0)	1.0-3.0
BET 122	Intermediate Keyboarding/Typing A/B/C	3.0

*3 units may be chosen from **one** of the following:*

BET 65	Speedwriting (3.0)	3.0
BET 66	Speedwriting/Shorthand Development and Review (3.0)	3.0

*3 units may be chosen from **one** of the following:*

BET 143	Business English (3.0)	3.0
BET 68	Proofreading A/B/C (3.0)	3.0

SPREADSHEET PROCESSOR CERTIFICATE

This curriculum is designed to prepare students for entry-level bookkeeping positions.

3.0 units

		Units
BET 112A/B/C	Spreadsheet: Excel for Windows	3.0

WORD PROCESSOR CERTIFICATE

This curriculum is designed to prepare students for entry-level secretarial positions.

3.0 units

Units

*3 units must be chosen from **one** of the following:*

BET 103A/B/C	Beginning Word Processing/Typing: WordPerfect for Windows (3.0)	3.0
BET 104A/B/C	Beginning Word Processing/Typing: Word for Windows (3.0)	3.0

Associate Degree

To earn an Associate in Science degree with a major in Business Education Technologies, complete 18 units from any of the certificate requirements above or from any Business Education Technologies courses, and meet all Victor Valley College graduation requirements. BET 138 (Cooperative Education) may be used as Elective credit but may not be used to fulfill major requirements.

Transfer

Not usually a transfer major. Some Business Education Technologies courses transfer as Electives or fulfill subject credit requirements. If a student chooses to pursue a bachelor's degree in Business Administration, Business Education Technologies courses will not fulfill major requirements for transfer. See Business Administration for transfer requirements for this degree.

The following California universities offer a B.S. degree in Business Education for students who plan to teach business in grades 7-12:

California State University

Los Angeles
Northridge

For further transferable courses, it is recommended to meet with your Counselor.

BUSINESS REAL ESTATE AND ESCROW

This program is designed to provide the student with the comprehensive knowledge needed to enter or invest in the real estate industry. A progressively challenging course curriculum starts with the Principles class, learning the language of real estate. This is a state-mandated course for those testing for a real estate salesperson's license. From there an "investor" student might pursue the more difficult Finance, Law, or Appraisal courses. The certificate program provides a structured approach to the course work. The Advanced Business Real Estate Certificate includes all the courses and Electives necessary to take the state's Real Estate Broker's examination.

The single largest business transaction entered into by most people is the sale or purchase of a home or other real estate. Consequently, people often seek the professional opinions and assistance of real estate salespersons, brokers, and appraisers. These professionals are familiar with the various forms of financing available in any given market. They keep abreast of actions taken by their county or city planners and become familiar with the zoning laws, tax laws, and real estate and contract law in order to better serve their clients. Real estate agents and brokers are not limited to selling real estate for they can also manage or develop property.

The escrow program provides the student with the training necessary for the escrow industry. The student is introduced to the basic principles of escrow before moving to the more advanced case studies and practices of the industry. A series of real estate courses acquaints the student with real estate agent skills. Additionally, business courses in accounting, law, human relations, math, and investments complete the program and will give the student an understanding of the business community and the responsibilities within the escrow industry.

The escrow officer is a highly trained individual whose knowledge of real estate transfer for private businesses and estate settlement procedures is essential for the operation of an escrow office.

Career Opportunities

Banking
Developer
Escrow Officer
Escrow Secretary
Loan Broker/Salesman
Property Manager
Real Estate Appraiser
Real Estate Broker
Real Estate Lawyer
Real Estate Salesperson
Real Estate Secretary
Securities Broker
Title Insurance Representative

Faculty

Full Time
Chris Grover

Degrees and Certificates Awarded

Associate in Science, Business Real Estate and Escrow
Advanced Business Real Estate Certificate
Basic Business Real Estate Certificate
Business Real Estate Apprentice Certificate
Property Management Certificate
Real Estate Appraiser Certificate
Real Estate Marketing Certificate
Real Estate Secretarial Services Certificate

Certificate Programs

BUSINESS REAL ESTATE APPRENTICE CERTIFICATE

"To sit for the real estate salesperson's exam, California Real Estate Law requires that prospective real estate licensees complete college level courses in Real Estate Principles, Real Estate Practices and one additional elective from the Group II list. This certificate program provides students with courses they need to comply with that law. This certificate, along with the successful completion of the California Real Estate Salesperson's exam, enables students to obtain employment as a real estate licensee within the state of California."

9.0 units

Group I - The following must be completed with a grade of "C" or better:

		Units
BRE 100	Real Estate Principles	3.0
BRE 101	Real Estate Practices	3.0

Group II- Any one of the following must be completed with a grade of "C" or better:

BRE 110	Legal Aspects of Real Estate I	3.0
BRE 120	Real Estate Appraisal	3.0
BRE 126	Real Estate Finance	3.0
BRE 127	Real Estate Office Management	3.0
BRE 139	Real Estate Economics	3.0
BRE 140	Real Property Management	3.0
BESC 141	Escrow 1	3.0

BASIC BUSINESS REAL ESTATE CERTIFICATE

This Certificate program thoroughly prepares the student to become a professional real estate salesperson in the state of California.

18.0 units

Group I - All of the following must be completed:

		Units
BRE 100	Real Estate Principles	3.0
BRE 110	Legal Aspects of Real Estate I	3.0
BRE 120	Real Estate Appraisal	3.0
BRE 126	Real Estate Finance	3.0
BRE 142	Real Estate Marketing	3.0

Group II - Either one of the following must be completed:

BRE 101	Real Estate Practices	3.0
BADM 103	Financial Accounting	3.0

ADVANCED BUSINESS REAL ESTATE CERTIFICATE

This Certificate program builds upon the "Basic" Certificate and thoroughly prepares the student who wishes to test for the real estate broker's license and go on to open and operate a professional real estate business.

27.0 units

Group I - All of the following must be completed:

		Units
BRE 100	Real Estate Principles	3.0
BRE 101	Real Estate Practices	3.0
BRE 110	Legal Aspects of Real Estate I	3.0
BRE 120	Real Estate Appraisal	3.0
BRE 121	Advanced Real Estate Appraisal: Income Property	3.0
BRE 126	Real Estate Finance	3.0
BRE 139	Real Estate Economics	3.0
OR		
BADM 101	Elementary Accounting	4.0
OR		
BADM 103	Financial Accounting	3.0

Group II- Any two of the following must be completed:

BADM 117	Legal Environment of Business	3.0
BESC 141	Escrow 1	3.0
BESC 142	Escrow 2	3.0
BRE 111	Legal Aspects of Real Estate II	3.0
BRE 125	Taxes and Real Estate Investment	3.0
BRE 127	Real Estate Office Management	3.0
BRE 140	Real Property Management	3.0
BRE 142	Real Estate Marketing	3.0

PROPERTY MANAGEMENT CERTIFICATE

The Certificate program thoroughly prepares future property managers by examining the principles of real estate, accounting, office and property management and the computer applications necessary for efficient property management.

21.0 units

Group I - All of the following must be completed:

		Units
BRE 100	Real Estate Principles	3.0
BRE 120	Real Estate Appraisal	3.0
BRE 140	Real Property Management	3.0
BADM 103	Financial Accounting	3.0
BADM 110	Business Management	3.0

Group II - Any two of the following must be completed:

BRE 101	Real Estate Practices	3.0
BRE 127	Real Estate Office Administration	3.0

REAL ESTATE APPRAISER CERTIFICATE

When completed, the Certificate program will give the student the basic skills and education necessary to become a real estate appraiser.

21.0 units

Group I - All of the following must be completed:

		Units
BRE 100	Real Estate Principles	3.0
BRE 120	Real Estate Appraisal	3.0
BRE 121	Advanced Real Estate Appraisal: Income Property	3.0
BRE 125	Taxes and Real Estate Investment	3.0
BRE 139	Real Estate Economics	3.0

Group II - Any two of the following must be completed:

BRE 126	Real Estate Finance	3.0
BESC 141	Escrow I	3.0
BET 104	Beginning Word Processing/Typing: Word for Windows A/B/C	3.0

REAL ESTATE SECRETARIAL SERVICES CERTIFICATE

The Certificate program will prepare the student for secretarial services within a real estate office by enhancing the practical knowledge of real estate and introducing computer applications in spreadsheets, database, and word processing.

21.0 units minimum

Group I - All of the following must be completed:

		Units
BRE 100	Real Estate Principles	3.0
BRE 101	Real Estate Practices	3.0
BRE 110	Legal Aspects of Real Estate I	3.0
BESC 141	Escrow I	3.0
BET 65	Speedwriting	3.0

Group II - Any two of the following must be completed:

BRE 127	Real Estate Office Administration	3.0
BET 104	Beginning Word Processing/Typing: Word for Windows A/B/C	3.0
BET 112	Spreadsheet: Excel for Windows A/B/C	3.0

REAL ESTATE MARKETING CERTIFICATE

This Certificate program prepares those interested in professionally marketing real estate by examining the elements which bring buyers and sellers together.

24.0 units

Group I - All of the following must be completed:

		Units
BRE 100	Real Estate Principles	3.0
BRE 126	Real Estate Finance	3.0
BRE 139	Real Estate Economics	3.0
BRE 142	Real Estate Marketing	3.0
BADM 112	Introduction to Marketing	3.0
BADM 116	Human Relations in Business	3.0

Group II - Any two of the following must be completed:

BADM 114	Sales	3.0
BRE 125	Taxes and Real Estate Investment	3.0
BADM 144	Business Communications	3.0

Associate Degree

To earn an Associate in Science degree with a major in Business Real Estate and Escrow, complete a minimum of 18 units from any of the certificate requirements above or from any Business Escrow or Business Real Estate courses, and meet all Victor Valley College graduation requirements. BESC 138 (Cooperative Education) and BRE 138 (Cooperative Education) may be used as Elective credit but may not be used to fulfill major requirements.

Transfer

Not usually a transfer degree. Many Business Escrow and Business Real Estate courses transfer as Electives or fulfill subject credit requirements. Students in this program often choose to pursue a bachelor's degree in Business Administration. See Business Administration for transfer requirements.

CHEMISTRY

Chemistry is a central science. It is an integral part of biological, geological, medical and environmental sciences. Every sight, sound, touch, smell, taste, and even thought is a result of chemical processes. An understanding of chemistry helps to make sound decisions in our increasingly technological society.

Courses for non-majors are offered in addition to the rigorous sequence designed for majors and transfer students. For course descriptions, see Section IX of this catalog.

Career Opportunities

Agricultural Technician
Analytical Chemist
Biochemist
Synthetic Organic Chemist
Environmental Chemist and Attorney
Geochemist
Chemical Engineer
Materials Scientist
Pharmaceutical Technician
Laboratory Technician
Science Teacher
Technical Salesperson

Faculty

Full Time
Thomas Basiri
Thomas Kennedy

Degrees and Certificates Awarded
Associate in Arts, Liberal Arts
Associate in Science, Math/Science

Certificate Program
No certificate awarded.

Associate Degree
No associate degree is offered with a major in Chemistry. Chemistry courses may be used to fulfill requirements for an Associate in Science degree with a major in Math/Science. See Math/Science for degree requirements for this major. Chemistry courses may also be used to fulfill requirements for an Associate in Arts degree with a major in Liberal Arts. See Liberal Arts for degree requirements for this major. CHEM 138 (Cooperative Education) may be used as Elective credit, but may not be used to fulfill major requirements.

Transfer
To pursue a bachelor's degree, complete the following courses prior to transfer if possible:

California State University, San Bernardino
Chemistry major
BA: CHEM 201, 202, MATH 226, H226, 227, H227
One group from the following: PHYS 221 + 222 or
PHYS 201, 202, 203, H204
One course from the following: BIOL 100, 201
Optional: CHEM 281+282
BS (ACS Certified Option): BIOL 201, CHEM 201, 202,
MATH 226 + 227, 228, PHYS 201, 202, 203, H204
Biochemistry major
BA: BIOL 201 + 202+ 203,CHEM 201, 202
MATH 226, H226, 227, H227
Optional: One group from the following: PHYS 221 + 222 or PHYS 201, 202, 203 + H204
BS: BIOL 201 + 202 + 203, CHEM 201, 202
MATH 226 + 227
One group from the following: PHYS 221 + 222
PHYS 201, 202, 203, H204
CSU General Education-Breadth Requirements

University of California, Riverside
Chemistry major & Biochemistry major
Refer to the major preparation agreements on ASSIST, at www.assist.org. Students can also contact a UCR transfer outreach counselor for information at (909) 787-4531.

IGETC not recommended. However, students who have completed IGETC can apply courses to the UCR breadth pattern as appropriate, but additional breadth course work may be required. See counselor for general education requirements for College of Natural and Agricultural Sciences.

CHILD DEVELOPMENT

The Child Development program provides courses that prepare students to enter the field of early childhood education. Courses are designed to give students fundamental skills in working with children in a variety of settings, as well as a strong theoretical understanding of children's development. For course descriptions, see Section IX of this catalog.

Career Opportunities
Child Development Center Administrator
Child Development Center Teacher
Child Life Specialist
Early Childhood Education Specialist
Elementary School Teacher
Family Child Care Provider
Juvenile Worker
Nanny
Recreation Department Programs
Social Worker
Special Education
Therapist
Tutor

Faculty
Full Time
Mary Sypkens
Sandy Visser
Joanne Eccleston, Emeritus

Degrees and Certificates Awarded
Associate in Science, Child Development
Level I: Associate Teacher Certificate of Achievement
Level II: Teacher (preschool) Certificate of Achievement
Level III: Supervisor (preschool) Certificate of Achievement

Certificate Programs
The Child Development Department offers three
Certificate of Achievements preparing students for different levels of entry into the field.

LEVEL I: ASSOCIATE TEACHER CERTIFICATE (PRE SCHOOL)
State and Federally Funded programs such as Head Start and State Preschool: This certificate satisfies all **educational** requirements for the Associate Teacher Permit, issued by the State of California. Students must also show evidence of meeting the **Experience Requirement before applying for the Permit (see below).** Permit applications can be obtained through the Child Development Department.

Private (Title 22) programs: This certificate satisfies all **educational** requirements to be a fully qualified preschool teacher in such programs.

22.0 units

All of the following must be completed with a grade of "C" or better:

		Units
ENGL 50	Writing Fundamentals	4.0
OR		
ENGL 101	English Composition	4.0
CHDV 100	Child Growth and Development	3.0
CHDV 106	Child, Family, and Community	3.0
CHDV 110	Principles and Practices	3.0
CHDV 142	Health, Safety and Nutrition	3.0
CHDV 150	Introduction to Curriculum	3.0
CHDV 160	Observation and Assessment	3.0

All course work must be completed with a "C" or better.

Experience Requirement necessary to apply for Child Development Permit. Students must complete 50 days of experience, of 3 or more hours per day, within the last two years. **(THIS IS NOT NECESSSARY FOR OBTAINING CERTIFICATE) Choose A or B:**

Option A – For students already working in the field.

A Verification of Experience Form must be complete and submitted with Permit Application.

Option B – For students with no work experience in the field.

CHDV 210 Practicum

2 units of CHDV 138 (Work Experience) spread over two terms, completed within the last two years.

Please note: Returning students may substitute CHDV 127A for CHDV 110 Principles and Practices. Student may submit the form "Course Substitution for Certificate Requirements" which can be obtained in the Admission and Records and Counseling Departments.

LEVEL II: TEACHER (PRE SCHOOL) CERTIFICATE OF ACHIEVEMENT

45.0 units

This certificate satisfies all requirements for the Teacher Permit, issued by the State of California. The permit qualifies one to hold positions at the teacher level in Sate and Federally Funded programs such as Head Start and Sate Preschool. Choose either Option A or Option B. (Permit applications can be obtained through the Child Development Department.)

Option A – For students already working in the field.

All of the courses required for the Associate Teacher Certificate. **PLUS:**

CHDV 200	Teaching in a Diverse Society	3.0
CHDV 210	Practicum	3.0

16 General Education Units (Must be Associate Degree Applicable), including one in each of the following categories.

English (in addition to Eng 50)
Humanities
Social Science (Cannot be CHDV 106 or 146)
Math or Science

All coursework must be completed with a grade of "C" or better:
Experience Requirement necessary to apply for the Child Development Permit: Evidence of working in an early childhood program for 175 days of 3+ hours per day within in the past 4 years. Use the Verification of Experience Form, which is included in the Permit Application, to document this experience. **(THIS IS NOT NECESSSARY FOR OBTAINING CERTIFICATE)**

Option B – For students with no work experience in the field.
All of the courses required for the Associate Teacher Certificate, plus completion of **all** other requirements for the A.S. degree in Child Development.
(See a counselor to identify specific courses which will facilitate transfer to a university.)

LEVEL III: SITE SUPERVISOR (PRE SCHOOL) CERTIFICATE OF ACHIEVEMENT

60.0 units

This certificate satisfies all **EDUCATIONAL** requirements for the Site Supervisor Permit, issued by the State of California. This permit qualifies one to hold positions at the Site Supervisor level in State and Federally Funded programs such as Head Start and State Preschool. (See note below for information on how to obtain the **EXPERIENCE** requirements.)

Certificate Requirements Include:

ALL of the courses required for the Associate of Science Degree in Child Development including:

Child Development Courses: CHDV 100, 106, 110, 142, 150, 160, 200, 210

18 General Education Units as required for the AS Degree (CHDV 100 and 106 cannot be used to satisfy Social and Behavioral Science requirement)

CHDV 220, 239, and 240
All coursework must be completed with a grade of "C" or better:

PLEASE NOTE: Prior to applying for the Site Supervisor Permit, student must complete a Verification of Experience for, documenting 350 days of work in an early childhood program of 3+ hours per day within 4 years including at least 100 days of supervising adults. (Permit applications can be obtained through the Child Development Department.)

Associate Degree

To earn an Associate Degree in Science with a major in Child Development, complete CHDV 100, 106, 110, 142, 150, 160, 200, 210, and meet all other Victor Valley College Associate Degree graduation requirements.

Transfer

To pursue a bachelor's degree, complete the following courses prior to transfer if possible:

California State University, San Bernardino
Human Development major
Child Development Track I (non-teaching emphasis):
BIOL 100, CHDV 110, 111, 150, and 160, PSYC 101, 110, SOC 101,
Optional: Add MATH 120, CHDV 210
CSU General Education-Breadth Requirements

University of California, Riverside
Human Development major
Refer to the major preparation agreements on ASSIST, at www.assist.org. Students can also contact a UCR transfer outreach counselor for information at (909) 787-4531.
IGETC recommended

University of LaVerne, Victorville
Child Development major
(See **Table 6** in Section VII of this catalog.)

COMMUNICATION STUDIES

Speech Communication is an expansive field which aims to: (1) analyze, understand, and facilitate effective expression of organized thought, and (2) facilitate successful interaction with self, others, society and the world. Skills developed within this field are readily applicable in daily life. A bachelor's degree in Speech Communication offers pathways to careers in law, education, government, public relations and advertising, arts and entertainment, social and human services, international relations and negotiations. For course descriptions, see Section IX of this catalog.

Career Opportunities

Administrator
Advertising
Counselor
Lobbyist
Marketing Specialist
Ministry
News Anchor
Public Information Officer
Publicity Manager
Speech Writer
Teacher

Faculty
Full Time
Jacqueline Augustine-Carreira
Ed Heaberlin
Gregory Jones
Steven McDevitt
Theresa Mirci-Smith
John Rude
Polly Fitch, Emeritus

Certificate Program
No certificates awarded.

Associate Degree
No associate degree offered with a major in Speech Communication. Speech courses may be used to fulfill Electives and general education requirements.

Transfer
To pursue a bachelor's degree, complete the following courses prior to transfer if possible:

California State University, San Bernardino
Communication major
Optional: JOUR 108
Human Communication Concentration
Once course from the following: CMST 106, 108
CSU General Education-Breadth Requirements

COMPUTER INFORMATION SYSTEMS

The Computer Information Systems (CIS) department provides training for those persons who plan to work within a technical, computer-centered environment. Because of the widespread use of computers in our society, employment opportunities are found in a multitude of different environments such as general business, communications industries, manufacturing, environmental engineering, education, medical technology, and banking and finance as well as computer information systems.

The program is specifically designed to provide the student with practical training which would be valuable and useful in the computer programming workplace. For course descriptions, see Section IX of this catalog.

Career Opportunities
Computer Operator
Computer Operations Management
Computer Training Specialist
Data Administrator
Data Control Clerk
Data Entry Operator
Documentation Clerk
Education Specialist
Electronic Graphics Artist
Information Center Specialist
Management Technical Assistant
Microcomputer Technical Support
Multimedia Specialist
Network Administrator
Network Specialist
Network Support Specialist
Production Control Clerk
Programmer
Programmer/Analyst
Programming Librarian
Quality Control Specialist
Systems Analyst
Technical Research Assistant
Technical Support Specialist
Technical Writer
User Support Specialist
Web Master
Web Page Development

Faculty
Full Time
Ed Burg
Reiji Cass
Shane Thomas
Paul Tonning

Degrees and Certificates Awarded
Associate in Science, Computer Information Systems
Database Administration Certificate
MySQL Database Developer Certificate
NetWare Certificate
Network Specialist Certificate
Programming I Certificate
Programming II Certificate
Productivity Software Specialist Certificate
UNIX Administrator Certificate
Visual Basic Programming Certificate
Web Authoring Certificate

Certificate Programs

DATABASE ADMINISTRATION CERTIFICATE
The Database Administration Certificate prepares the student with a foundation for database administration using the Oracle® database software.

18.0 units

All of the following must be completed:

		Units
CIS 105	Introduction to Systems Analysis	3.0
CIS 280	Fundamentals of Database Management Systems	3.0
CIS 281	Database Management	4.0
CIS 287A	Structured Query Language A (SQL A)	2.0
CIS 287B	Structured Query Language B (SQL B)	2.0
CIS 288A	Oracle® A	2.0
CIS 288B	Oracle® B	2.0

MySQL DATABASE DEVELOPER CERTIFICATE
The MySQL Database Developer Certificate is a high quality certification process that will provide evidence that a qualifying individual has skill in developing production relational MySQL database applications. By being certified, clients, customer, and employers are ensured that the database developer is competent and professional.

11.0 units

All of the following must be completed with a grade of "C" or better:

		Units
CIS 91A	MySQL Administration A	2.0
CIS 91B	MySQL Administration B	2.0
CIS 96A	Structured Query Language A using MySQL	2.0
CIS 96B	Structured Query Language B using MySQL	2.0
CIS 280	Fundamentals of Database Management Systems	3.0

NETWARE CERTIFICATE

Provides the student with training in the popular network environment of Novell NetWare.

16.5 units

All of the following must be completed:

		Units
CIS 101	Computer Literacy	4.0
CIS 252	Novell NetWare 6 Advanced Administration	2.5
CIS 67	Fundamentals of Networking	2.5
CIS 72	Novell NetWare 6 Basic Administration	2.5
CIS 77	NetWare Service and Support	2.5
CIS 79	NDS Design and Implementation	2.5

NETWORK SPECIALIST CERTIFICATE

This certificate program prepares the student to begin a career in the computer networking field and working and administering a variety of popular network platforms including UNIX, Microsoft and Novell.

16.5 units

All of the following must be completed:

		Units
CIS 123	Introduction to Operating Systems: UNIX	3.0
CIS 124	Fundamentals of Data Communication	2.0
CIS 139	Windows XP For Power Users	
OR		
CIS 240A	Windows 2000 Professional	4.0
CIS 240B	Intro to Microsoft Windows 2000 Server Administration	4.0
OR		
CIS 72	Novell NetWare 6 Basic Administration	1.5
& CIS 252	Novell 6 Advanced Administration	2.0
OR		
CIS 261	UNIX System Administration A	2.0
CIS 262	UNIX System Administration B	2.0
CIS 50	Computer Ethics	2.0
CIS 67	Fundamentals of Networking	2.0

PROGRAMMING I CERTIFICATE

This certificate trains the student to become a programmer with some of the most popular programming such as C and Visual BASIC.

27.0 units

All of the following must be completed:

		Units
CIS 101	Computer Literacy	4.0
OR		
CIS 103	Foundations of Computer Technology	4.0
CIS 105	Introduction to Systems Analysis	3.0
CIS 201	C++ Module A	4.0
CIS 202	C++ Module B	4.0
CIS 210	Visual BASIC Programming	4.0
OR		
CIS 206A	Java A	4.0
& CIS 206B	Java B	
CIS 50	Computer Ethics	2.0
CIS 64	Computer Mathematics	3.0
ENGL 112	Technical Writing	3.0
OR		
BADM 144	Business Communications	3.0

PROGRAMMING II CERTIFICATE

Completion of this certificate makes the student well versed in most popular programming languages and ready for business and highly technical software development.

22.0 units

All of the following must be completed:

		Units
CIS 104	Object-oriented Software Design	3.0
CIS 108	Assembly Language Programming	3.0
CIS 203	C++ Module C	4.0
CIS 211A/B/C	Advanced VB Programming A or B or C	4.0
OR		
CIS 206A	Java A	4.0
OR		
CIS 206B	Java B	
CIS 50	Computer Ethics	2.0
CIS 64	Computer Mathematics	3.0
ENGL 112	Technical Writing	3.0
OR		
BADM 144	Business Communications	3.0

PRODUCTIVITY SOFTWARE SPECIALIST CERTIFICATE

This certificate trains the student to become a well-rounded microcomputer user skilled in all the software that is common in business offices.

25.0 units

Group I - All of the following must be completed:		**Units**
CIS 101	Computer Literacy	
OR		
CIS 103	Foundations of Computer Technology	4.0
CIS 280	Fundamentals of Database Management Systems	3.0
CIS 111	Multimedia Presentations	4.0
CIS 136	Introduction to Internet/WWW	2.0
CIS 139	Windows XP For Power Users	4.0
BET 112	Spreadsheet: Excel for Windows A/B/C	3.0
ENGL 112	Technical Writing	3.0
OR		
BADM 144	Business Communications	
Group II - 3 units of the following must be completed:		3.0
BET 103	Beginning Word Processing/Typing:	
A, B, C	WordPerfect for Windows (3.0)	
BET 104	Beginning Word Processing/Typing:	
A, B, C	Word for Windows (3.0)	
BADM 106	Accounting on Microcomputers (3.0)	
BADM 107	Accounting on Microcomputers (3.0)	

UNIX ADMINISTRATOR CERTIFICATE

The UNIX Administrator Certificate is a high quality certification process that will provide evidence that a qualifying individual has skill in designing, implementing and maintaining UNIX and Linux based networks. By being certified, clients, customers, and employers are ensured that the UNIX administrator is well equipped to handle the day-to-day operations associated with a UNIX based network as well as the unforeseen problems that tend to arise in any network.

14.0 units

All of the following must be completed with a grade of "C" or better:

		Units
CIS 50	Computer Ethics	2.0
CIS 90	Introduction to UNIX Operating System	4.0
CIS 93	PERL	2.0
CIS 261	UNIX System Administration A	2.0
CIS 262	UNIX System Administration B	2.0

VISUAL BASIC PROGRAMMING CERTIFICATE

This certificate program provides the student with solid, in-depth training in developing applications with Visual Basic, one of today's most widely used programming languages.

16.0 units

All of the following must be completed:		**Units**
CIS 210	Introduction to Visual Basic Programming	4.0
CIS 211A	Advanced VB Programming A	4.0
CIS 211B	Advanced VB Programming B	4.0
CIS 211C	Advanced VB Programming C	4.0

WEB AUTHORING CERTIFICATE

This certificate provides the student solid training in developing web pages.

14.0 units

All of the following must be completed:

		Units
CIS 121	Introduction to Flash	
OR		
CIS 111	Multimedia Presentations	4.0
CIS 136	Introduction to Internet/WWW	2.0
CIS 137	Introduction to HTML	2.0
CIS 205	Javascript	4.0
CIS 50	Computer Ethics	2.0

Associate Degree

To earn an Associate in Science degree with a major in Computer Information Systems, complete a minimum of 18 units from any of the certificate requirements above or from any Computer Information Systems courses and meet all Victor Valley College graduation requirements. CIS 138 (Cooperative Education) may be used as Elective credit, but may not be used to fulfill major requirements.

Transfer

To pursue a bachelor's degree, complete the following courses prior to transfer if possible: (Note that an alternative to the CIS transfer major that appeals to many students is Administration, with an emphasis in CIS. See Business Administration.)

For the most current information, visit www.assist.org.

California State University, San Bernardino
Computer Science major
BS: CIS 201 + 202, MATH 226, H226, 227, H227
PHYS 201, 203, 202 + H204
One course from the following: BIOL 100, 201
One additional science course with lab from: BIOL, CHEM, GEOL, or PHYS
CSU General Education-Breadth Requirements
Computer Systems Major
BA: CIS 201, 202, MATH 226, H226

California State University, San Bernardino
Computer Engineering major
BS: CHEM 201, CIS 201 + 202, ECON 102, MATH 226, 227, 228, PHYS 201, 202, 203 + H204

University of California, Riverside
Computer Science major
Refer to the major preparation agreements on ASSIST, at www.assist.org. Students can also contact a UCR transfer outreach counselor for information at (909) 787-4531.
IGETC not recommended. However, students who have completed IGETC can apply courses to the UCR breadth pattern as appropriate, but additional breadth course work may be required. See counselor for general education requirements for College of Engineering.
Computer Engineering
CHEM 201, CIS 201, 202
ECON 102
MATH 226, H226, 227, H227, 228, H228, 231
PHYS 201, 203, 202, H204

COMPUTER INTEGRATED DESIGN AND GRAPHICS (CIDG)

Design Your Future

The Computer Integrated Design and Graphics (CIDG) at Victor Valley College is growing to keep pace with our High Desert community. We have many new and exciting courses, programs, and certificates to meet the needs of our students. Our focus is on designing courses and certificate programs that will provide students with the knowledge and skills to secure a job in a career field that has unlimited potential.

The Computer Animation program is designed for both beginning and advanced students. Three different certificates are currently offered, with each tailored to prepare a student for entry-level opportunities in the Animation industry. The program is geared toward individuals interested in creating video games, broadcast commercials, product visualizations, animated logos, 3D website graphics, and film-based special effects. The primary software package used in all CIDG Computer Animation classes is 3ds Max. Animation courses are also offered through the Media Arts Department.

The cornerstone of the department remains our Computer Aided Drafting & Design (CADD) program. There are five new certificates that have been designed to meet the needs of students new to the field of CADD and those experienced professionals looking to upgrade their software knowledge. A core certificate is offered for students with a limited knowledge of drafting, mathematics and blueprint reading. (Drafting Technician I) Two entry-level certificates are offered in the areas of CADD and Computer Animation. We have also included three specialized certificates in the areas of Architectural CADD, Geographic Information Systems (GIS) and Civil CADD.

Career Opportunities

Architect
Architectural Drafter
CAD Management
CAD Operator
Cabinet Shop Detailer
Civil Drafter
Computer Animator
Community College Instructor
Construction Technician
Desk-Top Publisher
Electrical Drafter
Electronics Drafter
GIS Technician
Graphics Designer
Interior Designer
Landscape Architect
Landscape Designer
Mapping Specialist
Mechanical Drafter
Public Works Technician
Rendering Specialist
Steel Fabricator Drafter
Structural Drafter
Technical Illustrator

Faculty

Full Time
Claude Oliver
Shuron Taylor
Gary Menser
Steve Nelle

Degrees and Certificates Awarded

Associate in Science, CIDG
Drafting Technician I Certificate
CADD I Technician
Architectural CADD Technician I Certificate
Civil CADD Technician I Certificate
Digital Animation Artist Certificate
Digital Animation Technician I Certificate - 3ds Max
Geographic Information Systems (GIS) Certificate
Visual Communications Graphic Design Certificate
Visual Communications Print Production Certificate

Certificate Programs

DRAFTING TECHNICIAN I CERTIFICATE

12.0 units

Select a minimum of 6 units from Group I and 6 units from Group II

Group I -

		Units
CIDG 101	Introduction to Drafting	3.0
CIDG 103	Blueprint Reading for Construction	3.0
CIDG 104	Blueprint Reading for Industry	3.0
CT 105	Technical Sketching	3.0

Group II -

CT 107	Technical Mathematics	3.0
CT 108	Advanced Technical Math	3.0
MATH 90	Intermediate Algebra	4.0
MATH 104	Trigonometry	3.0

ARCHITECTURAL CADD (COMPUTER AIDED DESIGN AND DRAFTING) TECHNICIAN I CERTIFICATE

9.0 units

All of the following must be completed:

		Units
CIDG 103	Blueprint Reading for Construction	3.0
CIDG 250	Architectural Computer Aided Design I	3.0
CIDG 251	Architectural Computer Aided Design II	3.0

CADD (COMPUTER AIDED DESIGN AND DRAFTING) TECHNICIAN I CERTIFICATE

9.0 units

All of the following must be completed:

		Units
CIDG 110	Two Dimensional AutoCAD	3.0
CIDG 210	Advanced Two Dimensional AutoCAD	3.0
CIDG 120	Solids Modeling and Three Dimensional CADD	3.0

CIVIL CADD (COMPUTER AIDED DESIGN AND DRAFTING) TECHNICIAN I CERTIFICATE

9.0 units

All of the following must be completed:

		Units
CIDG 230	Computer Aided Mapping I	3.0
CIDG 231	Computer Aided Mapping II	3.0
CIDG 280	Geographical Information System I (GIS)	3.0
OR		
AGNR 171	Introduction to Geographic Information Science	3.0

DIGITAL ANIMATION ARTIST CERTIFICATE

The Digital Animation Artist certificate is designed to expand an individual's knowledge in Animation, giving them the traditional art principles and practices that will help them become a well-rounded animator. Employers often prefer computer animators who have the ability to draw and understand traditional art concepts and principles. By earning the Digital Animation Artist certificate, graduates will better position themselves of traditional art courses that include drawing and composition, life drawing and sculpture. An additional course specific to learning Adobe Photoshop is also required to earn certification.

15.0 units

Group I - Animation Track

Choose between software package options 1 or 2

All of the following must be completed with a grade of "C" or better.

		Units
Option 1:	**3ds Max**	
CIDG 160	3ds Max Fundamentals	3.0
CIDG 260	3ds Max Advanced Modeling and Materials	3.0
CIDG 261	3ds Max Character Animation and Advanced Keyframing Techniques	3.0
MERT 56	Photoshop for Animators	3.0
Option 2:	**SoftImage XSI**	
MERT 50	Principles of Animation	3.0
MERT 51	Intermediate Modeling and Animation with SoftImage XSI	3.0
MERT 52	Digital Character Animation	3.0
MERT 56	Photoshop for Animators	3.0

Group II - Art Track

Choose any ONE of the following courses.

Each course must be completed with a grade of "C" or better.

		Units
ART 101	Survey of Art History	3.0
ART 104	Film as an Art Form	3.0
ART 112	Design I	3.0
ART 113	Design II	3.0
ART 122	Introduction to Life Drawing	3.0
ART 124	Anatomy for Life Drawing	3.0
ART 125	Drawing I	3.0
ART 141	Sculpture I	3.0

DIGITAL ANIMATION TECHNICIAN I 3ds Max CERTIFICATE

The 3ds Max certificate is designed to offer students a detailed look at one of the Animation industry's premiere 3D packages. Students will study a variety of topics, including how to model 3D objects, creation of a realistic material, the art of camera and lighting techniques, and an introduction to advanced keyframing. In addition to completing several animation projects, students learn about both the history of Animation and the traditional principles involved in making an individual's work look both realistic and believable.

9.0 units

All of the following must be completed with a grade of "C" or better.

		Units
CIDG 160	3ds Max Fundamentals	3.0
CIDG 260	3ds Max Advanced Modeling and Materials	3.0
CIDG 261	3ds Max Character Animation and Advanced Keyframing Techniques	3.0

GEOGRAPHICAL INFORMATION SYSTEMS CERTIFICATE

This certificate was recommended by the Computer Integrated Design and Graphics Advisory Committee to prepare the student for specialized employment in the vast fields of Geographic Information Systems. The curriculum is structured to provide the student with foundation skills to branch into many industry disciplines, i.e. mapping, utilities, forensics, government, geography, real estate to name a few.

9.0 units

All of the following must be completed:

		Units
AGNR 171	Introduction to GIS	3.0
CIDG 280	GIS I	3.0
CIDG 281	GIS II	3.0

VISUAL COMMUNICATIONS CERTIFICATE - GRAPHIC DESIGN

17.0 units

All of the following must be completed with a grade of "C" or better:

		Units
CIDG 70	Design for Graphic Artists	3.0
CIDG 71	Survey of Computer Graphic Studio	4.0
CIDG 72	Computer Illustration	3.0
CIDG 73	Typography and Layout	3.0
CIDG 79	Multimedia and Web Design	4.0

VISUAL COMMUNICATIONS CERTIFICATE - PRINT PRODUCTION

16.0 units

All of the following must be completed with a grade of "C" or better:

		Units
CIDG 70	Design for Graphic Artists	3.0
CIDG 77	Print Production Processes	3.0
CIDG 73	Typography and Layout	3.0
CIDG 71	Survey of Computer Graphic Studio	4.0
CIDG 75	Page Layout and Design	3.0

Associate Degree

To earn an Associate in Science degree with a major in CIDG, you must complete a minimum of 18 units from any of the certificate requirements above or from any CIDG courses, and meet all Victor Valley College graduation requirements. CIDG 138 may be used as Elective credit but may not be used to fulfill major requirements.

Transfer

Not a transfer major. Most CIDG courses transfer as Electives or fulfill subject credit requirements. Some CIDG courses fulfill lower division requirements for a related major. Students in this program sometimes choose to pursue a bachelor's degree in Architecture or Engineering. See Architecture and Engineering for transfer requirements for these majors.

CONSTRUCTION AND MANUFACTURING TECHNOLOGY

The Construction Technology program provides preparation for a wide variety of positions in the construction field as a contractor, supervisor, building inspector or tradesperson. The program offers the opportunity to be self-employed and the pride and satisfaction of creating and building with your own hands.

Certificates of achievement can be earned in Construction Management, Building Construction, Building Inspection, Public Works, HVAC/R, Plumbing and Electrical & Residential Maintenance. The Associate in Science degree is awarded upon completion of 18 semester units in Construction Technology courses and the required general education and Elective courses. Transfer to the CSU system for a bachelor's degree in Industrial Technology is available. For course descriptions, see Section IX of this catalog.

Career Opportunities

Building Inspector
Cabinetmaker
Construction Accountant
Construction Estimator
Construction Insurance Agent
Construction Law Specialist
Construction Salesperson
Construction Supervisor
Contractor
Cement Mason
Civil Engineer
Electrician
Environmental Construction Specialist
Financial Specialist
Framer
Grader
Hazardous Materials Specialist
Heating and Air Conditioning Engineer
Job Foreman
Materials Engineer
Millwright
Metal Building Specialist
Painter
Plumber
Plasterer
Project Supervisor
Public Works Technician
Purchasing Agent
Safety Specialist
Soils Engineer
Surveyor
Tinsmith
Waste Water Specialist
Water Distribution System Specialist
Workmans Comp Specialist

Faculty

Full Time

Nord Embroden

Degrees and Certificates Awarded

Associate in Science, Construction Technology,
Construction Management Certificate
Construction Technology Certificate
Basic Electrical Technician
Basic Heating, Ventilation and Air Conditioning/ Refrigeration Certificate
Basic Residential Maintenance Technician Certificate
Basic Woodworking Certificate
Building Construction Certificate
Building Inspector Certificate
Plumbing Technician
Public Works Certificate
Renewable Energy Certificate

Certificate Programs

CONSTRUCTION TECHNOLOGY CERTIFICATE

Provides the core knowledge and skills that are common and fundamental to success in a wide variety of construction trades.

19.5 units

All of the following must be completed:

		Units
CT 101	Careers in Construction and Manufacturing	1.5
CT 105	Technical Sketching	3.0
CT 106	Materials of Construction	3.0
CT 107	Technical Math	3.0
CT 108	Advanced Technical Math	3.0
CT 116	Construction Safety	2.0
CT 131	Microcomputers in Construction	4.0
CIDG 103	Blueprint Reading for Construction	3.0

BUILDING CONSTRUCTION CERTIFICATE

Provides the basic knowledge and skills necessary for job opportunities in a wide variety of specific construction trades including masonry, finish carpentry, framing, construction sales, drywall, painting, plumbing, electrical, roofing, heating, ventilation and air conditioning, and surveying.

Students must complete their Construction Technology Certificate plus all of the following:

18.0 units

Group I - All of the following must be completed:

		Units
CT 132	Construction Estimation	3.0

Group II - Two of the following must be completed:

CT 120A	Electrical Wiring	4.0
CT 120B	Commercial Wiring	4.0
CT 121	Finish Carpentry	4.0
CT 122A	Heating and Air Conditioning	4.0
CT 122B	Commercial Refrigeration	4.0
CT 123	Surveying	4.0
CT 124	Plumbing	4.0
CT 125	Concrete and Masonry Construction	4.0
CT 127	Framing	4.0

Group III - 7 units of the following must be completed: 6.0

CT 138	Cooperative Education	1.0-6.0
CT 140	Construction Internship	4.0
CT 141	Construction Internship Laboratory	2.0-12.0
CT 148	Special Topics	1.0-6.0
CT 60A-D	Construction Laboratory	1.0-4.0

BUILDING INSPECTION CERTIFICATE

Provides a thorough background and skill level for employment in the building inspection field. This certificate prepares the student for employment in City and County Building and Safety departments as a private industry or corporate job site inspector.

Students must complete their Construction Technology Certificate plus all of the following:

21.0 units

All of the following must be completed:

		Units
CT 110	Building Codes and Zoning	3.0
CT 111A	Uniform Building Code 1	3.0
CT 111B	Uniform Building Code 2	3.0
CT 112	Uniform Mechanical Code	3.0
CT 113	Uniform Plumbing Code	3.0
CT 114	National Electrical Code	3.0
CT 115	Technical Office Procedures and Field Inspection	3.0

CONSTRUCTION MANAGEMENT CERTIFICATE

Provides the skills and background necessary for employment as a contractor, construction business manager, construction supervisor, or foreman when linked with appropriate, trade-specific knowledge.

Students must complete their Construction Technology Certificate plus all of the following:

18.0 units

All of the following must be completed:

		Units
CT 103	Construction Management	3.0
CT 104	Construction Law	3.0
CT 109	Construction Financing	3.0
CT 110	Building Codes and Zoning	3.0
CT 132	Construction Estimation	3.0
BADM 101	Elementary Accounting	4.0
OR		
BADM 103	Financial Accounting	3.0

BASIC ELECTRICAL TECHNICIAN CERTIFICATE

This certificate provides the necessary knowledge and skill level required for employment in the electrical industry.

16.0 units

All of the following must be completed:

		Units
CT 107	Technical Math	3.0
OR		
CT 108	Advanced Technical Math	3.0
AND		
CT 114	National Electrical Code	3.0
CT 116	Construction Safety	2.0
CT 120A	Electrical Wiring	4.0
CT 120B	Commercial Wiring	4.0

BASIC HEATING, VENTILATION, AIR CONDITIONING AND REFRIGERATION (HVAC/R) SERVICE TECHNICIAN CERTIFICATE

This certificate provides the basic knowledge and skills necessary for job opportunities in heating, ventilation and air conditioning.

17.0 units

All of the following must be completed:

		Units
CT 107	Technical Math	3.0
OR		
CT 108	Advanced Technical Math	3.0
AND		
CT 116	Construction Safety	2.0
CT 122A	Heating and Air Conditioning	4.0
CT 122B	Commercial Refrigeration	4.0
CT 136	HVAC Circuits and Controls	4.0

PLUMBING TECHNICIAN CERTIFICATE

This certificate provides the necessary knowledge and skill level required for employment in the plumbing industry.

15.0 units

All of the following must be completed:

		Units
CT 107	Technical Math	3.0
OR		
CT 108	Advanced Technical Math	3.0
AND		
CT 113	Plumbing Code	3.0
CT 116	Construction Safety	3.0
CT 124	Plumbing	4.0
CTMT 121	Plumbing Repair	3.0

PUBLIC WORKS CERTIFICATE

This certificate provides the necessary skill level for employment on public works projects. Public works includes construction of streets and highways, water distribution systems, and waste water systems.

Students must complete their Construction Technology Certificate plus all of the following:

18.0 units

Group I - All of the following must be completed:

		Units
CTPB 111	Introduction to Public Works	3.0
CTPB 112	Plan Reading for Public Works	3.0
CTPB 113	Public Works Inspection	3.0
CTPB 114	Public Works Administration	3.0

Group II - Two of the following must be completed:

CT 23	Surveying	4.0
CTPB 115	Street and Highway Construction	3.0
	CTPB 116AWater Distribution Systems 3.0	
CTPB 117	Portland Cement Concrete	3.0
CTPB 118	Solid Waste Management	3.0
CTPB 119	Wastewater Management	3.0

BASIC RESIDENTIAL MAINTENANCE TECHNICIAN CERTIFICATE

This certificate provides the necessary knowledge and skill level required for employment in the residential maintenance and repair industry.

15.0 units

All of the following must be completed:

		Units
CT 107	Technical Math	3.0
OR		
CT 108	Advanced Technical Math	3.0
AND		
CT 116	Construction Safety	2.0
CTMT 120	Residential Maintenance and Repair	4.0
CTMT 121	Plumbing Repair	3.0
CTMT 122	Electrical Repair	3.0

BASIC WOODWORKING CERTIFICATE

This certificate demonstrates a basic understanding of wood, joinery and woodworking skills and the ability to safely and appropriately use common hand tools, power tools and equipment to perform common woodworking tasks. This certificate can lead to employment in a wide variety of woodworking trades.

17.0 units

All of the following must be completed:

		Units
CTMF 120A	Woodworking Tools and Equipment	2.0
CTMF 121A	Woodworking	3.0
CTMF 121B	Advanced Woodworking	3.0
CTMF 122	Advanced Wood Topics	3.0
CTMF 129A	Woodturning	3.0
CTMF 129B	Advanced Woodturning	3.0

RENEWABLE ENERGY CERTIFICATE

This certificate demonstrates an understanding of renewable generation and the effects of fossil fuel use on our environment, economy and society. This certificate can lead to employment in the renewable energy field.

17.0 units

Group I - All of the following must be completed:

		Units
CT 105	Technical Sketching	3.0
CT 107	Technical Math	3.0
OR		
CT 108	Advanced Technical Math	3.0
CT 142	Renewable Energy	3.0
CT 143	Renewable Energy Laboratory	5.0
CTMT 122	Electrical Repair	3.0

Associate Degree

To earn an Associate in Science degree with a major in Construction Technology a minimum of 22.5 must be completed from the following list of departmental classes and the student must meet all Victor Valley College graduation requirements.

Group I - All of the following must be completed:

		Units
CT 101	Careers in Construction	1.5
CT 103	Construction Management	3.0
CT 104	Construction Law	3.0
CT 106	Materials of Construction	3.0
CT 110	Building Codes and Zoning	3.0
CT 116	Construction Safety	2.0
CT 131	Microcomputers in Construction	4.0

Group II - One of the following must be completed:

CT 105	Technical Sketching	3.0
CT 107	Technical Math	3.0
CT 108	Advanced Technical Math	3.0
CIDG 103	Blueprint Reading for Construction	3.0

Transfer

Transfers to CSU system for bachelor's degree in Industrial Technology. Some Construction Technology courses transfer as Electives or fulfill subject credit requirements. Some students in this program choose to pursue a bachelor's degree in Architecture or Engineering. See Architecture and Engineering for transfer requirements for these majors.

CSU Stanislaus, located in the Central Valley not far from the San Francisco Bay area, offers a B.S. degree in Applied Studies (telephone: 209 667-3597), to which up to 30 units of VVC's Construction and Manufacturing Technology courses can be applied. Prerequisites: BADM 101, CIS 101, ECON 102, and MATH 120, plus complete the remaining CSU General Education-Breadth requirements (you can use ECON 102 and MATH 120 for both).

COOPERATIVE WORK EXPERIENCE EDUCATION

Cooperative Education is a key element of Victor Valley College's comprehensive approach to career development. Co-op is a 16-, 12-, or 8-week course that enables the student to receive college credit for on-the-job training that will make him/her a more efficient and valuable employee while providing a practical education that supplements and enhances classroom theory. It relates education to real work environments through learning while earning. It also provides the opportunity for work improvement by improving skills. Victor Valley College recognizes job experience as a valuable learning resource. It has the uniqueness of turning community business, industry, and public agencies into an expanded education training laboratory. Co-op also allows credit for volunteer training. Credit is awarded on the basis of objectives completed and the number of hours the student trains. Students may utilize their present worksites. More details are available in the Co-op Office, (760) 245-4271, ext. 2281. The office is open Monday-Friday, 8:30 a.m.-12 noon, 1:00-5:00 p.m., and by appointment.

Co-op is a course designed for students who are cross-training at their current worksite for upward mobility or possible career changes as well as those looking for entry-level occupational training through work-based learning experiences.

Are **you** looking for occupational skills training for employment? We can offer you:

- Practical experience
- An opportunity to apply classroom learning on the job
- College credit
- Career guidance in a realistic setting
- A chance to learn what you do well and what you enjoy doing
- A reason for staying in college
- Job contacts
- Up-to-date laboratory experience
- Orientation to changing job conditions
- New ways of getting ahead
- Opportunity to experience socialization in the work place
- Transferable college units

Credit is awarded on the basis of objectives completed and the number of hours worked. The student needs a minimum of 75 hours of paid work for each unit of credit or 60 hours of volunteer work for each unit of credit.

75 Hours per unit/per semester

Paid		Total Semester Hours
5 hrs/wk	1.0 unit	75
10 hrs/wk	2.0 units	150
15 hrs/wk	3.0 units	225
20 hrs/wk	4.0 units	300
40 hrs/wk	8.0 units	600

60 Hours per unit/per semester

Volunteer		Total Semester Hours
4 hrs/wk	1.0 unit	60
8 hrs/wk	2.0 units	120
12 hrs/wk	3.0 units	180
16 hrs/wk	4.0 units	240
32 hrs/wk	8.0 units	480

Students may utilize their present work sites.

Occupational Cooperative Work Experience Education (1-8 units per semester)

Up to 16 units may be used for elective credit for the AA/AS degree and transfer to CSU.

General Cooperative Work Experience Education (1-6 units per semester)

Students do not need a declared major and do not need to be working in a major to enroll in Coop General Work Experience.

Eligibility

To be eligible for Cooperative Education, students must:

- Be enrolled as a Victor Valley Community College student.
- Spend at least five (5) hours a week at a work site.
- Pursue a planned program of Cooperative Education that includes new or expanded responsibilities or learning opportunities beyond those of previous employment and training.

Transfer Credit

Up to 16 units may be used as elective credit for the AA/AS degree.

Cooperative Education Work Experience is offered in the following areas:
Administration of Justice
Agriculture and Natural Resources
Allied Health
Art
Automotive
Biology
Business Administration
Business Education Technologies
Business Escrow
Business Real Estate
Chemistry
Child Development
Computer Information Systems
Computer Integrated Design & Graphics (Drafting)
Construction & Manufacturing Technology
Education
Electronics and Computer Technology
English
Fire Technology
General Work Experience
Journalism
Mathematics
Music
Nursing
Photography
Physical Science
Physics
Political Science
Psychology
Respiratory Therapy
Restaurant Management
Sociology
Theater Arts
Welding

NOTE: To enroll in Cooperative Work Experience Education, you do not have to declare a major.

For further information and individual guidance, contact the Cooperative Education Office at 245-4271, ext. 2281.

Faculty

Full Time

Maggi Dunsmore

DEVELOPMENTAL STUDIES

Developmental Studies courses offer language analysis curriculum specifically designed for students with language based disabilities. The curriculum is a multisensory, sequential, and cognitive approach which includes both perceptual and neurological deficit therapy. For course descriptions, see Section IX of this catalog.

DIGITAL ANIMATION

See Computer Integrated Design and Graphics
See Media Arts

ECONOMICS

Economists study how society can best use resources such as land, raw materials, capital, and labor. They analyze the relationship between the supply of goods and services and the demand as well as how these goods and services are produced, distributed, and consumed. Some economists work on public issues such as the control of inflation, business cycles, unemployment, wage, tax, and tariff policies. Others collect, analyze, and interpret data on a wide variety of economic problems, develop theories to explain causes of these problems, and identify possible solutions.

Economics provides both a general academic experience and professional preparation. The program emphasizes economic analysis, institutions, and policy in America, regional, and urban settings. Economics is designed to facilitate the students' matriculation to the four-year college or to provide an understanding of the economic world in which we live. Key concepts and methodology for analysis are emphasized. For course descriptions, see Section IX of this catalog.

Career Opportunities

Budget Analyst
Business Analyst
Business Forecaster
Commodity Economist
Commodity Price Forecaster
Economic Analyst
Economic Forecaster
Economist
Industrial Relations Specialist
Investment Analyst

Faculty

Peter Allan
Henry Young

Degrees and Certificates Awarded

Associate in Arts, Liberal Arts

Certificate Program No certificates awarded.

Associate Degree

No Associate degree is offered with a major in Economics. Economics courses may be used to fulfill requirements for an Associate in Arts degree with a major in Liberal Arts. See Liberal Arts for degree requirements for this major.

Transfer

To pursue a bachelor's degree, complete the following courses prior to transfer if possible:

California State University, San Bernardino
Economics major
ECON 101, 102, MATH 104, 105 or H105, 120, H120
Social Science Teaching Credential Option:
All above courses
Add: ANTH 102, GEOG 101 + 101L, 102,
HIST 103 + 104, 117, H117, 118 or H118, POLS 102 or H102, PSYC 101, SOC 101, GEOG 102.
CSU General Education-Breadth Requirements

University of California, Riverside
Economics major
Refer to the major preparation agreements on ASSIST, at www.assist.org. Students can also contact a UCR transfer outreach counselor for information at (909) 787-4531.
Completion of IGETC recommended.

EDUCATION

The Department of Education and Educational Technology at Victor Valley College offers certificate programs for transfer into teaching credential programs offered at accredited four-year colleges. These preparatory courses may transfer to Education and Educational Technology majors when and where articulation agreements exist. Education is the career field for those individuals who desire to teach in elementary and secondary schools, as well as in colleges and professional education. This field of study prepares students to participate as teachers and learning facilitators. Graduates in this field—bachelors degree and postgraduate study required —qualify for a variety of positions including teaching at the elementary, secondary, and college levels. Education remains on the national list of growing occupations.

To obtain a California teaching credential, students must follow a five-year program by first pursuing a four-year bachelor's degree and then completing a fifth year teaching credential program in which they complete mostly education courses, including student teaching.

CBEST
Students will usually student teach during the last two quarters of their credential program. Before student teaching, all students must take the California Basic Educational Skills Test (CBEST). Most students take the CBEST during their junior year, a quarter or two after transfer to a university.

Credentials
California Commission on Teacher Credentialing is responsible for setting standards for licensure of teachers and for accreditation of institutions that prepare teachers. The Commission is working toward meeting the standards set by the Senate Bill 2042. Some institutions may still be in the process of making changes to comply with the Commission's new standards. If you are thinking of a career in teaching, you should see a counselor for the latest information.

Waiver Programs
No waiver programs for Multiple Subject teaching programs will be available. Multiple Subject candidates will be required to pass the CSET exam.

Multiple Subject Programs
California State University, San Bernardino:
Liberal Studies, Human Development/Child Development Track II

Multiple Subject Programs
University of California, Riverside:
English, Ethnic Studies, History, Human Development, Liberal Studies, Political Science, Sociology

Single Subject Waiver Programs
Middle school and high school teacher candidates must possess a bachelor's degree in the subject they plan to teach or possess a bachelor's degree in any subject and pass the CSET subject matter test in the subject they plan to teach.

Single Subject Programs
California State University, San Bernardino:
Art, English, English with a concentration in Communication Studies, English with a concentration in Theatre Arts, French, Health Sciences, History, Mathematics, Music, Physical Education, Political Science, Social Sciences, Spanish, any of the sciences

Single Subject Programs
University of California, Riverside
Biological Sciences, English, History, Mathematics, Political Science, Physical Sciences (Physics), Social Sciences

Educational Specialist Credential
New Legislation upcoming.

Because credential programs are subject to change, students should meet with a counselor periodically to obtain the most up-to-date information. A minimum 2.6-3.0 GPA is required for acceptance into a credential program. Minimum GPA accepted varies according to the major and the university the student chooses.

Career Opportunities

Administrative Services
Elementary Teacher
ESL Teacher
High School Teacher
College Instructor
Education Consultant
Training Facilitator
Instructional Designer
Distance Learning Specialist
MGM Teacher
Physically Handicapped Teacher
Pupil Personnel Services
Reading Teacher
Special Education Teacher
Vocational Teacher

Faculty

Mike Smith

Degrees and Certificates Awarded

Associate in Arts, Liberal Arts
Degree will vary with major.
Educational Technology Certificate
Collegial Education Certificate Level I, II

Certificate Program

EDUCATIONAL TECHNOLOGY CERTIFICATE

The Educational Technology Certificate Program significantly enhances transfer readiness for students who intend to pursue a career in public education (K-12 teacher, community college teacher, school administration, academic counseling, special education, etc.) or a career in professional education (instructional designer, business/corporate trainer, educational software engineer, educational consultant.) Additionally, the program (1) certifies teachers of all types in the use and integration of computer technology in their practice, and (2) certifies students for work as paraprofessionals or para educators in technology-enhanced school settings, such as computer labs and networked classrooms. The Educational Technology Certificate Program exceeds the rigorous standards set by version two of the California Technology Assessment Profile.

17.0 units

All of the following must be completed:

		Units
EDUC 101	Introduction to Teaching	3.0
OR		
EDUC 52	Educating Today's Learner	3.0
ETEC 106	Introduction to Computer Technology for Educators	4.0
ETEC 107	Introduction to the Internet for Educators	2.0
ETEC 51	Introduction to Educational Technology	3.0
ETEC 70	Leadership in Educational Technology	3.0
ETEC 90	Educational Technology Internship	2.0

COLLEGIAL EDUCATION CERTIFICATE

This certificate will serve the needs of parents who home school their children or are actively involved in the education of their children at school. It is intended to assist parents developing their understanding of how children think and learn, and how different educational styles and approaches influences learning. The certificate will initially be offered to parents of students at the Lewis Center in Apple Valley and has been developed in collaboration with the administration of the Lewis Center.

COLLEGIAL EDUCATION - LEVEL I

8.0 units minimum

All of the following must be completed with a grade of "C" or better:

		Units
EDUC 101	Introduction to Teaching	3.0
EDUC 50	Tutoring Principles and Practices	2.0
CHDV 100	Child Growth and Development	3.0

COLLEGIAL EDUCATION CERTIFICATE - LEVEL II CURRICULUM SPECIALIZATION

6.0 units

Students must first complete the Collegial Education Certificate - Level 1. Choose 6 units from any of the following:

		Units
CHDV 134	Language Experiences for Young Children	3.0
CHDV 144	Math and Science for Young Children	2.0
ENGL 235	Children's Literature	3.0
MATH 70	Building Mathematical Experiences for Children K-8	3.0
MATH 71	Guided Discoveries Practicum	2.0

COLLEGIAL EDUCATION CERTIFICATE - LEVEL II TEACHING AND LEARNING SPECIALIZATION

6.0 units

Students must first complete the Collegial Education Certificate - Level 1. Choose 6 units from any of the following:

		Units
CHDV 132	Montessori Methods	3.0
EDUC 52	Educating Today's Learner	3.0
GUID 107	Learning Strategies and Study Skills	3.0
PSYC 105	Personal and Career Success	3.0

COLLEGIAL EDUCATION - LEVEL II: TECHNOLOGY SPECIALIZATION

6.0 units

Students must first complete the Collegial Education Certificate - Level 1. Choose 6 units from any of the following:

		Units
ETEC 106	Introduction to Computing for Educators	4.0
ETEC 107	Introduction to the Internet for Educators	2.0
ETEC 51	Introduction to Educational Technology	3.0
BET 112	Building Mathematical Experiences for Children K-8	3.0
BET 131A	Presentation Software: PowerPoint I	1.0
BET 131B	Presentation Software: PowerPoint II	1.0
BET 131C	Presentation Software: PowerPoint III	1.0
BET 135	Desktop Publishing: PageMaker	2.0

Associate Degree

No associate degree offered with a major in Education. Courses in the Liberal Studies major may be used to fulfill requirements for an Associate in Arts degree with a major in Liberal Arts. See Liberal Arts for degree requirements for this major.

Transfer

To pursue a bachelor's degree which prepares the student for elementary (K-6) teaching, complete the following courses prior to transfer if possible:

MULTIPLE-SUBJECT TEACHING CREDENTIAL

- **California State University, San Bernardino**
  Liberal Studies major
  (See **Table 1** in Section VII of this catalog.)

For the most recent updates, visit www.assist.org.

- **University of California, Riverside**
  Liberal Studies major
  Multiple Subject Teaching Credential for Elementary Teaching

Refer to the major preparation agreements on ASSIST, at www.assist.org. Students can also contact a UCR transfer outreach counselor for information at (909) 787-4531.
Completion of IGETC recommended.

- **Azusa Pacific University, Victorville**
  Human Development major (CSET Waiver)
  (See **Table 3** in Section VII of this catalog.)

- **University of La Verne**
  Liberal Studies major
  (See **Table 7** in Section VII of this catalog.)

SINGLE SUBJECT TEACHING CREDENTIAL

Students pursuing a Single Subject Teaching Credential to teach a specific subject in Grades 7-12 should follow the bachelor's degree major requirements for that specific subject waiver program and complete the appropriate general education requirements. For example, a student who plans to teach English in high school should complete the transfer requirements for an English major or an English waiver and all general education transfer requirements for the specific university.

VOCATIONAL SUBJECTS

The following California State Universities (CSU) offer Vocational Ed./Occupational Studies as a Bachelor's Degree. Contact individual CSU campuses for admission requirements:

California State University

Long Beach	San Diego
Los Angeles	San Francisco
San Bernardino	San Luis Obispo

ELECTRONICS AND COMPUTER TECHNOLOGY

The Electronics and Computer Technology Department offers several concentrations in electronics and computer technology that are designed to prepare students for a variety of high-tech job/career opportunities in the fields of engineering and technology; electronics technology; computer technology; telecommunication technology; and related technologies.

The Electronics and Computer Technology Department offers an associate degree program in engineering technology with an emphasis in electronics, computers, and telecommunications. Technology certificates offered in areas of specialization include: electronics technology, computer technology, telecommunication technology, networking technology, electronic communication technology, and industrial electronics technology. Certificates/certifications offered in specific areas of electronics, computers, and related technology include: Certified Electronics Technician (Associate CET), A+ Certified Computer Service Technician, N+ Certified Networking Technician, CISCO Certified Network Associate (CCNA), CISCO Certified Network Professional (CCNP), Microsoft Certified Systems Engineer (MCSE), Certified Fiber Optics Installer, (FOIC), Electronics Communications (WCM, FCC license) and Digital and Microprocessor Electronics.

Career Opportunities

Electronics Engineering Technologist
Computer Engineering Technologist
Network Engineering Technologist
Telecommunications Engineering Technologist
Certified Electronics Technician, CET
A+ Certified Computer Technician
N+ Certified Network Technician
Certified Telecommunication Technician
CISCO Certified Network Associate (CCNA)
CISCO Certified Network Professional (CCNP)
Microsoft Certified Professional (MCP)
Microsoft Certified Systems Engineer (MCSE)
Networking Cable Installer
Fiber Optics Installer
Microwave/Radar Technician
Laser/Optical Technician
Industrial Electronics Technician
Consumer Electronics Technician
Biomedical Instrument Technician
Audio/Visual Systems Technician
Broadcast Radio and Television
Research and Development
Sales Representative, electronics and computer equipment
Quality Control Technician

Faculty

Full Time
Khalid Rubayi
Tom Faro, Emeritus

Degrees and Certificates Awarded

Associate in Science, Electronics and Computer Technology
Associate in Science, Electronics Engineering Technology
Associate Degree Electronics Engineering Technology Certificate
A+ Certification Examination Preparation Certificate
CISCO Networking Academy I, II, III, IV, V, VI, VII Certificate
Computer Technology Certificate
Communication Electronics Certificate
Digital Electronics Certificate
Electronics Technology Certificate
Fiber Optic Cabling Technician Certificate
N+ Certification Examination Preparation Certificate
Wireless Communication Technology Certificate
Wireless MSCSE Examination Preparation Certificate Level I, II

Certificate Programs

ASSOCIATE DEGREE ELECTRONICS ENGINEERING TECHNOLOGY CERTIFICATE

Professional Preparation

64.5-68.5 units

All of the following must be completed:

		Units
ELCT 131	DC Circuit Theory and Analysis	4.0
ELCT 132	AC Circuit Theory and Analysis	4.0
ELCT 133	Solid State Devices and Circuits	4.0
ELCT 134	Solid State Circuit Analysis	4.0
ELCT 50	A+ Operating Systems Technologies	4.0
ELCT 51	C++ Programming for Electronics and Computer Technology	4.0
ELCT 71	Principles of Digital Logic and Circuits	4.0
ELCT 73	Microprocessor Principles	4.0

One of the following two groups must be completed:

Electronics Emphasis

ELCT 53	Electronic Communication Principles	4.0
ELCT 54	Electronic Communication Systems	4.0

Computer Emphasis

ELCT 61	Basic Maintenance of Personal Computers	4.0
ELCT 77A	Networking Technology and Practices I	4.0

* Individualized instruction courses require 108 hours of supervised laboratory activities.

All of the following must be completed:

		Units
ELCT 57	Technical Mathematics for Electronics I	3.0
ELCT 58	Technical Mathematics for Electronics II	3.0
ELCT 59	Technical Calculus for Electronics I	3.0
ELCT 60	Technical Calculus for Electronics II	3.0

Students planning to transfer to an Electrical engineering program should take the following mathematics courses (instead of ELCT 57, 58, 59, and 60)

MATH 105	College Algebra	4.0
MATH 104	Trigonometry	3.0
MATH 226	Analytic Geometry and Calculus	5.0
MATH 227	Analytic Geometry and Calculus	5.0

One of the following must be completed:

Any course that will satisfy the VVC Social Science requirement* 3.0

One of the following must be completed:

Any course that will satisfy the VVC Humanities requirement* 3.0

6 units from the following must be completed:

Any courses that will satisfy the VVC Language Skills requirement* 6.0

One of the following must be completed:

Any course that will satisfy the VVC Physical Education requirement* 1.0

*See pages 48-49 for a listing of courses that can satisfy the various GE requirements listed here.

COMPUTER TECHNOLOGY CERTIFICATE

Career Preparation

36.0 units

All of the following must be completed:

		Units
ELCT 131	DC Circuit Theory and Analysis	4.0
ELCT 132	AC Circuit Theory and Analysis	4.0
ELCT 133	Solid State Devices and Circuits	4.0
ELCT 134	Solid State Circuit Analysis	4.0
ELCT 50	A+ Operating Systems Technologies	4.0
ELCT 57	Technical Mathematics for Electronics I	3.0
ELCT 58	Technical Mathematics for Electronics II	3.0
ELCT 61	Basic Maintenance of Personal Computers	4.0
ELCT 71	Principles of Digital Logic and Circuits	4.0
ELCT 73	Microprocessor Principles	4.0

Career Option - 6 Units

Career specialty options include individualized instruction courses that are designed to provide the student with skills and/or knowledge in a specific area of digital/microprocessor technology. Supervised time will be spent with computers, audiovisual material, and laboratory equipment to meet specific objectives. Each specialty course requires 108 hours to complete, or an average of 6 hours per week.

One of the following career options must be completed:

Option 1: Microprocessor Systems

ELCT 91	Microprocessor Interfacing	3.0
ELCT 92	Microprocessor Applications	3.0

Option 2: Computer Systems

ELCT 62	PC Servicing	3.0
ELCT 63	PC Troubleshooting	3.0

CISCO NETWORKING ACADEMY CERTIFICATE LEVEL I

17.0 units

All of the following must be completed:

		Units
ELCT 50	A+ Operating Systems Technologies	4.0
ELCT 61	Basic Maintenance of Personal Computers	4.0
ELCT 69	Network Topologies and Cabling	2.0
ELCT 80	Fiber Optics Cabling	3.0
ELCT 78A	CISCO Networking Academy I	4.0

CISCO NETWORKING ACADEMY CERTIFICATE LEVEL II

17.0 units

All of the following must be completed:

		Units
ELCT 50	A+ Operating Systems Technologies	4.0
ELCT 61	Basic Maintenance of Personal Computers	4.0
ELCT 69	Network Topologies and Cabling	2.0
ELCT 80	Fiber Optics Cabling	3.0
ELCT 78B	CISCO Networking Academy II	4.0

CISCO NETWORKING ACADEMY CERTIFICATE LEVEL III

17.0 units

All of the following must be completed:

		Units
ELCT 50	A+ Operating Systems Technologies	4.0
ELCT 61	Basic Maintenance of Personal Computers	4.0
ELCT 69	Network Topologies and Cabling	2.0
ELCT 80	Fiber Optics Cabling	3.0
ELCT 78C	CISCO Networking Academy III	4.0

CISCO NETWORKING ACADEMY CERTIFICATE LEVEL IV

17.0 units

All of the following must be completed:

		Units
ELCT 50	A+ Operating Systems Technologies	4.0
ELCT 61	Basic Maintenance of Personal Computers	4.0
ELCT 69	Network Topologies and Cabling	2.0
ELCT 80	Fiber Optics Cabling	3.0
ELCT 78D	CISCO Networking Academy IV	4.0

CISCO NETWORKING ACADEMY CERTIFICATE LEVEL V

17.0 units

All of the following must be completed:

		Units
ELCT 50	A+ Operating Systems Technologies	4.0
ELCT 61	Basic Maintenance of Personal Computers	4.0
ELCT 69	Network Topologies and Cabling	2.0
ELCT 80	Fiber Optics Cabling	3.0
ELCT 78E	CISCO Networking Academy V	4.0

CISCO NETWORKING ACADEMY CERTIFICATE LEVEL VI

17.0 units

All of the following must be completed:

		Units
ELCT 50	A+ Operating Systems Technologies	4.0
ELCT 61	Basic Maintenance of Personal Computers	4.0
ELCT 69	Network Topologies and Cabling	2.0
ELCT 80	Fiber Optics Cabling	3.0
ELCT 78F	CISCO Networking Academy VI	4.0

CISCO NETWORKING ACADEMY CERTIFICATE LEVEL VII

17.0 units

All of the following must be completed:

		Units
ELCT 50	A+ Operating Systems Technologies	4.0
ELCT 61	Basic Maintenance of Personal Computers	4.0
ELCT 69	Network Topologies and Cabling	2.0
ELCT 80	Fiber Optics Cabling	3.0
ELCT 78G	CISCO Networking Academy VII	4.0

DIGITAL ELECTRONICS CERTIFICATE

30.0 units

All of the following must be completed:

		Units
ELCT 131	DC Circuit Theory and Analysis	4.0
ELCT 132	AC Circuit Theory and Analysis	4.0
ELCT 133	Solid State Devices and Circuits	4.0
ELCT 134	Solid State Circuit Analysis	4.0
ELCT 57	Technical Mathematics for Electronics I	3.0
ELCT 58	Technical Mathematics for Electronics II	3.0
ELCT 71	Principles of Digital Logic and Circuits	4.0
ELCT 73	Microprocessor Principles	4.0

ELECTRONICS TECHNOLOGY CERTIFICATE

Career Preparation

36.0 units

All of the following must be completed:

		Units
ELCT 131	DC Circuit Theory and Analysis	4.0
ELCT 132	AC Circuit Theory and Analysis	4.0
ELCT 133	Solid State Devices and Circuits	4.0
ELCT 134	Solid State Circuit Analysis	4.0
ELCT 57	Technical Mathematics for Electronics I	3.0
ELCT 58	Technical Mathematics for Electronics II	3.0
ELCT 71	Principles of Digital Logic and Circuits	4.0
ELCT 73	Microprocessor Principles	4.0

Career Option - 6 Units

Career specialty options are individualized instruction courses and are designed to provide the student with skills and/or knowledge in a specific area of Electronics technology. Supervised time will be spent with computers, audiovisual material, and laboratory equipment to meet specific objectives. Each specialty option requires 108 hours to complete, or an average of 6 hours per week.

One of the following career options must be completed:

		Units
Option 1*:* Optoelectronics		
ELCT 85	Fiber Optics	3.0
ELCT 86	Lasers	3.0
Option 2*:* Telecommunications		
ELCT 97	Digital Communications	3.0
ELCT 99	Microwave Communications	3.0
Option 3: **Television and Video Systems**		
ELCT 93	TV Servicing	3.0
ELCT 94	VCR/Camcorder Servicing	3.0
Option 4*:* Industrial Electronics		
ELCT 87	Industrial Control Systems	3.0
ELCT 88	Industrial Process Control Applications	3.0
Option 5*:* Biomedical Electronics		
ELCT 89	Biomedical Instrumentation	3.0
ELCT 90	Advanced Biomedical Instrumentation	3.0

MICROSOFT CERTIFIED SYSTEMS ENGINEER (MCSE) EXAMINATION PREPARATION CERTIFICATE LEVEL I

14.0 units

All of the following must be completed:

		Units
ELCT 50	A+ Operating Systems Technologies	4.0
ELCT 61	Basic Maintenance of Personal Computers	4.0
ELCT 69	Network Topologies and Cabling	2.0
ELCT 79A	Microsoft Certified Systems Engineer	4.0

MICROSOFT CERTIFIED SYSTEMS ENGINEER (MCSE) EXAMINATION PREPARATION CERTIFICATE LEVEL II

14.0 units

All of the following must be completed:

		Units
ELCT 50	A+ Operating Systems Technologies	4.0
ELCT 61	Basic Maintenance of Personal Computers	4.0
ELCT 69	Network Topologies and Cabling	2.0
ELCT 79B	Microsoft Certified Systems Engineer II	4.0

NETWORK CABLING TECHNICIAN CERTIFICATE

16.0 units

All of the following must be completed:

		Units
ELCT 131	DC Circuit Theory and Analysis	4.0
ELCT 57	Technical Mathematics for Electronics I	3.0
ELCT 132	AC Circuit Theory and Analysis	4.0
ELCT 58	Technical Mathematics for Electronics II	3.0
ELCT 69	Network Topologies and Cabling	2.0

FIBER OPTIC CABLING TECHNICIAN CERTIFICATE

17.0 units

All of the following must be completed:

		Units
ELCT 131	DC Circuit Theory and Analysis	4.0
ELCT 57	Technical Mathematics for Electronics I	3.0
ELCT 132	AC Circuit Theory and Analysis	4.0
ELCT 58	Technical Mathematics for Electronics II	3.0
ELCT 80	Fiber Optics Cabling	3.0

A+ CERTIFICATION EXAMINATION PREPARATION CERTIFICATE

15.0 units

All of the following must be completed:

		Units
ELCT 50	A+ Operating Systems Technologies	4.0
ELCT 61	Basic Maintenance of Personal Computers	4.0
ELCT 65	PC Monitors	3.0
ELCT 69	Network Topologies and Cabling	2.0
ELCT 7	A+ Certification Exam Preparation	2.0

N+ CERTIFICATION EXAMINATION PREPARATION CERTIFICATE

17.0 units

All of the following must be completed:

		Units
ELCT 50	A+ Operating Systems Technologies	4.0
ELCT 61	Basic Maintenance of Personal Computers	4.0
ELCT 77A	Networking Technology and Practices I	4.0
ELCT 69	Network Topologies and Cabling	2.0
ELCT 80	Fiber Optics Cabling	3.0

WIRELESS COMMUNICATION TECHNOLOGY CERTIFICATE

38.0 units

All of the following must be completed:

		Units
ELCT 131	DC Circuit Theory and Analysis	4.0
ELCT 132	AC Circuit Theory and Analysis	4.0
ELCT 133	Solid State Devices and Circuits	4.0
ELCT 134	Solid State Circuit Analysis	4.0
ELCT 53	Electronic Communication Principles	4.0
ELCT 54	Electronic Communication Systems	4.0
ELCT 57	Technical Mathematics for Electronics I	3.0
ELCT 58	Technical Mathematics for Electronics II	3.0
ELCT 71	Principles of Digital Logic and Circuits	4.0
ELCT 73	Microprocessor Principles	4.0

SPECIAL PROGRAMS

FEDERAL COMMUNICATIONS COMMISSION (FCC) COMMERCIAL RADIO OPERATOR LICENSE

FCC licenses are required by law to operate and maintain many types of communications equipment. The broadcasting, avionics, and maritime industries are the primary employers of commercial license holders. Many other fields now require FCC licenses. New technologies are evolving which must have qualified technicians and operators to comply with the procedures and rules needed to bring order to the international communications maze.

Under the auspices of the Electronics Technician Association and the International (ETA), FCC license examinations are administered at the Electronics and Computer Technology Department by an official ETA examiner. An examination fee is required.

The following FCC commercial licenses and endorsements are obtained by successfully passing a series of examinations:

General Radiotelephone
(Examination elements 1 and 3)
Radar Endorsement (Element 8)
GMDSS', Radio Operator (Elements 1 and 7)
GMDSS', Radio Maintainer (Elements 1, 3, and 9)

Examination schedules can be obtained by contacting the Electronics and Computer Technology Department.

An FCC license preparation course also is offered (see course offerings in the Electronics and Computer Technology Department in the Victor Valley College Catalog).

Note: (1) Global Maritime Distress and Safety System

CERTIFIED ELECTRONICS TECHNICIAN (CET) CERTIFICATION

CET examinations thoroughly assess an individual's (a) general knowledge of electronics and computer technology, and (b) specific knowledge in fourteen separate specialty areas. Upon successful completion of the selected examination, the technician is registered and receives the CET certificate from the Electronics Technician Association, International. This certificate identifies the technician as having attained a high level of competence in the profession.

Under the auspices of the Electronics Technician Association, International (ETA), CET examinations are administered at the Electronics and Computer Technology Department by an official ETA examiner. An examination fee is required.

The following Electronic Technician Certifications and endorsements are obtained by successfully passing a series of examinations:

Associate: For students and entry level technicians with less than four years of experience. This examination pertains to basic Electronics and computer technology.

Journeyman: For technicians with four or more years of combined education and experience. This examination consists of the associate examination plus one of the following options:

Telecommunications Electronics Technician - TCM
Certified Network Systems Technician - CNST
Certified Web Specialist - CSW
Registered Small-Dish Installer - RSDI
Certified Satellite Installer - CSI
Certified Fiber Optics Installer Technician - FOIC
Wireless Communications Electronics Technician - WCM
Radar Electronics Technician - RAD
Biomedical Electronics Technician - CMP
Certified Computer Electronics Technician - CMP
Consumer Electronics Technician - CSM
Video Electronics Technician - VID
Certified Industrial Electronics Technician - IND
Certified Network Computer Technician - CNCT

Examination schedules can be obtained by contacting the Electronics and Computer Technology Department.

A CET certification preparation course also is offered (see course offerings in the Electronics and Computer Technology Department in the Victor Valley College catalog).

Associate Degree

To earn an Associate in Science degree with a major in Electronics and Computer Technology, complete a minimum of 18 units from any of the certificate requirements above or from any Electronics and Computer Technology courses and meet all Victor Valley College graduation requirements. The Associate Degree Electronic Engineering Technology Certificate includes all general education requirements for an Associate in Science degree with a major in Electronic Engineering Technology. ELCT 138 (Cooperative Education) may be used as Elective credit, but may not be used to fulfill major requirements.

Transfer

Most Electronics and Computer Technology courses transfer as Electives or fulfill subject credit requirements. Students in this program sometimes choose to pursue a bachelor's degree in technology fields such as Industrial Technology at California State Polytechnic University, San Luis Obispo or Engineering Technology at California State Polytechnic University, Pomona. Other students choose to pursue an Engineering degree which requires a more intense curriculum in mathematics, chemistry, and physics. See Engineering for transfer requirements.

Campuses that offer Electronics and Computer Technology majors include: CSU - Chico, Fullerton, Long Beach, Pomona and Sacramento.
Refer to ASSIST, at www.assist.org for major preparation requirements.

EMERGENCY MEDICAL TECHNICIAN

The EMT 1A is the beginning level for emergency response personnel. It is the minimum preparation required to staff an ambulance.

EMT 1A can be completed in one class. Classes in this area meet California State EMS authority and ICEMA regulations. For course descriptions, see Section IX of this catalog.

Career Opportunities
Emergency Medical Technician

Faculty
Full Time
Brian Hendricksen
Scott Jones
Dave Oleson

Degrees and Certificates Awarded
Emergency Medical Technician I Certificate (Ambulance)
Emergency Medical Technician Certificate (Refresher)

Certificate Programs

EMERGENCY MEDICAL TECHNICIAN I CERTIFICATE (AMBULANCE)

8.0 units

ALDH 71	Emergency Medical Technician I (Ambulance)	8.0

Valid for two years from date of issue.

EMERGENCY MEDICAL TECHNICIAN CERTIFICATE (REFRESHER)

1.0 unit

ALDH 72	Emergency Medical Technician (Ambulance) Refresher Course	1.0

Required for renewal of Emergency Medical Technician Certificate.

ENGINEERING

Victor Valley College does not offer this program, but does offer preparatory courses needed for transfer into Engineering.

Engineers seek to understand and solve a broad range of technological problems faced by our society. Engineers are responsible for such projects as converting raw materials and power sources into useful products, developing scientific equipment, and designing and planning the construction of buildings, highways, and rapid transit systems. As society becomes more technologically complex, so do the ever-emerging branches of engineering.

The rigorous curriculum of engineering programs is for high achieving students who have developed good study habits and possess a strong math and science background.

Degrees and Certificates Awarded
Associate in Science, Math/Science

Associate Degree
No associate degree offered with a major in Engineering from Victor Valley College. Because the math and science requirements are so extensive, students usually pursue an associate degree with a major in Math/Science.

Transfer
Engineering is a highly competitive transfer degree which is impacted at many universities. The following courses are minimal requirements for most engineering majors: CHEM 101, 202; MATH 226, 227; PHYSICS 101, 202, 203 General education requirements to include ENGL 101 and 202.

See appropriate university catalog for specific general education requirements as these requirements for engineering majors vary from university to university. IGETC or CSU General Education-Breadth Requirements are not always appropriate for an engineering major.

For the most current information, visit www.assist.org.

University of California, Riverside
Chemical Engineering:
Refer to the major preparation agreements on ASSIST, at www.assist.org. Students can also contact a UCR transfer outreach counselor for information at (909) 787-4531.

IGETC not recommended. However, students who have completed IGETC can apply courses to the UCR breadth pattern as appropriate, but additional breadth course work may be required. See counselor for general education requirements for College of Engineering.

California State University
Campuses that offer Engineering majors include: CSU-Chico, Fresno, Long Beach, Los Angeles, Northridge, Pomona, Sacramento, San Diego, San Francisco, San Jose, San Luis Obispo and Maritime Academy.

Refer to ASSIST, at www.assist.org for major preparation requirements.

ENGLISH

The study of English offers the student development of writing skills as well as an appreciation of literature. The discipline of reading and writing about the human experience is a vital foundation for all learning.

Since English composition courses are designed to help the student write the kind of papers commonly required in college courses, the student's first course in composition should be taken during the first semester (15 units) of college work, and the second course during the second semester (15 to 30 units) For course descriptions, see Section IX of this catalog.

Career Opportunities
B.A. Level (Most careers require a bachelor's degree.)
Copywriter
Creative Writer
Editor
Journalist
Library Reference Worker
Magazine Writer
Proofreader
Public Relations Worker
Researcher
Technical Writer

Faculty

Full Time
Tim Adell
Claudia Basha
Robert Begley
Bryce Campbell
Andrea Glebe
Patty Golder
Carol Golliher
Joe Pendleton
Jane Skuster
Judy Solis
Patricia Teel
Karen Tomlin
Patricia Wagner
James Wilson

Degrees and Certificates Awarded

Associate in Arts, Liberal Arts

Certificate Program No certificates awarded.

Associate Degree

No associate degree offered with a major in English. English courses may be used to fulfill requirements for an Associate in Arts degree with a major in Liberal Arts. See Liberal Arts for degree requirements. ENGL 138 (Cooperative Education) may be used as Elective credit, but may not be used to fulfill major requirements.

Transfer

To pursue a bachelor's degree, complete the following courses before transfer if possible:

California State University, San Bernardino
English major
ENGL 245 + 246
CSU General Education-Breadth Requirements

University of California, Riverside
English major
Refer to the major preparation agreements on ASSIST, at www.assist.org. Students can also contact a UCR transfer outreach counselor for information at (909) 787-4531.
Completion of IGETC recommended.

ENGLISH AS A SECOND LANGUAGE (ESL)

English as a Second Language (ESL) is the study of English designed for non-native speakers of English. As California becomes culturally and linguistically more diverse, the need for language and cultural orientation grows. Moreover, non-native speakers of English will need to develop academic language skills necessary for success at the college level. It is the goal of the ESL program to meet that need. For course descriptions, see Section IX of this catalog.

Career Opportunities

Although ESL is not recognized as a separate major, it is a necessary component for success in any field for the non-native student.

Faculty

Full Time
Laird Eklund
Maria Ruiz

ENVIRONMENTAL STUDIES

Promoting an understanding of the interaction of human beings with their environment is the focus of Environmental Studies. Career Opportunities cover a wide range of positions in public agencies, business, industry and nonprofit organizations which need individuals who can provide up-to-date environmental information and assist in compliance with environmental regulations. This transfer major combines courses from the biological sciences, physical sciences, and social sciences.

Transfer

To pursue a bachelor's degree, complete the following courses before transfer if possible:

California State University, San Bernardino
Environmental Studies major
Track A: BIOL 203, CHEM 100 or H100
Three courses from the following: ANTH 101, BIOLOGY 201, 202, CHEM 206, GEOG 101+101L, GEOL 101, PHYSICS 100 or 221
Track B: BIOL 201 + 202 + 203, CHEM 101, 202
One course from the following: PHYS 100, 221
Optional: CHEM 281 + 282
Optional: One course from the following:
GEOG 101+101L, GEOL 101
CSU General Education-Breadth Requirements

University of California, Riverside
Environmental Science major
Refer to the major preparation agreements on ASSIST, at www.assist.org. Students can also contact a UCR transfer outreach counselor for information at (909) 787-4531.
IGETC not recommended. However, students who have completed IGETC can apply courses to the UCR breadth pattern as appropriate, but additional breadth course work may be required. See counselor for general education requirements for College of Natural and Agricultural Sciences.

FINE ARTS

Degrees and Certificates Awarded

Associate in Arts, Fine Arts

Associate Degree

To earn an Associate in Arts degree with a major in Fine Arts, complete a minimum of 18 units from any of the following courses:

- ANTH
  ANTH 151
- ART
  ART 101, 102, 104, 105, 106, 107, 108, 109, 112, 113, 114, 115, 120, 121, 122, 123, 124, 150, 151, 125, 126, 128, 129, 130, 131, 132, 133, 141, 142
- MUSIC
  MUSC 101, 102, 104, 202, 204, 103, 105, 203, 205, 100, 112, 113, 115, 116, 117, 118, 110, 111, 210, 211, 120A-J, 130, 131, 134, 135, 128, 129, 137, 139, 140, 141, 146, 136, 145, 147, 122, 123, 124, 125, 132, 143, 144, 126, 108
- PHYSICAL E DUCATION
  PE103, 128 PEDA 101, 150, 151, 152, 153, 160, 161, 162, 163, 164, 165, 166, 167, 169, 170, 171, 174, 175, 176, 177, 266, 267, 270, 271, 274, 275, 276, 277
- PHOTOGRAPHY
  PHOT 52, 53, 54, 100, 101, 102, 103, 104, 105, 128, 129
- THEATRE ARTS

ENGL 116, TA 101, 102, 104, 106, 107, 109, 110, 111, 113, 115, 116, 117, 120, 125A-C, 128, 129, 160, 161, 166, 167, 170, 171, 174, 175, 266, 267, 270, 271, 274, 275, 276, 277

Transfer

The Associate in Arts degree in Fine Arts is often a degree earned by students who plan to pursue a bachelor's degree in transfer majors such as Art, Music, Photography, and Theatre Arts. Students who plan to pursue a bachelor's degree should complete the 18 units in Fine Arts for the major and fulfill the CSU General Education-Breadth Requirements or the IGETC before transfer.

FIRE TECHNOLOGY

Fire protection is a highly specialized professional field requiring extensive knowledge and use of scientific principles. Successful application of the fundamental principles of fire protection, including suppression and extinguishment of fires, rescue, emergency medical services, prevention techniques and practices, preplanning for fire protection, and disaster control, requires technical knowledge and the ability to work within an organized system at the fire ground or other emergency scene. These actions require trained, professional people to accomplish the goals and objectives of today's public and/or private organizations in meeting their commitment to the public and employees they serve. Fire Technology provides the student the opportunity to prepare for a rewarding career in the public fire service or in private industry. For course descriptions, see Section IX of this catalog.

Fire Technology

This Occupational Education program in Fire Technology at Victor Valley College provides vocational and technical in-service training for interested students. Each student who completes a program of courses that meets the specified requirements is entitled to a Certificate of Completion in that field. Certificates are awarded as evidence that well defined levels of proficiency have been attained and they are recognized as such by employers.

In order to be awarded the certificate, the student must have completed the prescribed program with at least a 2.0 grade point average in the prescribed course work. The number of courses prescribed for each certificate varies according to the area of training.

Career Opportunities

Apparatus Operator
Disaster Preparedness
Fire Administrative Analyst
Fire Chief
Fire Division Chief
Fire Fighter I
Fire Officer I
Fire Prevention Specialist
Fire Protection Engineer
Industrial Fire Safety Specialist

FACULTY

Full-time
Tom Turner

Degrees and Certificates Awarded

Associate in Science, Fire Technology
Fire Fighter Certificate
Fire Prevention Officer Certificate
Fire Company Officer Certificate

Certificate Programs

FIRE FIGHTER CERTIFICATE

Awarded to the student who successfully completes the following course of study to meet the minimum qualifications and competencies as required by National Fire Protection Association and California State Fire Marshal's Fire Fighter I certification program.

32.0 units

All of the following must be completed:

		Units
FIRE 100	Fire Protection Organization	3.0
FIRE 101	Fundamentals of Fire Service Operations	3.0
FIRE 102	Fire Prevention Technology	3.0
FIRE 103	Fire Protection Equipment and Systems	3.0
FIRE 104	Fire Behavior and Combustion	3.0
FIRE 82A	Hazardous Materials First Responder	1.5
FIRE 81	Emergency Medical Technician	8.0
OR		
ALDH 71	Emergency Medical Technician I (Ambulance)	8.0
FIRE 95	Basic Fire Academy	10.0

FIRE COMPANY OFFICER CERTIFICATE

Awarded to the individual who has successfully completed all requirements for certification by the State Fire Marshal's Office for Fire Officer. Meets entry requirements for firefighters to the middle and upper level management positions within the agency.

61.0 units

All of the following must be completed:

		Units
FIRE 100	Fire Protection Organization	3.0
FIRE 101	Fundamentals of Fire Service Operations	3.0
FIRE 102	Fire Prevention Technology	3.0
FIRE 103	Fire Protection Equipment and Systems	3.0
FIRE 104	Fire Behavior and Combustion	3.0
FIRE 105	Fire Apparatus and Equipment	3.0
FIRE 106	Fire Company Organization and Management	3.0
FIRE 108	Fire Hydraulics	3.0
FIRE 70	Fire Instructor Training 1A	2.0
FIRE 71	Fire Instructor Training 1B	2.0
FIRE 72	Fire Command 1A	2.0
FIRE 73	Fire Command 1B	2.0
FIRE 76	Fire Management 1	2.0
FIRE 82A	Hazardous Materials First Responder	1.5
FIRE 81	Emergency Medical Technician	8.0
OR		
ALDH 71	Emergency Medical Technician I(Ambulance)	8.0
FIRE 95	Basic Fire Academy	10.0
CIS 101	Computer Literacy	4.0

Group II - Three of the following must be completed:

FIRE 107	Fire Investigation	3.0
FIRE 109	Wildland Fire Control	3.0
FIRE 61	Rescue Practices	3.0
FIRE 74	Fire Prevention 1A	2.0
FIRE 75	Fire Prevention 1B	2.0
FIRE 77	Investigation 1A	2.0

FIRE PREVENTION OFFICER CERTIFICATE

Describes an individual who has successfully completed the competencies as required for a certified fire prevention officer by the California State Fire Marshal's Office. Meets entry requirements for fire prevention specialist and/or fire prevention officer.

30.0 units

All of the following must be completed:

		Units
FIRE 100	Fire Protection Organization	3.0
FIRE 101	Fundamentals of Fire Service Operations	3.0
FIRE 102	Fire Prevention Technology	3.0
FIRE 103	Fire Protection Equipment and Systems	3.0
FIRE 104	Fire Behavior and Combustion	3.0
FIRE 107	Fire Investigation	3.0
OR		
FIRE 77 and 79	Investigation 1A and 1B	4.0
FIRE 70	Fire Instructor Training 1A	2.0
FIRE 71	Fire Instructor Training 1B	2.0
FIRE 74,75,78	Fire Prevention 1A, 1B, 1C	6.0
FIRE 76	Fire Management 1	2.0

Associate Degree

To earn an Associate in Science degree with a major in Fire Technology complete 18 units from any of the certificate requirements above or from any Fire Technology courses and meet all Victor Valley College graduation requirements. FIRE 138 (Cooperative Education) may be used as Elective credit, but may not be used to fulfill major requirements.

Transfer

Not usually a transfer major. Some Fire Technology courses do transfer as Electives or fulfill subject credit requirements.

As an exception, California State University, Los Angeles offers a B.S. degree in Fire Protection Administration and Technology which requires a minimum of 15 major units to be completed in Fire Technology at a community college. See counselor for community college courses which will transfer as requirements toward the bachelor's degree. Students planning to pursue this bachelor's degree should also complete the CSU General
Education-Breadth Requirements before transfer if possible.

Business Administration is also a highly recommended bachelor's degree major for people in this field who are seeking advancement. See Business Administration for transfer requirements.

FRENCH

The study of French concentrates on explaining and communicating ideas and concepts by means of reading, writing, and verbal processes through creative use of words and study of culture, literature, and civilization, with classroom emphasis on the spoken language. This study affords insight into foreign attitudes and methods and encourages free communication, written and oral, among people. For course descriptions, see Section IX of this catalog.

Career Opportunities

Advertising
Education
Government
Health Services
International Business
Journalism
Law Enforcement
Publishing
Social Work
Writing

Faculty

Full Time
Claudia Basha

Degrees and Certificates Awarded

Associate in Arts, Liberal Arts

Certificate Program

No certificates awarded.

Associate Degree

No associate degree offered with a major in French. French courses may be used to fulfill requirements for an Associate in Arts degree with a major in Liberal Arts. See Liberal Arts for degree requirements for this major.

Transfer

To pursue a bachelor's degree, complete the following courses prior to transfer if possible:

California State University, San Bernardino
French major
FREN 104
Business Track: Add BADM 101 or 103, CIS 101
CSU General Education-Breadth Requirements

University of California, Riverside
French major
Refer to the major preparation agreements on ASSIST, at www.assist.org. Students can also contact a UCR transfer outreach counselor for information at (909) 787-4531.
Completion of IGETC recommended.

GEOGRAPHIC INFORMATION SYSTEMS (GIS)

Programs in GIS at VVC are offered under two different disciplines:

The Agriculture and Natural Resources department offers two classes and a certificate with emphasis on students developing a GIS for conservation projects in the Mojave Desert. They utilize the Environmental Systems Research Institute's suite of ARCGIS software and have an active Mobile GIS/GPS unit that uses the ARCPAD software.

The Anthropology department plans to offer four classes and a certificate in GIS for the Social Sciences.

GEOGRAPHY

Geography explains and describes the Earth. Geographers look at earth-sun relationships, seasons, weather, and other physical aspects of the earth's environment such as climate, topography, earthquakes, and volcanoes. Some geographers look at the cultural landscape of the earth in terms of its people, their organizations, language, religion, and settlement patterns. All geographers compare and contrast information in order to explain similarities and differences as they occur over time and space. The framework of geography is location through the use of place names. The primary tool of geographers is the map. For course descriptions, see Section IX of this catalog.

Career Opportunities

Computer analysis of data through the use of Geographic Information Systems is a rapidly growing field which can be applicable to many employment settings. The following list is a general guideline. Most require at least a bachelor's degree.

Aerial Photographer/Interpreter
Biogeographer
Cartographer
City Planner
County Planner
Environmental Analyst
Economic Geographer
Foreign Correspondent
Foreign Correspondent Educator
Industrial Location Specialist
International Trade Relations
Marketing Analyst
Meteorologist
Population Specialist
Resource Planner
Soil Scientist
Transportation Specialist
Travel Agent

Faculty

Full Time
Carol A. DeLong

Degrees and Certificates Awarded

Associate in Arts, Liberal Arts

Certificate Program

No certificates awarded.

Associate Degree

No associate degree offered with a major in Geography. Geography courses may be used to fulfill requirements for an Associate in Arts degree with a major in Liberal Arts. See Liberal Arts for degree requirements.

Transfer

To pursue a bachelor's degree, complete the following courses prior to transfer if possible:

California State University, San Bernardino
Geography major

Track A & B GEOG 101 + 101L, 102
Track C (Social Science Credential Option)
ANTH 102, ECON 101, 102, GEOG 101 + 101L, 102,
HIST 103 + 104, 117, 118 or H118, POLS 102 or H102,
PSYC 101, SOC 101, RLST 117/PHIL 117
CSU General Education-Breadth Requirements

University of California, Riverside
Geography major

Refer to the major preparation agreements on ASSIST, at www.assist.org. Students can also contact a UCR transfer outreach counselor for information at (909) 787-4531.
IGETC not recommended. However, students who have completed IGETC can apply courses to the UCR breadth pattern as appropriate, but additional breadth course work may be required.

GEOLOGICAL SCIENCES

Geology is the science of the world. It is a broad field encompassing such diverse specific topics as ground water management, mining, volcanic processes, and soil conservation as well as theoretical aspects within the broader fields of mineralogy, petrology, paleontology, weathering processes, plate tectonics, and geologic times. Geology necessarily extracts much of its knowledge from the related sciences of chemistry, physics, biology, meteorology, oceanography, and even astronomy.

Because of its breadth, virtually no construction, manufacturing, or environmental planning can take place without considering geological or environmental principles, and there is a corresponding range of employment opportunities.

The geological sciences program is a two-year sequence designed to prepare students for continuing study at an advanced undergraduate level at a four-year college or university. For course descriptions, see Section IX of this catalog.

Career Opportunities

Mining Geologist
Environmental Planner
Ground Water Quality Manager
Petroleum Engineer
Paleontologist
Geoarchaeologist
Geological Engineer
Soil Conservationist
Metallurgist
Exogeologist (Astrogeologist)
Geomorphologist

Degrees and Certificates Awarded

Associate in Arts, Liberal Arts
Associate in Science, Math/Science

Certificate Program

No certificates awarded.

Associate Degree

No associate degree offered with a major in Geological Sciences. Courses in Geological Sciences may be used to fulfill requirements for an Associate in Science degree with a major in Math/Science. See Math/Science for degree requirements for this major. Courses may also be used to fulfill requirements for an Associate in Arts degree with a major in Liberal Arts. See Liberal Arts for degree requirements for this major.

Transfer

To pursue a bachelor's degree, complete the following courses prior to transfer if possible:

California State University, San Bernardino
Geology major

BA: BIOL 201, GEOL 101, 102, MATH 226
One course from the following: CHEM 101, H100, 201
One group from the following: PHYS 221 + 222 or
PHYS 201, 202, 203 + H204
BS: CHEM 201, 202, GEOL 101, 102, MATH 226 + 227,
PHYS 201, 202, 203 + H204
One course from the following: BIOL 100, 201
Environmental Option: Add CHEM 206, H206
CSU General Education-Breadth Requirements

University of California, Riverside
Geology major and Geophysics major
Refer to the major preparation agreements on ASSIST, at www.assist.org. Students can also contact a UCR transfer outreach counselor for information at (909) 787-4531.
IGETC not recommended. However, students who have completed IGETC can apply courses to the UCR breadth pattern as appropriate, but additional breadth course work may be required. See counselor for general education requirements for College of Natural and Agricultural Sciences.

GERMAN

The study of German focuses on explanation and communication of ideas and concepts using reading, writing, and verbal processes. Classroom emphasis is on the spoken language. Culture, literature, and civilization are important aspects of study as well. This study affords insight into foreign attitudes and methods and encourages free communication, written and oral, among people.

Career Opportunities
Advertising
Education
Government, including military
Health Services
Journalism
Law Enforcement
Publishing
Scientific Research
Social Work

Degrees and Certificates Awarded
Associate in Arts, Liberal Arts

Certificate Program
No certificates awarded.

Associate Degree
No associate degree offered with a major in German. German courses may be used to fulfill requirements for an Associate in Arts degree with a major in Liberal Arts. See Liberal Arts for degree requirements for this major.

GRAPHIC ARTS
See Computer Integrated Design and Graphics.

GUIDANCE

Guidance classes offered at Victor Valley College are designed to assist students in becoming goal directed and successful.

Students needing help in identifying career and educational goals or help in applying successful learning and studying techniques are encouraged to sign up for these classes. For course descriptions, see Section IX of this catalog.

HEATING, VENTILATION, AIR CONDITIONING AND REFRIGERATION
See Construction and Manufacturing Technology.

HISTORY

History examines the processes that have made today's realities. History is an evolving record of emotion, aspiration, frustration, and success. Historians deal with the goals, fears, interests, opinions, and prejudices of people in the past. What made people the way they were? What is the impact of their thought and action on people today and what is their impact on people tomorrow? As a study of people, history offers both a necessary understanding of one's place in the human experience and the conceptual framework for a lifelong avocation. For course descriptions, see Section IX of this catalog.

Career Opportunities
Careers usually require bachelor's or advanced degrees.

Advertising/Marketing Research
Archivist/Museum Curator
Educator
Genealogist
Historian
Journalist/Writer/Editor
Lobbyist/Law Clerk/Lawyer
Management Trainee
Politician/Diplomat
Pollster
Professor
Reference Librarian
Risk Analyst
Researcher
Teacher
Writer

Faculty
Full Time
James Comer
Tracy Davis
Lisa Ellis
Eric Mayer

Degrees and Certificates Awarded
Associate in Arts, Liberal Arts

Certificate Program
No certificate awarded.

Associate Degree
No associate degree offered with a major in History. History courses may be used to fulfill requirements for an Associate in Arts degree with a major in Liberal Arts. See Liberal Arts for degree requirements for this major.

Transfer
To pursue a bachelor's degree, complete the following courses prior to transfer if possible:

California State University, San Bernardino
History major
Track A (Social Science Credential Option): ECON 101, 102, GEOG 101 + 101L, GEOG 102, HIST 103 + 104,
HIST 117 or H117, HIST 118 or H118.
Track B: HIST 103 + 104, HIST 117 or H117, HIST 118 or H118,
CSU General Education-Breadth Requirements
Track C: HIST 103, 104, 117, H117, 118, H118
University of California, Riverside
History major
Refer to the major preparation agreements on ASSIST, at www.assist.org. Students can also contact a UCR transfer outreach counselor for information at (909) 787-4531.
Completion of IGETC recommended.

HONORS

The honors program offers enriching experiences to improve the quality of education for academically talented students who are striving for advanced academic achievement. Honors courses are more extensive and intensive in terms of research, depth of discussion and material covered. They are designed to promote a deeper, more comprehensive understanding of the material and the connectedness of disciplines while preparing students to excel later in advanced degree preparation. They offer additional opportunities for independent and focused study, and more individualized interdisciplinary, experimental, enhanced and collaborative learning experiences. Students participate in advanced seminars and intensive research and course work. Students should be self-motivated and must have demonstrated superior academic achievement in either high school or college.

Victor Valley College is a member of the Honors Transfer Council of California. This membership can provide students with numerous scholarship and financial aid opportunities, as well as possible transfer advantages to participating universities, such as UCLA, UCR, UCI, Whitman College and many others.

For enrollment criteria or any other information contact the Honors Coordinator at (760) 245-4271, ext, 2691. For course descriptions, see Section IX of this catalog.

JOURNALISM

Journalism offers the interest and challenges of investigating and reporting current events and topics of interest. The discipline touches on every aspect of human affairs with the opportunity to specialize in areas such as politics, sports, economics, and international affairs. Journalistic skills demand good writing ability, creativity, curiosity, and commitment to exacting professional standards. While one typically thinks of journalists working for a newspaper, many excellent employment opportunities are offered with popular magazines, professional journals, business and industry newsletters, government agencies, and publishing houses. For course descriptions, see Section IX of this catalog.

Career Opportunities
Advertising Agency Executive
Community Relations Specialist
Copy Writer
Journalism
Promotions Manager
Public Information Officer
Publicity Director
Reporter
Television News Producer

Degrees and Certificates Awarded
Journalism Certificate

Certificate Programs

JOURNALISM CERTIFICATE

17.0 units

All of the following courses must be completed with a grade of "C" or better:

		Units
JOUR 108	Fundamentals of Journalism	4.0
JOUR 108L	Journalism Lab	4.0
ENGL 101	English Composition	4.0
PHOT 100	Beginning Photography	3.0
BET 135	Desktop Publishing: PageMaker	2.0

LAW

There is no single "prelaw" major. Research has revealed that success in law school is based more on one's ability to grasp and solve difficult intellectual problems and to employ disciplined work habits. In choosing a major, one should choose a course of study that will give broad cultural background and include intensive research. Most law students major in Business Administration, Economics, English, Liberal Studies, History, Philosophy, Political Science, or Sociology, although law schools accept any major.

Most American Bar Association (ABA) accredited law schools require a bachelor's degree and certain scores on the Law School Admission Test (LSAT) for entrance into an intensive three-year program. Students who complete law school earn the Juris Doctor (J.D.) degree and can practice law in the state of California upon passage of the California bar exam. Some law schools require only an associate degree for admission and often require completion of a four-year program.

The following sampling of ABA accredited law schools in California require sufficient scores on the LSAT and a bachelor's degree:

Pepperdine University
Stanford University
University of California
- Berkeley
- Davis
- Los Angeles

University of LaVerne
University of Southern California

LIBERAL ARTS

Degrees and Certificates Awarded
Associate in Arts, Liberal Arts

Associate Degree
The Associate degree in Liberal Arts is designed for students who wish to have a broad knowledge of liberal arts and sciences plus additional coursework in an "Area of Emphasis". This area of emphasis is recommended for students who plan on transferring to California State University (CSU) or University of California (UC) as students can satisfy general education requirements, plus focus on transferable course work that relates to majors at these institutions. Please consult with a counselor for information regarding your intended major and the specific college or university of your choice.

Complete 18 units in one **"Area of Emphasis"** from those outlined below. (Note: Where appropriate, courses in the "Area of Emphasis" may also apply towards General Education areas on the General Education pattern).

For **ALL DEGREE OPTIONS:** Complete necessary Victor Valley College Graduation and Proficiency requirements (See catalog for a list of applicable courses).

All classes listed below transfer to CSU system and courses in BOLD also transfer to the UC system. Please refer to www.assist.org for articulation agreements and transfer details for each course.

UNITS

I . ASSOCIATES DEGREE IN LIBERAL ARTS:

A. General Education **35-39**
A minimum of 39 units necessary to meet **CSU-GE Certification** requirements

or

A minimum of 35 units necessary to meet **IGETC Certification** requirements only.

B. Areas of Emphasis: **18**

A minimum of 18 units are required in one Area of Emphasis listed below. For depth of study, 2 or more courses in one discipline are required.

C. Electives: **1-6**

Elective units may be necessary to total 60 overall units required for the Associate Degree. These units must be transferable to the CSU and/or UC for appropriate credit.

Total Units 60

AREAS OF EMPHASIS

1. **MATHEMATICS & SCIENCE: 4902.00**
These courses emphasize the natural sciences which examine the physical universe, its life forms and its natural phenomena. Courses in Math 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 the world's civilization.

ANTH 101 + 101L
ASTR 101
BIOL 100, 104, 107, 109, **114,118,** 121, **201, 202, 203, 211,212, 221, 231, 232**
CHEM 100, H100, 114, 201, 202, 206, 207, H207, **255, 281, 282**
GEOG 101 + 101L
GEOL 101, 102, 103, 110
MATH 104, **105, H105, 119, 120, H120, 132, 226, 227, 228, 231, 270**
OCEA 101
PHYS 100, 201, 202, 203, H204, 221, 222
PSCI 101, 114, 115

2. **ARTS & HUMANITIES: 4903.00**
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 through 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.

ANTH 106
ART 101, 102, 104, 105, 106, 107, 108, 109, 112, 113, 114, 120, 122, 125, 150
CMST 105
ENGL 102, H102, 116*, 162, 210, 211, **220, 225, 230, 231, 232, 235, 240, 241, 245, 246, 247**
Foreign Language: **CMST (ASL)** 122, **123, 124, 125; FREN** 101, **102, 103, 104; GERM** 101, **102, 103, 104; LATIN** 101, **102; SPAN** 101, **102, 103, 104**
HIST 103, 104, 115, **117, H117, 118, H118, 119, 120, 121, 124, 125, 127, 130, 131, 135, 150, 153, 155, 157**
MUSIC 100, 101, 102, 103, 115, 116, 117, 118, 131, **202, 204**
PE 103
PHIL 101, 108, 117, 120, 121
RLST 101, 105, 106, 110, 111, 115, 117
TA 101, 102, 104, 107, 110, **116*,** 117

- **Cross-listed course English 116 is the same as TA 116**

3. **SOCIAL & BEHAVIORAL SCIENCES 4903.30**
These courses emphasize the perspective, concepts, theories and methodologies of the disciplines typically found in the vast variety of disciplines that comprise study in Social and Behavioral Sciences. Students will study about themselves and others as members of a larger society. 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.

AJ 101
ANTH 101, 102, 103, 105, 106
CHDV 100, 106,
CMST 105 (Intercultural)
ECON 101, 102
GEOG 101, **102,** 103
HIST 103, 104, 115, 117, H117, 118, H118, 119, **120, 121, 124, 125, 127, 130, 131,** 135, 150, 153, **155,** 157
POLS 101, 102, H102, 103, **110,** H110, **111, 112, 113**
PSYC 101, H101, 103, 110, H110, 111, 116, 121, 130, **204, 213**
RLST 105, 106, 110, **113, 115**
SOC 101, 102, 103, **107**

LIBERAL STUDIES

See "Education."

MATH/SCIENCE

Degrees and Certificates Awarded

Associate in Science, Math/Science

Associate Degree

To earn an Associate in Science degree with a major in Math/Science, complete a minimum of 18 units from the following courses:

- MATHEMATICS
  MATH 90, 104, 105, H105, 119, 120, H120, 226, H226, 227, H227, 228, H228, 270, 129, 231, 132

- LIFE SCIENCES
  ALDH 102*
  ANTH 101, 101L
  BIOL 201, 202, 203, 108, 100, 114, 129, 211, 212, 221, 231, 232, 121, 126, 127, 128, 149, 215A, 215B, 215C, 70, 104, 107, 109, 113, 118, 120
  PE 102*

- PHYSICAL SCIENCES
  ASTR 101
  CHEM 201, 202, 255, 206, 207, 281, 282, 100, H100, 114, 128, 129, 55, 120, H206, 255, 281, 282
  ELCT 57, 58, 59, 60
  GEOG 101, 101L, 103
  GEOL 101, 102, 103, 109, 110, 112, 128, 129
  OCEA 101
  PSCI 101, 114, 115, 128,
  PHYS 201, 202, 203, H204, 221, 222, 100, 128, 129

* Cross-listed courses (the same course listed under more than one department) may be counted only once. GUIDE 105 and PSYC 105 are the same course.

Transfer

The Associate in Science degree in Math/Science is often a degree earned by students who are pursuing a bachelor's degree in transfer majors such as Biology, Chemistry, Engineering, Environmental Studies, Geology, Mathematics, and Physics. Breadth Requirements, IGETC, or appropriate general education requirements for specific transfer major.

MATHEMATICS

Mathematics is a rapidly expanding, dynamic discipline which has contributed to recent advances in astronomy, biology, chemistry, engineering, medicine and physics. Mathematics is truly becoming the necessary language of a wide spectrum of knowledge.

The mathematics program is designed to accept students at many levels of mathematical maturity and enable them to gain the mathematical knowledge necessary for them to achieve their goals. For course descriptions, see Section IX of this catalog.

Career Opportunities

An undergraduate degree in mathematics can lead to a variety of jobs in business, industry, government, and teaching. Mathematicians are employed by companies in communication, computers, energy and finance.

Faculty

Full Time
Robert Carlson
Mary Lynn Doan
Joe Estephan
Patrick Malone
Pat Mauch
Arda Melkonian
Dave Moser
Said Ngobi
Cherie Reardon
Jeff Redona
Jeff Ridge
Stephen Toner
Anh Tran Weis

Degrees and Certificates Awarded

Associate in Arts, Liberal Arts
Associate in Science, Math/Science

Certificate Program

No certificates awarded.

Associate Degree

A major has been submitted to the Chancellor's office and is pending approval. Mathematics courses may be used to fulfill requirements for an Associate in Science degree with a major in Math/Science. See Math/Science for degree requirements for this major. Courses may also be used to fulfill requirements for an Associate in Arts degree with a major in Liberal Arts. See Liberal Arts for degree requirements for this major. MATH 138 (Cooperative Education) may be used for Elective credit, but may not be used to fulfill major requirements.

Transfer

To pursue a bachelor's degree, complete the following courses prior to transfer if possible:

California State University, San Bernardino
Mathematics major
BA: MATH 226, H226, 227, H227, 228, 231, 270
Select One: CIS 201, 203, 206A, 206B
BS: Add PHYS 201
CSU General Education-Breadth Requirements
Select One: CIS 201, 203, 206A, 206B

University of California, Riverside
Mathematics major
Refer to the major preparation agreements on ASSIST, at www.assist.org. Students can also contact a UCR transfer outreach counselor for information at (909) 787-4531.
IGETC not recommended. However, students who have completed IGETC can apply courses to the UCR breadth pattern as appropriate, but additional breadth course work may be required.

MEDIA ARTS

Digital Animation has rapidly become one of the fastest growing careers within the computer graphics industry. Victor Valley College's Media Arts courses are designed for individuals seeking training and experience ranging from fundamental concepts and principles to advanced techniques and procedures currently used in today's workplace. Designed for both the beginner and the more advanced student, the Media Arts' curriculum is geared toward those interested in creating video games, broadcast commercials, product visualizations, animated characters and logos, 3D website graphics, and film-based special effects.

Students learn essential techniques and disciplines for producing professional quality work. Each student is immersed in simulated problem-solving situations similar to those encountered in production environments. Graduate students successfully completing the series of program courses posses entry-level skills that apply to such positions as storyboard artist, background artist, 3D modeler, character designer, character animator, texture artist, lighting specialist, effects artist and many other exciting career opportunities. Animation courses are also offered through the Computer Integrated Design and Graphics department.

Degrees and Certificate Programs

Digital Animation Technician I - SoftImage XSI Certificate
Digital Animation Technician I - 3ds Max Certificate
Digital Animation Artist Certificate

Certificate Programs

DIGITAL ANIMATION TECHNICIAN I -SoftImage XSI' CERTIFICATE

The SoftImage XSI certificate is designed to offer students a detailed look at one of the Animation industry's premiere 3D packages. Students will study a variety of topics, including how to model 3D objects, creation of a realistic material, the art of camera and lighting techniques, and an introduction to advanced keyframing. In addition to completing several animation projects, students learn about both the history of Animation and the traditional principles involved in making an individual's work look both realistic and believable.

9.0 units

All of the following must be completed with a grade of "C" or better.

		Units
MERT 50	Principles of Animation	3.0
MERT 51	Intermediate Modeling and Animation with SoftImage XSI	3.0
MERT 52	Digital Character Animation	3.0

DIGITAL ANIMATION TECHNICIAN I - 3ds Max CERTIFICATE

The 3ds Max certificate is designed to offer students a detailed look at one of the Animation industry's premiere 3D packages. Students will study a variety of topics, including how to model 3D objects, creation of a realistic material, the art of camera and lighting techniques, and an introduction to advanced keyframing. In addition to completing several animation projects, students learn about both the history of Animation and the traditional principles involved in making an individual's work look both realistic and believable.

9.0 units

All of the following must be completed with a grade of "C" or better.

		Units
CIDG 160	3ds Max Fundamentals	3.0
CIDG 260	3ds Max Advanced Modeling and Materials	3.0
CIDG 261	3ds Max Character Animation and Advanced Keyframing Techniques	3.0

DIGITAL ANIMATION ARTIST CERTIFICATE

The new Digital Animation Artist certificate is designed to expand an individual's knowledge in animation, giving them the traditional art principles and practices that will help them become a well-rounded animator. Employers often prefer computer animators who have the ability to draw and understand traditional art concepts and principles. By earning the Digital Animation Artist certificate, graduates will better position themselves of traditional art courses that include drawing and composition, life drawing and sculpture. An additional course specific to learning Adobe Photoshop is also required to earn certification.

15.0 units

Group I - Animation Track
Choose between software package options I or II
All of the following must be completed with a grade of "C" or better.

Option 1: 3ds Max		**Units**
CIDG 160	3ds Max Fundamentals	3.0
CIDG 260	3ds Max Advanced Modeling and Materials	3.0
CIDG 261	3ds Max Character Animation and Advanced Keyframing Techniques	3.0
MERT 56	Photoshop for Animators	3.0
Option 2:	**SoftImage XSI**	
MERT 50	Principles of Animation	3.0
MERT 51	Intermediate Modeling and Animation with SoftImage XSI	3.0
MERT 52	Digital Character Animation	3.0
MERT 56	Photoshop for Animators	3.0

Group II - Art Track
Choose any ONE of the following courses.
Each course must be completed with a grade of "C" or better.

		Units
ART 101	Survey of Art History	3.0
ART 104	Film as an Art Form	3.0
ART 112	Design I	3.0
ART 113	Design II	3.0
ART 122	Introduction to Life Drawing	3.0
ART 124	Anatomy for Life Drawing	3.0
ART 125	Drawing I	3.0
ART 141	Sculpture I	3.0

MEDICAL AND HEALTH PROFESSIONS

The programs of study in the following medical and health professions are not offered at Victor Valley College, but preparatory courses needed for transfer into these majors are offered as outlined below.

Athletic Training

Athletic training is a growing profession that involves evaluation, management, and rehabilitation of athletic injuries. It is also the organization and administration of athletic training programs, as well as the education and counseling of the athlete. This program of study was recently endorsed by the American Medical Association as an allied health profession.

Athletic Training programs are usually offered as an option under Physical Education majors at most universities. Students should fulfill all transfer requirements for a Physical Education major and complete the following:

BIOL 211 or 212, CHEM 100 or PHYS 100, BIOL 231 or 232, PSYC l01

Chiropractic Medicine

Chiropractic Medicine places the emphasis on spinal manipulation and neuromuscular treatments as the means of restoration and preservation of health. Chiropractors diagnose health problems, provide care and consult with other health care providers. The following are typically required:

BIOL 201, 211 or 212, 231 or 232, CHEM 101, 202, 281, 282, ENGL 101, 102, 104 or CMST 109, MATH 105, PHYS 221, 222, PSYC 101
15 semester units from Social Sciences and Humanities

The following four schools are the only California colleges accredited by American Chiropractic Association:
Research each one for specific requirements.

Cleveland Chiropractic College, Los Angeles
Life Chiropractic College-West, San Lorenzo
Los Angeles College of Chiropractic
Palmer College of Chiropractic, Sunnyvale
So. Calif. Univ. of Health Sciences

Dental Hygiene

Dental hygienists provide educational and clinical services for patients, including dental health education and disease prevention procedures, obtaining and recording patients' medical and dental histories, scaling and polishing teeth, recording conditions of patients' mouths and teeth, exposing and processing dental x-ray films, nutritional counseling, and applying fluoride and pit and fissure sealants for prevention of decay. Dental Hygiene is a rapidly growing profession and is emerging as a vital, highly respected component of dental health.

The following three schools are the only California colleges accredited by Commission on Dental Accreditation which award a bachelor's degree:

Loma Linda University
University of California, San Francisco
University of Southern California
University of the Pacific

Before admission into the Dental Hygiene program at University of Southern California, students must have graduated from an accredited secondary school, have a minimum of 60 semester units of transferable course work, rate sufficiently high on the Dental Hygiene Aptitude Test (DHAT), and complete all course requirements as follows:

University of Southern California
Dental Hygiene major:
CHEM 201, 202, ENGL l01, l02, PSYCH l01, SOC 101, CMST 109
Two courses from: BIOL 211 or 212
Other courses recommended to complete 60 required units: CHEM 206 in addition to other chemistry requirements, BIOL 211 in addition to other biology requirements, SPAN 101, 102, 103
Check colleges of interest for updates.

A handout with all transfer requirements for a B.S. degree in Dental Hygiene from Loma Linda University is available in Counseling. No appointment is necessary to receive a copy of these requirements.

Dentistry

Dentists provide comprehensive dental treatment to patients including oral and maxillofacial surgery, endodontics, orthodontics, and restorative processes.

Students must have graduated from an accredited secondary school, complete a minimum of 90 semester units of transferable course work, score sufficiently high on the Dental Admission Test (DAT), and meet the following minimum requirements:

BIOL 201 or 202, CHEM 201 , 202, 206+207 or 281+282, ENGL 101, 102, MATH 226, PHYS 221, 222, PSYC 101, CMST 109
Choose two courses from these biology courses: BIOL 201, 202, 221
11 units in Soc. Sci/Humanities/For. Language

The following five schools are the only California colleges accredited by the Commission on Dental Accreditation:

Loma Linda University
University of California, Los Angeles
University of the Pacific
University of California, San Francisco
University of Southern California

A handout with all transfer requirements for a D.D.S. degree in Dentistry from Loma Linda University is available in counseling. No appointment is necessary to receive a copy of these requirements. **Check colleges of interest for updates.**

Medicine (MD or Doctors of Osteopathic Medicine (OD)

Doctors of Medicine manage the diagnosis, treatment, and prevention of disease and injuries of individuals to restore them back to optimal health. Treatment may include surgery, various treatment methods, conferring with other specialists, and prescribing appropriate drugs. Physicians also research the causes, transmission, and control of diseases and other ailments.

Medicine is a highly competitive field and acceptance into medical school is based on a combination of preparatory courses completed, GPA, letters of recommendation, and sufficiently high scores on the Medical College Admissions Test (MCAT).

Most medical schools require: BIOL 201, 202, CHEM 201, 202, 281, 282, ENGL 101, 102, MATH 226, 227, PHYS 221, 222
In addition, courses from the following are highly recommended: CHEM 206, 207, CIS 101, SPAN 101,102, PSYC/SOC/CMST 106 or 109
A minimum of 90 semester units, at least 20 of which must be upper division from a four-year university.

A handout entitled "Premedical Course Preparation for California Medical School Programs" is available from the VVC Counseling department.

The following eight medical schools in California are accredited by the Liaison Committee on Medical Education (LCME) of the American Medical Association (AMA):

Loma Linda University
Stanford University
University of California
- Davis
- Irvine
- Los Angeles
- San Diego
- San Francisco

University of Southern California
Western Univ. of Health Sciences

Entrance requirements may vary slightly from college to college. For example, USC requires a minimum of 120 semester units of academic course work. **Students pursuing a medical degree should send off for entrance requirements and information from every school to which they plan to apply.**

Most students who are admitted into medical school have a bachelor's degree. Since requirements for medical school places emphasis on biology and chemistry, most students choose to pursue a bachelor's degree in biology or chemistry.

Nursing - see page 142

Occupational Therapy

Occupational Therapists look at the psychological and social concerns, as well as physical factors, to assist physically disabled people relearn and adapt basic motor skills. Occupational Therapists use every day (occupational) activities as a means of helping those people achieve independence, focusing on critical daily tasks ranging from dressing to employment tasks.

The following award a bachelor's degree in Occupational Therapy:

CSU Dominguez Hills
Loma Linda University
San Jose State University
University of Southern California

Because the entrance requirements, prerequisites, and program components differ from college to college, **students should send off for specific information about the programs from each college to which they plan to apply.**

A handout with all transfer requirements for a B.S. degree in Occupational Therapy from Loma Linda University is available in the counseling department.

Occupational Therapy Assistant

Occupational therapy assistants (COTA) work under the guidance of occupational therapists to carry out treatment programs for many different kinds of patients. The COTA enjoys a job that uses creative, personal, and technical skills; works with people of all ages with many kinds of health problems; uses specialized job skills developed in classroom and clinical experiences; benefits from a career with excellent employment opportunities; and shares a respected position as an important member of the health care team.

The following California colleges offer associate degrees in Occupational Therapy Assistant: Loma Linda University

A handout with all transfer requirements for an associate degree from Loma Linda University is available in the VVC Counseling Department. No appointment is necessary to obtain a copy of these requirements.

Optometry

Optometry is a health care profession that focuses on the prevention and remediation of disorders of the vision system. Optometrists examine, diagnose and treat eye diseases, determine appropriate prescriptions for glasses and contacts, and handle the overall eye care of a patient.

The following California schools offer programs leading to a Doctor of Optometry (O.D.) degree:

Southern California College of Optometry
University of California, Berkeley

Entrance into the Doctor of Optometry degree program requires graduation from an accredited secondary school, sufficient scores on the Optometry Admissions Test (OAT), completion of a minimum of 90 units of which 20 must be from a four-year university, and the entrance requirements. The following must be completed with a grade of "C" or better prior to transfer:

Southern California College of Optometry, Fullerton
Doctor of Optometry program
BIOL 201, 202, CHEM 201, 202, 206 or 281, ENGL 101, 102, MATH 120, 226, BIOL 221, PHYS 221, 222, PSYC 101,110
Check colleges for updates.

Osteopathic Medicine (see Medicine)

A Doctor of Osteopathic Medicine (D.O.) diagnoses and treats diseases and injuries of the human body, relying upon accepted medical and surgical modalities. The emphasis of osteopathic medicine is holistic medicine.

The College of Osteopathic Medicine of the Pacific is the only California college accredited by the Council of Allied Health Education of the American Medical Association.

Entrance into the intense four-year program is based on a minimum requirement of 90 semester units or 3/4 toward a bachelor's degree and completion of the following admission requirements:

Western University of Health Science
Doctor of Osteopathic Medicine program
CHEM 201, 202, 281, 282, ENGL 101, l02, PHYS 221, 222
Choose two courses from the following: BIOL 211 or 212, BIOL 201, 202, 203, 104, BIOL 231 or 232
Six units in Behavioral Science

Pharmacy

A pharmacist compounds and dispenses prescribed medications, drugs, and other pharmaceuticals for patient care, closely following professional standards and state and federal legal requirements. **Research websites for updates.**

Doctor of Pharmacy degrees:
University of the Pacific (Stockton):
BIOL 201, 202, 221 CHEM 201, 202, 281, 282, ECON 101, ENGL 101, 102, MATH 226, PHIL 101, PHYS 201, 221, PSYC 101, CMST 109
Choose one course from: ANTH 102, GEOG 102, RLST 110, CMST 105
Choose one course from: ART 101, 102, 105, MUSC 100, TA101

University of Southern California (Los Angeles):
BIOL 201, 202, CHEM 201, 202, 281, 28, ENGL 101, 102, MATH 226, CMST 109, ECON 101 or 102, PSYC 101, six units from humanities, twelve units from social science
A minimum of 60 semester hours.
Only grades of C- or higher accepted.

Western University of Health Sciences (Pomona):
ENGL 101; either ENG 102, 104 or 109; MATH 226, 227, 228 BIOL 211, 231, 221; CHEM 201 + 202, 281, 282, 207; CMST 109, AND 9 units of Humanities and/or SOCIAL SCIENCES, chosen from ANTH, SOC, PSYC, TA, MUSC, ART.

Physical Therapy

Physical Therapists evaluate neuromuscular, musculoskeletal, sensory-motor, and related cardiovascular and respiratory functions of the patient. They perform and interpret tests and measurements of these functions and abilities as an aid in the treatment of the patient.

Physical Therapy is a highly competitive transfer major which is impacted at many universities. Fulfilling all minimum requirements for admission to this program, maintaining a high GPA, and strong letters of recommendation are important in the selection process.

The following courses are minimum requirements for the Physical Therapy major at most universities: BIOL 211 or 212, CHEM 201, 202, 281, 282, ENGL 101, 102, MATH 120 or 104 or 226 (Based on specific univ.), PHYS 221, 222, BIOL 231 or 232, PSYC 101, 110, CHEM 207 recommended.

The following nine California colleges offer bachelor's degree or master's degree programs accredited by the Commission on Accreditation in Physical Therapy Education (CAPTE):
California State University(ies)
Fresno, Long Beach, Northridge,
Sacramento, San Francisco
Azusa Pacific, Chapman College, Loma Linda University
Mount St. Mary's College, University of California, San Francisco
University of the Pacific, University of Southern California
Western Univ. of Health Sciences

A handout with all transfer requirements for a Master of Physical Therapy degree from Loma Linda is available in the Counseling Department. No appointment is necessary to receive a copy of these requirements.

Because each college varies as to what it requires, **students should request entrance requirements for each of the above colleges to which they plan to apply.** A counselor can then help a student determine which Victor Valley College courses meet specific requirements.

Physical Therapist Assistant

The physical therapist assistant is a skilled technical health worker who, under the supervision of a physical therapist, assists in the patients' treatment program. The extent to which the physical therapist assistant is involved in treatment depends upon the policies of the health facility, the supervising therapist, and the patient.

The following California colleges offer associate degrees in Physical Therapist Assistant:

Loma Linda University.

A handout with all transfer requirements for an associate degree from Loma Linda University is available in the VVC Counseling Department. No appointment is necessary to obtain a copy of these requirements.

Physician Assistant

A physician assistant (PA) is a skilled health care professional who, under the supervision of a physician, performs a variety of medical, diagnostic and therapeutic services. Most physician assistants routinely elicit complete medical histories and perform comprehensive physical examinations. They treat patients with common acute problems such as infections and injuries, perform minor surgical procedures, and provide ongoing care for common chronic problems such as arthritis, hypertension and diabetes.

The usual program requires 24 months to complete. Most PA students earn a bachelor's degree, although an increasing number of PA programs award master's degrees upon completion of the program.

Upon graduation from an accredited PA program, students take an examination given by the National Commission on Certification of Physician Assistants (NCCPA) and achieve national certification by passing the exam. Certified Physician Assistants (PA-C) must be retested every six years.

Admission into the PA programs requires a minimum of 60 semester units. The following course requirements must be completed before transfer:

BIOL 211 or 212, 231 or 232, CHEM 100, ENGL 101, 102, MATH 105, PSYC 101, 12 units from humanities
Choose one course from: BIOL 201, 202, 203, 100, BIOL 221

Charles Drew University, Los Angeles
Loma Linda University
Stanford University
University of California, Davis
University of Southern California
Western Univ. of Health Sciences

Because the requirements for each program vary slightly, **students who are serious about pursuing a career as a physician assistant should send for an application and admission requirements from each college to which they plan to apply.** Counselors will help students determine which Victor Valley College courses meet these requirements.

Podiatry

Podiatry is a specialty in medicine and surgery. A podiatrist is concerned with the prevention, diagnoses, and treatment of diseases and disorders which affect the human foot and contiguous structures.

Students must complete a minimum of 60 units before transfer, take the College of Podiatry Admission Test (CPAT), and meet the following transfer requirements:
Research website for updates.
California College of Podiatric Medicine, San Francisco
Doctor of Podiatric Medicine program
BIOL 201, 202, CHEM 201, 202, 207, 281, 282, ENGL 101, 102, PHYS 221
12 elective units in Liberal Arts

Radiologic Technology

The radiologic technologist (x-ray technician) is responsible for the accurate demonstration of body structures on a radiograph or other receptor. The technologist determines proper exposure factors, manipulates medical imaging equipment, evaluates the radiographic quality, and provides for patient protection and comfort.

Most radiologic technology programs are two-year programs with students earning an associate degree upon completion of the program.

Radiologic technologists may choose to train further in the areas of medical sonography, nuclear medicine technology, radiation therapy technology, and special imaging technology.

Entrance requirements vary slightly from college to college. Students should send off for requirements for each college to which they plan to apply.

Students need to complete the following courses before transfer into Chaffey College's radiologic technology program:

Chaffey College Radiologic Therapy
ALDH 139 , BIOL 211 or 212, CHEM 100 or PHYS 100, ENGL 101, MATH 10 or show competency of basic math or MATH 10, MATH 50, POLS 102, CMST 109, one course in the arts, one course in humanities, one course in social sciences, one course in a multi-cultural/gender studies.

A handout with all transfer requirements for an A.S. degree in Medical Radiography and a B.S. degree in Radiation Technology from Loma Linda University is available in counseling. No appointment is necessary to receive a copy of these requirements.

Speech-Language Pathology and Audiology

Speech-language pathologists are concerned with evaluating and treating children and adults with communication disorders. Difficulties in the areas of speech, language, fluency, and voice are associated with a variety of disorders, including developmental delay, hearing impairment, cleft palate, cerebral palsy, stroke, and head injury. Audiologists are concerned with prevention, identification, assessment, and rehabilitation of hearing disorders. For both professions, it is important that the student have an interest in working with people.

The following California colleges offer bachelor's degrees or master's degrees in Speech Pathology and/or Audiology:

Biola University, California State University (several campuses), Loma Linda University

Sports Medicine

The field of Sports Medicine deals with understanding the role of science in exercise and health promotion. Programs in Sports Medicine provide a sound knowledge of the scientific principles of maintaining, enhancing, and rehabilitating the body through the medium of exercise and sport.

Only a few universities offer a major in Sports Medicine or even a Sports Medicine option within a physical education or health-related degree. Pepperdine University offers one of the few B.S. degrees in Sports Medicine. To pursue a bachelor's degree, the following course work should be completed prior to transfer:

Pepperdine University Sports Medicine major

BIOL 211 or 212, 231 or 232, CHEM 201, 202, ENGL 101, 102, MATH 226, PHYS 221, 222, CMST 109, third semester of foreign language. Complete general education requirements of specific university including at least 9 units of humanities and 9 units of social sciences. See Pepperdine catalog for general education requirements.

Calif. Lutheran University, Christian Heritage College
Vanguard University

Veterinary Medicine

Veterinary medicine is the health profession that deals with the scientific knowledge and decision-making process that culminate in the diagnosis, treatment and prevention of animal diseases. The profession is concerned with enhancing the health, welfare, productivity and utility of animals as well as with the safety of animal products used by people.

Students completing a veterinary medicine program approved by the Board of Examiners in Veterinary Medicine earn a Doctorate of Veterinary Medicine (DVM).

Veterinary medicine is a highly competitive program. Acceptance to this program is based on GPA, scores on the Graduate Record Examination (GRE) and any additional examinations, and completion of a minimum of 72 semester units from an accredited college to include the following entrance requirements:

BIOL 201, 202, 203,CHEM 201, 202, 281, 206 or 282, ENGL 101, 102, MATH 120, PHYS 221, 222, CMST 109.
8 units from anthropology, art, history, music, language, psychology, sociology to fulfill humanities and social science general education requirements. Additional upper division required sciences must be taken at a four-year university.
Recommended: PSYC 101, SPAN 101, 102, CHEM 207

As with many specialized medical programs, the majority of those accepted have already earned a bachelor's degree before admission. Students pursuing veterinary medicine usually choose a major in one of the fields of animal science, biological sciences, or chemistry.

Check websites for specific requirements.

University of California, Davis
Western Univ. of Health Sciences

MEDICAL ASSISTANT

The Medical Assistant is a professional, multi-skilled person dedicated to assisting in patient care management. The practitioner performs administrative and clinical duties and may manage emergency situations, facilities, and/or personnel. Competence in the field also requires that a medical assistant display professionalism, communicate effectively, and provide instructions to patients.

The medical assistant program is a one-year program that is designed to prepare students to work effectively in a physician's office, medical records or business office of a clinic or a hospital. Upon completion of the required courses, the student will demonstrate proficiency in both front and back office procedures. Successful completion of the program leads to a Certificate of Achievement. For course descriptions, see Section IX of this catalog. See Medical Office under Business Education Technologies for a program with more emphasis in front office.

Career Opportunities

Medical Assistant
Patient Account Representative
Receptionist
Medical Secretary
Medical Records Technician

Faculty

Full Time

Diego Garcia

Degrees and Certificates Awarded

Associate in Science, Medical Assistant
Medical Assistant Certificate

Certificate Program

MEDICAL ASSISTANT CERTIFICATE

This certificate prepares students for an entry-level position in a physician's office, clinic, or medical records.

		23.5 units Units
ALDH 139	Medical Terminology	3.0
ALDH 80	Pharmacology	3.0
ALDH 81	Medical Insurance	3.0
ALDH 82	Medical Office Procedures	3.0
ALDH 82C	Medical Office Procedures/Clinical	5.0
ALDH 91	Basic CPR	0.5
BET 103	Beginning WordProcessing/Typing-WordPerfect for Windows A/B/C	3.0
OR		
BET 104	Beginning Word Processing/Typing-Word for Windows A/B/C	3.0
PSYC 110	Developmental Psychology	3.0

Associate Degree

To earn an Associate in Science degree with a major in Medical Assistant, complete the certificate requirements above, three additional units in Allied Health, and meet all remaining Victor Valley College graduation requirements.

Transfer

Not a transfer major. Some Allied Health courses transfer as Electives or fulfill subject credit requirements.

MUSIC

Music is the study of the language of sound and its effect on the minds and souls of creator, performer and listener. It is one of the few academic disciplines to deal extensively with the development of the creative side of personhood; in that sense it is one of the most wholly "human" of the humanities. The creative problem-solving skills and discipline of music studies prepare students for a wide range of life's activities and pursuits. The Music Department offers a wide range of classes, providing opportunities for transfer music majors, music for general studies students, and the opportunity for student and community musicians of all skill levels to participate in a wide variety performance ensembles. For course descriptions, see Section IX of this catalog.

Career Opportunities

Accompanist
Announcer
Composer/Arranger
Educator
Instrumentalist
Music Publisher
Music Sales Business
Musician
Private Music Teacher
Studio Engineer
Vocalist

Faculty

Full Time
David Graham
Thomas E. Miller

Degrees and Certificates Awarded

Associate in Arts, Fine Arts
Associate in Arts, Liberal Arts

Certificate Program

No certificate awarded.

Associate Degree

No associate degree offered with a major in Music. Music courses may be used to fulfill requirements for an Associate in Arts degree with a major in Fine Arts. See Fine Arts for degree requirements for this major. Courses may also be used to fulfill requirements for an Associate in Arts with a major in Liberal Arts. See Liberal Arts for degree requirements for this major. MUSC 138 (Cooperative Education) may be used as Elective credit, but may not be used to fulfill major requirements.

Transfer

Transfer music majors are required to begin major courses at the freshman level. Music majors will take the following music courses in preparation for transfer to a four-year institution: MUSC 102, 103, 104, 105, 106, 110, 111, 202, 203, 204, 205, 206, 210, 211, and the appropriate applied music studies from MUSC 120-J. In addition, music majors music studies from MUSC 120-J. In addition, music majors must be enrolled in the appropriate performance ensemble each semester. The Music Department offers periodic workshops for transfer majors to insure that students are aware of the curriculum requirements of transfer institutions and such additional concerns as concert attendance, juries, entrance proficiency exams and scholarship and performance auditions.

To pursue a bachelor's degree at these specific universities below, complete the following courses prior to transfer along with the above recommended if possible:

California State University, San Bernardino
Music major
MUSC 102, 104, 103, 105, 210
CSU General Education-Breadth Requirements

University of California, Riverside
Music major
Refer to the major preparation agreements on ASSIST, at www.assist.org. Students can also contact a UCR transfer outreach counselor for information at (909) 787-4531.
Completion of IGETC recommended.

NURSING

The Associate Degree of Science in Nursing is approved by the California Board of Registered Nursing. The graduate is eligible to take the National Council for Licensure Examination for Registered Nursing (NCLEX-RN) and, upon successful completion, becomes eligible for licensure as a Registered Nurse in the state of California.

California law allows for the denial of Registered Nurse Licensure on the basis of any conviction or action substantially related to nursing practice. The California Board of Registered Nursing requires applicants for licensure with prior convictions to provide proof of rehabilitation before taking the NCLEX-RN that establishes fitness for performing nursing functions. For further clarification, contact the Nursing Department or the California Board of Registered Nursing.

The Associate Degree Nursing Faculty accepts and operates within the framework of the philosophy and mission of Victor Valley College. The conceptual framework is based on the systems and change theory using the Nursing Process. The components of the curriculum are arranged around the client's bio-psych-social, and cultural/spiritual beliefs. The faculty believes that the student is an adult learner who is expected to take an active role in the learning process.

Separate application must be made into the nursing program. Several admission and progression options are available, including generic, advanced placement, transfer, non-graduate and 30 unit option. Specific information is available in the application packet, the student nurse handbook and from the program director. Please contact the Nursing Department for fall and spring application dates. For course descriptions, see Section IX of this catalog.

Prerequisites for admission into the nursing program.

1. Human anatomy (equivalent to Victor Valley College BIOL 211 or 212), 4-5 units completed with a grade of "C" or better.
2. Human physiology (equivalent to Victor Valley College BIOL 231 or 232), 4-5 units completed with a grade of "C" or better.
3. Microbiology (equivalent to Victor Valley College BIOL 221) 5 units with a grade of "C" or better.
4. Program prerequisites must be completed prior to application.

Enrollment Process

After the prerequisites have been verified and there are still too many students for the spaces available, those accepted into the program will be based on the enrollment criteria. The enrollment process is based on the recommended Best Practice for Enrollment prepared by the Chancellor's Office of the California Community Colleges, and approved by the Chancellor's Office. Please contact the Nursing Department or Nursing Counselor for further clarification of the enrollment process.

NOTE:
1. Prior to admission to the ADN program, students must demonstrate physical health as determined by a history and physical examination.

2. To continue in the program, the students must submit a current physical and meet required immunizations, titers, and have a chest X-ray and/or PPD. Also, a current American Heart Association Health Care Provider CPR Certificate, or equivalent, must be obtained and current. Current liability insurance and criminal background checks are required in order to comply with the program and clinical agencies' contractual requirements. Per individual facility requirements, random drug testing may also be required.
3. The College does not provide transportation to and from required clinical facilities.
4. In order to continue in the ADN program students must earn a minimum grade of C in all nursing and other required courses.
5. Nursing courses have specific prerequisites. Refer to course descriptions in this catalog.

Career Opportunities

The graduate is prepared to practice nursing at any entry level in the following settings:
Medical/Surgical Nursing
Psychiatric Nursing
Maternal/Newborn Nursing
Post-Anesthesia Nursing
Perioperative Nursing
Geriatric Nursing
Critical Care Nursing
Rehabilitation Nursing
Neurosurgical Nursing
Oncology Nursing

Faculty

Full Time
Diane Cline
Starlie Cuna
Diego Garcia
Renata Longoria
Kay McKinley
Alice Ramming
Jeanine Speakman
Yolanda Simental
Sally Thibeault
Terry Truelove

Degrees and Certificates Awarded

Associate in Science, Nursing
Associate Degree Nursing Certificate
Nursing Licensure Certificate

Certificate Programs

ASSOCIATE DEGREE NURSING CERTIFICATE

74.0 units

Group A: All of the following must be completed:		**Units**
NURS 220	Pharmacology and Nursing Management	2.0
NURS 221	Nursing Process 1	10.0
NURS 222	Nursing Process 2	9.0
NURS 223	Nursing Process 3	9.0
NURS 224	Nursing Process 4	9.0
BIOL 211	Human Anatomy	5.0
OR		
BIOL 212	Human Anatomy	4.0
BIOL 221	General Microbiology	5.0
BIOL 231	Human Physiology	5.0
OR		
BIOL 232	Human Physiology	4.0
ENGL 101	English Composition and Reading	4.0
PSYC 101	General Psychology	3.0
PSYC 110	Developmental Psychology	3.0
SOC 101	Introduction to Sociology	3.0

Group B: One of the following must be completed:

CMST 106	Human Communication	3.0
CMST 107	Family Communication	3.0
CMST 108	Group Discussion	3.0
CMST 109	Public Speaking	3.0

Group C: One of the following must be completed: (3 units)
One course which meets the VVC Mathematics general education requirements for Category V (See page 48)

Group D: One of the following must be completed: (3 units)
One course which meets the VVC Humanities general education requirement for Category III (See page 48)

Group E: One of the following must be completed: (1 unit)
One Physical Education Course

Each class must be completed with a grade of "C" or better.
Any course which meets the general education transfer requirements to the CSU or UC system may be used as a general education requirement for the associate degree in Groups III and IV.

NURSING LICENSURE CERTIFICATE

67 units

		Units
BIOL 211 or 212	Human Anatomy	4.0-5.0
BIOL 231 or 232	Human Physiology	4.0-5.0
BIOL 221	General Microbiology	5.0
SOC 101	Introduction to Sociology	3.0
PSYC 101	General Psychology	3.0
PSYC 110	Developmental Psychology	3.0
CMST 106, 107, 108, or 109	Human Communication, Family Communication, Group Discussion or Public Speaking	3.0
ENGL 101	English Composition and Reading	3.0
NURS 220	Pharmacology and Nursing Management	2.0
NURS 221	Nursing Process 1	10.0
NURS 222	Nursing Process 2	9.0
NURS 223	Nursing Process 3	9.0
NURS 224	Nursing Process 4	9.0

EACH CLASS MUST BE COMPLETED WITH A GRADE OF "C" OR BETTER.

Placement Options

1. **GENERIC STUDENTS are those who will complete the entire nursing program at Victor Valley College**.
   The application is submitted, and after approval, class selection is made according to the current enrollment process.

2. **TRANSFER STUDENTS are those who transfer nursing units from another college**.
   The education code allows one to transfer only lower division units to a community college. Each student requesting transfer of Nursing units will be individually evaluated by the Nursing Program Admission, Promotion and Program Effectiveness (AEPE) Committee to determine appropriate placement in the VVC Program. Placement will be made on a space available basis and be determined by the course content and number of nursing degree units completed. A Priority Transfer List will be established according to the Policy for Nursing Program Transfer. Students will be given credit for general education courses according to the college's published policy (see College Catalog). If the student has earned a non-progression grade (D or F) in a registered nursing at another school, acceptance to Victor Valley College Nursing Program will be considered their second chance.

3. **ADVANCED PLACEMENT STUDENTS**
(LVN to RN) are those documented as a Licensed Vocational Nurse in California.
Students choosing this option must apply to the program, meet the prerequisites, and take the challenge exams for NURS 220 (Pharmacology and Nursing Management), NURS 221 (Nursing Process 1) and NURS 222 (Nursing Process 2). Advanced placement students must pass the challenge exams for NURS 221. Students are also required to pass (C or better) NURS 225 LVN to RN transition course. Placement into 2nd or 3rd semester is determined by student scores on the challenge exams. Depending on the number of applicants, acceptance into the transition course may be based on the program's entry policy (Nursing Student Handbook). Applications for this option are accepted in the spring and fall.

4. **CHALLENGE STUDENTS**.
Students admitted to the Nursing Program with previous documented experience may be allowed to challenge certain specified content areas. (Education Code, Section 5557537), Title 5 of the California Administrative Code. Refer to current college catalog.)
(Contact the Director of Nursing regarding this option.)

5. **THIRTY-UNIT OPTION**
is available to California Licensed Vocational Nurses. The Board of Registered Nursing regulation 1435.5 provides the option of completing 30 semester units in Nursing and related science courses. In order to enter this option the applicant must: 1) have a current California Vocational Nurse License (LVN); 2) have previously completed Human Physiology, 4 or 5 units with a lab, and Microbiology, 4 or 5 units with a lab. (Contact the Director of Nursing regarding this option.)

6. **NON-GRADUATE OPTION**
allows students to complete only those classes required to take the NCLEX exam. In the Victor Valley Community College Nursing Program those classes are:
BIOL 211SOC 101, CMST 10 6, 107, 108, or 109
BIOL 231 or 232, PSYC 101,ENGL 101
BIOL 221,PSYC 110,NURS (5 classes)

For detailed information regarding the Victor Valley College, Associate Degree Nursing Program Placement/Advancement Policy, please refer to the current ADN Program Student Handbook.

Associate Degree

To earn an Associate in Science degree with a major in Nursing one must complete all certificate courses and meet all Victor Valley College graduation requirements. The Associate Degree Nursing Certificate includes all requirements for both a certificate and an Associate in Science degree in Nursing. The Nursing Licensure Certificate requires additional general education courses to complete an associate degree. The Nursing Licensure Certificate precludes receiving the Associate Degree in Science with a major in nursing.

Transfer

Acceptance into a baccalaureate of science degree in Nursing is based on completion of prerequisites and entrance requirements. To pursue a BSN complete the following requirements prior to transfer.

California State University, Dominguez Hills
RN to BSN program

1. Minimum of 56 semester units of transferable college credit with a grade point average of at least 2.0 (C) or better in all transferable course work (non-residents, 2.4) and have satisfied any high school subject deficiency in English and mathematics by equivalent course work (the maximum transferable credit accepted from a two-year college is 70 semester units). English composition, Speech, GE Math and Logic/Critical Thinking must be completed prior to admission for new applicants.
2. Current RN licensure in the United States or equivalent or an RN interim permit.

California State University, San Bernardino
BSN program

1. Completion of an application to the university and nursing program
2. Attendance at a group advising session
3. Completion of the following prerequisites:
BIOL 211 or 212 + BIOL 231 or 232, BIOL 221, CHEM 100 OR H100, CHEM 207, MATH 105 or H105 or MATH 132, CMST 109, ENGL 101
One course from the following: PHIL 109, 207, ENGL 104
4. Additional support courses: PSYC l10
5. 3.0 GPA minimum
6. "C" or better on all course work

NURSING ASSISTANT

See Allied Health for certificate information.

PARALEGAL STUDIES

A paralegal works in a paraprofessional capacity as an assistant to an attorney in a private law firm, governmental agency industry, or private association. The paralegal performs many tasks normally handled by an attorney, such as preparing forms, writing memoranda, interviewing clients, researching legal matters, managing the law office, and a variety of other tasks. There are also self-employed paraprofessionals who work for attorneys on request.

The Paralegal Studies Certificate program at Victor Valley College is designed for students pursuing paraprofessional careers in the legal field. There are two types of such paraprofessionals.

Paralegal: Pursuant to California Assembly Bill 1761, a person may use the title "paralegal" only when they have obtained the required educational qualifications and they work directly under the supervision of a licensed California attorney.

Legal Document Assistant: Pursuant to California Senate Bill 1418, independent non-attorneys who provide law-related services to the public for compensation must register with the county clerk as a "Legal Document Assistant," and may not use the term "paralegal" in reference to themselves or their service. (For more information on the LDA registration process, contact the California Association of Legal Document Assistants at www.caip.org).

It is *strongly recommended* that students complete ENGL 101 and Political Science 1B before they begin taking paralegal courses so that they will have a firm foundation in writing skills and a basic understanding of the American legal system at the state and national levels of government. It is *further recommended* that students first complete (or at least concurrently enroll in) POLS 130, Introduction to Paralegalism, before continuing with other paralegal courses.

This is not a four-year transfer program, it is not transferable for advanced standing in a law school, and is not designed to be a "pre-law" program. The Paralegal Studies Certificate is not equivalent to a law school (J.D. degree) program, and thus, does not serve as a preparation for the bar exam. See a counselor for transfer requirements to other institutions.

PARALEGAL STUDIES CERTIFICATE

Students must complete a minimum of 33 units, with at least 15 units taken in residence at Victor Valley College, with a minimum grade of "C" in all paralegal classes.

33 units

Group I—All of the following must be completed

		Units
POLS 130	Introduction to Paralegalism	3.0
POLS 131	Fundamentals of Litigation for Paralegals	3.0
POLS 132	Legal Research and Writing for Paralegals	3.0
POLS 133	Legal Ethics for Paralegals	3.0
POLS 134	Family Law For Paralegals	3.0
POLS 135	Tort Law for Paralegals	3.0
AJ 103	Criminal Law	3.0
BADM 117	Legal Environment of Business	3.0

Group II—At least 9 units of the following must be completed

		Units
AJ 102	Criminal Procedures	3.0
AJ 104	Legal Aspects of Evidence	3.0
BADM 101	Elementary Accounting	
OR 103	Principles of Accounting	3-4.0
BADM 111	Introduction to Public Administration	3.0
BADM 72	Internal Revenue Service Procedures and Taxpayer Bill of Rights	3.0
BRE 110	Legal Aspects of Real Estate I	3.0
BET 103A, 103B, 103C	Beginning Word Processing/Typing Word Perfect for Windows	3.0
OR		
BET 104A, 104B, 104C	Beginning Word Processing/Typing Word for Windows	3.0
ENGL 104	Critical Thinking and Composition	3.0
OR		
PHIL 109	Introduction to Logic	3.0
CMST 109	Public Speaking	3.0

Associate Degree

At this time, Victor Valley College does not offer an associate degree with a major in Paralegal Studies.

Transfer

To pursue a bachelor's degree, complete the following requirements prior to transfer if possible:

California State University, San Bernardino
Criminal Justice major with a concentration in Paralegal Studies:
AJ 101,103, POLS 130, BADM 101 or 102
One course from the following: MATH 105, H105,132
CSU General Education-Breadth Requirements

PARAMEDIC

The paramedic is able to diagnose and treat medical emergencies and accident victims in the prehospital setting.

Paramedic preparation involves a one year program which runs from June to May. Special application must be made to the Paramedic program (call the Program Director for details). Classes in this area meet California State EMS authority and ICEMA regulations. For course descriptions, see Section IX of this catalog.

Career Opportunities

Paramedic

Faculty

Full Time
Brian Hendricksen
Scott Jones
Dave Oleson

Degrees and Certificates Awarded

Associate in Science, Paramedic
Paramedic Certificate

Certificate Programs

PARAMEDIC CERTIFICATE

This certificate prepares students to take the state examination to practice as a paramedic.

37.5 units

All of the following must be completed

		Units
ALDH 50	Paramedic Anatomy and Physiology	4.0
ALDH 51	Paramedic Introduction to EMS	1.0
ALDH 52	Paramedic Cardiology	4.0
ALDH 53	Paramedic Pharmacology	3.5
ALDH 54	Paramedic ACLS	1.0
ALDH 55	Paramedic EMS Theory	10.0
ALDH 56	Paramedic Clinical	3.0
ALDH 57	Paramedic Field Internship	11.0

Associate Degree

To earn an Associate in Science degree with a major in EMS, complete the above Paramedic Certificate requirements and meet all Victor Valley College graduation requirements.

Transfer

Not a transfer major. Some students pursue bachelor's degrees in related fields such as Emergency Medical Care at Loma Linda

PHILOSOPHY

The study of philosophy is dedicated to reflection on the most fundamental concerns of human life. Students examine and assess the concepts and arguments expressed in writings of influential philosophers on such enduring themes as moral value, religious knowledge, political order, truth, and ultimate reality. Philosophical study assists students in developing such valuable and transferable skills as analytical reading and writing, creative and critical thinking, and sound judgment. For course descriptions see Section IX of this catalog.

Career Opportunities

(Most careers require a bachelor's or advanced degree.)
Corporate Manager
Ethics Consultant
Lawyer
Management Trainer
Public Administrator
Religious Leader
Social Worker
Teacher
Writer

Faculty

Full Time
Marc Skuster
Emeritus
Milton Danielson

Degrees and Certificates Awarded
Associate in Arts, Liberal Arts

Certificate Program
No certificates awarded.

Associate Degree
No associate degree offered with a major in Philosophy. Philosophy courses may be used to fulfill requirements for an Associate in Arts degree with a major in Liberal Arts. See Liberal Arts for degree requirements for this major.

Transfer
To pursue a bachelor's degree, complete the following courses prior to transfer if possible:

California State University, San Bernardino
Philosophy major
One course from the following, if not already used to satisfy GE requirements: PHIL 101, 207, 108, 109, RLST 110, RLST 207, RLST 117/PHIL 117
CSU General Education-Breadth Requirements

University of California, Riverside
Philosophy major
Refer to the major preparation agreements on ASSIST, at www.assist.org. Students can also contact a UCR transfer outreach counselor for information at (909) 787-4531.
Completion of IGETC recommended.

PHOTOGRAPHY

The study of photography offers a multitude of career possibilities. From fine art to commercial applications, photography is an exciting field that involves an education founded in conceptual as well as technical aspects. The development of the visual mind and a technical foundation in both traditional and digital imaging are the goals of the study of photography here at Victor Valley College. For course descriptions see Section IX of this catalog.

Career Opportunities
Aerial Surveying
Advertising
Architectural Design
Art
Digital Imaging
Fashion
Film Maker
Forensic and Criminal Applications
Marine Biology
Photo Finishing
Portrait Photography
Product Photography
Photographer's Assistant
Sports
Teaching

Faculty
Full Time
Frank Foster
Brent Wood

Degrees and Certificates Awarded
Associate in Arts, Fine Arts
Associate in Arts, Liberal Arts
Digital Photography Certificate

Certificate Program

DIGITAL PHOTOGRAPHY CERTIFICATE
Prepares the student for a variety of employment opportunities within the photographic field. This certificate also provides an opportunity for the student to continue on toward a more advanced certificate program. The student will be exposed to portrait, industrial, commercial, and architectural photography. An emphasis will be placed on learning Adobe Photoshop, digital cameras and digital output devices. The proper use of light will also be extensively covered. All camera formats will be covered.

17.0 units

All of the following must be completed:

		Units
PHOT 100	Beginning Photography	3.0
PHOT 101	Intermediate Photography	3.0
PHOT 105	Portraiture	3.0
PHOT 52	Introduction to Photoshop	3.0
PHOT 53	Basic Photographic Lighting Techniques	3.0
PHOT 54	Portfolio Design	2.0

Associate Degree
No associate degree offered with a major in Photography. Photography courses may be used to fulfill requirements for an Associate in Arts degree with a major in Fine Arts. See Fine Arts for degree requirements for this major. Courses may also be used to fulfill requirements for an Associate in Arts degree with a major in Liberal Arts. See Liberal Arts for degree requirements for this major. PHOT 138 (Cooperative Education) may be used as Elective credit, but may not be used to fulfill major requirements.

Transfer
Photography is usually a concentration or option within an Art or Applied Art major at colleges within the University of California and California State University systems. Various private or independent colleges which focus specifically on the arts offer bachelor's degrees with a major in Photography or as a concentration or option within an Art or Applied Art major.

Because the major and the general education requirements vary in this major from university to university, students interested in photography should study the catalog of the specific university to which they plan to transfer.

The following is a sampling of colleges which offer Photography majors or Photography concentrations within Art or Applied Art majors:

Art Center College of Design, Pasadena
California College of Arts and Crafts, Oakland
California Institute of the Arts, Valencia
California State University
- Fullerton
- Hayward
- Long Beach
- San Jose
- San Luis Obispo

Chapman University
University of California, Santa Cruz

PHYSICAL EDUCATION

Physical Education as an academic science emphasizes knowledge of the body through the study of kinesiology and exercise physiology. Physical Education also contributes to the intellectual, social, emotional, spiritual and physical growth and development of each student. Other areas of study in Physical education include: nutrition, healthy lifestyles, stress management as well as psychological aspects of physical activity and injury care and prevention. Additional specialties within the discipline of Physical Education which are more fully addressed in the curriculum at Victor Valley College are Dance and Adapted Physical Education. A variety of activities are offered, encouraging students to develop lifelong fitness activities and patterns for recreation.

Any of the physical education activity courses may be repeated up to three times, but not more than four units of physical education activity classes will be counted toward the Associate in Arts or Science Degrees.

With the exception of the Adapted courses, all physical education activity classes are intended for normal, healthy, individuals. It is highly recommended that anyone 35 years or older have a physical checkup before enrolling. A physical education course is required for the Associate degree. For course descriptions, see Section IX of this catalog.

UC maximum credit allowed for PE courses combined: 4 units.

Career Opportunities

Adapted Physical Education Instructor
Certified Athletic Trainer
Certified Personal Trainer
Community Health Practitioner
Dance Choreographer
Dance Instructor
Dietician/Nutritionist
Exercise Physiologist
Exercise Scientist
Health Instructor
Leisure Services Specialist
Physical Education Instructor
Physical Therapist
Professional Dancer
Recreation Director
Sports Manager
Sports Psychologist

Faculty

Full Time
Debra Blanchard
Lynn Guardado
David Hoover
John Paine
Bruce Victor
Christa White

Degrees and Certificates Awarded

Associate in Arts, Liberal Arts
Dance Certificate

Certificate Program

DANCE CERTIFICATE

13.0 units minimum

Group I - All of the following must be completed:		**Units**
PE 103	History and Appreciation of Dance	3.0

Group II - 10 units of the following must be completed:

APE 164	Adapted Modern Dance	1.0
PEDA 160	Beginning Tap	1.0
OR TA 160		
PEDA 161	Intermediate Tap	1.0
OR TA 161		
PEDA 169	Alignment and Correctives I	1.0
PEDA 162	Ballroom Dance I	1.0
PEDA 163	Ballroom Dance II	1.0
PEDA 151	World Dance	2.0
OR ANTH 151		
PEDA 164	Creative Movement I	1.0
PEDA 165	Creative Movement II	1.0
PEDA 152	Dance Choreography I	2.0
PEDA 153	Dance Choreography II	2.0
PEDA 101	Dance Rhythmic Analysis	3.0
PEDA 166	Ballet I	1.0
OR TA 166		
PEDA 167	Ballet II	1.0
OR TA 167		
PEDA 266	Ballet III	1.0
OR TA 266		
PEDA 267	Ballet IV	1.0
OR TA 267		
PEDA 170	Jazz Dance I	1.0
OR TA 170		
PEDA 171	Jazz Dance II	1.0
OR TA 171		
PEDA 270	Jazz Dance III	1.0
OR TA 270		
PEDA 271	Jazz Dance IV	1.0
OR TA 271		
PEDA 174	Modern Dance I	1.0
OR TA 174		
PEDA 175	Modern Dance II	1.0
OR TA 175		
PEDA 274	Modern Dance III	1.0
OR TA 274		
PEDA 275	Modern Dance IV	1.0
OR TA 275		

Associate Degree

No associate degree offered with a major in Physical Education. Physical Education courses may be used to fulfill requirements for an Associate in Arts degree with a major in Liberal Arts. See Liberal Arts for degree requirements.

Transfer

To pursue a bachelor's degree, complete the following courses prior to transfer if possible:

California State University, San Bernardino
Kinesiology major
BIOL 211 or 212 + BIOL 231 or 232, PE 101
CSU General Education-Breadth Requirements
Select One: CHEM 100, H100, 201
Select One: PHYS 100, 221, 201

Different concentrations within the Kinesiology major include Exercise Science, Pedagogy, and pre-physical therapy. For information about these options, see CSUSB's catalog (available in the Transfer Center), visit the website at www.csusb.edu, or visit www.assist.org.

Specialties in Exercise Physiology, Exercise Science, Fitness Training, and Sports Medicine are usually under the departments of Physical Education or Kinesiology at the four-year colleges. A major in Kinesiology may also lead to graduate programs in Physical Therapy at other institutions. See Sports Medicine under Medical and Health Professions for further information in these specific fields.

PHYSICAL SCIENCES

General Physical Sciences includes a number of scientific courses which often encompass a number of related disciplines. They are intended to serve as introductory level general education courses while also providing a basis for future, more advanced study in each of their respective fields.

Career Opportunities

(May require advanced degree)
Astronomer
Geologist
Meteorologist
Oceanographer

Degrees and Certificates Awarded

Associate in Arts, Liberal Arts
Associate in Science, Math/Science

Certificate Program

No certificates awarded.

Associate Degree

No associate degree offered with a major in Physical Sciences. Physical Science courses may be used to fulfill requirements for an Associate in Science degree with a major in Math/Science. See Math/Science for degree requirements for this major. Courses may also be used to fulfill requirements for an Associate in Arts degree with a major in Liberal Arts. See Liberal Arts for degree requirements for this major. PSCI 138 (Cooperative Education) may be used for Elective credit, but may not be used to fulfill major requirements.

Transfer

University of California, Riverside
Physical Sciences major

Refer to the major preparation agreements on ASSIST, at www.assist.org. Students can also contact a UCR transfer outreach counselor for information at (909) 787-4531. IGETC not recommended. However, students who have completed IGETC can apply courses to the UCR breadth pattern as appropriate, but additional breadth course work may be required.

PHYSICS

The study of physics involves trying to understand, at the most fundamental level, our observations of natural phenomena. Inquiries extend from the most minute of subatomic particles, to nuclei, atoms, molecules, solids, liquids, gases and plasmas, stars and galaxies. Physics seeks to explain how, under the influence of some fundamental forces, nature behaves as it does. In a larger sense it tries to address questions about our universe, such as: Where did we come from? What will be our ultimate fate?

The sequence of physics classes fills the lower division requirements for students who plan to major in fields such as physics, engineering or medicine. The classes will also fill general education requirements. For course descriptions, see Section IX of this catalog.

Career Opportunities

(May require advanced degree)
Engineer
Physicist
Teaching at many levels

Faculty

Full Time
Michael Butros

Degrees and Certificates Awarded

Associate in Arts, Liberal Arts
Associate in Science, Math/Science

Certificate Program

No certificates awarded.

Associate Degree

No associate degree offered with a major in Physics. Physics courses may be used to fulfill requirements for an Associate in Science degree with a major in Math/Science. See Math/Science for degree requirements for this major. Courses may also be used to fulfill requirements for an Associate in Arts degree with a major in Liberal Arts. See Liberal Arts for degree requirements for this major. PHYS 138 (Cooperative Education) may be used as Elective credits, but may not be used to fulfill major requirements.

Transfer

To pursue a bachelor's degree, complete the following courses prior to transfer if possible:

California State University, San Bernardino
Physics major

CHEM 201, 202, MATH 226 + 227, 228, 231
PHYS 20l + 202 + 203 + H204
BS: Optional: Add CIS 201
CSU General Education-Breadth Requirements

University of California, Riverside
Physics major

Refer to the major preparation agreements on ASSIST, at www.assist.org. Students can also contact a UCR transfer outreach counselor for information at (909) 787-4531. IGETC not recommended. However, students who have completed IGETC can apply courses to the UCR breadth pattern as appropriate, but additional breadth course work may be required.

POLITICAL SCIENCE

Political science is the study of political philosophies, processes, principles, and the structures of government and other political institutions. This academic discipline leads toward an understanding of the institutions of political ideologies, institutions of government, the roles of citizens and political leaders, interest groups and political parties, the electoral process, and contemporary issues that surround our public life. This field also includes an analysis of governments around the world and of international relations. For course descriptions, see Section IX of this catalog.

Career Opportunities

Attorney
Budget Analyst
Campaign Consultant/Staff Member
Educator
Foreign Diplomat/International Organization Worker
Government Official/Elected Official
Intelligence Officers & Analysts
Law Enforcement Officer
Legislative/Executive Staff Assistant
Lobbyist
National/International Business Position
Nonprofit Organization Staff Member
Print/Broadcast Journalist
Political PartyWorker
Urban Planner/City Manager

Faculty
Full Time
Dino Bozonelos
David Dupree

Degrees and Certificates Awarded
Associate in Arts, Liberal Arts

Certificate Program

INTERNATIONAL STUDIES CERTIFICATE
15.0 – 17.0 units

Group I: All of the following must be completed:

		Units
POLS 110	Contemporary World Affairs	3.0
POLS 111	Global Issues	3.0
POLS 112	Comparative Government	3.0
POLS 113	Politics of the Middle East and North Africa	3.0
		12.0

Group II: One of the following must be completed:

ANTH 102	Cultural Anthropology	3.0
FREN 101	Elementary French	5.0
GEOG 102	Cultural Geography	3.0
GERM 101	Elementary German	5.0
HIST 104	World History Since 1500	3.0
HIST 121	British History and Institutions	3.0
HIST 125	History of the Far East	3.0
HIST 131	Latin American History	3.0
RLST 110	World Religions	3.0
SPAN 101	Elementary Spanish	5.0
SPAN 101A	Fundamentals of Spanish 1A	3.0
SPAN 125	Conversational Spanish	3.0
CMST 105	Intercultural Communication	3.0

The Political Science Department also offers a certificate in Paralegal Studies. See paralegal Studies for further information about this program of study.

Associate Degree
No associate degree offered with a major in Political Science. Some Political Science courses may be used to fulfill requirements for an Associate in Arts degree with a major in Liberal Arts. POLS 130, 131, 132, 133, 134, 135 (Paralegal courses) may be used as Electives and may not be used to fulfill major requirements for any degree at this time. See Liberal Arts for degree requirements for Liberal Arts major.

Transfer
To pursue a bachelor's degree, complete the following courses prior to transfer if possible:

California State University, San Bernardino
Political Science major
POLS 101, 102, 110
CSU General Education-Breadth Requirements
Note: CSU, San Bernardino also offers German.
CSU General Education-Breadth Requirements

University of California, Riverside
Political Science major
Refer to the major preparation agreements on ASSIST, at www.assist.org. Students can also contact a UCR transfer outreach counselor for more information at (909) 787-4531.
Completion of IGETC recommended.

PSYCHOLOGY

Psychology is a behavioral science which has as its goals to describe, understand, explain, predict and influence behavior and mental processes. Graduates in psychology—bachelor's degree and post-graduate study required—are employed in a number of areas, including teaching, research, and practice. Some of the major sub-fields in psychology are clinical, counseling, developmental, educational, environmental, health, industrial/organizational, neuroscience, physiological, quantitative (math, psychometrics, statistics), school, and social psychology. For course descriptions, see Section IX of this catalog.

Career Opportunities
Advertising Executive
Industrial/Organizational Psychologist
Marriage, Family and Child Counselor
Mental Health Officer
Personnel Analyst
Probation Officer
Psychologist
Psychometrist
Rehabilitation Counselor
School Counselor
School Psychologist

Faculty
Full Time
Patricia Jennings
Jim Previte
Milt Danielson, Emeritus
Jennie Lackey, Emeritus

Degrees and Certificates Awarded
Associate in Arts, Liberal Arts

Certificate Program
No certificates awarded[o]. See Alcohol and Drug Studies for certificates offered at surrounding community colleges.

Associate Degree
No associate degree offered with a major in Psychology. Psychology courses may be used to fulfill requirements for an Associate in Arts degree with a major in Liberal Arts. See Liberal Arts for degree requirements for this major. PSYC 138 (Cooperative Education) may be used as Elective credit, but may not be used to fulfill major requirements.

Transfer
To pursue a bachelor's degree, complete the following courses prior to transfer if possible:

California State University, San Bernardino
Psychology major
PSYC 101, ENGL 101
MATH 120, H120
CSU General Education-Breadth Requirements

University of California, Riverside
Psychology major and Psychobiology major
Refer to the major preparation agreements on ASSIST, at www.assist.org. Students can also contact a UCR transfer outreach counselor for information at (909) 787-4531.
Completion of IGETC recommended.

Chapman University, Victorville
Psychology major
(See **Table 5** in Section VII of this catalog.)

RELIGIOUS STUDIES

The academic study of religion is an objective, factual study of the texts, symbols, myths, rituals, ideas, and values of the world's many religious traditions. Students are encouraged to view religion multiculturally as a means of understanding more deeply the spiritual dimensions of human nature, history, and society. Study in this field prepares students for life in a multicultural society and provides practice in such valuable skills as empathetic reading and listening, critical reflection, and descriptive and analytical writing. For course descriptions, see Section IX of this catalog.

Career Opportunities

(Most careers require a bachelor's or advanced degree.)
Chaplain
Counselor
Government Service
Nonprofit Management
Professional Religious Leader
Religious Broadcaster
Religious Business Manager
Religious Educator
Religious Journalist
Religion Publisher
Social Worker
Teacher

Faculty

Full Time
Marc Skuster
Milt Danielson, Emeritus

Degrees and Certificates Awarded

Associate in Arts, Liberal Arts

Certificate Program

No certificates awarded.

Associate Degree

No associate degree offered with a major in Religious Studies. Religious Studies courses may be used to fulfill requirements for an Associate in Arts degree with a major in Liberal Arts. See Liberal Arts for degree requirements for this major.

Transfer

To pursue a bachelor's degree, complete the following courses prior to transfer if possible:

University of California, Riverside
Religious Studies major
Refer to the major preparation agreements on ASSIST, at www.assist.org. Students can also contact a UCR transfer outreach counselor for information at (909) 787-4531.
Completion of IGETC recommended.

RESPIRATORY THERAPY

Respiratory therapy is an allied health profession specializing in the diagnosis, treatment, and care of patients suffering from cardiopulmonary disease.

The program provides didactic instruction and supervised clinical practice in Inland Empire hospitals. Graduates of the VVC Respiratory Therapy Program, as a result of the education and training they receive, pass the state licensing and national registry exams at a rate much greater than the national average. The Victor Valley College Respiratory Therapy Program is accredited by the Commission on Accreditation of Allied Health Education Programs (www.caahep.org) upon the recommendation of the Committee on Accreditation for Respiratory Care (CoARC), Commission on Accreditation of Allied Health Education Programs, 1361 Park Street, Clearwater, Fl 33756. 727-210-2350. For course descriptions, see Section IX of this catalog.

Separate application must be made to the Respiratory Therapy Program. Seating is limited to a maximum of twenty-five students per class.

Applications are available from the Program Director, Allied Health and the Counseling Department.

Career Opportunities

Respiratory Care Practitioner
Critical Care Specialist
Diagnostic Testing Specialist
Education
Home Care
Neonatal/Pediatric Specialist
Pulmonary Rehabilitation
Research

Faculty

Full Time
Traci Marin
Russell McCord

Degrees and Certificates Awarded

Associate in Science, Respiratory Therapy
Respiratory Therapy Certificate

Certificate Program

RESPIRATORY THERAPY (A.S. AND CERTIFICATE)

This certificate prepares the student to take the State examination to practice as an entry level practitioner and the National Examination for Advanced level practitioner.

78.0 units minimum

Group A: All of the following must be completed:

		Units
RSPT 230	Introduction to Respiratory Therapy	3.0
RSPT 231	Orientation to and Basic Fundamentals of Respiratory Therapy	10.0
RSPT 232	Patient Assessment and Clinical Application of Respiratory Care	10.0
RSPT 233	Intensive Respiratory Care and Advanced Pulmonary Physiology	13.0
RSPT 234	Neonatal and Pediatric Respiratory Care and Pathophysiology and Pulmonary Rehabilitation	13.0
RSPT 239	Introduction to Continuous Mechanical Ventilatory Support	2.0
BIOL 211	Human Anatomy	5.0
OR		
BIOL 212	Human Anatomy	4.0
BIOL 221	General Microbiology	5.0
BIOL 231	Human Physiology	4.0
OR		
BIOL 232	Human Physiology	5.0
ENGL 101	English Composition and Reading	3.0
PSYC 101	General Psychology	3.0

Group B: One of the following must be completed:

CMST 106	Human Communication	3.0
CMST 107	Family Communication	3.0
CMST 108	Group Discussion	3.0
CMST 109	Public Speaking	3.0

Group C: One of the following must be completed:
One course which meets the VVC Logic/Mathematical general education requirements for Category V (See page 48)

Group D: One of the following must be completed:
One course which meets the VVC Humanities general education requirements for Category III (See page 48)

Group E: One of the following must be completed:
One Physical Education Course

Any course which meets the general education transfer requirements to the CSU or UC system may be used as a general education requirement for the associate degree in Groups III and IV.

The Respiratory Therapy Faculty accepts and operates within the framework of the philosophy and objectives of Victor Valley College.

The Associate Degree in Respiratory Therapy provides a foundation for continuing personal, professional and educational development, and includes the study of the arts, sciences and humanities. The program is designed to produce a competent, self-directed respiratory therapist who, in a variety of settings, can assume leadership in planning, providing, and evaluating respiratory care of individuals and groups; who participates in the determination of the goals of the profession; and who actively searches for knowledge in respiratory therapy and related fields essential to the development and application of scientific respiratory care.

The respiratory therapy graduate receives the Associate of Science Degree and is eligible to take the National Registry Exam for Respiratory Therapists and the entry level exam for licensure in the State of California.

In order to be admitted to the Respiratory Therapy Program, separate application must be made in addition to application to the college. The annual deadline date for submitting applications to be considered for respiratory therapy is March 15. Applications can be obtained through the Allied Health Office or the Counseling Department. Prerequisites: CHEM 100, BIOL 100 or 107, and MATH 50 must be completed with a grade of "C" or higher before entry into the program.

Associate Degree

To earn an Associate in Science degree with a major in Respiratory Therapy, complete all requirements for the Respiratory Therapy Certificate. The Respiratory Therapy Certificate above includes all requirements for both a certificate and an Associate in Science degree in Respiratory Therapy.

Transfer

Most Respiratory Therapy courses do not transfer. Two universities offer a bachelor's degree in Respiratory Therapy: California College for Health Sciences, National City,Loma Linda University

Students in this field may choose to pursue a bachelor's degree in Health Care Services, Respiratory Therapy, or related majors from Loma Linda University or other universities. An articulation agreement is in existence. Selected courses can be transferred to California State University, San Bernardino.

A handout with all transfer requirements for a B.S. degree in Health Care Services, Respiratory Therapy, and other related medical degrees from Loma Linda University is available in the Counseling Department.

RESTAURANT MANAGEMENT

The Restaurant Management program prepares students for careers in the food service industry. Due to an increasing demand, the opportunities in this field are vast and varied. Restaurants, hotels, clubs, colleges, retirement homes, hospitals, and industrial food service are but a few of the areas of employment available. Basic food preparation and techniques, nutrition, sanitation and safety are taught as the fundamentals for an educational foundation of more specialized and advanced skills. Creativity, innovation, and team concepts are encouraged. Skills are learned by emphasizing hands-on, practical experience coupled with strong managerial and accounting subjects, making graduates well qualified for employment. For course descriptions, see Section IX of this catalog.

Career Opportunities

Assistant Manager
Banquet Manager
Catering Manager
Chef
Dietary Assistant
Dining Room Manager
Food and Beverage Director
Foodservice/Restaurant Manager
Kitchen Manager
Purchasing Agent

Faculty

Emeritus
Duane Buckles

Degrees and Certificates Awarded

Associate in Science, Restaurant Management
Restaurant Management Certificate

Certificate Program

RESTAURANT MANAGEMENT CERTIFICATE

The Restaurant Management certificate program gives the student the basic skills and education to become an entry-level manager in the food service industry. **51.0 units**

All of the following must be completed:

First Semester:	**Units**	
RMGT 81	Prep/Line Cook	3.0
RMGT 82	Customer Service	3.0
RMGT 86	Food Service Sanitation	3.0
RMGT 87	Principles of Professional Cooking	3.0
Second Semester:		
RMGT 83	Kitchen/Dining Room Training	6.0
**Plus two academics offered on a rotating basis, see list below		
Third Semester:		
RMGT 84	Kitchen/Dining Room Management	6.0
**Plus two academics offered on a rotating basis, see list below		
Fourth Semester:		
RMGT 85	Advanced Restaurant Management	6.0
**Plus two academics offered on a rotating basis, see list below		

** Rotating Academic List

RMGT 88	Management by Menu	3.0
RMGT 89	Purchasing for Foodservice Managers	3.0
RMGT 90	Restaurant Marketing	3.0
RMGT 91	Controlling Foodservice Costs	3.0
RMGT 93	Human Resources Management in the Foodservice Industry	3.0
RMGT 94	Hospitality and Restaurant Management	3.0
RMGT 120	Nutrition	
Or		
CHEM 120	Nutrition	3.0

Associate Degree
To earn an Associate of Science degree with a major in Restaurant Management, complete the above Restaurant Management Certificate requirements and meet all Victor Valley College graduation requirements.

Transfer
Victor Valley College Restaurant Management courses do not usually transfer toward a bachelor's degree program. Students who earn a certificate or degree in Restaurant Management may choose to pursue a bachelor's degree in Hospitality Management or Hotel and Restaurant Management. The following universities offer degrees in these areas:

CSU-Long Beach, Pomona, San Francisco and San Jose.

Refer to ASSIST, at www.assist.org for major preparation requirements.

Students interested in pursuing a bachelor's degree in one of these majors will be required to complete lower division major requirements and general education requirements before transferring. See counselor for transfer requirements for major at specific universities.

Some students who earn a certificate or degree in Restaurant Management from Victor Valley College may choose to pursue a further degree from California Culinary Academy in San Francisco or The Culinary Institute of America in New York which also has a Napa Valley campus in St. Helena, California. These colleges specialize in preparing a student to become a chef.

SOCIAL SCIENCES

Transfer
To pursue a bachelor's degree that leads to a social science teaching credential at the secondary level, students must contact the specific university campus for detailed major preparation requirements, or go to www.assist.org.

California State University, San Bernardino
Refer to the Social Science teaching credential option listed in CSU-SB's Catalog, or visit www.assist.org.

University of California, Riverside
Refer to the major preparation agreements on ASSIST, at www.assist.org. Students can also contact a UCR transfer outreach counselor for information at (909) 787-4531.
Completion of IGETC recommended.

Chapman University, Victorville
Social Science major
(See **Table 5** in Section VII of this catalog.)

SOCIOLOGY

Sociology offers much to the student who desires to understand the web and rhythm of human behavior. From intimate, personal, and family relationships to international corporation activities; from marginality, deviance and crime to recreation, religion and medicine, few disciplines have such broad scope and relevance. For course descriptions, see Section IX of this catalog.

Career Opportunities
(Bachelor's or advanced degree usually necessary.)
Claims Examiner
Criminologist
Educator
Employment/Personnel Specialist
Interviewer/Researcher
Law Enforcement/Probation or Corrections Officer
Public Relations Consultant
Social Worker/Counselor
Statistician/Population Analyst
Urban Planning Consultant
Youth Counselor/Recreation Specialist

Faculty
Full Time
Gene Tashima

Degrees and Certificates Awarded
Associate in Arts, Liberal Arts

Certificate Program
No certificates awarded.

Associate Degree
No associate degree offered with a major in Sociology. Sociology courses may be used to fulfill requirements for an Associate in Arts degree with a major in Liberal Arts. See Liberal Arts for degree requirements for this major. SOC 138 (Cooperative Education) may be used for Elective credit, but may not be used to fulfill major requirements.

Transfer
To pursue a bachelor's degree, complete the following courses prior to transfer if possible:

California State University, San Bernardino
Sociology major
SOC 101
CSU General Education-Breadth Requirements

California State University, San Bernardino
Human Services major
PSYC 101, 110, SOC 101
CSU General Education-Breadth Requirements

University of California, Riverside
Sociology major
Refer to the major preparation agreements on ASSIST, at www.assist.org. Students can also contact a UCR transfer outreach counselor for information at (909) 787-4531.
Completion of IGETC recommended.

Chapman University, Victorville
Sociology major
(See **Table 5** in Section VII of this catalog.)

SPANISH

The study of Spanish has as its goals to explain, evaluate and communicate ideas and concepts by means of reading, writing and verbal processes through creative use of words (literature) and culture (civilization). This study affords insight into foreign attitudes and methods and encourages free communication, written and oral, among people.

Career Opportunities

Advertising
Business
Education
Government
Health Service
Journalism
Law Enforcement
Publishing
Social Work
Translating

Faculty

Full Time
Cuauhtemoc Franco
Dolores Hinson
Martha Vila

Degrees and Certificates Awarded

Associate in Arts, Liberal Arts

Certificate Program

No certificates awarded.

Associate Degree

No associate degree offered with a major in Spanish. Spanish courses may be used to fulfill requirements for an Associate in Arts degree with a major in Liberal Arts. See Liberal Arts for degree requirements for this major.

Transfer

To pursue a bachelor's degree, complete the following courses prior to transfer if possible:

California State University, San Bernardino
Spanish major
SPAN 103, 104
Business Track: Add BADM 101 or 103, CIS 101
CSU General Education-Breadth Requirements

University of California, Riverside
Spanish major
Refer to the major preparation agreements on ASSIST, at www.assist.org. Students can also contact a UCR transfer outreach counselor for information at (909) 787-4531.
Completion of IGETC recommended.

SPEECH COMMUNICATIONS

See "Communication Studies."

TEACHING

See "Education."

THEATRE ARTS

Theatre Arts is the essence of the humanities in that it is the only art form that incorporates all the other fine arts into its final product. Our primary goal is to educate the whole person, to emphasize comprehensive education. Everyone should experience the dynamics of theatre, and our ensemble technique teaches cooperation, teamwork, and communication. The skills learned in producing theatre are necessary in every occupational arena. For course descriptions, see Section IX of this catalog.

Career Opportunities

Actor/Actress
Choreographer
Costumer
Makeup Artist
Publicist
Scene Designer
Screenwriter
Sound Technician
Stage Director
Teacher

Faculty

Full Time
Ed Heaberlin
Steve McDevitt
John Rude
Theresa Mirci-Smith
Polly Fitch, Emeritus

Degrees and Certificates Awarded

Associate in Arts, Fine Arts
Associate in Arts, Liberal Arts

Certificate Program

No certificates awarded.

Associate Degree

No associate degree offered with a major in Theatre Arts. Theatre Arts courses may be used to fulfill requirements for an Associate in Arts degree with a major in Fine Arts. See Fine Arts for degree requirements for this major. Courses may also be used to fulfill requirements for an Associate in Arts degree with a major in Liberal Arts. See Liberal Arts for degree requirements for this major. TA 138 (Cooperative Education) may be used as Elective credits, but may not be used to fulfill major requirements.

Transfer

To pursue a bachelor's degree, complete the following courses prior to transfer if possible:

California State University, San Bernardino
Theatre Arts major
TA 106, 107, 110
Three courses from the following: 113, 115, 117, 120
CSU General Education-Breadth Requirements
There are several different concentrations to choose from in this major. Please refer to CSUSB's catalog, visit them online at www.csusb.edu, and check at www.assist.org.

University of California, Riverside
Theatre Arts major
Refer to the major preparation agreements on ASSIST, at www.assist.org. Students can also contact a UCR transfer outreach counselor for information at (909) 787-4531.
Completion of IGETC recommended.

VISUAL COMMUNICATION

See **"Computer Integrated Design and Graphics**."

WELDING

This program prepares students to enter welding-related occupations, offers retraining for those seeking a new career, and provides an opportunity for those employed in welding occupations to learn new skills and upgrade themselves in their positions.

The department is a member of the American Welding Society's Educational Institution Program for entry level welders and is entitled to all the privileges. This entry level welder program is part of the National Skills Standards Program, which is being enacted across a wide range of industries in the United States.

The program prepares students to pass the written test and welding performance test necessary to acquire a welding license from the Los Angeles Department of Building and Safety. The program offers a certificate of achievement in welding, and an associate degree may be obtained upon completion of 18 units of welding course work in addition to general education. For course descriptions, see Section IX of this catalog.

Educational Institution Member

Career Opportunities

Boilermakers
Iron Workers
Maintenance Worker
Millwrights
Sheet Metal Workers
Welder
Welder-Fitter
Welding Estimator
Welding Inspector
Welding Instructor
Welding Operator
Welding Sales Representative
Welding Service Representative
Welding Supervisor
Welding Technician

Faculty

Full Time
Gary Menser

Degrees and Certificates Awarded

Associate in Science, Welding
Welding Certificate

Certificate Program

WELDING CERTIFICATE

The Welding Technology courses included in the certificate program will give the students the skills necessary to become an entry-level combination welder.

19.0 units

All of the following must be completed:

		Units
WELD 51	Oxyacetylene Welding, Cutting, and Brazing	3.0
WELD 52	Shielded Metal Arc Welding-Basic	3.0
WELD 53	Shielded Metal Arc Welding-Advanced	4.0
WELD 57A	Gas Tungsten Arc Welding-Basic	2.0
WELD 57B	Gas Tungsten Arc Welding-Advanced	2.0
WELD 58A	Gas Metal Arc Welding-Basic	2.0
WELD 58B	Gas Metal Arc Welding-Advanced	2.0
WELD 59	Welding Symbols and Blueprint Reading	1.0

Associate Degree

To earn an Associate in Science degree with a major in Welding, complete 18 units from Welding courses and meet all Victor Valley College graduation requirements. WELD 138 (Cooperative Education) may be used as Elective credit, but may not be used to fulfill major requirements.

Transfer

Not a transfer major.

IX.
COURSE DESCRIPTIONS

“The very spring and root of honesty and virtue lie in good education.”

-Plutarch
46-120 A.D.

ADMINISTRATION OF JUSTICE

AJ 8.0 PC 832.3 Campus Law Enforcement 2.0 Units
(formerly AJ103)
This course complies with the Commission on Peace Officer Standards and Training (POST) and satisfies the recent legislation regarding school police training for K-12 and community colleges. This course includes role of school police, laws and liability, tactical awareness in an educational environment, campus oriented policing, conflict resolution, incident command system, and dynamics of student behavior. 32-36 hours lecture. This course will not apply to the Associate Degree. (No Prerequisite. Credit/No Credit) This course may be repeated as required.

AJ 25 Public Safety Dispatcher 5.5 Units
(formerly AJ106)
This course complies with the Commission on Peace Officer Standards and Training (POST) requirements for Public Safety Dispatchers. This course includes the criminal justice system, criminal law, communication technology, telephone and radio procedures, missing persons, domestic violence, cultural diversity, sexual harassment, gang awareness, emergency medical services and stress management. 80-90 hours lecture and 24-27 hours laboratory. This course will not apply to the Associate Degree. (No Prerequisite. Credit/No Credit) This course may be taken four times.

AJ 30 PC 832 Firearms 0.5 Unit
(formerly AJ110)
This course satisfies the Commission on Peace Officer Standards and Training (POST) firearms certification for the Level III reserve and PC 832. Additionally, this course exceeds the State of California firearms safe handling and use certification required from any person purchasing a firearm in California. This course will not apply to the Associate Degree. 24 hours laboratory. (Prerequisite. All students must have a DOJ criminal record clearance, in writing, from DOJ before registering for this class. Credit/No Credit) This course may be repeated as required.

AJ 31 Fingerprint Recognition and Classification
(formerly AJ 111) 2.5 Units
This course offers instruction in fingerprint recognition and classification to a person without any prior knowledge in fingerprint patterns. Every person who is successful in this course will be able to recognize and accurately classify a fingerprint and distinguish a known fingerprint from an unknown fingerprint. This course will not apply to the Associate Degree. 40-45 hours lecture. (No prerequisite. Credit/No Credit) This course may be repeated as required.

AJ 58 PC 832 Laws of Arrest 3.0 Units
This course complies with the requirements of the Commission on Peace Officers Standards and Training for certification in PC 832. This course includes professionalism, law, evidence, investigation, arrest methods and control, community relations, and communication skills for interviewing and interrogation. 48-54 hours lecture. (No prerequisite; Credit/No Credit) This course may be repeated as required.

AJ 64 Basic Corrections Officer Academy 8.0 Units
This course satisfactorily meets the requirements of section 1020 of the California Administrative code, Minimum Jail Standards and the Basic Jail/Adult Institution requirements of the S.T.C. program. 112-126 hours lecture and 48-54 hours laboratory. (No prerequisite; Credit/No Credit) This course may be repeated.

AJ 67 Crime Scene Investigation 3.5 Units
This course concentrates on the technical aspects of evidence collection, crime scene reconstruction, crime scene photography, evidence packaging, and court room testimony. The student is prepared to distinguish between trace, stain, and impression evidence and the role of these types of evidence in criminal investigations. 48-54 hours lecture and 24 hours laboratory. (No prerequisite)

AJ 73 Legal Aspects of Corrections 3.0 Units
This course provides students with an awareness of the historical framework, concepts and precedents that guide correctional environment, the civil rights of prisoners and responsibilities and liabilities of correction officials. Emphasis will be placed on federal case law and its application to correctional work. 48-54 hours lecture. (No prerequisite)

AJ 75 Juvenile Counselor Course 6.0 Units
The Juvenile Counselor Core Course is designed specifically for the individual seeking employment with the County Probation Department and working in any Juvenile Intake Center. This course is certified by the California Board of Corrections, Standards and Training Corrections (STC). The course includes the Criminal Justice System, psychological and medical issues in an intake center, identifying sociological and cultural issues, assaultive behavior and evasive tactics, supervision, security and counseling case work. In addition, First Aid/CPR must be completed as part of this course or have current certification. 88-99 hours lecture and 24-27 hours laboratory. (No Prerequisite. Credit/No Credit) This course may be taken two times.

AJ 80 Level III Modulated Law Enforcement Basic Course
(formerly AJ63) 6.5 Units
This course complies with the Commission on Peace Officers Standards and Training (POST) requirements for the Level III Modulated Basic Course. This course includes professionalism and ethics; criminal law; laws of arrest and search and seizure; report writing, vehicle operations; use of force and force options; chemical agents; and firearms training. 86 hours lecture and 85 hours laboratory. (No Prerequisite. Credit/No Credit) This course may be taken four times.

AJ 81 Level II Modulated Law Enforcement Basic Course
(formerly AJ68) 9.0 Units
This course complies with the Commission on Peace Officers Standards and Training (POST) requirements for the Level II Modulated Basic Course. This course includes community relations; victimology; Crimes against property and persons; crimes against children; specific sex crimes; search and seizure law; investigative report writing; crimes in progress and patrol tactics; use of force; defensive tactics; and firearms training. 121 hours lecture and 133 hours laboratory. (Prerequisites: AJ 80 and Department of Justice criminal record clearance. Credit/No Credit.) This course may be taken four times.

AJ 91 Corrections Supervision and Control 3.0 Units
Students will learn to supervise and control inmates in the emotionally charged atmosphere of adult corrections. They will learn to detect and mitigate problems using motivational and communications techniques. They will learn to set and enforce standards. These skills are invaluable in a corrections environment. 48-54 hours lecture. (No prerequisite) This course may be taken two times.

AJ 101 Introduction to the Administration of Justice 3.0 Units
(formerly AJ11 (CAN AJ 2)
This course provides an overview of the history and philosophy of the criminal justice system as it evolved. The course provides an in-depth study of the American system and the various sub-systems; roles and role expectations of criminal justice agents in their interrelationships in society; concepts of crime causation, punishment and rehabilitation; ethics, education and training for professionalism in the criminal justice

system. 48-54 hours lecture. CSU, UC. Offered Fall, Spring. (No prerequisite)

AJ 102 Criminal Procedures 3.0 Units
(formerly AJ12)
Legal processes from pre-arrest through trial, sentencing and correctional procedures. A review of the history of case and common law; conceptual interpretations of law as reflected in court decisions. A study of case law methodology and case research as the decisions impact upon the procedures of the justice system. 48-54 hours lecture. CSU. (No prerequisite)

AJ 103 Criminal Law 3.0 Units
(formerly AJ13) (CAN AJ 4)
Historical development, philosophy of law and constitutional provisions; definitions, classifications of crime and their applications to the system; legal research, review of case law, and concepts of law as a social force. Explores crimes against persons, property and the state as a social, religious, and historical ideology. 48-54 hours lecture. CSU, UC (No prerequisite)

AJ 104 Legal Aspects of Evidence
(formerly AJ 14) (CAN AJ 6) 3.0 Units
Origin, development, philosophy, and constitutional basis of evidence; constitutional and procedural considerations affecting arrest, search, and seizure; kinds and degrees of evidence and rules governing admissibility; judicial decisions interpreting individual rights and case studies viewed from a conceptual level. 48-54 hours lecture. CSU. (No prerequisite)

AJ 126 Traffic Enforcement and
(formerly AJ26) Investigation 3.0 Units
A study of the fundamentals of accident investigation and reconstruction employing the principles of crime scene initial survey, evidence collection, skid mark analysis, and interviewing techniques. Includes the study and comprehension of the California Vehicle Code. 48-54 hours lecture. CSU. (No prerequisite)

AJ 127 Crime and Delinquency 3.0 Units
(formerly AJ27)
Formerly Fundamentals of Crime and Delinquency.
An introduction to major types of criminal behavior, characteristics of offenders, factors which contribute to crime and delinquency; the criminal justice process; the function of law enforcement, the courts, probation, parole and institutions; changes in crime control and treatment processes, the role of society. 48-54 hours lecture. CSU. (No prerequisite)

AJ 130 Death Investigation 3.0 Units
(formerly AJ30)
A course designed to prepare the law enforcement officer with the appropriate knowledge and techniques for handling homicide investigations. 48-54 hours lecture. CSU. (No prerequisite)

AJ 132 Introduction to Corrections
(formerly AJ32) 3.0 Units
Formerly AJ 65
A survey of the field of correctional science. Historical development, current concepts and practice; explanations of criminal behavior; functions and objectives of the criminal justice system concerned with institutional, probation, and parole processes as they modify the offender's behavior; survey of professional career opportunities in public and private institutions. 48-54 hours lecture. CSU. (No prerequisite)

AJ 133 Writing for Criminal Justice 3.0 Units
(formerly AJ 33)
Techniques of communicating facts, information, and ideas effectively in a simple, clear and logical manner in the various types of criminal justice system reports: letters, memorandums, directives, and administrative reports with an emphasis on criminal justice terminology in note taking and report writing. 48-54 hours lecture. CSU. (No prerequisite)

AJ 135 Juvenile Law and Procedures
(formerly AJ35) 3.0 Units
Techniques of handling juvenile offenders and victims; prevention and repression of delinquency; diagnosis and referral; organization of community resources. Juvenile law and juvenile court procedures. 48-54 hours lecture. CSU. (No prerequisite)

AJ 138 Cooperative Education
(formerly AJ38)
See Cooperative Education listing (1-8 units). CSU

AJ 140 Communication Skills for
(formerly AJ40) Interviewing and Interrogation
3.0 Units
The course will focus on the technical and legal aspects of interview and interrogation within the Administration of Justice system. It will provide the student with the communication skills required to elicit reliable and admissible information from witnesses and suspects. Constitutional and Legislative law will be emphasized. 48-54 hours lecture.CSU. (No prerequisite)

AJ 145 Introduction to Criminal
Investigations 3.0 Units
The course explores the processes involved in investigation crimes against persons; crimes against property; sex crimes; cyber-crime; controlled substances and organized crime; bomb and illegal explosive crimes; and crimes against children. The course will examine various communication methods when interviewing victims or interrogating suspects and examine the Constitutional restrictions when conducting searches or seizures for evidence. 48-54 hours lecture. CSU. (No prerequisite)

AJ 148 Special Topics
(formerly AJ48)
See Special Topics listing (Variable units). CSU

AJ 149 Independent Study
(formerly AJ49)
See Independent Study listing (1-3 units). CSU

AJ 150 Introduction to Forensic Science 3.0 Units
This course introduces the role of forensics in the criminal justice system. The course includes: crime scene processes and analysis; interpretation of patterns for reconstruction; physical pattern evidence; fingerprint identification and patterns; questioned document examination; tool marks and firearms examination; biological evidence and DNA; arson and explosives evidence, and drug analysis. 48-54 hours lecture. CSU. (No prerequisite.)

AJ 201 Multicultural Issues
(formerly AJ74) in Public Safety 3.0 Units
A theoretical and conceptual overview of multicultural concepts and issues: an application of those concepts and issues to the four public safety disciplines (corrections, fire safety, hazardous materials, law enforcement); identification of problems related to our increasingly diverse population; examination of strategies to overcome those problems, particularly in relation to the maintenance of social order. 48-54 hours lecture. (No prerequisite)

AGRICULTURE and NATURAL RESOURCES

AGNR 50 Equine Health 3.0 Units
Students learn the basics of proper veterinary care of the horse, including what to do before the veterinarian is called. Course introduces the diseases and lameness associated with the musculoskeletal system, as well as diseases of the respiratory, digestive, neurological, and reproductive systems. Emphasis is on preventive maintenance and managerial practices needed to keep the equine athlete, broodmare or family horse in good health in the High Desert Region of California. 48-54 hours lecture. (No prerequisite) Grade option. This course may be taken four times.

AGNR 50A Introduction to Equine Health and Disease Prevention; When to Call the Vet 0.5 Unit
Introduction to the anatomy and physiology of the horse and the impact of these sometimes fragile systems can impact overall equine health. Students learn to identify the indicators of good health using a first-aid check list and warning signs of disease. Nine hours lecture. (No prerequisite) Grade option. This course may be taken four times.

AGNR 50B Equine Diseases, Toxicology and Parasites 0.5 Unit
Course emphasizes the early detection and prevention of these agents. Focus on West Nile Virus, Strangles, Rhinopneumonitis and other diseases prevalent in the High Desert. Students develop region-specific vaccination and worming regimens. Nine hours lecture. (No prerequisite) Grade option. This course may be taken four times.

AGNR 50C Colic and Proper Feeding Practices 0.5 Unit
Students learn the common environmental factors that may cause digestive health problems like colic and diarrhea. Emphasis is laced on a balanced diet and proper feeding practices. Nine hours lecture. (No prerequisite) Grade option. This course may be taken four times.

AGNR 50D Equine Lameness; Laminitis, Navicular and beyond 0.5 Unit
Students assess the pathogenesis of navicular Disease and Laminitis; describe common methods of treatment; evaluate the impact of these and other lameness on the athletic potential of the equine athlete. Techniques for diagnosis (radiography, ultrasound) and treatment (chiropractic, drugs) are explored. Nine hours lecture. (No prerequisite) Grade option. This course may be taken four times.

AGNR 50E Equine Reproductive Health 0.5 Unit
The unusual reproductive conformation of the mare and the stallion and breeding practices has produced an inordinately low level of reproductive efficiency in modern horse breeds. Course presents the appropriate use of recent management and technology innovations: progesterone therapy, increased day-length, ultrasonic imaging, artificial insemination, cooled semen and embryo transfer. Nine hours lecture. (No prerequisite) Grade option. This course may be taken four times.

AGNR 50F Equine Foaling and Neonatal Care 0.5 Unit
The successful foaling of a mare is fraught with problems from dystocia to assuring that the foal gets sufficient colostrum. Students develop a foaling checklist and guidelines on when to call for Veterinary assistance. Nine hours lecture. (No prerequisite) Grade option. This course may be taken four times.

AGNR 55 Animal Management Lab 1.0-3.0 Units
This course provides hands-on exposure to the management of large farm animals (livestock) and the experience needed to implement the theory learned in this department's animal and equine science classes. Special emphasis is placed on handling, preventative veterinary care, feeding, facility design, selection, evaluation, judging and preparation for sale. Provides a detailed analysis of various visual and physical methods of appraising beef, sheep, swine and horses for functional and economic value. 48-162 hours laboratory. (No prerequisite. Grade Option.) This course may be taken four times.

AGNR 60 (formerly AG80) Environmental Horticulture Laboratory 1.0-4.0 Units
Horticulture laboratory setting for horticulture students to practice the skills gained from experience and traditional lecture/laboratory classes. This setting will further prepare students for employment in the horticulture industry. 48-54 hours laboratory per unit, per term. (No prerequisite) This course may be taken four times.

AGNR 61 Natural Landscape Practices 4.0 Units
Introduction to the basics of landscape design; plant material selection; planting and care; composting; irrigation design and maintenance organic and natural methods; sol factors; landscape redesign and renovation; integrated pest management; creating a custom landscape. Emphasis is on the use of water-conserving and resource-efficient practices in establishing functional, attractive landscapes. 64-72 hours lecture. (No prerequisite. Grade Option.) This course may be taken four times.

AGNR 61A Basics of Water-Efficient Landscape Design 0.5 Units
Introduction to the seven xeriscape principles (landscape planning and design, soil considerations, practical turf areas, plant material selection, irrigation design, use of mulches, and landscape maintenance. Additional emphasis on drip and water-conserving irrigation, with an overview of local and regional water resources issues. Students will learn the basic elements of landscape design and be introduced to the dynamics of water resource management. Eight - nine hours lecture. (No prerequisite. Grade Option.) This course may be taken four times.

AGNR 61B Trees for the Suburban Forest: Selection, Planting, and Care 0.5 Units
Students will learn the elements required for the selection, planting, and care of fruit, shade, ornamental, and windbreak trees that are adapted to local climatic conditions and that meet particular landscaping objectives. Emphasis will be on choosing the right type of tree for the location, optimizing site selection, soil preparation and planting, efficient irrigation practices, establishing a home orchard, and tree health, maintenance and pruning. Eight - nine hours lecture. (No prerequisite. Grade Option.) This course may be taken four times.

AGNR 61C Recycling the Natural Way: Essentials of Composting 0.5 Units
Learn how to make productive use of unwanted yard waste and other materials through the Master Composter Program. Topics include: benefits of composting; the biological process of composting; materials that can and cannot be composted; types of composting units and how to establish and manage them; vermiculture; using the finished product as a soil conditioner or mulch, using other solid waste such as straw and concrete in the landscape. Eight - nine hours lecture. (No prerequisite. Grade Option.) This course may be taken four times.

AGNR 61D Designing Drip Irrigation and Other Water-Efficient Systems 0.5 Units

Students will learn to design, install, and maintain drip and other water-efficient landscape irrigation systems. Topics include: system layout; description of available irrigation hardware components and their use; converting existing systems to water-efficient; adapting an existing system to a redesigned landscape; effective use of timers and controllers based on seasonal water requirements; troubleshooting and repair. Eight - nine hours lecture. (No prerequisite. Grade Option.) This course may be taken four times.

AGNR 61E Organic Methods for Gardening and Landscaping 0.5 Units

Introduction to the use of organic methods in cultivating vegetables, herbs, flowers, shrubs, and trees. Students will learn to evaluate basic soil characteristics and assess the need for soil amendments and fertilizers. Other topics include: assessing plant health; organic and natural soil amendments and fertilizers; selecting and sourcing native and climate-adapted plant materials; plant pests and natural methods for controlling them. Eight - nine hours lecture. (No prerequisite. Grade Option.) This course may be taken four times.

AGNR 61F Outdoor Remodeling: Approaches to Landscape Conversion 0.5 Units

Learn to remodel a landscape to make it more resource efficient and attractive. Emphasis will be on redesigning and planning, water-saving approaches for lawn areas, low-maintenance alternatives to lawn areas, utilization of existing landscape elements, salvaging trees and shrubs by pruning and retraining and introduction of new landscape elements that are readily established. Eight - nine hours lecture. (No prerequisite. Grade Option.) This course may be taken four times.

AGNR 61G Integrated Pest Management for the Landscape and Home 0.5 Units

Managing pests with an integrated approach using knowledge of their habits and life histories to determine the best method or combination of methods for controlling them. Students will learn about the biology of pest organisms (weeds, insects, plant diseases, rodents, and other pests), preventing the establishment of pests before they become a problem, evaluating the effects of pests on plant health, and methods of pest control, with emphasis on low-impact practices and safe handling of chemical treatment.. Eight - nine hours lecture. (No prerequisite. Grade Option.) This course may be taken four times.

AGNR 61H Natural Landscapes: Creating A Custom Habitat 0.5 Units

Design a landscape that incorporates natural practices to create a custom habitat. Includes Habitat Gardening: plants that attract desirable wildlife such as birds and butterflies; edible landscapes; incorporating vegetables, herbs, and fruit trees; planting for seasonal color; allergy-free landscaping; creating outdoor living spaces; integrating hardscape elements such as decks, gazebos, and rockscapes into the design. Eight - nine hours lecture. (No prerequisite. Grade Option.) This course may be taken four times.

AGNR 72 Geospatial Technology I (formerly AG65L) 4.0 Units

Provides a laboratory where students apply the skills gained from prior experience traditional lecture/laboratory classes using state of the art hardware and software. Students work alone or in groups to design a GIS (Geographic Information System) to address actual or simulated Natural Resource Conservation needs. 32-36 hours lecture and 96-108 hours laboratory. (No prerequisite) This course may be taken four times.

AGNR 73 Water Resource Management 3.0 Units

This class is a complete overview of water resource management in the West Mojave Desert and makes appropriate linkages to the critical nature of water management around the world. Local water management leaders present guest lectures on the economic, political, social, and environmental pressures that must be balanced in providing sustainable water supplies. The scientific principles are presented that must underlie sound water management decisions. Cutting-edge technologies like Geospatial Analysis are used to present the study of groundwater, local watershed health, soil erosion, water quality and water distribution issues. 48-54 hours lecture. (No prerequisite. Grade Option.) This course may be taken four times.

AGNR 74 Conservation and Sustainability Practices 6.0 Units

This course introduces students to the exciting and rapidly expanding practice of the conservation and sustainable use of our natural resources. Students use case studies and high-tech tools to learn how we can live comfortably while ensuring that we sustain the environment for future generations. Students explore the social, economic, environmental, technological, scientific, conservation practices and career fields that support this new frontier in societal development. 96-108 hours lecture. (No prerequisite. Grade Option.) This course may be taken four times.

AGNR 74A Sustainable Community Development 1.0 Unit

Students learn to plan and implement sustainable development practices; development that meets the needs of the present generation with compromising the ability of future generations to meeting their own needs. It is also often described as development that considers multiple, sometimes competing values grouped into three general categories; environmental, social and economic. Extensive use is made of case studies and practical on-site experiences. Class may be taught in the Mojave Desert, Costa Rica, Namibia, New Zealand, etc. 16-18 hours lecture. (No prerequisite. Grade Option.) This course may be taken four times.

AGNR 74B Biodiversity Management and Conservation Technology 1.0 Unit

The reduction of species diversity is a major indicator of the health of a complete ecosystem. This class explores the science, tools and practice of conserving species diversity. Students learn to implement the exciting tools of Geographic Information Systems (GIS), Global Positioning Systems (GPS), Satellite Imaging and Database Management, along with an understanding of the unlimited career opportunities in these fields. An example case study is on the viability of the Lucerne Valley Big Horn Sheep population. Class may be taught in Mojave Desert, Costa Rica, Namibia, New Zealand, etc. 16-18 hours lecture. (No prerequisite. Grade Option.) This course may be taken four times.

AGNR 74C Water and Soil Conservation 1.0 Unit

Students discover the tenuous nature of many of the world's water supplies. Tools like GIS are used to study watershed health. The fantastic chemistry of water and methods of water quality testing are presented. Students study the relationships between soil and water, soil mapping, soil analysis and soil erosion using real-world examples. Class may be taught in the Mojave Desert, Costa Rica, Namibia, New Zealand, etc. 16-18 hours lecture. (No prerequisite. Grade Option.) This course may be taken four times.

AGNR 74D Ecological Restoration 1.0 Unit

Students learn to design an ecological restoration plan that effectively balances environmental mitigation with local community social and economic needs. The methodologies appropriate to a particular situation are presented. Topics include: native seed banking, Mycorrhizal relationships, seed stratification and scarification, nutrient

requirements, water requirements, transplanting protocols, watershed restoration, soil evaluation and rehabilitation. Class may be taught in the Mojave Desert, Costa Rica, Namibia, New Zealand, etc. 16-18 hours lecture. (No prerequisite. Grade Option.) This course may be taken four times.

AGNR 74E Sustainable Agriculture Practices 1.0 Unit

Tremendous progress has been made towards farming with nature and restoring ranches to be part of the natural ecosystem. This "farming with the wild" is not only producing more food but enhancing the environment. Students study sustainable practices like rotational grazing, organic farming, hedgerows and natural pollination in the United States and overseas. Class may be taught in the Mojave Desert, Costa Rica, Namibia, New Zealand, etc. 16-18 hours lecture. (No prerequisite. Grade Option.) This course may be taken four times.

AGNR 74F Sustainable Building and Energy Practices 1.0 Unit

The technology to reduce our reliance on fossil fuels by producing energy alternately and building in a sustainable manner is very well represented in the Western Mojave Desert. Students study the latest technology to produce energy from the sun, wind, animal waster and plant matter. The "smart" building practices of straw-bale, Super Adobe, Cob, grey-water and radiant heating are explored. 16-18 hours lecture. (No prerequisite. Grade Option.) This course may be taken four times.

AGNR 75 Conservation Research Laboratory 1.0-4.0 Units

Students design, implement and analyze applied research projects on the environmental issues of the Mojave Desert. Projects are student initiated or may be part of existing conservation projects with local mines and public agencies that include desert restoration, native plant propagation, soils rehabilitation and water management. Students apply field study skills and the latest natural resource management technologies like Geographic Information Systems in real-world situations. Several scholarship and internship opportunities are available to students in this program. 48-54 hours laboratory per unit, per term. (Corequisite: AGNR 170) This course may be taken four times.

AGNR 76 Advanced Irrigation Technology 3.0 Units

Students will focus on advanced irrigation technology and will be introduced to state of the art software, irrigation equipment, water management techniques and water quality technology that supports better management of our limited water supply. 48-54 hours lecture. (No prerequisite. Grade Option.) This course may be taken four times.

AGNR 80 Master Gardener 2.0 Units

This course is intended for homeowners and professionals who wish to increase their proficiency in high desert gardening. Topics will include: plant selection, waterwise irrigation, fruit, vegetables, roses, fertilizers, mulches, soil amendments, composting, herbaceous plants, landscape design, pruning, maintenance, weed control, cactus, succulents, turf-grass and water features. One lecture, three laboratory hours per week. 16-18 hours lecture and 48-54 hours laboratory. (No prerequisite. Grade Option.) This course may be taken four times.

AGNR 100 General Animal Science (formerly AG31) 3.0 Units

Discussion of breeds, types of enterprises, nutrition, reproduction and management of beef cattle, dairy cattle, sheep, swine, rabbits, poultry, and goats. 48-54 hours lecture. One Saturday field trip required. CSU, UC. Offered Fall. (No prerequisite)

AGNR 101 Animal Nutrition 3.0 Units (formerly AG90)

This course covers modern nutritional techniques in large animal production and management. Anatomy of large animal digestive systems will be discussed along with feed composition and meeting large animal dietary requirements for maximum performance and growth. Students will formulate rations for a variety of livestock. 48-54 hours lecture. CSU. (No prerequisite. Grade Option). This course may be taken three times.

AGNR 102 Equine Science 4.0 Units (formerly AG55)

An overview of the equine industry encompassing the role of the equine species throughout history. Breed selection, development, nutrition, diseases, preventative health, reproductive management, basic horsemanship, and management practices. Emphasis placed on the practices, breeds and career opportunities that are appropriate to the California horse industry. 64-72 hours lecture. (No prerequisite) This course may be taken two times. CSU, UC.

AGNR 120 Pest Management in (formerly OH19) Environmental Horticulture 3.0 Units

Students will learn how to employ the principles and concepts of managing insects, diseases and weeds of the landscape and nursery environment, and their identification and control. To include concept of Integrated Pest Management, laws, and regulations. Effective use of pesticides and herbicides will be emphasized. 32-36 hours lecture and 48-54 hours laboratory. CSU. (No prerequisite.) This course may be taken four times.

AGNR 121 Fundamentals of Environmental (formerly OH31) Horticulture 3.0 Units

General course in environmental horticulture with emphasis on nursery operations, landscaping, turf management and floral industries. Topics include basic plant structure, cultural practices, propagation, structures and layout, pest management, houseplants, floral design, plant identification, turf grass care and survey of career opportunities. This class is recommended as a starting point for all landscape and horticulture certificate candidates. 32-36 hours lecture and 48-54 hours laboratory. CSU. (No prerequisite) This course may be taken three times.

AGNR 122 Plant Propagation and (formerly OH32) Greenhouse Production 3.0 Units

Students will explore the challenges of propagation and production of native and drought tolerant plants that are adapted to the extreme climate of the High Desert using techniques commonly used in a professional nursery/greenhouse environment. Topics include sexual and asexual propagation techniques including: seeds, cuttings, layering, division, bulbs, grafting and budding. The greenhouse production techniques for transplanting; fertilizing; pest, humidity, water and temperature control are studied. Nursery operations such as: growing structures; site layout; preparation of planting media; use and maintenance of tools and equipment; and regulations pertaining to plant production are emphasized. This class is highly recommended for all landscape, environmental horticulture and ecological restoration certificate candidates. 32-36 hours lecture and 48-54 hours laboratory. CSU. (No prerequisite) This course may be taken four times.

AGNR 123 Introduction to Plant Science 3.0 Units

This course provides an introduction to plant science with topics in plant structure and function and the environmental factors involved in plant growth and development. Students learn: plant physiology; plant reproduction and propagation; effects of soil, water, and climate; use of plants to meet human needs; sustainable horticultural practices; integrated pesty management; the role of new technologies in contemporary plant science. Application to Mojave Desert issues and to careers in Horticulture, Agriculture, Natural Resource Management and Restoration Ecology are emphasized. 32-36 hours lecture and 48-54 hours laboratory. CSU. (No prerequisite. Grade option.) This course may be taken two times.

AGNR 129 Water Efficient Landscaping
(formerly AG54) 3.0 Units
This is a combination course covering the seven xeriscape principles: landscape planning and design; limited turf areas; efficient landscape irrigation; soil improvement and mulching; use of low water plants; disease, weed, and insect control; and appropriate landscape maintenance. 48-54 hours lecture. CSU (No prerequisite. Credit/No Credit) This course may be taken two times.

AGNR 131 Soil Science 3.0 Units
(formerly AG70)
This course provides a basic knowledge of the physical, chemical, and biological properties of soils and their characteristics. The course includes fundamental soil properties, soil and plant relationships, principles of soil formation, fertilizers and soil management, salinity, pH, erosion management, and non-agricultural uses of soil. Emphasis is placed on soil as a natural resource and on its conservation. 48-54 hours lecture. CSU, UC. (No prerequisite) This course may be taken three times.

AGNR 138 Cooperative Education
(formerly OH38)
See Cooperative Education listing (1-8 units). CSU

AGNR 140 Plant Materials and Usage I
(formerly OH40) 3.0 Units
Identification, growth habits and cultural requirements for plants common to the California landscape. Emphasis is placed on plants that have adapted to the climate of the high desert and ones that are drought tolerant. 32-36 hours lecture and 48-54 hours laboratory. CSU. (No prerequisite.)

AGNR 141 Plant Materials and Usage II
(formerly AG75) 3.0 Units
This class emphasizes the identification, growth habits, cultural requirements, seed collecting techniques and ornamental use of California native plants appropriate for use in southern California landscapes and desert revegetation. Plants emphasized will be California native plants adapted to the High Desert region. Plants to be studied will include those recommended by the California Native Plant Society. 32-36 hours lecture and 48-54 hours laboratory. CSU, UC. (No prerequisite) This course may be taken four times.

AGNR 148 Special Topics(formerly OH48)
See Special Topics listing (Variable units). CSU

AGNR 149 Independent Study (formerly OH49)
See Independent Study listing (1-3 units). CSU

AGNR 150 Landscape Design 3.0 Units
(formerly OH39)
Fundamentals and history of landscape design for residential and commercial sites. Studies of color, texture, form, and use of landscape material. Emphasis will be on selection and placement of plant material, walks, patios, decks, and other structures for landscape use. Consideration will also be given to proper site layout with regard to existing elevations. The lab sessions will emphasize practice in design and drafting of actual landscape projects. 32-36 hours lecture and 48-54 hours laboratory. CSU. This course may be taken three times.

AGNR 151 Landscape Construction
(formerly OH17) 3.0 Units
Techniques used in constructing wood, concrete, and masonry projects common in the landscape industry. Labs include using wood products for structures, decks, gazebos and fences. Estimating procedures, planning, mixing and forming for concrete walkways are identified. 32-36 hours lecture and 48-54 hours laboratory. CSU. (No prerequisite)

AGNR 152 Landscape Irrigation 3.0 Units
(formerly OH35)
Prepares students to design, install and maintain a water efficient landscape irrigation system. Topics include water supply, basic hydraulics, component identification and terminology, system layout, pipe sizing; types of heads, valves, controllers. Students will gain appreciation for water conservation and quality issues. Students will also learn to troubleshoot irrigation design and electrical systems. 32-36 hours lecture and 48-54 hours laboratory. CSU. (No prerequisite) This course may be taken two times.

AGNR 153 Landscape Maintenance
(formerly OH36) Fundamentals 2.0 Units
Maintenance of trees, shrubs and ground covers, cultural requirements, pruning, fertilizing, and irrigation. Repair of irrigation systems and equipment. 16-18 hours lecture and 48-54 hours laboratory. CSU. (No prerequisite)

AGNR 154 Landscape and Nursery
(formerly OH43) Management 3.0 Units
A combination course covering the basics of landscaping and nursery management. 48-54 hours lecture. CSU.

AGNR 160 Beginning Floral Design
(formerly OH34) 3.0 Units
Introduction to the theory of floral design, including principles and elements of design, color theory, identification of plant materials and preparation and care of plant material. Emphasis is placed on “hands on” floral designs, boutonnieres and corsages. 32-36 hours lecture and 48-54 hours laboratory. CSU. (No prerequisite)

AGNR 161 Floral Design II 2.0 Units
(formerly OH37)
Continued application of principles in the art of floral design. Contemporary design theory emphasizing creativity, self expression, and professional design situations. 16-18 hours lecture and 48-54 hours laboratory. CSU. (No prerequisite) This course may be taken three times.

AGNR 170 Environmental Science
(formerly AG70) 4.0 Units
Use and protection of the worlds natural resources, including soil, water, forest, mineral, plant, and animal life, with particular attention to California conditions. Ecological principles, history of the conservation movement, modern problems in resource use, global environmental issues and the citizen’s role in conservation. The unique nature of natural resource management and career opportunities in the Mojave Desert region are emphasized. 64-72 hours lecture. CSU (No prerequisite) This course may be taken four times.

AGNR 171 Introduction to Geographic
(formerly AG71) Information Science 3.0 Units
This class will prepare students to construct a Geographic Information System for natural resource management and agriculture. Students will become proficient in the operation of ArcView software and be introduced to the 3D Analyst, Spatial Analyst, Image Analyst and Network Analyst extensions. This is a hands-on class where students work with actual case studies and data, appropriate to the management of natural resources in the Mojave Desert ecosystem. 32-36 hours lecture and 48-54 hours laboratory. CSU (No prerequisite) This course may be taken four times.

ALLIED HEALTH

ALDH 50 (formerly AH50) Paramedic Anatomy and Physiology and Medical Terminology 4.0 Units
This is the introductory course of the Paramedic program. This course includes Basic Anatomy, Physiology, and Medical Terminology for the Paramedic.64-72 hours lecture. Offered Summer/Winter. (No prerequisite) This course may be taken two times.

ALDH 51 (formerly AH51) Paramedic Introduction to EMS 1.0 Unit
This course covers the roles and responsibilities of the EMT-P. It also includes the Emergency Medical Services System and EMS communication as it relates to the EMT-P. 16-18 hours lecture. Offered Summer/Winter. (No prerequisite) This course may be taken two times.

ALDH 52 (formerly AH52) Paramedic Cardiology 4.0 Units
This course covers the cardiovascular system and includes anatomy and physiology of the heart, and application and interpretation of EKG's. 64-72 hours lecture. Offered Fall. (No prerequisite) This course may be taken two times.

ALDH 53 (formerly AH53) Paramedic Pharmacology 3.5 Units
This course will cover the general principles of pharmacology including calculations and administration of various medications. 48-54 hours lecture and 24-27 hours laboratory. Offered Fall. (No prerequisite) This course may be taken two times.

ALDH 54 (formerly AH54) Paramedic Advanced Cardiac Life Support 1.0 Unit
This course will provide a review of basic cardiology, pharmacology, and EKG interpretation used in Advanced Cardiac Life Support. 16-18 hours lecture. Offered Fall. (No prerequisite) This course may be taken two times.

ALDH 55 (formerly AH55) Paramedic Emergency Medical Services Theory 10.0 Units
This course covers the theoretical base of assessing and reporting all aspects of trauma and medical emergencies, and includes skills practice in the lab. 144-162 hours lecture and 64-72 hours laboratory. Offered Fall. (Prerequisites: Successful completion of ALDH 50, 51, 52, 53 and 54) This course may be taken two times.

ALDH 56 (formerly AH56) Paramedic Clinical 3.0 Units
This course is the first part of the student's internship as part of the Paramedic program. This includes 176 hours at an acute care facility performing Inland Counties Emergency Medical Agency skills. 144-162 hours laboratory. Offered Spring. (No prerequisite) This course may be taken two times.

ALDH 57 (formerly AH57) Paramedic Field Internship 11.0 Units
This course is the field internship portion of the Paramedic program. Students will spend 600 hours in the field with a transport service performing Emergency Medical Technician skills. 528-594 hours laboratory. Offered Spring. (No prerequisite) This course may be taken two times.

ALDH 60 (formerly AH70) Nursing Assistant 4.5 Units
Enables students to become familiar with basic principles of nursing, including procedures and techniques. Clinical experience is provided in extended care facilities. Students will learn to provide and meet the patient's basic physical and psychological needs and promote a spirit of restoration and independence in a safe, efficient, and competent manner. State approved precertification program. Does not guarantee certification. Must achieve a grade of C or better to take state certification examination. 102 hours lecture and 102 hours laboratory. Offered Fall, Spring. (Prerequisite: Documented clearance for any crime more serious than a minor traffic ticket. Fingerprinting will be required. Health exam prior to clinical rotation. (Corequisites: Completion of Healthcare Provider CPR program with current card or other Healthcare Provider CPR program.)

ALDH 61 (formerly AH78) Home Health Aide 1.5 Units
Enable students to become familiar with basic principles of nursing care in a home style setting. Clinical experience is provided in residential care facilities. Students will learn to provide and meet the patient's basic physical and psychological needs and to promote a spirit of rehabilitation and independence in a safe, efficient and competent manner. State approved certification course. A grade of C or better must be earned to receive state certification. 20 hours lecture and 24 hours laboratory. (Prerequisites: Must have current and active California CNA certificate. Students who have completed Victor Valley ALDH 60 Nursing Assistant course this semester, but have not completed the state exam may enter the course. State Home Health Aide certification will be contingent upon passing the State CNA Certification exam. Corequisite: Current Healthcare Provider CPR card or concurrent enrollment in ALDH 91 or other acceptable Healthcare Provider CPR course.)

ALDH 62 (formerly AH79) Acute Care CNA 4.0 Units
This course will allow the Certified Nursing Assistant to expand upon basic nursing practices to include those specific for the acute care setting. Clinical experience is provided in acute care facilities. Students will learn nursing practice skills related to the medical-surgical patient and will have an understanding of physical and psychosocial changes seen in the acute setting. Must achieve a grade of C or better to receive Victor Valley College Certification.51 hours lecture and 51 hours laboratory. (Prerequisites: Must have a current and active State of California Certificate for Nursing Assistant (CNA). Students that have completed Victor Valley ALDH 60 Nursing Assistant course this semester, but have not completed the state exam may enter the program. Certification of completion by Victor Valley College will be contingent upon the student also passing the State CNA Certification exam. Corequisite: Current Healthcare Provider CPR card.)

ALDH 71 (formerly AH71) Emergency Medical Technician I (Ambulance) 8.0 Units
This course provides training in basic emergency care skills, including CPR, automated external defibrillation, use of definitive airway adjuncts and assisting patients with certain medications. Approved by the Inland County Emergency Medical Agency; All students must be eighteen years of age and have CPR (Cardio-Pulmonary Resuscitation) training equivalent to the American Heart Association Healthcare Provider Level (Title 22, Div. 9, Ch. 2, Sect. 100066 b2 California Code of Regulations) prior to the first day of class due to current clinical/field internship affiliation agreements.
112-126 hours lecture and 48-54 hours laboratory. Offered Fall, Spring, Summer. (Prerequisites: 18 years of age by clinical rotation and CPR training.)

ALDH 72 (formerly AH81) Emergency Medical Technician (Ambulance) Refresher Course 1.0 Unit
Thirty hour refresher course required for renewal of Emergency Medical Technician I Certificate. New Certificate of Completion awarded. Course approved by the Inland County Emergency Medical Agency. Eight hours lecture and 24 hours laboratory. Offered Fall, Spring. (No prerequisite) This course may be taken four times.

ALDH 76 Athletic Training III
(formerly AH76) 2.0-6.0 Units
In this course, students will provide the pre-participation, on-site first aid and event maintenance for fall/winter/spring sports programs at VVC (baseball, basketball, football, golf, soccer, softball, tennis, volleyball and wrestling.) Experience will include but is not limited to, prophylactic taping and padding, immediate first aid, monitoring vital signs, completion of accident forms, proper use of universal biohazard precautions, supervision of safe playing conditions and coaching techniques, recognition of medical emergencies, assisting other medical personnel as needed, game preparation and pre-participation medical screenings. 108-324 hours laboratory. See cross listing for PE 76. (Prerequisite: ALDH 141 or PE 141 Athletic Training I, or equivalent.) This course may be taken four times.

ALDH 77 Athletic Training IV
(formerly AH77) 2.0-6.0 Units
In this course, students will provide the care to athletes involved in fall/winter/spring sports programs at VVC (baseball, basketball, football, golf, soccer, softball, tennis, volleyball and wrestling.) Experience will include but is not limited to development and implementation of rehabioitation protocols. Use of modalities including, whirlpool, ultrasound, ice, Emergency Medical Services, hydrocolator, Range of Motion exercises, joint mobilization, strengthening exercises (isokinetic, isotonic, isometric), cardiovascular conditioning and proprioceptive exercises. See cross listing for PE 77. 108-324 hours laboratory. Offered Fall. (Prerequisite: ALDH 141 or PE 141 Athletic Training I, or equivalent.) This course may be taken four times.

ALDH 80 Pharmacology 3.0 Units
(formerly AH80)
Current concepts of pharmacology, its relationship to patient care, and legal and ethical considerations are covered. Basic mechanisms of drug action, administration, toxicity, side effects, and dosages are also included. 48-54 hours lecture. Offered Fall. (No prerequisite)

ALDH 81 Medical Insurance 3.0 Units
(formerly AH85)
Intensive instruction and drill in completing medical insurance forms for the private sector, industrial Medi-Care, Medi-Cal, Medi-Care/Medi-Cal patient. Basic skills in billing, collecting, banking, and preparation of payroll. 48-54 hours lecture. Offered Fall, Spring. (No prerequisite)

ALDH 82 Medical Office Procedures
(formerly AH86) 3.0 Units
Provide practice in medical office procedures, medical correspondence, case histories, insurance forms, and reports. Study of telephone techniques, medical record keeping, and filing. Verbal communication with patients, other offices and facilities. Preparation and assistance with common back office procedures. 48-54 hours lecture. Offered Fall. (No prerequisite)

ALDH 82C Medical Office Procedures-
(formerly AH86C) Clinical 5.0 Units
This course is designed to provide the externship component of Allied Health 86, Medical Office Procedures. The individual students will complete 270 hours of practical clinical experience. This will be performed in rotation sequence in the offices and clinics of qualified physicians located throughout the High Desert. 240-270 hours laboratory. Offered Spring. (No prerequisite)

ALDH 83 Basic Arrhythmia 3.0 Units
(formerly AH83)
A review of the general anatomy and physiology of the heart and coronary system, the complications associated with acute myocardial infarction with strong electrophysiological/arrhythmogenic component. Upon successful completion, the student will receive a certificate in Basic Electrocardiography and Arrhythmia Interpretation. (This course has been approved by the Board of Registered Nursing for Continuing Education credit, Provider #00047.) 48-54 hours lecture. Offered Fall. (No prerequisite)

ALDH 84 Intravenous Therapy 2.0 Units
(formerly AH84)
Approved by the Board of Vocational Nursing and the Board of Registered Nursing for Continuing Education. Emphasis placed on providing factual knowledge base, patient-centered psychological aspects, venipuncture techniques and materials. Legal aspects, especially as they relate to LVN's and RN's, are included. Thirty hours of theory/laboratory and six hours of clinical practice in IV therapy. Offered Spring. (No prerequisite)

ALDH 90A Certified Phlebotomy Technician1A 5.0 Units
Certified Phlebotomy Technician 1A prepares a student with the education, training, experience, and examination requirements as specified by the California Department of Health Services, to perform skin punctures or venipunctures in a hospital, clinical lab or doctor's office. A minimum of 48-54 hours of didactic, 48-54 hours laboratory, and 48-54 hours of practical clinical instruction will be required. (Prerequisite: High School graduate or GED, or documentation of equivalent education.) This course may be taken four times.

ALDH 90B Certified Phlebotomy Technician1B 3.0 Units
Certified Phlebotomy Technician 1B is designed for a student who has less than 1040 hours of job experience and has completed 50 successful venipunctures and 10 successful skin punctures within the past 5 years. This course will prepare the student for the State examination by covering 24-27 hours of basic didactic material and 24-27 hours of advanced didactic material in Phlebotomy techniques. This course does not require the student to attend a clinical component. 40 hours lecture. (Prerequisite: High School graduate or GED or documentation of equivalent education. Employed within the past 5 years as a Phlebotomist with less than 1040 hours of experience. Completion of 50 successful venipunctures and 10 successful skin punctures.) This course may be taken four times.

ALDH 90C Certified Phlebotomy Technician1C 1.5 Unit
Certified Phlebotomy Technician 1C is designed for a student who has 1040 hours or greater of on the job experience and who has completed 50 successful venipunctures and 10 successful skin punctures within the past 5 years. This course will prepare the student for the State examination by covering 24-27 hours of advanced didactic material in Phlebotomy techniques, blood borne pathogens, anti-coagulation theory, specimen collection and transportation. This course does not require the student to attend a clinical component. 20 hours lecture. (Prerequisite: High School graduate or GED or documentation of equivalent education. Employed within the past 5 years as a Phlebotomist with 1040 hours or greater of on the job experience. Completion of 50 successful venipunctures and 10 successful skin punctures.) This course may be taken four times.

ALDH 91 Basic CPR
(formerly AH95) (Cardiopulmonary Resuscitation) 0.5 Unit
Emergency first aid procedure that consists of recognizing respiratory and cardiac arrest and starting the proper application of cardiopulmonary resuscitation to maintain life until advanced life support is available. Upon successful completion of the course, the student will receive a Basic CPR Certificate from the American Heart Association. Two hours lecture and ten hours laboratory. Offered Fall, Spring, Summer. (No prerequisite) This course may be taken four times.

ALDH 125 (formerly AH25) **Medical Aspects of Drugs and Alcohol** **3.0 Units**
This course will provide an in-depth study of the physiological effects and medical consequences of drug and alcohol use and abuse, including the effects on the central nervous system and behavior. The pharmacological aspects of drug and alcohol use will be presented including metabolism of various drugs, the meaning and implication of "half-life," tolerance, dependence, addiction process, and withdrawal. Categories of substances covered will include major and minor stimulants, alcohol, depressants, psychotropic drugs, opiates, marijuana, hallucinogens, and other prescription and over-the-counter drugs. 48-54 hours lecture. CSU, UC (UC credit limitation). (No prerequisite)

ALDH 138 **Cooperative Education (formerly AH38)**
See Cooperative Education listing (1-8 units). CSU

ALDH 139 (formerly AH39) **Medical Terminology** **3.0 Units**
This course describes the body's anatomical systems with stress placed on medical terms, their use, spelling, and pronunciation. The use of these terms is defined in regard to anatomy, physiology, treatment, and surgery. 48-54 hours lecture. CSU. (No prerequisite)

ALDH 141 (formerly AH20) **Athletic Training I** **3.0 Units**
Introduction to principles of athletic training, including prevention, evaluation, treatment, and rehabilitation of common athletic injuries. 40-45 hours lecture and 24-27 hours laboratory. CSU. See cross listing for PE 141. (No prerequisite. Interest and/or experience in athletics and sports recommended)

ALDH 142 (formerly AH21) **Athletic Training II** **3.0 Units**
This course will build on the students basic knowledge of human anatomy and athletic injuries. Topics will include emergency procedures, current health concerns of the athlete, protective devices, advanced taping techniques and injury management. See cross listing for PE 142. 48-54 hours lecture and 16-18 hours laboratory. CSU. (Prerequisite: ALDH 141 or PE 141 Athletic Training I, or equivalent.)

ALDH 148 (formerly AH48) **Special Topics**
See Special Topics listing (Variable units). CSU

ALDH 149 **Independent Study (formerly AH49)**
See Independent Study listing (1-3 units). CSU

ANATOMY

See Biology.

ANTHROPOLOGY

ANTH 53 (formerly ANTHRO53) **Forensic Anthropology** **3.0 Units**
This course is designed to introduce the student to the theory and methods of forensic anthropology. The student will also become familiar with many of the basic techniques used by the forensic anthropologist through classroom activities and videos of case studies. 48-54 hours lecture. Offered Fall. (No prerequisite)

ANTH 54L (formerly ANTHRO54L) **Archaeology Lab** **2.0 Units**
This course is designed as a laboratory class that compliments the Archaeology Field Course. The class introduces the students to laboratory work in archaeology, providing hands-on experience. Students learn to process the materials collected from the field class archaeology site, from cleaning and identification to their analysis. 96-108 hours laboratory. Offered Fall. (No prerequisite.)

ANTH 101 (formerly ANTHRO1) **Introduction to Physical Anthropology (CAN ANTH 2)** **3.0 Units**
Biological anthropology explores the biological and adaptations of humans in relation to their different natural environments through the biological approach. This course provides information on how and why human populations vary within and between themselves; how and why humans have changed biologically and behaviorally through time; physical and behavioral comparisons between human and non-human primates; and biological and behavioral development from the earliest to modern humans. 48-54 hours lecture. CSU, UC. Offered Fall, Spring, Summer, Winter. (No prerequisite)

ANTH 101L (formerly ANTHRO1L) **Physical Anthropology Laboratory** **1.0 Unit**
Coordinated with the lecture, this optional lab provides hands-on experience in human genetics, variation, and evolution; comparisons of non-human primate behavior; knowledge of the human skeleton and forensic anthropology identification methods. 48-54 hours lecture. CSU, UC. Offered Fall, Spring, Summer, Winter. (Corequisite ANTH 101. Grade Option)

ANTH 102 (formerly ANTHRO2) **Introduction to Cultural Anthropology** **3.0 Units**
Cultural anthropology explores the social aspect of being human, in context with the multicultural approach. This course provides comparisons of all aspects of culture such as societal organization, economy, marriage and family, language development, gender issues, religion, and traditions and rituals. The development and evolution of cultural groups is discussed in relation to how several of these groups successfully adapt to particular environments. Drawing from anthropology and other social sciences, the history and development of Modern World System Theory and its effect on culture groups worldwide is outlined. 48-54 hours lecture. CSU, UC. Offered Fall, Spring, Summer, Winter. (No prerequisite. Grade Option)

ANTH 103 (formerly ANTHRO3) **Introduction to Archaeology** **3.0 Units**
Archaeology is the study of human groups in the context of their historic and prehistoric past. Through excavation of archaeology sites and laboratory analysis, archaeologists investigate and reconstruct the time frame, the life activities, and technological changes of ancient cultures. This course provides information on the history and development of archaeology, the archaeological methods used to excavate sites, how archaeologists relate the artifacts and other remains found on the sites to human behavior, how the sites within a region relate to each other and the natural surroundings, and the theoretical framework that helps to explain the behavioral and technological changes through time. 48-54 hours lecture. CSU, UC. Offered Fall, Spring. (No prerequisite. Grade Option)

ANTH 104 (formerly ANTHRO4) **Archaeology Field Class** **3.0 Units**
This course provides the student with hands-on experience in the excavation and investigation of an archaeology site and the materials contained in archaeology sites, the archaeological methods used to excavate sites, and how archaeologists relate the artifacts and other remains found on the sites to human behavior. Eight-nine hours lecture and 120 hours laboratory. CSU. Offered Spring. (No prerequisite. Grade Option).This course may be taken three times.

ANTH 106 **Introduction to Linguistic**
(formerly ANTH 90) **Anthropology** **3.0 Units**
This course examines human language systems and their significance in social context. Topics that will be covered include: the origins and evolution of language; nonhuman primate communication systems; language classification; language structure; semantic systems; the social and cultural function of language; language acquisition; language change and the reconstruction of language at earlier stages. 48-54 hours lecture. CSU (No prerequisite. Grade Option.)

ANTH 128 **Special Topics**
(formerly ANTHRO28)
See Special Topics listing (Variable units). CSU, UC

ANTH 151 **World Dance** **2.0 Units**
(formerly ANTHRO24)
This course is designed to introduce students to the elements of dances and dance techniques from specific regional areas, cultures, or ethnic groups. This introduction will include the geographic, historic, social and aesthetic factors that have shaped the development and function of such movement. Dances from at least three culture areas will be used as examples during a semester, and will vary from semester to semester. See cross listing for PE 151. 16-18 hours lecture and 48-54 hours laboratory. CSU, UC (No prerequisite) This course may be taken four times.

ART AND DESIGN

ART 51 **Macromedia Flash Application Design** **3.0 Units**
This class introduces web application design and development to students with no prior programming experience. Students will be instructed and practice creating media rich web applications. Instruction will cover using screens, built in component and behaviors. The course will introduce ActionScript programming. At the end of the course students will be able to design and construct Flash applications This class is the second class in a three-part series. 32-36 hours lecture and 48-54 hours laboratory. (No prerequisite) This course may be taken four times.

ART I01 **Survey of Art History**
(formerly ART1A) **(CAN ART 2)** **3.0 Units**
An historical survey of significant art from prehistoric times through the fourteenth century. 48-54 hours lecture. CSU, UC. Offered Fall. (No prerequisite) (ART 101 + ART 102 = CAN ART SEQ A)

ART I02 **Survey of Art History**
(formerly ART1B) **(CAN ART 4)** **3.0 Units**
An historical survey of significant art from the Renaissance through modern times. 48-54 hours lecture. CSU, UC. Offered Spring. (No prerequisite) (ART 101 + ART 102 = CAN ART SEQ A)

ART 104 **Film As An Art Form** **3.0 Units**
(formerly ART4)
Film as a form of art and its construction as a communicative, expression of global culture, politics, literature and gender will be studied. Important films will be viewed that address these topics. Students will learn to be more critical viewers of media and its presentation of world culture. 48-54 hours lecture. CSU, UC. (No prerequisite)

ART 105 **Introduction to Art** **3.0 Units**
(formerly ART5)
This course is a general introduction to the visual arts, its nature, vocabulary, media, and history. The course examines the historical and contemporary value of art to both the individual and society. Consideration will also be given to a study of the organization and component parts of the visual art and the various media used in the making of art. 48-54 hours lecture. CSU, UC. Offered Fall and alternate summers. (No prerequisite)

ART 106 **Art Concepts** **3.0 Units**
(formerly ART6)
This illustrated lecture course will introduce students to the practice, theory and history of art. Art's impact upon our contemporary society as well as its reflection of history and meaning will be investigated. 48-54 hours lecture. CSU, UC. Offered Spring and alternate summers. (No prerequisite. Grade Option.)

ART 107 **The Art and Life of Greece**
(formerly ART7) **3.0 Units**
This is an illustrated lecture course. Conceptual analysis of the effects of Greek art upon Greek life will be investigated from the formative years of 1100 B.C. (the evolvement of Western civilization) and present depictions. Students will investigate the visual statements, mythology, philosophies, and other matters relative to the Greek portrayals of man and his existence at specific times. 48-54 hours lecture. CSU, UC. Offered alternate semesters. (No prerequisite)

ART 108 **The Art and Life of Italy** **3.0 Units**
(formerly ART8)
This is an illustrated lecture course. The art and life of Italy will be analyzed from a conceptual aspect with the involvement of critical thinking. Study will involve the formation of the Roman Empire to present times, with emphasis upon the high renaissance, legend, philosophies, religions, and other matters relative to the Roman portrayals of man and his statements of life through art at specific times. 48-54 hours lecture. CSU, UC. Offered alternate semesters. (No prerequisite)

ART 109 **Survey of African American Art** **3.0 Units**
This course will survey the arts of the African peoples in diaspora from traditional African arts to contemporary times. Focus will be on identification of artists, art styles within their historical, cultural, political framework and exploration of aesthetic preference. 48-54 hours lecture. CSU, UC. (No prerequisite. Grade Option.)

ART 112 **Design I** **3.0 Units**
(formerly ART12A)
The focus of this course will be on the basics of design utilizing black and white graphic elements. Emphasis will be placed on the principles and practices of design involved in the production of art forms. Lectures will demonstrate examples of design in classic and contemporary works of art. 32-36 hours lecture and 48-54 hours laboratory. CSU, UC. Offered Fall, Spring and alternate summers. (No prerequisite) This course may be taken four times.

ART 113 **Design II** **3.0 Units**
(formerly ART12B)
A continuation of Art 112 utilizing the same principles of design expanded to color and three- dimension. Critiques and lectures will focus student's evaluative skills in applying comprehension of art history to contemporary concepts of design. 32-36 hours lecture and 48-54 hours laboratory. CSU, UC. Offered Spring. (No prerequisite)

ART 115 **Water-Based Media** **3.0 Units**
(formerly ART15)
An introduction to basic water based media and the methods used for applying pigment to paper. Color theory, design principles and a comprehensive history of the medium will be included. 32-36 hours lecture and 48-54 hours laboratory. CSU, UC. (No prerequisite) This course may be taken two times.

ART 120 Acrylic Painting
(formerly ART17A) (CAN ART 10) 3.0 Units
Designed as a problem solving course, students will be introduced to the basics of acrylic painting, design, conceptual thought, history, and composition. Knowledge of history and artists will be an asset to the students' comparative analogies of their work and its message. Repetition of this course provides the opportunity for increased skill development. 32-36 hours lecture and 48-54 hours laboratory. CSU, UC. Offered Fall. (No prerequisite) This course may be taken four times.

ART 121 Intermediate Acrylic Painting
(formerly ART17B) 3.0 Units
Problems of techniques, medium control, and creative validity will be presented to the student as he seeks to ratify his quality judgments in visual form through resolutions derived from a historical context and implemented into contemporary focus. Critical thinking is intended to be a major component of this course. Repetition of this course provides the opportunity for increased skill development. 32-36 hours lecture and 48-54 hours laboratory. CSU, UC. Offered Spring. (No prerequisite) This course may be taken four times.

ART 122 Life Drawing I 3.0 Units
(formerly ART18A) (CAN ART 24)
A beginning life drawing course emphasizing the study and analysis of the human form using basic art materials and fundamental drawing concepts. 32-36 hours lecture and 48-54 hours laboratory. CSU,UC. Offered Fall, Spring. (No prerequisite. ART 125 or ART 126 recommended.) This course may be taken four times.

ART 123 Intermediate Life Drawing
(formerly ART18B) 3.0 Units
Analysis and implementation of techniques to show expression, mass, motion; critical visualization by drawing direct studies from live models. Repetition provides the opportunity for increased skill development. 32-36 hours lecture and 48-54 hours laboratory. CSU, UC. Offered Fall, Spring. (No prerequisite) This course may be taken four times.

ART 124 Anatomy for Life Drawing
(formerly ART18C) 3.0 Units
Critical dissection of anatomical and physiological studies incorporated into the fine art of life drawing. Repetition of this course provides skill development. 32-36 hours lecture and 48-54 hours laboratory. CSU, UC. Offered Fall, Spring. (No prerequisite) This course may be taken four times.

ART 125 Drawing I
(formerly ART25A) (CAN ART 8) 3.0 Units
This course is an introduction to principles and techniques in drawing. Students will gain a working knowledge of line, shape, perspective, proportion, volume, and composition. Students will learn how to look at, evaluate and present art work as well as be introduced to traditional and contemporary drawing with an emphasis on the development of observational skills and creative thinking. 32-36 hours lecture and 48-54 hours laboratory. CSU, UC. Offered Fall, Spring. (No prerequisite. Grade option). This course may be taken four times.

ART 126 Drawing and Composition
(formerly ART25B) 3.0 Units
An intermediate drawing course emphasizing development of skills in various media and studies of compositional methods. Extended concentration is to include the ability to distinguish fact from judgment, belief from knowledge, and skills in elementary inductive and deductive visual processes which include an understanding of the formal and informal fallacies of language and thought in the artistic process. Repetition of this course provides the opportunity for increased skill development. 32-36 hours lecture and 48-54 hours laboratory. CSU, UC. Offered Spring. (No prerequisite) This course may be taken four times.

ART 128 Special Topics (formerly ART28)
See Special Topics listing (Variable units). CSU, UC

ART 129 Independent Study
(formerly ART29)
See Independent Study listing (1-3 units). CSU

ART 132 Advertising Art 3.0 Units
(formerly ART32)
Implementation of the elements and principles of advertising design. Involvement will include the invention of highly controlled images which are confronted by the consumer. Repetition of this course provides the opportunity for increased skill development. 32-36 hours lecture and 48-54 hours laboratory. CSU. Offered alternate years. (No prerequisite) This course may be taken two times.

ART 133 Computer Graphics 3.0 Units
(formerly ART33A)
The scope of this course is introductory in nature, involving the theory, basic principles, and techniques of computer-generated hi-resolution graphics, video ditherizing, image transfer, and fonts generation. Through individual resourcefulness and problem solving, the student will be presented with exercises involving critical thinking. 32-36 hours lecture and 48-54 hours laboratory. CSU, UC. Offered Spring. (No prerequisite)

ART 138 Cooperative Education
(formerly ART38)
See Cooperative Education Listing (1-8 units). CSU

ART 141 Sculpture I 3.0 Units
(formerly ART41)
Students explore the principles of three-dimensional forms in space in order to develop an understanding of the relationship between form, space and materials and process. In order to construct their own ideas in space students will become familiar with a variety of materials, which may include clay, metal, wood and stone. 32-36 hours lecture and 48-54 hours laboratory. CSU, UC. (No prerequisite)

ART 142 Sculpture II 3.0 Units
Students explore the traditional materials and techniques of sculpture such as building armatures, sculpting in wax, plaster and clay, mold making methods, and surface treatments for the sculptural pieces which may include stains, patina, antiquing and waxing of plaster and applying slips and glazes to clay. 32-36 hours lecture and 48-54 hours laboratory. (No prerequisite)

ART l50 Introduction to Oil Painting
(formerly ART19A) 3.0 Units
A basic course in painting with oil pigments. Emphasis in this course will involve problem solving experiences and critical judgments to correlate with individual aesthetics and to obtain unambiguous visual statements of knowledge and belief through the artistic process. Repetition of this course provides the opportunity for increased skill development. 32-36 hours lecture and 48-54 hours laboratory. CSU, UC. Offered alternate semesters. (No prerequisite. ART 125 and ART 112/113 recommended). This course may be taken four times.

ART l51 Intermediate Oil Painting
(formerly ART19B) 3.0 Units
There will be continuation of techniques covered in Art l9A with an emphasis upon aesthetics, art history, critical analysis, and creativity. The student, through his own resourcefulness, is to formulate problems of compositional design, control of the medium and establish value judgments based upon fact that will be reflected in his works. Repetition of this course provides the opportunity for increased skill development. 32-36 hours lecture and 48-54 hours laboratory. CSU, UC. Offered alternate semesters. (No prerequisite) This course may be taken four times.

ASTRONOMY

ASTR 101 Descriptive Astronomy 3.0 Units
(formerly ASTRONOMY1)
A comprehensive study of astronomy. The historical development of astronomy, the structure of the solar system, modern techniques and instruments, the character of nebulae and galaxies, stellar character and theories, and the philosophical implications of astronomical discoveries. 48-54 hours lecture. CSU, UC. Offered Fall, Spring. (No prerequisite)

ATHLETICS

ATHL 120 Varsity Baseball 3.0 Units
(formerly ATHLTCS 20)
Students will learn the basic skills, rules, and strategies for competition in baseball. CSU, UC (UC maximum credit allowed: 4 units) Offered Spring. This course may be taken four times.

ATHL 120P Preparation for Intercollegiate
(formerly ATHLTCS 20) Men's Baseball 0.5-1.0 Unit
This Men's Baseball course is designed to satisfy the interest, development and needs of the highly skilled student athlete. It will provide students with high level instruction and experience required for intercollegiate competition. CSU (No prerequisite. Grade Option.) Offered Fall, Winter, Summer. This course may be taken four times.

ATHL 121 Varsity Basketball (Men)
1.5 Units
(formerly ATHLTCS 21)
Students will learn the basic skills, rules, and strategies for competition in basketball. CSU, UC (UC maximum credit allowed: 4 units) Offered Fall, Spring. This course may be taken four times.

ATHL 121P Preparation for Intercollegiate
(formerly ATHLTCS 44) Men's Basketball 0.5-1.0 Unit
This Men's Basketball course is designed to satisfy the interest, development and needs of the highly skilled student athlete. It will provide students with high level instruction and experience required for intercollegiate competition. CSU (No prerequisite. Grade Option.) Offered Fall, Spring, Summer. This course may be taken four times.

ATHL 122 Varsity Basketball (Women)
(formerly ATHLTCS 22) 1.5 Units
Students will learn the basic skills, rules, and strategies for competition in basketball. CSU, UC (UC maximum credit allowed: 4 units) Offered Fall, Spring. This course may be taken four times.

ATHL 122P Preparation for Intercollegiate
(formerly ATHLTCS 41) Women's Basketball 0.5-1.0 Unit
This Women's Basketball course is designed to satisfy the interest, development and needs of the highly skilled student athlete. It will provide students with high level instruction and experience required for intercollegiate competition. CSU (No prerequisite. Grade Option.) Offered Fall, Spring, Summer. This course may be taken four times.

ATHL 123 Cross Country (Women) 3.0 Units
(formerly ATHLTCS 23)
This cross country course is designed to develop the knowledge, skills and strategy for the serious and recreational competitive athlete in collegiate long distance running. The course is designed to emphasize competition and will help the athlete achieve a higher level of competitive ability through instruction of skills, techniques, strategy and personal evaluation during or after competition. The students will be given an opportunity to compete at a wide range of competitive levels. CSU, UC. (No prerequisite. Recommended: high school or club cross country running.) This course may be taken four times.

ATHL 123P Preparation for Intercollegiate
(formerly ATHLTCS 23P) Women's Cross Country
0.5-1.0 Unit
This Women's Cross Country course is designed to satisfy the interest, development and needs of the highly skilled student athlete. It will provide students with high level instruction and experience required for intercollegiate competition. CSU (No prerequisite. Grade option.) Offered Spring, Summer. This course may be taken four times.

ATHL 124 Varsity Football 3.0 Units
(formerly ATHLTCS 24)
Students will learn the basic skills, rules, and strategies for competition in football. CSU, UC (UC maximum credit allowed: 4 units) Offered Fall. This course may be taken four times.

ATHL 124P Preparation for Intercollegiate
(formerly ATHLTCS 24P) Football 0.5-1.0 Unit
This Football course is designed to satisfy the interest, development and needs of the highly skilled student athlete. It will provide students with high level instruction and experience required for intercollegiate competition. CSU (No prerequisite. Grade Option.) Offered Spring, Summer. This course may be taken four times.

ATHL 125 Varsity Golf (Men) 3.0 Units
(formerly ATHLTCS 25)
Students will learn the basic skills, rules, and strategies for competition in golf. CSU, UC (UC maximum credit allowed: 4 units) Offered Spring. This course may be taken four times.

ATHL 125P Preparation for Intercollegiate
(formerly ATHLTCS 25P) Golf 0.5-1.0 Unit
This Golf course is designed to satisfy the interest, development and needs of the highly skilled student athlete. It will provide students with high level instruction and experience required for intercollegiate competition. CSU (No prerequisite) Offered Fall, Summer. This course may be taken four times.

ATHL 126 Varsity Soccer (Women)
(formerly ATHLTCS 26) 3.0 Units
Students will learn the basic skills, rules, and strategies for competition in soccer. CSU, UC (UC maximum credit allowed: 4 units) Offered Fall. This course may be taken four times.

ATHL 126P Preparation for Intercollegiate
(formerly ATHLTCS 45) Women's Soccer
0.5-1.0 Unit
This Women's Soccer course is designed to satisfy the interest, development and needs of the highly skilled student athlete. It will provide students with high level instruction and experience required for intercollegiate competition. CSU (No prerequisite. Grade Option.) Offered Spring, Summer. This course may be taken four times.

ATHL 127 Varsity Softball 3.0 Units
(formerly ATHLTCS 27)
Students will learn the basic skills, rules, and strategies for competition in softball. CSU, UC (UC maximum credit allowed: 4 units) Offered Spring. This course may be taken four times.

ATHL 127P Preparation for Intercollegiate
(formerly ATHLTCS 43) Women's Softball
0.5-1.0 Unit
This Women's Softball course is designed to satisfy the interest, development and needs of the highly skilled student athlete. It will provide students with high level instruction and experience required for intercollegiate competition. CSU (No prerequisite) Offered Fall, Winter, Summer. This course may be taken four times.

ATHL 128 Varsity Tennis (Women)
(formerly ATHLTCS 28) 3.0 Units
Students will learn the basic skills, rules, and strategies for competition in tennis. CSU, UC (UC maximum credit allowed: 4 units) Offered Spring. This course may be taken four times.

ATHL 128P Preparation for Intercollegiate
(formerly ATHLTCS 28P) Women's Tennis 0.5-1.0 Unit
This Women's Tennis course is designed to satisfy the interest, development and needs of the highly skilled student athlete. It will provide students with high level instruction and experience required for intercollegiate competition. CSU (No prerequisite. Grade Option.) Offered Fall, Winter, Summer. This course may be taken four times.

ATHL 129 Varsity Tennis (Men) 3.0 Units
(formerly ATHLTCS 29)
Students will learn the basic skills, rules, and strategies for competition in tennis. CSU, UC (UC maximum credit allowed: 4 units) Offered Spring. This course may be taken four times.

ATHL 129P Preparation for Intercollegiate
(formerly ATHLTCS 29P) Men's Tennis 0.5-1.0 Unit
This Men's Tennis course is designed to satisfy the interest, development and needs of the highly skilled student athlete. It will provide students with high level instruction and experience required for intercollegiate competition. CSU (No prerequisite. Grade Option.) Offered Fall, Winter, Summer. This course may be taken four times.

ATHL 130 Varsity Volleyball 3.0 Units
(formerly ATHLTCS 30)
Students will learn the basic skills, rules, and strategies for competition in volleyball. CSU, UC (UC maximum credit allowed: 4 units) Offered Fall. This course may be taken four times.

ATHL 130P Preparation for Intercollegiate
(formerly ATHLTCS 30P) Volleyball 0.5-1.0 Unit
This Volleyball course is designed to satisfy the interest, development and needs of the highly skilled student athlete. It will provide students with high level instruction and experience required for intercollegiate competition. CSU (No prerequisite) Offered Spring, Winter, Summer. This course may be taken four times.

ATHL 132 Varsity Wrestling (Men) 3.0 Units
(formerly ATHLTCS 32)
Students will learn the basic skills, rules, and strategies for competition in wrestling. CSU, UC credit pending (UC maximum credit allowed: 4 units) Offered Fall. This course may be taken four times.

ATHL 132P Preparation for Intercollegiate
(formerly ATHLTCS 32P) Wrestling 0.5-1.0 Unit
This Wrestling course is designed to satisfy the interest, development and needs of the highly skilled student athlete. It will provide students with high level instruction and experience required for intercollegiate competition. CSU (No prerequisite. Grade Option.) Offered Spring, Summer. This course may be taken four times.

ATHL 133 Men's Cross Country 3.0 Units
(formerly ATHLTCS 33)
A cross country course designed to develop the knowledge, skills and strategy for the serious and recreational competitive athlete in collegiate long distance running. The course is designed to emphasize competition and will help the athlete achieve a higher level of competitive ability through instruction of skills, techniques, strategy and personal evaluation during or after competition. Students will be given an opportunity to compete. CSU, UC. (No prerequisite) Offered Fall. This course may be taken four times.

ATHL 133P Preparation for Intercollegiate
(formerly ATHLTCS 33P) Men's Cross Country
0.5-1.0 Unit
This Men's Cross Country course is designed to satisfy the interest, development and needs of the highly skilled student athlete. It will provide students with high level instruction and experience required for intercollegiate competition. CSU (No prerequisite. Grade Option.) Offered Spring, Summer. This course may be taken four times.

ATHL 134 Track and Field (Women)
(formerly ATHLTCS 34) 3.0 Units
Students will demonstrate knowledge of rules, meet organizations, proper mechanics of running, strategies necessary for competition in collegiate track and selected field events. Students must demonstrate a desire to learn, train, accept challenges, and excel in collegiate track and field. CSU, UC (UC maximum credit allowed: 4 units) Offered Spring. This course may be taken four times.

ATHL 134P Preparation for Intercollegiate
(formerly ATHLTCS 34P) Women's Track and Field
0.5-1.0 Unit
This Women's Track and Field course is designed to satisfy the interest, development and needs of the highly skilled student athlete. It will provide students with high level instruction and experience required for intercollegiate competition. CSU (No prerequisite. Grade Option.) Offered Fall, Winter, Summer. This course may be taken four times.

ATHL 135 Track and Field (Men) 3.0 Units
(formerly ATHLTCS 35)
Students will demonstrate knowledge of rules, meet organizations, proper mechanics of running, strategies necessary for competition in collegiate track and selected field events. Students must demonstrate a desire to learn, train, accept challenges, and excel in collegiate track and field. CSU, UC (UC maximum credit allowed: 4 units) Offered Spring. This course may be taken four times.

ATHL 135P Preparation for Intercollegiate
(formerly ATHLTCS 35P) Men's Track and Field
0.5-1.0 Unit
This Men's Track and Field course is designed to satisfy the interest, development and needs of the highly skilled student athlete. It will provide students with high level instruction and experience required for intercollegiate competition. CSU (No prerequisite. Grade Option.) Offered Fall, Winter, Summer. This course may be taken four times.

ATHL 140 Varsity Soccer (Men) 3.0 Units
(formerly ATHLTCS 40)
Students will demonstrate knowledge of rules, basic skills, and offensive and defensive strategies necessary to compete at collegiate level for soccer. CSU, UC. (No prerequisite) Offered Fall. This course may be taken three times.

ATHL 140P Preparation for Intercollegiate
(formerly ATHLTCS 42) Men's Soccer 0.5-1.0 Unit
This Men's Soccer course is designed to satisfy the interest, development and needs of the highly skilled student athlete. It will provide students with high level instruction and experience required for intercollegiate competition. CSU (No prerequisite. Grade Option.) Offered Spring, Summer. This course may be taken four times.

AUTOMOTIVE

AUTO 50 Introduction to Automotive Technology 4.0 Units
This course provides the student with a basic knowledge of automotive systems and components. Information covered will serve as a foundation and prerequisite for advanced automotive classes. Topics covered will include safety, tool and shop equipment use, industry practices, technician certification, theory and design of the major automotive systems. 48-54 hours lecture and 48-54 hours laboratory. (No prerequisite) This course may be taken two times.

AUTO 51 Automotive Engines and Drive Trains 12.0 Units
This course covers techniques used by the Automotive Industry to diagnose and repair engine and drive train malfunctions, cylinder head, cylinder block, and drive train systems. Instruction will cover the diagnosis and repair of engine and drive train systems, cylinder heads, cylinder blocks, rotating assemblies, and basic drive train as they apply to the automobile. 128-144 hours lecture and 192-216 hours laboratory. (Prerequisite: AUTO 50 with a minimum grade of "C") This course may be taken four times.

AUTO 51A Engine Repair 6.0 Units
This course provides the student with the knowledge necessary to diagnose and repair engines. Information covered will include diagnosis and repair of cylinder head and valve train, engine block, lubrication, cooling systems and general engine assembly. 72-81 hours lecture and 72-81 hours laboratory. (No Prerequisites) This course may be taken four times.

AUTO 52.0 (formerly AUTO 83) Automotive Cylinder Head Machinist 4.0 Units
This course covers diagnosis and repair of cylinder heads and their components. 48-54 hours lecture and 48-54 hours laboratory. (Prerequisite: AUTO 51 or equivalent) This course may be taken four times.

AUTO 53.0 (formerly AUTO 75) Automotive Machinist/Cylinder Block Specialist 4.0 Units
This course covers diagnosis and repair of the components of Cylinder Block: cylinder bores, oil galley, crank shaft bores, camshaft bores. Related parts will be disassembled inspected and determination made of the serviceability of existing parts. The need for replacement parts will be established as the components are reassembled. 48-54 hours lecture and 48-54 hours laboratory. (Prerequisite: AUTO 51)

AUTO 54.0 (formerly AUTO 132) Automotive Machinist/Engine Assembly Specialist 4.0 Units
This course covers the inspection and reassembly of an engine assembly. Operations include valve timing component installation and verification, inspection and mounting of cylinder heads on the cylinder block, all peripheral engine components (water pump, fuel pump, intake manifold, exhaust manifold, fuel system, ignition system), and initial setup and test run. This course will not apply to the Associate Degree. 48-54 hours lecture and 48-54 hours laboratory. (Prerequisite: AUTO 51)

AUTO 55.0 (formerly AUTO 56) Automotive, Standard Transmission and Differential Overhaul 5.0 Units
This course covers diagnosis and repair of the components of standard transmission systems, gears, synchronizers, bearings, clutches, and electronic controls. Standard transmissions and related parts will be disassembled, inspected and determination made of the serviceability of existing parts. The need for replacement parts will be established as the components are disassembled, inspected and reassembled. 72-81 hours lecture and 72-81 hours laboratory. (Prerequisite: AUTO 51) This course may be taken four times.

AUTO 56.0 (formerly AUTO 125) Automatic Transmission Overhaul 5.0 Units
This course covers diagnosis and repair of the components of automatic transmission systems: clutches, bands, servo valve bodies, hydraulic pumps, cases, governors, torque converters, and electronic controls. Automatic transmissions and related parts will be disassembled, inspected and determination made of the serviceability of existing parts. The need for replacement parts will be established as the components are disassembled, inspected and reassembled. 48-54 hours lecture and 96-108 hours laboratory. (Prerequisite: AUTO 51) This course may be taken four times.

AUTO 56A (formerly AUTO 58) Transmission Computer Systems 2.0 Units
This course covers techniques used by the Automotive Industry to diagnose and repair transmission computer systems. Instruction will cover the diagnosis and repair of runability problems relating to electronic malfunctions of the computer controlled transmission. 24-27 hours of lecture and 24-27 hours laboratory. (Prerequisite: AUTO 56) This course may be taken four times.

AUTO 57.0 (formerly AUTO 52) Automotive Brakes, Suspension, and Wheel Alignment 12.0 Units
This course covers diagnosis and repair and maintenance of the brake and suspension systems; drum and disc brakes, brake hydraulics, power assist units, front and rear suspension systems, shocks and struts, steering linkages and power steering systems. All aspects of alignments will be covered including two and four wheel and struts on different alignment apparatuses. Maintenance of all parts of the brake and suspension systems will be covered. 128-144 hours lecture and 216-243 hours laboratory. (Prerequisite: AUTO 50 with a minimum grade of "C".) This course may be taken four times.

AUTO 58 (formerly AUTO 81) Automotive Lubrication Technician 2.0 Units
This course covers techniques used by the Automotive Industry to perform routine preventative maintenance. Instruction will cover changing automotive fluids, lubrication, safety inspections, installing filters and ignition components. 24-27 hours lecture and 24-27 hours laboratory. (No prerequisite) This course may be taken four times.

AUTO 59.0 (formerly AUTO 82) Automotive Tire Technician 2.0 Units
This course covers techniques used by the Automotive Industry to perform duties of a tire technician. Instruction will cover brake and suspension inspections, mounting, balancing, and repairing tires. 24-27 hours lecture and 24-27 hours laboratory. (No prerequisite) This course may be taken four times.

AUTO 60 (formerly AUTO 69) Automotive Suspension and Alignment 4.0 Units
This course covers diagnosis and repair of the components of automotive suspension, front and rear suspensions, shocks, struts, control arms, bushings, steering components, and related parts will be disassembled, inspected and determination made of the serviceability of existing parts. The need for replacement parts will be established as the components are disassembled, inspected and reassembled. Alignments of different types of vehicles, including two and four wheel alignments, computer and non computer alignments will be completed. 48-54 hours lecture and 48-54 hours laboratory. (Prerequisite: AUTO 50 or equivalent experience in the automotive repair field.) This course may be taken four times.

AUTO 61.0 Automotive Brakes 4.0 Units
(formerly AUTO 68)
This course covers diagnosis and repair of the components of automotive brake systems: basic disassembled, inspected and determination made of the serviceability of existing parts. The need for replacement parts will be established as the components are disassembled inspected and reassembled. 48-54 hours lecture and 48-54 hours laboratory. (Prerequisite: AUTO 50 or equivalent experience) This course may be taken four times.

AUTO 62 Automotive Detailing 2.0 Units
This course provides students with the knowledge and skills necessary to correctly perform an automotive detail. Topics covered will include exterior paint polishing and treatment, interior and upholstery cleaning techniques, proper chemical and equipment usage, and dealership porter responsibilities. 16-18 hours lecture and 48-54 hours laboratory. (No Prerequisite) This course may be taken four times.

AUTO 63.0 Introduction to Diesel
(formerly AUTO 55) Engine Repair 4.0 Units
This course covers the techniques used by the Automotive and Medium Truck industries to diagnose and repair compression pressure combustion designed, four stroke, diesel fueled engines. Instruction will cover diesel engine design and operation, diesel fuel systems, air induction systems, light/medium duty electrical, and introduction to electronic fuel control. This course emphasizes the theory and operation of light/medium diesel engines. 48-54 hours lecture and 48-54 hours laboratory. (Prerequisite: AUTO 50)

AUTO 63A Advanced Diesel Engine Repair
(formerly AUTO 74) 4.0 Units
This course covers the techniques used by heavy duty truck industries to diagnose and repair compression pressure combustion designed, four stroke and two stroke diesel fueled engines. Instruction will cover diesel engine design and operation, diesel fuel systems, air induction systems, heavy duty electrical, and introduction to electronic fuel control. This course emphasizes hands-on frame and shop engine overhaul. 48-54 hours lecture and 48-54 hours laboratory. (Prerequisite: AUTO 51) This course may be taken four times.

AUTO 64.0 Medium/Heavy Duty Truck
(formerly AUTO 79) Suspension and Steering
4.0 Units
This course will provide students with the knowledge and techniques used by the trucking industry to diagnose, adjust, and repair medium/heavy duty truck suspension and steering systems. Instruction will cover theory, inspection, maintenance, and repair of suspension and steering systems. 48-54 hours lecture and 48-54 hours laboratory. (No prerequisite) This course may be taken three times.

AUTO 65.0 Heavy Duty Diesel Truck
(formerly AUTO 73) Lubrication and
Inspection Technician 4.0 Units
This course covers the techniques used by the Trucking Industry to perform routine preventative maintenance on heavy duty diesel trucks. Instruction will cover changing fluids, lubrication, safety inspections, and installing filters. 48-54 hours lecture and 48-54 hours laboratory. (No prerequisite) This course may be taken four times.

AUTO 65.2 Fundamentals of Heavy Duty
Truck and Off Highway
Equipment Hydraulics 4.0 Units
Topics covered include introduction to hydraulic systems components and theory of operation, entry level skills to disassemble, inspect, reassemble and test hydraulic components and understand the relationship between component failure and system operation. 48-54 hours lecture and 48-54 hours laboratory. (No prerequisite. Grade Option.) This course may be taken four times.

AUTO 65.3 Advanced Heavy Duty Truck and
Off Highway Equipment
Hydraulics 6.0 Units
This course covers advanced hydraulic systems components and theory of operation, entry level skills to disassemble, inspect, reassemble and test hydraulic components and understand the relationship between component failure and system operation, hydrostatic motors, pumps, valves, and inspection and repair. 64-72 hours lecture and 96-108 hours laboratory. (Prerequisite: AUTO 65.2. Grade Option.) This course may be taken four times.

AUTO 67.0 Heavy Duty Truck Air Brakes
(formerly AUTO 88) 4.0 Units
This course covers the techniques used by the trucking industry to diagnose and repair heavy duty truck air brake systems. Instruction will cover theory, inspection, maintenance, and repair of air brake systems. 48-54 hours lecture and 48-54 hours laboratory. (No prerequisite) This course may be taken two times.

AUTO 68.0 Heavy Duty Truck
(formerly AUTO 89) Hydraulic Brakes 4.0 Units
This course covers the techniques used by the trucking industry to diagnose and repair heavy duty truck hydraulic brake systems. Instruction will cover theory, inspection, maintenance, and repair of hydraulic brake systems. 48-54 hours lecture and 48-54 hours laboratory.(No prerequisite) This course may be taken four times.

AUTO 70.0 Small Engine Repair 4.0 Units
(formerly AUTO 87)
This class covers the fundamentals of small internal combustion engines and their uses in various forms of equipment and light vehicles. Topics covered will include, but not limited to, theory of small internal combustion engines, troubleshooting, repair and small engine applications. 48-54 hours lecture and 48-54 hours laboratory.(No prerequisite) This course may be taken four times.

AUTO 71.0 Motorcycle Engine Repair
(formerly AUTO 96) 4.0 Units
This course provides the student with the knowledge necessary to diagnose and repair motorcycle engines/transmissions. Information covered will include engine diagnosis, disassembly and inspection, valve reconditioning, bearing replacement, piston and ring service, and engine reassembly. 48-54 hours lecture and 48-54 hours laboratory. (No prerequisite) This course may be taken four times.

AUTO 73.0 Motorcycle Service Tune Up
(formerly AUTO 78) and Maintenance 4.0 Units
This course provides the student with the knowledge necessary to perform motorcycle tune up and maintenance. Information covered will include chassis and suspension systems, servicing schedules and procedures, tire care, tune up schedules and procedures, wheel lacing, truing, and balancing, brake systems, clutch systems, drive systems, general shop procedures and service writing. 48-54 hours lecture and 48-54 hours laboratory. (No prerequisite) This course may be taken two times.

AUTO 74.0 Motorcycle Fuel and Emission
Systems Repair 4.0 Units
This course provides the student with the knowledge necessary to diagnose and repair motorcycle fuel and emission systems. Information covered will include a study of carburetor types, construction and operating principles, fuel injection principles, supercharging and turbocharging principles, two and four stroke motorcycle exhaust principles, motorcycle emission control principles, diagnosis and repair, fuel and emission system performance analysis. 48-54 hours lecture and 48-54 hours laboratory. (No prerequisite) This course may be taken four times.

AUTO 75.0 Motorcycle Electrical and Ignition Systems Repair 4.0 Units

This course provides the student with the knowledge necessary to diagnose and repair motorcycle ignition and electrical systems. Information covered will include electrical theory; motorcycle electrical circuitry and wiring schematics; electrical component identification, diagnosis and repair; motorcycle ignition systems identification, diagnosis and repair; ignition system performance analysis. 48-54 hours lecture and 48-54 hours laboratory. (No prerequisite) This course may be taken four times.

AUTO 77 (formerly AUTO 62) Automotive Service Writing and Shop Manager 3.0 Units

This course prepares students to manage an automotive repair shop. Topics covered include work order preparation, parts and labor estimating, parts ordering, office and shop organization, writing a legal work order, sales skills, and customer relations. 48-54 hours lecture. . (No prerequisite) This course may be taken four times.

AUTO 77.1 Automotive Leadership and Team Building 3.0 Units

This course provides the student with the knowledge necessary to successfully build a functional automotive team and be an effective automotive team leader. Topics covered will include automotive industry team development, recruitment and retention of team members. The course will also cover automotive industry motivation and compensation and the creation and maintenance of employee policies and procedures handbooks. 48-54 hours lecture. (No prerequisite. Grade Option) This course may be taken four times.

AUTO 77.2 Automotive Safety Training for Managers 3.0 Units

This course provides the student with the knowledge necessary to initiate and maintain an effective automotive safety training program in an automotive repair facility. Topics covered will include employee "Right to Know" laws and training requirements, safety audits and facility assessment, hazardous communications guidelines, personal protective equipment, and material handling and storage. 48-54 hours lecture. (No prerequisite) This course may be taken four times.

AUTO 77L (formerly AUTO 62L) Automotive Service Writing and Shop Manager Laboratory 2.0 Units

This course prepares students to effectively write automotive service orders and manage an automotive repair shop. Topics covered include labor guide look up and labor calculation, work order preparation, parts and labor estimating, parts ordering, office and shop organization, writing a legal work order, sales skills, and customer relations. 96-108 hours laboratory. (No Prerequisite) This course may be taken four times.

AUTO 78.0 Auto Parts Specialist 4.0 Units

This course prepares students to perform the duties of a counterperson in an auto parts store. Topics covered will include automotive assemblies, systems and basic parts. Course includes instruction in customer service, telephone technique, sales, merchandising, and cash drawer management. 48-54 hours lecture and 48-54 hours laboratory. (No prerequisite.) This course may be taken four times.

AUTO 79.0 Automotive Tune-Up, Emission Control, and Fuel System 12.0 Units

This course covers techniques used by the automotive industry to diagnose and repair ignition systems, fuel systems, and emission control systems. Instruction will cover the diagnosis and repair of conventional and electronic ignition systems, conventional and feedback carburetors, fuel injection, and emission control devices. 128-144 hours lecture and 192-216 hours laboratory. (No prerequisite.) This course may be taken four times.

AUTO 79A (formerly AUTO 80) Basic Tune-Up 2.0 Units

This course covers techniques used by the Automotive Industry to diagnose and repair fuel and ignition systems. Topics will cover the diagnosis and repair of conventional and electronic ignition systems, fuel systems, and introduction to automotive computers. 24-27 hours lecture and 24-27 hours laboratory. (No prerequisite) This course may be taken four times.

AUTO 79B (formerly AUTO 115) Trouble Shooting and Repair of Ignition and Fuel Systems 4.0 Units

This course covers techniques used by the automotive industry to diagnose and repair ignition systems and fuel systems. Topics covered included the diagnosis and repair of conventional and electronic ignition systems, conventional and feed back carburetors, along with emission control devices. (No prerequisite) This course may be taken four times. 48-54 hours lecture and 48-54 hours laboratory.

AUTO 80.0 (formerly AUTO 54) Automotive Computers, Electronics and Electrical Systems 12.0 Units

This course covers techniques used by the automotive industry to diagnose and repair electrical malfunctions, computer, fuel injection, and electronic ignition systems. Instruction will cover the diagnosis and repair of electronic ignition systems, alternators, starters, computers, and basic electrical and electronic concepts as they apply to the automobile. 128-144 hours lecture and 192-216 hours laboratory. This course may be taken four times.

AUTO 80.6 Introduction to Automotive Electricity 3.0 Units

This course covers electrical theory, basic electricity, electrical safety procedures, electrical diagnostic equipment, and industry approved procedures to diagnose and repair electrical malfunctions in the automobile. 48-54 hours lecture. (No prerequisite. Grade Option.) This course may be taken four times.

AUTO 80A (formerly AUTO 119) Automotive Computers, Electronics, and Electrical Systems 4.0 Units

This course covers techniques used by the automotive industry to diagnose and repair computer and fuel injection systems. Topics covered include the diagnosis and repair of electronic ignition systems, alternators and starters. Basic electrical and electronic concepts as they apply to the automobile. 48-54 hours lecture and 48-54 hours laboratory. (No prerequisite) This course may be taken four times.

AUTO 82.0 (formerly AUTO 93B) Automotive Electrical Repair 4.0 Units

This course provides the student with the knowledge necessary to diagnose and repair automotive malfunctions including lighting systems, electrical instruments and accessories, electrical door components, air bags, and alarm systems. Information covered will include electrical fundamentals, test equipment, electrical circuits, electrical malfunctions, wiring diagrams, and electrical diagnosis. 48-54 hours lecture and 48-54 hours laboratory. (No prerequisite) This course may be taken four times.

AUTO 83D (formerly AUTO 60D) Basic Area California Clean Air Car Course 4.0 Units

This Bureau of Automotive Repair (BAR) Course provides the student with the knowledge necessary to perform a smog inspection in a basic inspection area according to BAR guidelines, generic On Board Diagnostic II (OBD II) systems. Information covered will include

preconditioning procedures, proper use of smog test equipment, current laws and regulations, consumer waiver and extension procedures, generic OBD II information, BAR required update courses. This class satisfies the BAR requirement for the Basic Area California Clean Air Car Course. 48-54 hours lecture and 48-54 hours laboratory. (No prerequisite) This course may be taken four times.

AUTO 84.0 Enhanced Area California (formerly AUTO 61) Clean Air Car Course 1.5 Units
This course covers information needed to prepare students to take the California State Smog Examination for an enhanced emissions area. Topics covered include the diagnosis and repair for oxides of nitrogen, oxygen sensor evaluation, emission failure diagnostic procedures, and dynamometer safety. This course trains technicians to use BAR '97 loaded mode test equipment and lab scopes. This class combines the BAR Dynamometer Diagnostics Update Class and 8 Hour Dynamometer Safety Class. 16-18 hours lecture and 24-27 hours laboratory. (No prerequisite) This course may be taken four times.

AUTO 85.0 Engine Performance 1.0 Unit (formerly AUTO 91)
This course provides the student with the knowledge necessary to take a California Alternative Test for Engine Performance. Information covered will include engine testing and diagnosis, fuel management, ignition systems, computer theory and testing. Successful completion of this course satisfies the California Bureau of Automotive Repair's requirements for engine performance. 8-9 hours lecture and 24-27 hours laboratory. (No prerequisite) This course may be taken four times.

AUTO 85A Advanced Engine Performance (formerly AUTO 92) 1.0 Unit
This course is preparation for the Bureau of Automotive Repair California Alternative Test for Advanced Engine Performance. Information covered will include engine testing and diagnosis, fuel management, ignition systems, computer diagnosis and repair. Successful completion of this course satisfies the California Bureau of Automotive Repairs requirements for advanced engine performance. Eight-nine hours lecture and 24-27 hours laboratory. (No prerequisite) This course may be taken four times.

AUTO 85B Automotive Electrical and Electronic Systems 1.0 Unit (formerly AUTO 93)
This course is preparation for the Bureau of Automotive Repair California Alternative Test for Automotive Electrical and Electronic Systems. Information covered will include test equipment, electrical circuits, electrical malfunctions, wiring diagrams, and electrical diagnosis. Successful completion of this course satisfies the California Bureau of Automotive Repairs requirements for automotive electrical/electronic training. Eight – nine hours lecture and 24-27 hours laboratory. (No prerequisite) This course may be taken four times.

AUTO 86.1 Import Sport Tuning Engine Performance 4.0 Units
This course provides the student with the knowledge to properly install aftermarket engine performance parts while staying in the confines of applicable state and federal laws. Topics discussed will include forced air induction, exhaust systems, computerized fuel and ignition system modifications. 48-54 hours lecture and 48-54 hours laboratory. (No prerequisite) This course may be taken four times.

AUTO 86.2 Import Suspension Sport Tuning 4.0 Units
This course provides the student with the knowledge to install aftermarket lowering kits, suspension enhancements and alignment procedures for modified suspension systems. Information covered will include suspension geometry, accepted procedures for lowering vehicles, shock absorber choices, tire choices for sport tuned vehicles, and maintenance of modified suspensions. 48-54 hours lecture and 48-54 hours laboratory. (No prerequisite) This course may be taken four times.

AUTO 86.3 Extreme On and Off Road Suspension 4.0 Units
This course provides the student with the knowledge to install aftermarket lift kits, prerunner aftermarket fenders, modify gear ratios, and alignment procedures for modified suspension systems. Information covered will include suspension geometry, lift kit installation, vehicle raising procedures, prerunner aftermarket accessories, tire choices for modified vehicles, and maintenance of modified (raised) suspensions. 48-54 hours lecture and 48-54 hours laboratory. (No prerequisite) This course may be taken four times.

AUTO 86.4 Aftermarket Electrical Accessories 4.0 Units
This course provides the student with the knowledge to install aftermarket electrical accessories. Information covered will include electrical theory, installation of stereos, amplifiers, sub-woofers, and aftermarket lights. 48-54 hours lecture and 48-54 hours laboratory. (No prerequisite) This course may be taken four times.

AUTO 86.5 Import Body Customizing 4.0 Units
This course provides the student with the knowledge and skills necessary to customize and install aftermarket body parts. Course covers installation and customization of metal, fiberglass and high carbon fiber body parts, wings, spoilers, ground effects, and door direction reversing. This course also covers shaving door handles and installing remote control door release solenoids. 48-54 hours lecture and 48-54 hours laboratory. (No prerequisite) This course may be taken four times.

AUTO 86.6 American Iron Hot Rods 4.0 Units
This course provides the student with the knowledge to properly modify classic domestic vehicles. Topics covered will include engine performance enhancement and suspension modification. 48-54 hours lecture and 48-54 hours laboratory. (No prerequisite) This course may be taken four times.

AUTO 91A Auto Body Repair I 4.0 Units (formerly AUTO 64)
Basic auto body repair and refinishing techniques to prepare students with entry level skills used by the automotive industry. 48-54 hours lecture and 48-54 hours laboratory. (No prerequisite) This course may be taken four times.

AUTO 91B Auto Body Repair II 4.0 Units (formerly AUTO 85)
This course is designed for the student who has received instruction in basic auto body repair. Topics covered will include structural repair, automotive refinishing, and damage analysis. The course will focus on developing auto body skills in a hands-on environment with emphasis on improving speed and workmanship. 48-54 hours lecture and 48-54 hours laboratory. This course may be taken four times.

AUTO 91L Automotive Auto Body (formerly AUTO 64L) Laboratory 1.0 Unit
A laboratory class to develop skills in electrical, auto body and refinishing procedures. 48-54 hours laboratory. (No prerequisite) This course may be taken four times.

AUTO 92.0 Auto Body Damage Estimating I (formerly AUTO 86) 2.0 Units
This class covers the basic of auto body damage estimating. Topics covered will include, but not limited to, sheet metal damage, primary and secondary frame and/or unibody damage, painting and blending, repair vs. replacement of components, and two or four wheel alignment needs. 24-27 hours lecture and 24-27 hours laboratory. (No prerequisite) This course may be taken four times.

AUTO 95A **Automotive Laboratory** **1.0 Unit**

A laboratory class to develop skills in engine repair, tune up, emissions, electrical, suspension, brakes, and general maintenance procedures. 48-54 hours laboratory. (No prerequisite) This course may be taken four times.

AUTO 95B **Automotive Laboratory** **2.0 Units**

A laboratory class to develop skills in engine repair, tune up, emissions, electrical, suspension, brakes, and general maintenance procedures. 96-108 hours laboratory. (No prerequisite) This course may be taken four times.

AUTO 97.0 **Automotive Air Conditioning and Heating Systems** **4.0 Units**
(formerly AUTO 117)

This course covers diagnosis and repair of the components of air conditioning and heating systems; evaporators, compressors, control valves, condensers, blowers, heater cores, and all lines and hoses. Air conditioning and heating related parts will be disassembled, inspected and determination made of the serviceability of existing parts. The need for replacement parts will be established as the components are reassembled. Recovery and charging of different systems will be covered for both R-12 and R-134 systems. 48-54 hours lecture and 48-54 hours laboratory. (No prerequisite) This course may be taken four times.

AUTO 98 **Special Topics**

See Special Topics listing (Variable units).

AUTO 99 **Car Care Clinic** **1.0 Unit**
(formerly AUTO 66)

This course covers preventative maintenance techniques for the modern automobile. Instruction will cover the Scheduling of preventive maintenance procedures, interactions wit auto repair shops, vehicle purchasing techniques, theory and operation of the engine, drive train, suspension, cooling system, brake and lighting system. One and one-half lecture hours, one and one-half laboratory hours per week for nine weeks. (No prerequisite) This course may be taken four times.

AUTO 138 **Cooperative Education**
(formerly AUTO 38)

See Cooperative Education listing (1-8 units). CSU

AVIATION

AVA 51 **General Aviation I** **7.0 Units**

This course is designed to prepare students for a career in aviation maintenance technology. Topics include math, basic electricity, basic physics, fluid lines and fittings and materials and processes. 48-54 hours lecture and 192-216 hours laboratory. (No prerequisite. Grade Option.) This course may be taken four times.

AVA 52 **General Aviation II** **7.0 Units**

This course is designed to prepare students for a career in aviation maintenance technology. Topics include maintenance and ground operations. 48-54 hours lecture and 192-216 hours laboratory. (No prerequisite. Grade Option.) This course may be taken four times.

AVA 61 **Airframe I** **7.0 Units**

This course is designed to prepare students for a career in aviation maintenance technology. Topics include aircraft materials (wood, metal, nonmetallic), coverings and finishes, aircraft inspection, assembly and rigging and welding. 48-54 hours lecture and 192-216 hours laboratory. (No prerequisite. AVA 51 and AVA 52 recommended. Grade Option.) This course may be taken four times.

AVA 62 **Airframe II** **7.0 Units**

This course is designed to prepare students for a career in aviation maintenance technology. Topics include aircraft atmosphere, communication, navigation, fuel, landing gear, hydraulic, and pneumatic power systems. 48-54 hours lecture and 192-216 hours laboratory. (No prerequisite. AVA 51 and AVA 52 recommended. Grade Option.) This course may be taken four times.

AVA 63 **Airframe III** **7.0 Units**

This course is designed to prepare students for a career in aviation maintenance technology. Topics include aircraft electrical systems, positioning and warning systems, ice and rain control systems, and fire protection systems. 48-54 hours lecture and 192-216 hours laboratory. (No prerequisite. AVA 51 and AVA 52 recommended. Grade Option.) This course may be taken four times.

AVA 71 **Powerplant I** **7.0 Units**

This course is designed to prepare students for a career in aviation maintenance technology. Topics include reciprocating engines, turbine engines, and engine inspection. 48-54 hours lecture and 192-216 hours laboratory. (No prerequisite. AVA 51 and AVA 52 recommended. Grade Option.) This course may be taken four times.

AVA 72 **Powerplant II** **7.0 Units**

This course is designed to prepare students for a career in aviation maintenance technology. Topics include induction and engine airflow systems, engine exhaust and reverser systems, and propellers. 48-54 hours lecture and 192-216 hours laboratory. (No prerequisite. AVA 51 and AVA 52 recommended. Grade Option.) This course may be taken four times.

AVA 73 **Powerplant III** **7.0 Units**

This course is designed to prepare students for a career in aviation maintenance technology. Topics include engine instrument systems, engine electrical, ignition and starting systems, and engine fuel systems. 48-54 hours lecture and 192-216 hours laboratory. (No prerequisite. AVA 51 and AVA 52 recommended. Grade Option.) This course may be taken four times.

BASIC SKILLS
(Developmental Education)

IMPORTANT NOTE: Basic Skills courses offered in units or modules. The student must spend 36 hours to complete 1.0 unit, 72 hours to complete 2.0 units, and 108 hours to complete 3.0 units. Instruction is by computer and handwritten assignments. Individual assistance is provided.

BSKL 1 **Reading and Writing One** **2.0 Units**

This course is the first in a series that focuses on reading and writing skills. Students develop their vocabulary base along with grammar and sentence writing skills. 16-18 hours lecture and 48-54 hours laboratory. This course will not apply to the Associate Degree. (No prerequisite. Credit/No Credit.) This course may be taken two times.

BSKL 2 **Reading and Writing Two** **2.0 Units**

This course is the second in a series that focuses on reading and writing skills. Students develop their reading comprehension and paragraph writing skills. 16-18 hours lecture and 48-54 hours laboratory. This course will not apply to the Associate Degree. (Prerequisite: BSKL 1. Credit/No Credit.) This course may be taken two times.

BSKL 10A (formerly BSKL 110A) Beginning Word Knowledge and Reading Skills 1.0 Unit
The course is the first in a series of three courses that focus on reading skills. Students develop their vocabulary skills and abilities to recall factual information from non-fiction readings. Students learn how to use contextual clues, word structure clues and memorization techniques. Students also read and respond to a number of short reading selections and one non-fiction book. This course does not apply to the Associate Degree. (No prerequisite. Credit/No Credit.)

BSKL 10B (formerly BSKL 110B) Intermediate Word Knowledge and Reading Skills 1.0 Unit
The course is a continuation of BSKL 10A. Students develop their vocabulary and reading skills by learning how to use dictionaries and word structure clues and by learning how to distinguish topics and main ideas from supporting details in paragraphs and short essays. Students also read and respond to a number of reading selections and one non-fiction book. This course does not apply to the Associate Degree. (No prerequisite. Credit/No Credit.)

BSKL 10C (formerly BSKL 110C) Advanced Word Knowledge and Reading Skills 1.0 Unit
The course is a continuation of BSKL 10A and BSKL 10B. Students develop their vocabulary and reading skills by learning how to use word structure and context clues and by learning how to identify main ideas from supporting details in short essays and longer narratives. Students also read and respond to a number of reading selections and one non-fiction book. This course does not apply to the Associate Degree. (No prerequisite. Credit/No Credit.)

BSKL 11A (formerly BSKL 111A) Sentence Writing and Grammar Skills 1.0 Unit
The course is the first in a series of three courses that focus on writing and grammar skills. Students develop their grammar skills and abilities to write sentences in a clear and legible manner. Students learn how to recognize subjects and verbs and use other grammatical principles along with being introduced to the process of revising written sentences. This course does not apply to the Associate Degree. (No prerequisite. Credit/No Credit.)

BSKL 11B (formerly BSKL 111B) Paragraph Writing and Grammar Skills 1.0 Unit
The course is the second in a series of three courses that focus on writing and grammar skills. Students develop their grammar skills and abilities to write paragraphs in a clear and organized manner. Students learn how to revise sentences for clarity and grammatical correctness and learn process of revising paragraph length work. This course does not apply to the Associate Degree. (No prerequisite. Credit/No Credit.)

BSKL 11C (formerly BSKL 111C) Short Composition Writing and Grammar Skills 1.0 Unit
The course is the third in a series of three courses that focus on writing and grammar skills. Students develop their grammar skills and abilities to write paragraphs and essays in a well-organized and clearly written manner. Students learn how to write topic sentences and organize essay length assignments. This course does not apply to the Associate Degree. (No prerequisite. Credit/No Credit.)

BSKL 12A (formerly BSKL 112A) Math: Operations with Whole Numbers 1.0 Unit
This course teaches students to understand addition, subtraction, multiplication and division of whole numbers. Students will be required to memorize basic single-digit number facts. This course will not apply to the Associate Degree. Four and one-half hours individualized instruction for eight weeks. (No prerequisite) This course may be taken four times.

BSKL 12B (formerly BSKL 112B) Math: Operations with Rational Numbers 1.0 Unit
This course teaches students to understand factorization of whole numbers and addition, subtraction, multiplication, and division of fractions. This course will not apply to the Associate Degree. Four and one-half hours individualized instruction for eight weeks. (Prerequisite: BSKL 12A or equivalent) This course may be taken four times.

BSKL 12C (formerly BSKL 112C) Math: Operations with Decimals 1.0 Unit
This course teaches students to understand factorization of whole numbers and addition, subtraction, multiplication and division of decimals. This course will not apply to the Associate Degree. Four and one-half hours individualized instruction for eight weeks. (Prerequisite: BSKL 12B or equivalent) This course may be taken four times.

BSKL 12D (formerly BSKL 112D) Operations with Fractions, Decimals and Percents 1.0 Unit
This course will review adding and subtracting of fractions and decimals. It will then introduce multiplying and dividing fractions and decimals, along with changing fractions and decimals to percents and vice versa. This course also introduces translations of verbal problems into mathematical statements. This course will not apply to the Associate Degree. (No prerequisite) This course may be taken four times.

BIOLOGY

BIOL 30 Molecular Forensics 0.5 Unit
This course is designed to meet the need for continuing education and supplemental forensics training for law enforcement personnel and educators. Topics will include the molecular science behind DNA fingerprinting analysis and serology. Emphasis will be on collection, recognition, analysis, and evaluation of these forms of evidence. 9 hours lecture. (No prerequisite)

BIOL 31 Forensic Taphonomy 0.5 Unit
Taphonomy is the study of the postmortem process. Taphonomy incorporates the use of entomology, pathology, osteology, odontology, animal behavior and chemistry in order to recover, study and preserve dead organisms. Reconstruction of the biology and/or ecology along with circumstances of death is important in answering questions that pertain to cause, manner and time since death. This course will not apply to the Associate Degree. 9 hours lecture. (No prerequisite. Grade Option) This course may be taken four times.

BIOL 52 (formerly BIOLOGY 52) Forensic Entomology 3.0 Units
Students will learn some of the various aspects of forensic entomology. Students will learn basic insect morphology and how it applies to the forensic field. This course will also cover the basic forensic collection techniques, laboratory procedures, analysis of the data, and how to write a written case report.. 48-54 hours lecture. (No prerequisite. Grade Option.)

BIOL 54 (formerly BIOLOGY 53) Forensic Pathology 3.0 Units
This course examines the medico-legal investigation of death from accidental causes, suicides, homicides, blunt/sharp force injuries, gunshot wounds, asphyxia and drowning. The course will cover the identification of individuals through dental remains and records, as well as sex, age and race determinations. 48-54 hours lecture. (No prerequisite)

BIOL 70 Introduction to Biotechnology
(formerly BIOLOGY 70) 5.0 Units
This course is designed to introduce students to concepts of modern molecular biology. The concepts will be applied as students learn general manipulation of phage, plant, and bacterial DNA. Students will learn theory and techniques of PCR, gene cloning, DNA fingerprinting, restriction analysis, immunoblot analysis and library construction/screening. 48-54 hours lecture and 96-108 hours laboratory. (No prerequisite)

BIOL 71 Introduction to Laboratory
(formerly BIOLOGY 71) Technique 4.0 Units
An introduction to laboratory methods for students interested in a career in a laboratory setting. Emphasis will be on basic laboratory methods, the principles that underlie those methods, and the equipment that makes laboratory work possible. Topics will include laboratory safety, quality control, regulatory agencies, and will address problem solving in a laboratory environment. 48-54 hours lecture and 48-54 hours laboratory. (No prerequisite)

BIOL 72 Biomolecular Science 3.0 Units
(formerly BIOLOGY 72)
This course is a theoretical approach to laboratory techniques common to modern biotechnical/clinical laboratories. Principles of molecular biology, genetics, metabolism, and immunology will be studied with emphasis on their application to modern analytical methods. Information and Communication technology will be used to develop formal writing and public speaking skills. See cross listing for CHEM 72. 48-54 hours lecture. (No prerequisite. Recommended: BIOL 100 or BIOL 107)

BIOL 98 A/B International Natural History
(formerly BIOLOGY 65A) 2.0-4.0 Units
This course offers students the opportunity to learn first hand about plants, animals, ecology, geography, and conservation policies of the destination country. Pre-trip lectures will include slide shows and previews of activities you will experience on the natural history tour. Eighteen lecture hours plus 54 hours laboratory for each unit. (No prerequisite. Grade Option.) This course may be taken four times.

BIOL 100 General Biology 4.0 Units
(formerly BIOLOGY 10)
An introductory course in biological principles. Emphasis is on the scientific method, analysis of scientific data, metric system, current biological problems, cellular biology, genetics and heredity, classification and systematics, evolution, ecology, behavior and environmental issues. In addition, the laboratory will include a survey of the morphology characteristics of various organisms on this planet. 48-54 hours lecture and 48-54 hours laboratory. CSU, UC (UC credit limitation). Offered Fall, Spring, Summer. (No prerequisite)

BIOL 104 General Botany 4.0 Units
(formerly BIOLOGY 4)
This botany course is for non-biology majors. Topics include plant anatomy, plant physiology, plant cell structure, photosynthesis, cell respiration, ecology, genetics, systematics, and plant evolution. The course also includes brief introductions to reproduction of flowering plants, mosses, ferns, and conifers; and sections on field botany and plant identification. Emphasis will be placed on use of the scientific method, critical thinking, and problem solving skills. Up to two field trips may be required. 48-54 hours lecture and 48-54 hours laboratory. CSU, UC. Offered Spring. (No prerequisite)

BIOL 107 Introduction to Human Biology
(formerly BIOLOGY 11) 4.0 Units
An introductory course in biological principles with a human perspective. Emphasis on cellular structure and function, organ systems, the concept of homeostasis, adaptation, cellular and population genetics, and the interaction of the human species with the ecosystems. 48-54 hours lecture and 48-54 hours laboratory. CSU. Offered Fall, Spring, Summer (No prerequisite)

BIOL 113 Biology of Sexually
(formerly BIOLOGY 13) Transmitted Diseases 2.0 Units
This course will provide an understanding of the history and pathogenesis of the most prominent sexually transmitted diseases. Emphasis will be placed on the biological agent, epidemiology, diagnosis and treatment of the disease. Vaccine development and current treatments will also be examined. 32-36 hours lecture. CSU (No prerequisite)

BIOL 114 Introduction to Ecology
(formerly BIOLOGY 14) 3.0 Units
The first part of this course covers ecology basics such as demography and population growth, species interactions and food webs, introduction to photosynthesis and metabolism, and nutrient cycling. The remainder of the course emphasizes environmental problems and how they relate to ecological principles. Topics include global biodiversity and endangered species, water and air pollution, alternate energy sources, alternative agriculture and pesticides, and other topics of local interest. Although this course has no laboratory, some outdoor activities may be required. 48-54 hours lecture. CSU, UC. (No prerequisite)

BIOL 118 Principles of Heredity
(formerly BIOLOGY 8) 3.0 Units
A survey of Mendelian inheritance, quantitative traits, and population genetics. Also includes sections on DNA technology, immune genetics and genetics of cancer. This course places special emphasis on human inheritance and family pedigree analysis, and will stress development of critical thinking and problem solving skills. 48-54 hours lecture. CSU, UC. (No prerequisite)

BIOL 120 Identification and Study of Wildflowers
(formerly BIOLOGY 20) 3.0 Units
This course employs an evolutionary approach to give students a working knowledge of plant classification, as well as an appreciation for the diversity of the flora of southern California. Students will learn how to use keys to identify local plant species, learn characteristics of the most common plant families, and will be able to describe, identify, and understand some of the dynamics of local plant communities. Vigorous field activities are required. Four lecture, six lab/field trip hours per week for 9-week course; two lecture, three lab/field trip hours per week for 18-week course. CSU. (No prerequisite. Grade Option)

BIOL 126 Natural History of the Mojave Desert
(formerly BIOLOGY 16) 3.0 Units
This course acquaints students with the unique plants of the Mojave Desert and their adaptations for survival. Emphasis is on identification, life history, water economy, and thermoregulatory mechanisms. Mojave Desert plant communities, climate, geology, geography, and history will also be discussed. Local conservation issues will also be surveyed, with special consideration of rare and endemic species. 32-36 hours lecture and 48-54 hours laboratory. CSU. Offered Spring. (No prerequisite. Grade Option.)

BIOL 127 Identification and Study of Birds
(formerly BIOLOGY 17) of the Mojave Desert and
Adjacent Mountains 3.0 Units
Field identification of 75 bird species of the local area. Includes song and habitat identification, study of birds' feathers, colors, and their uses. Adaptations of bills, feet, wings, and bones. Course also covers the food of birds, their ecological relationships, eggs and nests, senses and behavior, flight and song. Course touches briefly on bird migration. 32-36 hours lecture and 48-54 hours laboratory. CSU. (No prerequisite. Grade Option.)

BIOL 128 Identification and Study of
(formerly BIOLOGY 18) Amphibians and Reptiles of the Mojave and Adjacent Mountains
3.0 Units

This course is a survey of the amphibians and reptiles of the Mojave Desert and adjacent mountains. This course reviews amphibian and reptile characteristics, origin and evolution, and classification. This course will also discuss habitats, behaviors and adaptations of the local amphibians and reptiles. 32-36 hours lecture and 48-54 hours laboratory. CSU. (No prerequisite. Grade Option.) This course may be taken four times.

BIOL 138 Cooperative Education
(formerly BIOLOGY 38)

See Cooperative Education listing (1-8 units). CSU

BIOL 149 Independent Study
(formerly BIOLOGY 29)

See Independent Study listing (1-3 units). CSU

BIOL 201 Biology of Cells
(formerly BIOLOGY 1) (CAN BIOL 2) 5.0 Units

This course will provide students with a comprehensive introduction to the biological principles at the cellular level. Emphasis will be placed on the scientific method, molecular biology, biochemistry, structure and function of cells, cellular reproduction and molecular genetics. This course is designed for preprofessional and biology
majors but is open to all students. Majors should also take BIOL 202 and 203. 48-54 hours lecture and 96-108 hours laboratory. CSU, 72 hours lecture and 16-18 hours laboratory. CSU, UC. Offered Fall. (Prerequisite: CHEM 201 or CHEM 100 as prerequisite or corequisite).

BIOL 202 Biology of Organisms
(formerly BIOLOGY 2) (CAN BIOL 4) 5.0 Units

This course will provide students with a comprehensive introduction to the extraordinary diversity of biological organisms on the earth. Emphasis will be placed on origins of life, the evolutionary relationships among groups of organisms, and the basic anatomy and physiology of the major groups of living organisms. This course is designed for preprofessional and biology majors but is open to all students. Majors should also take BIOL 201 and 203. 48-54 hours lecture and 96-108 hours laboratory. CSU, UC. Offered Spring alternating with BIOL 203. (No prerequisite)

BIOL 203 Population and Environmental
(formerly BIOLOGY 3) Biology
(Biology 201+202+203 = CAN BIOL SEQ A) 4.0 Units

An introduction to the structure and organization of populations, communities, and ecosystems. Emphasis will be on demography, population growth, life history traits, extinction, species interactions, ecosystem dynamics, and evolution, as well as selected current environmental issues. Students will participate in field laboratories, use simple statistics to analyze data, and compose scientific papers. This course is designed for biological science majors but is open to all students. 48-54 hours lecture and 48-54 hours laboratory. CSU, UC. Offered Spring alternating with BIOL 202. (Prerequisite: CHEM 20l or CHEM 100 as prerequisite or corequisite)

BIOL 211 Human Anatomy
(formerly ANATOMY 1) 5.0 Units

An introduction to the gross and microscopic anatomy of the human body. Lab includes dissection of cat, sheep eye, kidney, heart, and larynx. Lab also includes demonstrations on a human cadaver and assorted anatomical models. Lecture covers cells, tissues, and the major human systems such as the integumentary, skeletal, muscular, nervous, endocrine, cardiovascular, respiratory, urinary, and reproductive. 48-54 hours lecture and 96-108 hours laboratory. CSU, UC (UC credit limitation). Offered Fall, Spring, Summer. (Prerequisite: BIOL 109, 100, 201 or 107 with a grade of "C" or better.)

BIOL 215 Human Gross Anatomy
4.0 Units

An advanced anatomy class that utilizes a regional approach to the study of the thorax, abdomen, pelvis, back, extremities, head and neck. Lecture will include medical/clinical applications and case studies on these regions. Laboratory includes hands on group dissection on a whole cadaver; as well as work on a high-level anatomy software program. 48-54 hours lecture and 48-54 hours laboratory. CSU. Offered Fall, Spring, Summer. (Prerequisite: BIOL 211 with a grade of "C" or better.)

BIOL 221 General Microbiology
(formerly MICRO 1) (CAN BIOL 14) 5.0 Units

Introduction to bacteria, viruses, and parasitic forms of protozoa, helminths, and fungi. Examination of morphological, physiological, and epidemiological characteristics of these organisms and of the immune response produced by their hosts. 48-54 hours lecture and 96-108 hours laboratory. CSU, UC. Offered Fall, Spring, Summer. (Prerequisites: BIOL 100, 109, 107 or 201; CHEM 100 or CHEM 201; all completed with a grade of "C"or better.)

BIOL 231 Human Physiology
(formerly PHYSIO 1) (CAN BIOL 12) 5.0 Units

An introduction to general physiology with emphasis on the functioning of the human body. Included in the topics to be covered are biochemical aspects of cell function, integrated control of organ systems and homeostasis. The laboratory will include demonstrations and experiments to support basic physiological concepts. 48-54 hours lecture and 96-108 hours laboratory. CSU, UC (UC credit limitation). Offered Fall, Spring. (Prerequisite: One college chemistry class equivalent to CHEM 100 or CHEM 20l; and one college biology class equivalent to BIOL 201, 100, 109 or 107; and BIOL 211 or 212, all with a grade of "C"or better.)

BIOL 232 Human Physiology 4.0 Units
(formerly PHYSIO 2)

An introduction to general physiology with emphasis on the functioning of the human body. Included in the topics to be covered are biochemical aspects of cell function, integrated control of organ systems, and homeostasis. The laboratory will include demonstrations and experiments to support basic physiological concepts. 48-54 hours lecture and 48-54 hours laboratory. CSU, UC (UC credit limitation). Offered Fall, Spring. (Prerequisite: One college chemistry class (equivalent to CHEM 100 or CHEM 201); and one college biology class (equivalent to BIOL 201 or BIOL 100); and BIOL 212, all with a grade of "C" or better.)

BIOL 250A Tropical Field Biology
and Natural History 3.0 Units

This course lets students experience the tropical environment from a fieldwork and research perspective. Students will learn research techniques hands-on from basic specimen collecting and data gathering in the field to preparing a manuscript for publication in a peer-reviewed scientific journal and will apply these in biodiversity surveys of both terrestrial and aquatic habitats. An emphasis will be placed on amphibians and reptiles and their adaptations to life in the tropical forest, as an example for the high diversity of tropical organisms. 48-54 hours lecture and 96-108 hours laboratory. CSU (Prerequisite: BIOL 100 or equivalent.)

BUSINESS ADMINISTRATION

BADM 50 Applied Accounting I 3.0 Units
(formerly B AD 5IA)
Introduction to the bookkeeping problems of a small business enterprise for both merchandising and service-type organization. Emphasis on the development of skills for both cash and accrual methods of recording, including procedures for completion of an accounting cycle. Attention is given to special journals, subsidiary ledgers, and payroll and control systems. 48-54 hours lecture. Offered Fall, Spring. (No prerequisite)

BADM 51 Applied Accounting II 3.0 Units
(formerly B AD 51B)
Continuation of bookkeeping procedures. Special emphasis on development of skills in the following areas: valuation of assets, business taxes, problems of accruals and deferrals, department and branch office records, preparation of statements and budgeting. 48-54 hours lecture. Offered Fall, Spring. (No prerequisite)

BADM 52 Elements of Supervision
(formerly B AD 52) 3.0 Units
This course is designed to introduce the student to the management skills needed by the first line supervisor. While employees generally receive promotions to supervision based on their technical skills and knowledge, this course provides new management and people skills to add to those technical skills. 48-54 hours lecture. Offered Fall, Spring. (No prerequisite)

BADM 100 Introduction to Business
(formerly B AD 20) Organizations 3.0 Units
Business is dynamic and constantly changing. This course is designed to introduce the student to contemporary issues and principles of business. The business functions of management, marketing, accounting and finance presented along with global dimensions of business, the various forms of business ownership, teamwork, securities, ethics and social responsibility, and economic challenges facing the United States. 48-54 hours lecture. CSU, UC. Offered Fall, Spring, Summer (No prerequisite)

BADM 101 Elementary Accounting
(formerly B AD 1A) (CAN BUS 2) 4.0 Units
Introduction to accounting theory and practice for a sole proprietorship. Concepts and principles are developed in a logical progression from basic transactions of a service enterprise to the more complex transactions of a merchandise enterprise. Accounting theory is reinforced by the completion of a practice set which includes the recording, analyzing, and summarizing of business transactions. 64-72 hours lecture and 16-18 hours laboratory. CSU, UC (UCcredit limitation). Offered Fall, Spring. (No prerequisite)

BADM 102 Elementary Accounting
(formerly B AD 1B) (CAN BUS 4) 4.0 Units
Application of the basic principles of partnership and corporate organizations, and study of the theory and practices unique to these more complex business forms. Manufacturing cost, branch and departmental accounting, budgeting, special reports for management, and statement analysis. 64-72 hours lecture and 16-18 hours laboratory CSU, UC (UC credit limitation). Offered Fall, Spring. (No prerequisite)

BADM 103 Financial Accounting
(formerly B AD 2A) (CAN BUS 2) 3.0 Units
This course is a study of the theory and practice of financial accounting for a sole proprietorship. Concepts and principles are introduced in a logical progression from the introduction of the accounting equation to preparation of financial statements. The course focuses on both service enterprises and merchandise enterprises. Business transactions are recorded, analyzed, and summarized within the accounting system of record keeping. 48-54 hours lecture. CSU, UC (UC credit limitation). Offered Fall, Spring, Summer. (No prerequisite)

BADM 104 Principles of Accounting
(formerly B AD 2B) (CAN BUS 4) 3.0 Units
Introduction to the theory and practice of accounting for partnership interests from formation to liquidation and division of income and losses. The study of corporations combines the theory and practice of financial reporting for corporations. Special emphasis is placed on managerial accounting principles of the job order cost system, process cost systems, and budgeting and standard cost systems. 48-54 hours lecture. CSU, UC (UC credit limitation). Offered Fall, Spring. (No prerequisite)

BADM 106 Accounting on Microcomputers
(formerly B AD 4A) 2.0 Units
A course in basic accounting procedures using IBM - PC microcomputers to complete all accounting procedures. General ledger, accounts payable, accounts receivable, depreciation, and payroll will be covered. 24-27 hours lecture and 24-27 hours laboratory. CSU. Offered Fall, Spring. (No prerequisite)

BADM 107 Accounting on Microcomputers
(formerly B AD 4B) 2.0 Units
This course is intended to be a continuation and expansion on accounting procedures covered in B AD 4A. Topics covered include billing, purchasing, product assembly, inventory control, payroll, taxation, and reporting and graphics presentations. Students successfully completing both B ADM 106 and 107 should be fully qualified to take full control of any computerized accounting program used by a small business. 24-27 hours lecture and 24-27 hours laboratory. CSU. (No prerequisite)

BADM 109 Human Resource Management
(formerly B AD 6) 3.0 Units
This introductory course is designed to acquaint the student with the important functions performed by the human resource department in a business organization. These functions include recruiting, staffing, training and development, compensation, strategic human resource planning, personnel evaluation, and management-labor relations. Other topics include global issues, the legal environment, EEO, sexual harassment, and design of work. This course is for the managerial candidate, for those who have not had formal management training, or for the individual who is currently or interested in working in a human resource department. 48-54 hours lecture. CSU. Offered Fall, Spring. (No prerequisite)

BADM 110 Principles of Management
(formerly B AD 7) 3.0 Units
This is an introductory course to the management functions of planning, organizing, leading and controlling. The concepts of corporate culture, the impact of the external environment, business ethics and social responsibility, motivation, communication and teamwork, globalization, and quality control are a few of the topics covered. This course is designed for the managerial candidate or for the individual who has worked but not had formal training in business management. 48-54 hours lecture. CSU. Offered Fall, Spring. (No prerequisite)

BADM 112 Introduction to Marketing
(formerly B AD 9) 3.0 Units
This course is an introduction to contemporary marketing principles. Included in this course will be relationship marketing, the global dimension of marketing, e-commerce, marketing plan development, research, market segmentation, product strategy, distribution, promotional, and pricing strategies. 48-54 hours lecture. CSU. Offered Fall, Spring. (No prerequisite, Grade Option)

BADM 113 Retailing Management 3.0 Units
(formerly BAD 11)
This course presents a strategic approach to retail management. Topics include appropriate marketing strategies, communicating with customers and staff, searching for and finding appropriate retail locations, and merchandising and pricing. Field trips may be included. 48-54 hours lecture. CSU. Offered Spring. (No prerequisite. Grade Option.)

BADM 116 Human Relations in Business
(formerly B AD 16) 3.0 Units
Human relation skills mean interactions among people and represent the single biggest reason for career success and failure. This course provides a clear understanding of human relation concepts, the application of human relation concepts for critical thinking in the business world, and the ability to increase the student's development of human relation skills. 48-54 hours lecture. CSU. Offered Fall, Spring. (No prerequisite)

BADM 117 Legal Environment of Business
(formerly B AD 17) 3.0 Units
The study of the American legal system and principles of law as applies to business. Course content includes the legal environment of business, nature and source of law, court systems, dispute resolution, common and statutory law, Constitutional law, administrative agencies, torts and business torts, contract law, and the Uniform Commercial Code as it relates to the sale of goods. Additionally, the legal forms of business will be addressed as to the formation, operation, and termination of proprietorships, partnerships, and corporations. 48-54 hours lecture. CSU, UC (UC credit limitation). Offered Fall, Spring, Summer. (No prerequisite, Grade Option)

BADM 118 Business Law 3.0 Units
(formerly B AD 18)
The study of business law, both case and statutory, as it applies to the Uniform Commercial Code dealing with negotiable instruments; secured transactions and bankruptcy; employment law and agency; property, real and personal, to include bailments; and governmental agencies' regulation of business to include antitrust and fair business practices. 48-54 hours lecture. CSU, UC (UC credit limitation). Offered Fall, Spring. (No prerequisite)

BADM 122 Small Business Management
(formerly B AD 22) 3.0 Units
An introduction to contemporary management techniques used by small businesses in the free enterprise system. The course focuses on entrepreneurial opportunities, developing a business plan for a planned or existing small business, small business marketing, operations, and financial management. 48-54 hours lecture. CSU. Offered Fall, Spring. (No prerequisite)

BADM 138 Cooperative Education
(formerly B AD 38)
See Cooperative Education listing (1-8 units). CSU

BADM 142 Business Mathematics 3.0 Units
(formerly B AD 42)
An introduction to a variety of business computations and applications such as percents, payroll, markup/markdown, cash and trade discounts, simple and compound interest, annuities, credit, mortgages, financial statements, inventory, depreciation, and taxes. 48-54 hours lecture. CSU. Offered Fall, Spring, Summer. (No prerequisite)

BADM 144 Business Communications 3.0 Units
(formerly BAD 44)
Studies the principles and role of business communication and the need for communication skills in a global marketplace. Emphasizes written communications such as standard and persuasive business letters, memorandums, and informational as well as analytical reports. Studies effective proposal, resumes, and other employment-related documents. Develops planning, organizing, and outlining skills as well as editing proficiency. Evaluates grammar skills and improves writing style. 48-54 hours lecture. CSU. Offered Fall, Spring. (No prerequisite. Grade Option.)

BADM 148 Special Topics
(formerly B AD 48)
See Special Topics listing (Variable units). CSU

BADM 149 Independent Study
(formerly B AD 49)
See Independent Study listing (1-3 units). CSU

BUSINESS EDUCATION TECHNOLOGIES

NOTE: Business Education Technologies courses offered in modules require 36 hours to complete 1.0 unit, 72 hours to complete 2.0 units, and 108 hours to complete 3.0 units.
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BET 65 Speedwriting 3.0 Units
A simplified method of shorthand based on systematic abbreviations. This course is intended for the entry-level promotable secretary, the electronic office, and college students desiring note-taking skills. 48-54 hours lecture. Offered Fall, Spring. (No prerequisite) This course may be taken two times.

BET 68 Proofreading 1.0 - 3.0 Units
Students develop proofreading skills necessary to meet high levels of accuracy and review basic business English skills: punctuation, word usage, sentence and paragraph structure. Practice/exercises are done on the microcomputer for Modules B and C. Offered Fall, Spring. 18 hours lecture per unit, per term. (Prerequisite: Successful completion of BET 103A or BET 104A) This course may be taken three times.

BET 74 Office Machine Calculations
2.0 Units
Provides practice on ten-key calculating machine with applications of actual business problems and forms. 64-72 hours individualized instruction. (No prerequisite)

BET 77 Speed and Accuracy Development 2.0 Units
This course is individualized to fit the needs of each student and develops keyboarding/typing speed for continuing to higher level courses or developing job skills by intensive training and practices. 64-72 hours individualized instruction. (No prerequisite. Grade Option.) This course may be taken four times.

BET 100 Introduction to Computers 2.0 Units
This course is directed to those with little or no computer experience. It will introduce basic essential elements of computers such as: power up, hardware components, evolution of computers, types of personal computers, the input-process-out put cycle, desktop components, email, and the World Wide Web. 32-36 hours lecture. CSU. (No prerequisite. Grade Option.) This course may be taken four times.

BET 101 Beginning Keyboarding/Typing
(formerly BET 1) 1.0 Unit
This course is individualized to fit the needs of each student and develop basic alpha/numeric keyboarding skills and basic mouse operation on the computer. Emphasis is on achieving a straight-copy speed of 20 gross words a minute with a predetermined error limit. 32-36 hours individualized instruction. CSU. (No prerequisite) This course may be taken three times.

BET 103 Beginning Word Processing/
(formerly BET 3) Typing: WordPerfect for Windows A 3.0 Units
Introduces students to WordPerfect for Windows. Students will develop a working knowledge of this current software package to prepare documents. 48-54 hours lecture. CSU. (Prerequisite: BET 101 or ability to type 20 gross words per minute and type basic business documents.) This course may be taken two times.

BET 103C Beginning Word Processing/
(formerly BET 3C) Typing: WordPerfect for Windows C 1.0 Unit
The third unit is designed to meet the individualized needs of each student. Topics are merging, creating envelopes and labels, sorting, managing files, and working with window arrangements. 32-36 hours individualized instruction. CSU. (Prerequisite: BET 103B) This course may be taken four times.

BET 104 Beginning Word Processing/
(formerly BET 4) Typing: Word for Windows A/B/C 3.0 Units
This course Introduces students to Word for Windows. Students will develop a working knowledge of this current software package to prepare documents. 48-54 hours lecture. CSU. (No prerequisite. Grade Option.) This course may be taken four times.

BET 104A Beginning Word Processing/
(formerly BET 4A) Typing: Word for Windows A 1.0 Unit
This course introduces students to Word for Windows with emphasis on creating, editing, formatting, and printing documents. It is designed for students with limited experience on the computer. 32-36 hours individualized instruction. CSU. ((No prerequisite. Grade Option.) This course may be taken four times.

BET 104B Beginning Word Processing/
(formerly BET 4B) Typing: Word for Windows B 1.0 Unit
This course introduces students to Word for Windows. Students will develop a working knowledge of this current software package to prepare documents. 32-36 hours individualized instruction. CSU. (No prerequisite. Grade Option.) This course may be taken four times.

BET 104C Beginning Word Processing/
(formerly BET 4C) Typing: Word for Windows C 1.0 Unit
This course introduces students to Word for Windows. Students will develop a working knowledge of advanced Word features including styles, macros, and integrating Microsoft Office programs. 32-36 hours individualized instruction. CSU. (No prerequisite. Grade Option.) This course may be taken four times.

BET 107 Internet Level A/B/C 3.0 Units
This course is designed to teach students concepts and business skills of the Internet including creating an e-mail; creating, editing, and printing effective web pages; and understanding internet technologies and security. 48-54 hours lecture. CSU (No prerequisite. Grade Option.) This course may be taken four times.

BET 107A Internet Level A 1.0 Unit
(formerly BET 7)
This course is a self-paced, individualized course. Basic Internet topics and commands such as defining the internet and browsing the Web are covered. 32-36 hours individualized instruction. CSU. (No prerequisite. Grade Option.) This course may be taken four times.

BET 107B Internet Level B 1.0 Unit
(formerly BET 8)
This course is a self-paced, individualized course. Internet topics and commands such as searching the internet composing and sending e-mails, and using research and reference tools are covered. 32-36 hours individualized instruction. CSU. (No prerequisite. Grade Option.) This course may be taken four times.

BET 107C Internet Level C 1.0 Unit
(formerly BET 9)
The third unit is a self-paced, incividualized introduction designed to teach students concepts of internet technologies and security, creating web pages and managing a web site. 32-36 hours individualized instruction. CSU. (No prerequisite. Grade Option.) This course may be taken four times.

BET 112 Spreadsheet:
(formerly BET 12) Excel for Windows A/B/C 3.0 Units
This course offers spreadsheet operations for creating, editing, formatting and enhancing in worksheets. Students learn to manage workbooks and prepare them for the web. Students plan, create, and then filter lists using Excel's database. 48-54 hours lecture. CSU. (No prerequisite. Grade Option.) This course may be taken four times.

BET 112A Spreadsheet:
(formerly BET 12A) Excel for Windows A 1.0 Unit
This first unit of Excel is a self-paced, individualized introduction to spreadsheet operations for creating, editing, formatting and placing graphics in worksheets. Extensive hands-on practice is provided at individualized workstations. 32-36 hours individualized instruction. CSU. (No prerequisite. Grade Option.) This course may be taken four times.

BET 112B Spreadsheet:
(formerly BET 12B) Excel for Windows B 1.0 Unit
This second unit is a self-paced, individualized introduction to the commands and functions for customizing the worksheet, working with the tool bar, and enhancing worksheet charts or graphs. Extensive hands-on practice is provided at individual workstations. 32-36 hours individualized instruction. CSU. (No prerequisite. Grade Option.) This course may be taken four times.

BET 112C Spreadsheet:
(formerly BET 12C) Excel for Windows C 1.0 Unit
This third unit is a self-paced, individualized introduction to complex formulas, enhancing charts and worksheets working with pivot tables and customizing Excel and advanced worksheet management. Extensive hands-on practice is provided at individual workstations. 32-36 hours individualized instruction. CSU. (No prerequisite. Grade Option.) This course may be taken four times.

BET 118 Database: Access A/B/C 3.0 Units
(formerly BET 18)
Familiarity with computers is recommended. Introduces database concepts through advanced skill levels including advanced queries, briefcase replication, macros and use of Visual Basic for applications code. 48-54 hours lecture. CSU. (No prerequisite) This course may be taken three times.

BET 118A Database: Access A 1.0 Unit
(formerly BET 18A)
Introduces database concepts and skills. Students will learn to manage and organize database files with extensive hands-on practice at individual work stations. 32-36 hours individualized instruction. CSU. Offered Fall, Spring, Summer (No prerequisite) This course may be taken three times.

BET 118B Database: Access B 1.0 Unit
(formerly BET 18B)
This second unit in database management will feature advanced querying, storing and organizing business information. 32-36 hours individualized instruction. CSU. Offered Fall, Spring, Summer (Prerequisite: BET 118A) This course may be taken three times.

BET 118C Database: Access C 1.0 Unit
(formerly BET 18C)
This course is designed to teach the student advanced concepts and business skills using Access, including working with advance queries, briefcase replication, macros and the use of Visual Basic for applications code. 32-36 hours individualized instruction. CSU. Offered Fall, Spring, Summer (Prerequisite: BET 118B) This course may be taken three times.

BET 122 Intermediate Typing/
(formerly BET 22) Keyboarding 3.0 Units
This course is designed to build speed and skills learned in Beginning Typing/Keyboarding with an emphasis on attaining straight copy rate of 45-60 gross wpm with a predetermined error limit. Additionally, students will develop skills needed to effectively format a variety of business documents. 48-54 hours lecture. CSU. Offered Fall, Spring, Summer. (Prerequisite: BET 101. Grade Option.) This course may be taken four times.

BET 122A Intermediate Word Processing/
(formerly BET 22A) Typing Applications A 1.0 Unit
The first module is individualized to fit the needs of each student. The students apply their knowledge of word processing in developing more skill in document formatting on the PC. Emphasis is on achieving a typing speed of 45 gross words per minute with a predetermined error limit. 32-36 hours individualized instruction. CSU. (Prerequisite: Successful completion of BET 101, 102, 103 or BET 102ABC, or BET 103ABC and the ability to type 40 gross words per minute)

BET 122B Intermediate Word Processing/
(formerly BET 22B) Typing - Applications B 1.0 Unit
The second module is individualized to fit the needs of each student in developing more skill in document preparation (tables and various business forms) using the computer/typewriter. Emphasis is on achieving a straight-copy speed of 50 gross words per minute with a predetermined error limit. 32-36 hours individualized instruction. CSU. (Prerequisite: Successful completion of BET 122A and the ability to type 45 gross words per minute)

BET 122C Intermediate Word Processing/
(formerly BET 22C) Typing - Applications C 1.0 Unit
The third module is designed so students can further apply their knowledge of word processing on business forms and various business documents and correspondence. Emphasis is on achieving a typing speed of 60 gross words per minute with a predetermined error limit. 32-36 hours individualized instruction. CSU. (Prerequisite: Successful completion of BET 122B and the ability to type 50 gross words per minute)

BET 123L Machine Transcription - Legal
(formerly BET 23L) 3.0 Units
Students develop machine transcription skills used in a typical law firm and learn to prepare legal documents and correspondence. 96-108 hours individualized instruction. CSU. Offered Fall, Spring. (Prerequisite: Successful completion of BET 103C or 104C. Recommended: BADM 117) This course may be taken three times.

BET 123M Machine Transcription - Medical
(formerly BET 123M) 3.0 Units
Students develop machine transcription skills for a medical transcriber and learn the use and meaning of medical terminology used in the Allied Health field. 96-108 hours individualized instruction.CSU. Offered Fall, Spring. (Prerequisite: Successful completion of BET 103C or 104C. Recommended: ALDH 139) This course may be taken three times.

BET 123T Machine Transcription 1.0 Unit
(formerly BET 23T)
Introduces students to word processing transcription of business letters and memos working from transcription machines. Emphasis is on mechanics of written English, and letter styles. 32-36 hours individualized instruction. CSU. (Prerequisite: Successful completion of BET 103A or 104A) This course may be taken three times.

BET 124 Records Management with
(formerly BET 24) Microcomputer Applications
2.0 Units
Principles and procedures of establishing and maintaining records systems with detailed instruction and practice in the use of alphabetic, geographic, numeric, and subject filing systems as defined by the Association of Records Managers and Administrators; setting up and managing electronic files. Also includes topics on effective listening, working with people, and telephone techniques. 32-36 hours lecture. CSU. (No prerequisite)

BET 131 Presentation Software:
(formerly BET 33) PowerPoint A/B/C 3.0 Units
This course is designed to teach students concepts and business skills of PowerPoint including creating, editing, and printing effective presentations. Students learn advanced PowerPoint features such as creating graphs and tables, and customizing, and inserting artwork, WordArt, and slide show effects. Students learn concepts and business skills of PowerPoint. The concepts and skills include working with embedded and linked objects, hyperlinks, and delivering and publishing presentations. 48-54 hours lecture. CSU. (No prerequisite) This course may be taken four times.

BET 131A Presentation Software:
(formerly BET 31A) PowerPoint A 1.0 Unit
This course is designed to teach students the concepts and business skills of PowerPoint including creating, editing, and printing effective presentations. This class provides students with skills that enable them easily and quickly to produce classroom and business presentations. 32-36 hours individualized instruction. CSU. (No prerequisite) This course may be taken four times.

BET 131B Presentation Software:
(formerly BET 31B) PowerPoint B 1.0 Unit
Students will learn advanced PowerPoint features such as creating graphs, tables, customizing color schemes and inserting artwork, WordArt and slide show effects. 32-36 hours individualized instruction. CSU. (No prerequisite) This course may be taken four times.

BET 131C Presentation Software:
(formerly BET 31C) PowerPoint C 1.0 Unit
This is a selfpaced, individualized introduction designed to teach students concepts and business skills of PowerPoint including customizing, working with embedded and linked objects and hyperlinks and delivering and publishing presentations. 32-36 hours individualized instruction. CSU. (No prerequisite) This course may be taken four times.

BET 133 Microsoft Office 3.0 Units
This class is designed to introduce students to the basic functions of Microsoft Office Word, Excel, PowerPoint, and Access, as well as a brief overview of operating systems and the Internet. 48-54 hours lecture. CSU. (No prerequisite. Grade Option.) This course may be taken four times.

BET 134 Condensed Word Processing
(formerly BET 34) 1.0 Unit
Formerly Condensed Word Processing Using WordStar. Introduction to using the microcomputer to gain practical experience in word processing by completing personal projects. 32-36 hours individualized instruction. CSU. Offered Fall, Spring. (No prerequisite)

BET 135 Desktop Publishing:
(formerly BET 35) PageMaker 2.0 Units
Introduction to page production methods and practices involving text and graphics. Emphasis is on layout and typographical principles to create typeset, camera-ready business publications. Hands-on experience with scanning software, desktop color separation procedures and electronic publishing using the PC computer system. 24-27 hours lecture and 24-27 hours laboratory. CSU. (No prerequisite)

BET 136 Career Applications for
(formerly BET 36) Word Processing 3.0 Units
This course is designed for the student who is familiar with word processing functions and formatting principles. Topics will include terminology and methodology used in a variety of business careers by applying formatting and keyboarding skills to complex porfessional documents inlcuding letters, memos, forms, tables and reports. 48-54 hours lecture. CSU. (No prerequisite. Recommended preparation: Successful completion of BET 104 or BET 103. Ability to use word processing functions to create, format and edit advanced business documents. Grade Option.)

BET 137 A/B/C Desktop Publishing: Microsoft Publisher A/B/C 3.0 Units
This class is designed to teach students practical, professional quality publications using Microsoft Publisher. 48-54 hours lecture. CSU. (No prerequisite. Grade Option.) This course may be taken four times.

BET 137A Desktop Publishing: Microsoft Publisher A 1.0 Unit
This is the introductory course designed to teach students the concepts and business skills of Microsoft Publisher. This class provides students with the skills to easily and quickly produce professional classroom and business publications. 32-36 hours individualized instruction. CSU. (No prerequisite. Grade Option.) This course may be taken four times.

BET 137B Desktop Publishing: Microsoft Publisher B 1.0 Unit
This unit will teach students the advanced Publisher features such as enhancing a publication and using Publisher's drawing tools and styles. 32-36 hours individualized instruction. CSU. (No prerequisite. Grade Option.) This course may be taken four times.

BET 137C Desktop Publishing: Microsoft Publisher C 1.0 Unit
This unit is designed to teach students advanced concepts and business skills of Publisher including customizing publications and publishing web sites. 32-36 hours individualized instruction. CSU. (No prerequisite. Grade Option.) This course may be taken four times.

BET 138 Cooperative Education
(formerly BET 38)
See Cooperative Education listing (1-8 units). CSU

BET 141A Operating System: Windows A
(formerly BET 41A) 1.0 Unit
This first unit is an introduction to Windows, A Graphical User Interface environment. Extensive hands-on practice at individual workstations will provide students with the fundamental commands and features of Windows. 32-36 hours individualized instruction. CSU. (No prerequisite.) This course may be taken three times.

BET 141B Operating System: Windows B
(formerly BET 41B) 1.0 Unit
This second unit covers more extensive hands-on practice with additional Windows commands and use of icons. 32-36 hours individualized instruction. CSU. (Prerequisite: BET 141A) This course may be taken three times.

BET 141C Operating System: Windows C
(formerly BET 41C) 1.0 Unit
This third unit includes features using program manager and Windows interface. 32-36 hours individualized instruction. CSU. (Prerequisite: BET 141B) This course may be taken three times.

BET 142 Office Technologies and
(formerly BET 42) Procedures 3.0 Units
Students will learn practical application of current automated office procedures, duties, and human relations. Specific topics include telephone, electronic mail, Internet activities, data entry, reference resources, job seeking, mail and shipping services and procedures, office relations, office etiquette and dress, time management, travel arrangements, meetings, minutes, and office equipment. Development of critical thinking skills and decision-making skills throughout the course. 48-54 hours lecture. CSU. (Prerequisite: BET 103A or BET 104A, typing skill and competency with a word processing program to format and edit basic business documents.)

BET 143 Business English 3.0 Units
(formerly BET 43)
This is a technical course to develop a proficiency in written business communication. A comprehensive review of proofreading, grammar, punctuation, sentence structure, and letter and memo formats emphasizes the function of business English in various types of business communications. 48-54 hours lecture. CSU. (No prerequisite. Grade Option.) This course may be taken four times.

BET 145 Communications for Business
(formerly BET 45) 3.0 Units
This is a course designed for Business Education Technologies to create proficiency in the mechanics of writing, reading, and critically analyzing various types of business correspondence. This course includes a review of grammar, reading, proofreading and editing; and analysis of writing styles in business correspondence and report format. Principles of communication psychology as it applies to human relations will be reviewed in solving business communications problems. 48-54 hours lecture. CSU. (No prerequisite. Grade Option.) This course may be taken four times.

BET 148 Special Topics
(formerly BET 48)
See Special Topics listing (Variable units).

BET 149 Independent Study
(formerly BET 49)
See Independent Study listing (1-3 units). CSU

BUSINESS ESCROW

BESC 138 Cooperative Education
(formerly BUS ESC 38)
See Cooperative Education listing (1-8 units). CSU

BESC 141 Escrow I, Principles (Basic)
(formerly BUS ESC 41) 3.0 Units
Methods and techniques of escrow procedures for various types of business transactions with emphasis on real estate, including the legal and ethical responsibilities for persons engaged in escrow work. Elective for the Real Estate Broker's license. Meets the 18-month, post licensing, educational requirements for the California Real Estate Salesman's license. 48-54 hours lecture. CSU. Offered Fall. (No prerequisite)

BESC 142 Escrow II, Principles (Advanced)
(formerly BUS ESC 42) 3.0 Units
Covers the more unusual and difficult types of escrows with an evaluation of the possible solutions. Emphasis is on real estate with some personal property and bulk sales covered. Elective for the Real Estate Broker's license. Meets the 18-month, post licensing, educational requirements for the California Real Estate Salesman's license. 48-54 hours lecture. CSU. Offered Spring. (No prerequisite)

BESC 148 Special Topics
(formerly BUS ESC 48)
See Special Topics listing (Variable units). CSU

BESC 149 Independent Study
(formerly BUS ESC 49)
See Independent Study listing (1-3 units). CSU

BUSINESS REAL ESTATE

These classes are open to all students with an interest in Real Estate. They are not just for Licensees."

BRE 51 Mortgage Loan Brokering
(formerly BUS RE 51) and Lending 3.0 Units
This course provides the student with the broad technical knowledge of both the state and federal laws governing the mortgage loan brokerage business and other lending practices in the state of California. General topics include disclosure statements, RESPA, fair lending practices, trust fund handling, hard money lenders, third party originators, reporting requirements, and securities in the lending industry. Satisfies one of the course requirements for a non-conditional real estate salesperson's license or for the real estate broker's examination. 48-54 hours lecture. Elective for Broker's License. (No prerequisite)

BRE 54 Principles of Mortgage
(formerly BUS RE 54) Origination 3.0 Units
This course is designed to provide the student with basic skills needed to originate loans. It includes taking the borrower from the qualification process to designing a loan that will fit individual needs. This course helps demonstrate how to find the right loan among the maze of multiple programs available to the borrower. 48-54 hours lecture. (No prerequisite)

BRE 55 Principles and Practices of
(formerly BUS RE 55) Mortgage Processing 3.0 Units
This course provides the student with the basics of loan processing and an overview of underwriting regulations and industry terminology. Students learn how to efficiently package and submit a loan for underwriting and approval. This course demonstrates how to analyze a loan application and relevant documents necessary for a loan submission. State and federal mandatory guidelines and disclosures are also discussed. 48-54 hours lecture. (No prerequisite)

BRE 56 Introduction to Financial
(formerly BUS RE 56) Planning 3.0 Units
Financial planning draws upon several business disciplines such as finance, banking, insurance, and real estate as well as behavioral sciences that include economics and psychology. This course emphasizes the student's ability to analyze, evaluate, and make decisions regarding the components of personal financial planning. Discussion topics include the time value of money, managing money, the importance of life, health, disability, property and liability insurance, managing investments, tax planning, estate planning, retirement planning and more. 48-54 hours lecture. (No prerequisite)

BRE 60 Advanced Real Estate Appraisal: Compliance and Review Procedures 3.0 Units
This course draws on the disciplines of real estate brokerage, finance, banking and appraisal with special attention to loss reduction due to underwriting and appraisal errors. Students with prior experience in the banking, mortgage, or appraisal industries will appreciate this course, however all are welcome. This course enhances the student's ability to analyze, understand and correct errors in real estate appraisals on federally required underwriting forms, narrative reports and electronic data exchanges. Discussion topics include appraisal analysis, valuation trends, demographic and census interpolation, reporting, communication and review. Uniform Standards of Professional Appraisal Practice will be discussed in relation to the forms reviewed. 48-54 hours lecture. (No prerequisite) This course may be taken four times.

BRE 61 Advanced Real Estate Appraisal: Land Valuations 3.0 Units
This course offers investigative techniques used to analyze and evaluate data leading to land valuation reports. Topics include discussion of soils analysis, topographic study, market analysis, environmentally affected properties, subdivisions, and more. This course is a continued education elective for the California Real Estate Broker's license and all four types of California real estate appraisers. 48-54 hours lecture. (No prerequisite)

BRE 62 Advanced Real Estate Appraisal: The Narrative Report 1.0 Unit
This course offers and demonstrates the techniques designed to assist appraisers in effectively communicating the results of their valuation processes. Special emphasis is placed on the narrative portion of the form and/or complete self-contained type reports. 16-18 hours lecture. (No prerequisite)

BRE 100 Real Estate Principles
(formerly BUS RE 30) 3.0 Units
Introductory course stressing the study of basic information in fundamental subjects in the field of real estate. Topics include legal aspects, legal descriptions, encumbrances, financing, escrow, contracts, taxation, subdivisions and zoning, appraisal, landlord/tenant relations, and arithmetic. Required course before testing for the Department of Real Estate Salesman's License. Elective for Real Estate Broker's License. 48-54 hours lecture. CSU. Offered Fall, Spring. (No prerequisite)

BRE 101 Real Estate Practices 3.0 Units
(formerly BUS RE 31)
Working practices in office listings and sales methods leading to competence. General basic course leading toward professionalism in real estate practice. Advanced topics involve prospecting and listing techniques, real estate agency and disclosure, selling and marketing techniques, advertising, office operations, finance, property management and real estate investment. Required for Real Estate Broker's license. Mandatory course before testing for the Real Estate Salesman's license. 48-54 hours lecture. CSU. (No prerequisite)

BRE 110 Legal Aspects of Real Estate I
(formerly BUS RE 32) 3.0 Units
A practical, applied study of California Real Estate Law which will help avoid legal difficulties arising from real estate transactions, instruments, zoning, and planning. This class is required for the Real Estate Broker's license and is an elective for the pretesting, educational requirements for the California Real Estate Salesman's license. 48-54 hours lecture. CSU. (No prerequisite)

BRE 120 Real Estate Appraisal 3.0 Units
(formerly BUS RE 34A)
This course examines narrative appraisal reports, theories of valuation, studies in specific properties, neighborhood data, market research, cost analysis, causes of depreciation, and how to treat the misplaced valuation of residential properties. Course also covers how to start an effective "appraisal plan" and sources of information. This course is an elective for the pretesting, educational requirements for the California Real Estate Salesman's license. 48-54 hours lecture. CSU. (No prerequisite.)

BRE 121 Advanced Real Estate
Appraisal: Income Property
(Formerly BUS RE 34B) 3.0 Units
Special emphasis given to income properties, how to obtain significant data and relate to the subject property, the importance of thorough research, and the introduction of capitalization methods. 48-54 hours lecture. CSU. Elective for Broker's License. (No prerequisite)

BRE 125 Taxes and Real
(formerly BUS RE 35) Estate Investment 3.0 Units
Introductory real estate investment course discusses ownership interests, sources of financing, tax aspects of real estate ownership, market and cash flow analysis for income property, land investing, creative financing, and the laws dealing with foreclosure property investing. 48-54 hours Lecture. Advanced Finance course for Real Estate Brokers License. CSU. (No prerequisite)

BRE 126 Real Estate Finance 3.0 Units
(formerly BUS RE 36)
This course offers a practical applied study and analysis of money markets, interest rates, and real estate financing with actual case illustrations. Cases demonstrate lending policies, problems, and rules involved in financing commercial and special purpose properties. This class is required for the Real Estate Broker's license and is an elective for the pretesting, educational requirements for the California Real Estate Salesman's license. 48-54 hours lecture. CSU. (No prerequisite)

BRE 127 Real Estate Office
(formerly BUS RE 37) Administration 3.0 Units
Designed for practicing real estate brokers, managers, or salespersons who plan to open their own office. This course emphasizes factors for success in real estate brokerage. Topics discussed include office location, organization, marketing, accounting, finance, property management, development and professional relations. Elective for the Real Estate Broker's license. 48-54 hours lecture. CSU. (No prerequisite)

BRE 138 Cooperative Education
(formerly BUS RE 38)
See Cooperative Education listing (1-8 units). CSU

BRE 139 Real Estate Economics 3.0 Units
(formerly BUS RE 39)
This course offers a study of the economic aspects that impact real estate values and land use. Included is the government's role in the economy, money and credit, community growth patterns, land use controls, and the economic principles of capitalism. This class is required for the Real Estate Broker's license and is an elective for the pretesting, educational requirements for the California Real Estate Salesman's license. 48-54 hours lecture. CSU. (No prerequisite)

BRE 140 Real Property Management
(formerly BUS RE 40) 3.0 Units
Professional approach to the principles and practices of managing income properties. Topics include leases, rent schedules, collections, evictions, budgets, purchasing, market economics, taxation, maintenance, and record keeping. Elective for the Real Estate Broker's license and is an elective for the pretesting, educational requirements for the California Real Estate Salesman's license. 48-54 hours lecture. CSU. Offered Fall. (No prerequisite)

BRE 142 Real Estate Marketing 3.0 Units
(formerly BUS RE 42)
A study of principles and processes involved in professionally marketing real estate. Course content includes: communication and marketing skills as practiced within the real estate industry, real estate advertising, target marketing, development of a marketing plan, product knowledge, people knowledge, qualifying both the buyer and the seller, negotiating and financing skills, and closing the escrow. Development of marketing tools including signs, maps, mail-outs and brochures, referrals, forms and media campaigns will also be covered. 48-54 hours lecture. CSU (No prerequisite)

BRE 148 Special Topics
(formerly BUS RE 48)
See Special Topics listing (Variable units).

BRE 149 Independent Study
(formerly BUS RE 49)
See Independent Study listing (1-3 units).

CHEMISTRY

CHEM 50 Forensic Chemistry 5.0 Units
This course introduces chemical and scientific techniques applicable to the analysis of physical evidence at a crime scene. Here, a crime is not limited to those against individuals. It also includes those against society such as environmental pollution, food adulteration and unsafe chemicals. The course is therefore applicable for students interested in entry level positions in a variety of fields including Administration of Justice, Anthropology and Government/Professional laboratories. A close relationship between theoretical lecture principles and field and laboratory methods is emphasized. 48-54 hours lecture and 96-108 hours laboratory. (No prerequisite)

CHEM 72 Biomolecular Science 3.0 Units
This course is a theoretical approach to laboratory techniques common to modern biotechnical/clinical laboratories. Principles of molecular biology, genetics, metabolism, and immunology will be studied with emphasis on their application to modern analytical methods. Information and Communication technology will be used to develop formal writing and public speaking skills. See cross listing for BIOL 72. 48-54 hours lecture. (No prerequisite. Recommended: BIOL 100 or BIOL 107)

CHEM 100 Introductory Chemistry
(formerly CHEM 10) (CAN CHEM 6) 5.0 Units
An introductory course in general, organic, and biological chemistry. This course is specifically designed for students preparing for careers in allied health, such as nursing and various fields of therapy. The course satisfies general education requirements for non-majors and assumes no background in chemistry, however, basic math skills are highly recommended. 48-54 hours lecture and 96-108 hours laboratory. CSU, UC (UC credit limitation). Offered Fall, Spring, Summer. (No prerequisite)

CHEM H100 Honors Introductory Chemistry
(formerly CHEM H10) (CAN CHEM 6) 6.0 Units
A foundation in the fundamental concepts, theories, and methodologies of Introductory Chemistry is highly recommended. Critical thinking and analytical skills will be used to develop problem-solving strategies used in Chemistry. Emphasis will be on the use of communication and information technologies in the analysis and presentation of experimental data. 64-72 hours lecture and 96-108 hours laboratory. CSU. UC (Prerequisite: Enrollment in honors course requires acceptance in Honors Program.)

CHEM 114 Environmental Chemistry
(formerly CHEM 14) 3.0 Units
A course whose concern is "Can we survive?" indicating that we live in a chemical world, a world of drugs, biocides, fertilizers, nerve gases, defoliants, detergents, plastics, and pollutants, all molecular in nature, and all produced chemically. Consideration of alternative solutions. Regulatory agencies and their functions and limitations. Introduction of sufficient fundamental chemistry to make the practical applications intelligible. 48-54 hours lecture. CSU, UC. Offered Fall, Spring. (No prerequisite)

CHEM 120 Introduction to Nutrition
(formerly CHEM 20) 3.0 Units
This course focuses on the fundamentals of carbohydrates, proteins, fats, vitamins, minerals, and their roles in human metabolism. It is specifically designed for individuals directing nutrition programs, hospitals, and care centers of those acquiring degrees in allied health, child development, or restaurant management, as well as interested homemakers. Selected nutrition topics include personalized and vegetarian nutrition, menu planning, marketing options and chemistry of nutrition. 48-54 hours lecture. CSU (No prerequisite) See cross listing for RMGT120. This course may be taken two times.

CHEM 128 Special Topics
(formerly CHEM 28)
See Special Topics listing (Variable units). CSU, UC

CHEM 129 Independent Study
(formerly CHEM 29)
See Independent Study listing (1-3 units). CSU

CHEM 138 Cooperative Education
(formerly CHEM 38)
See Cooperative Education listing (1-8 units). CSU

CHEM 201 General Chemistry
(formerly CHEM 1A) (CAN CHEM 2) 5.0 Units
The theories of atomic structure and the application of these theories to an understanding of bonding, solution processes, states of matter, gas laws, general properties of matter, and principles of stoichiometric calculations. Laboratory emphasis on the development of experimental skills. 48-54 hours lecture and 96-108 hours laboratory. CSU, UC. Offered Fall, Spring. (Prerequisite: High school chemistry, or CHEM 100, and working knowledge of MATH 90.) (CHEM 201+202 = CAN CHEM SEQ A)

CHEM 202 General Chemistry
(formerly CHEM 1B) (CAN CHEM 4) 5.0 Units
Using atomic theory as developed in Chemistry lA to examine the principles of periodic classification of the elements, thermodynamics, acids and bases, chemical equilibrium, reaction kinetics, coordination compounds. A survey of nuclear, organic and biochemistry. Laboratory emphasis on the development of experimental skills. 48-54 hours lecture and 96-108 hours laboratory. CSU, UC. Offered Spring. (Prerequisite: CHEM 201) (CHEM 201+202 = CAN CHEM SEQ A)

CHEM 206 Introductory Chemistry II:
(formerly CHEM 6) Organic Chemistry 4.0 Units
An introduction to fundamental concepts of Organic Chemistry for students entering professional health careers. Emphasis is on chemical bonding, structure, nomenclature, chemical properties, and reaction mechanisms of the major organic functional groups emphasizing their relationships to biological systems. 48-54 hours lecture and 48-54 hours laboratory. CSU, UC (UC credit limitation). Offered Spring. (Prerequisite: CHEM 100 or equivalent)

CHEM H206 Honors Introductory Chemistry II:
(formerly CHEM H6) Organic Chemistry 5.0 Units
Modern organic synthesis, biotech, and pharmaceutical laboratories assess the feasibility of their proposed syntheses using computer generated models of target compounds. Current trends in modern research indicate a growing dependence on computational chemistry. This program will extend topics covered in CHEM 206 into basic concepts of computational chemistry. Emphasis will be on molecular modeling techniques, acquisition, processing, and presentation of experimental data. 64-72 hours lecture and 48-54 hours laboratory. CSU. UC

CHEM 207 Introductory Chemistry III:
(formerly CHEM 7) Biochemistry 4.0 Units
An introduction to fundamental concepts of biochemical compounds for students entering professional health careers. Emphasis is on the structure, chemical properties, and physiological roles of carbohydrates, lipids, proteins, and nucleic acids. 48-54 hours lecture and 48-54 hours laboratory. CSU, UC. Offered Summer. (Prerequisite: CHEM 206 or equivalent)

CHEM H207 Introductory Chemistry III:
Biochemistry Honors 5.0 Units
The application of molecular modeling techniques to biological macromolecules. Computer generated force-fields and molecular

graphics will be used to study structural geometry, potential energy surfaces, energy gradients, bond energies, and bond angles. Confirmational analyses will be performed to gain a practical understanding of the advantages and limitation of molecular modeling. 64-72 hours lecture and 48-54 hours laboratory.

CHEM 255 Quantitative Analysis
(formerly CHEM 5) (CAN CHEM 12) 4.0 Units
Quantitative, gravimetric, volumetric, and instrumental methods of analysis. Stoichiometric calculations and applications of principles of chemical equilibrium to analytical problems. Laboratory accuracy required. 48-54 hours lecture and 48-54 hours laboratory. CSU, UC. Offered Summer. (Prerequisite: CHEM 202 or year course in General Chemistry)

CHEM 281 Organic Chemistry 5.0 Units
(formerly CHEM 8A)
The chemistry of aliphatic and aromatic hydrocarbons with emphasis on material fundamental to biochemistry. Modern concepts of chemical bonding, molecular reactions, structure, nomenclature, principles of stereo-chemistry, mechanisms, and synthetic pathways. Laboratory techniques include isolation, separation, purification, spectroscopy, and chromatographic analysis of organic compounds. 48-54 hours lecture and 96-108 hours laboratory. CSU, UC (UC credit limitation). Offered Fall. (Prerequisite: CHEM 202)

CHEM 282 Organic Chemistry 5.0 Units
(formerly CHEM 8B)
Principles and experimental techniques developed in CHEM 8A are extended to include synthesis and identification, nomenclature, derivatives, spectroscopy, and reactions of functional groups, heterocycles, and aromatic compounds. Biochemistry of carbohydrates, lipids, proteins, nucleic acids, and other biologically significant compounds is also examined. 48-54 hours lecture and 96-108 hours laboratory. CSU, UC. Offered Spring. (Prerequisite: CHEM 281)

CHILD DEVELOPMENT

CHDV 100 Child Growth and Development
(formerly CHDV 146) 3.0 Units
A study of the child from conception through adolescence. It addresses cognitive, physical, and social emotional development. Guidance for the developmental stages is included. 48-54 hours lecture. CSU,UC. Offered Fall, Spring. (No prerequisite.)

CHDV 106 Child, Family and Community
(formerly CLDDEV 6) 3.0 Units
The scientific study of societal institutions which socialize the child, such as the family, school, peer group, community and media within the context of culture, religion, economics, politics and change. Major theoretical perspectives will be examined. 48-54 hours lecture. CSU, UC. Offered Fall, Spring. (No prerequisite)

CHDV 110 Principles and Practices 3.0 Units
(formerly CLDDEV 10)
This course provides an introduction to the critical principles and practices of the field of early childhood education. Emphasis is placed on introducing students to interaction strategies that build meaningful relationships, provide for guidance and discipline, and support play and exploration. Students will consider developmental theory and its implications on interaction through play and relationships. The course will provide a brief overview of the field of early childhood education, and introduce students to developmentally appropriate practices of observation, assessment and curriculum planning. 48-54 hours lecture. CSU. Offered Fall, Spring. (No prerequisite.)

CHDV 111 Infant and Toddler Caregiving
(formerly CLDDEV 11) 3.0 Units
A study of the physical, perceptual, socio-emotional, cognitive development and behavior of the young child from birth to age three. Emphasis will be on the translation of theories of development to appropriate practices in the caregiving environment. 48-54 hours lecture. CSU. Offered Fall, Spring. (No prerequisite)

CHDV 115 Family Day Care Provider
(formerly CLDDEV 15) 3.0 Units
This course will address the many factors involved in providing quality child care in one's home. This course will cover how to set up a safe, healthy and stimulating environment that meets the developmental needs of the diverse ages served in family day care homes. Providers will develop or refine their business policies and procedures, parent contracts, and personal philosophy and goals. Additionally, training in preventive health practices will enable providers to partially fulfill AB 243 requirements. 48-54 hours lecture. CSU (No prerequisite. Grade option.)

CHDV 132 Montessori Methods
(formerly CLDDEV 132) of Education 3.0 Units
This course is designed to introduce the student to Dr. Montessori's life, work, philosophy of education and classroom design. This will be accomplished through lecture, reading and exploration of her materials designed specifically for the education of the young child. Students will be exposed to a variety of such materials and will create materials to use in his/her own classroom. 48-54 hours lecture. CSU. (No prerequisite. Grade option.)

CHDV 133 Art Experiences for Young
(formerly CLDDEV 33) Children 3.0 Units
This course offers students the opportunity to develop the ability to plan curriculum in the area of creative art for the young child. Students will select, develop, and present art materials and activities for young children. An understanding of appropriate developmental art experiences and the creative process will be stressed. Emphasis is placed on developing a classroom environment that promotes creative expression. 48-54 hours lecture. CSU. Offered Fall. (No prerequisite)

CHDV 134 Language and Early Literacy
(formerly CLDDEV 34) Development 3.0 Units
This course will focus on the young child's language acquisition and early literacy development. Emphasis will be on introducing students to developmentally appropriate activities and practices, which will foster language and early literacy. The course will allow students to develop language curriculum materials. It will satisfy the program/curriculum requirement for licensing and credentialing. 48-54 hours lecture. CSU. Offered Spring. (No prerequisite)

CHDV 137 The Child with Special Needs
(formerly CLDDEV 37) 3.0 Units
This course will provide the history of special education in the early childhood setting including an overview of legislation, assessment, curriculum development, and environmental issues. Students will identify the interrelationships of family, communities, and the early childhood educators. 48-54 hours lecture. CSU. Offered Spring. (No prerequisite)

CHDV 138 Cooperative Education
(formerly CLDDEV 38)
See Cooperative Education listing (1-8 units). CSU

CHDV 141 Basics of School-Age
(formerly CLDDEV 41) Child Care 3.0 Units
An introduction to appropriate practices in school-aged programs and curriculum based upon knowledge of the social, emotional, physical, and cognitive development of the child ages six to twelve. Exploration of curriculum units that include creative art, music, and literature. 48-54 hours lecture. CSU. (No prerequisite)

CHDV 142 (formerly CLDDEV 42) Child Health, Safety, and Nutrition 3.0 Units
This course addresses basic concepts of health, safety and nutrition which promote optimal health and positive attitudes toward wellness in the growing child at home and at school. Included will be identification and prevention of health problems; practical aspects of developing safe and healthy environments; and promoting good nutrition and food habits. 48-54 hours lecture. CSU. Offered Fall, Spring. (No prerequisite)

CHDV 143 (formerly CLDDEV 43) Introduction to the High/ Scope Curriculum 3.0 Units
Provides students with a working knowledge of the High/Scope curriculum model. This model stresses an active learning classroom based upon Jean Piaget's theories of child development. Course will cover origins of model, classroom arrangement, curriculum, adult/child interaction and observation techniques. 48-54 hours lecture. CSU. (No prerequisite)

CHDV 144 (formerly CLDDEV 44) Math and Science Experiences for Young Children 2.0 Units
This class will focus on the preschool child's acquisition of science and mathematical concepts. Emphasis will be on introducing students to developmentally appropriate activities and practices which will foster development in these areas. This course will also focus on the teacher's (adult) role in establishing an environment rich in opportunities for self-directed activities and will assist teachers in developing science and math materials and activities. CSU. Offered Spring. (No prerequisite)

CHDV 145 (formerly CLDDEV 45) Music/Movement Experiences for Young Children 2.0 Units
This course focuses on musical activities and experiences through which children develop skills, concepts and attitudes. It will introduce students to gross motor development in the early years and how to facilitate this development with music and movement activities. Students will select, develop and present music and movement activities leading to a comprehensive file of classroom activities to be implemented in one's own early childhood setting. 32-36 hours lecture. CSU Offered Fall. (No prerequisite)

CHDV 148 (formerly CLDDEV 48) Special Topics
See Special Topics listing (Variable units). CSU

CHDV 149 (formerly CLDDEV 49) Independent Study
See Independent Study listing (1-3 units). CSU

CHDV 150 Introduction to Curriculum 3.0 Units
The study and application of curriculum design principles for early childhood educational programs. Course includes planning and evaluating developmentally appropriate activities and experiences that promote physical cognitive, creative, social and emotional growth in children. Planning a comprehensive unit of study is also included. 48-54 hours lecture. CSU. (No prerequisite. Eligibility for ENGL 50 or ENGL 101.0 recommended.)

CHDV 160 Observation and Assessment 3.0 Units
This course offers an in-depth study of current observation and assessment approaches to understand and articulate development in children birth through age 8. Guided by developmental theory, students will learn how observation and assessment influence the design of early childhood settings, understanding and guiding child behavior, curricular plans, communication with families, and support program quality. Student must be aware that homework for this course involves observing children in a variety of settings. TB clearance advisory. 48-54 hours lecture. CSU. (No prerequisite. Successful completion of ENGL 50 or ENGL 101.0 and CHDV 100 recommended.)

CHDV 200 Teaching In A Diverse Society 3.0 Units
This course is designed to help students become teachers who can explore and address diversity in ways that enhance the development of children in early childhood settings. It will address attitudes and behaviors toward others in the areas of culture, race, gender, age and abilities; the development of an anti-bias curriculum; the analysis of the classroom environment for culturally relevant and diverse materials and resources; as well as highlighting developmental issues and advocacy. 48-54 hours lecture. CSU. (No prerequisite. Eligibility for ENGL 50 or ENGL 101.0 recommended.)

CHDV 210 Practicum 4.0 Units (formerly CHDV 127B)
This course focuses on the integration and application of child development theory to facilitate learning among young children. Students will complete 108 lab hours of supervised field experience at the campus Child Development Center or with an approved mentor teacher in the community. Emphasis is placed on developing effective teaching strategies, curriculum planning based upon observation and assessment, discipline and guidance techniques, cooperative relationships with staff and families, professional ethics and assessment of one's own professional competence. Current (within a year) medical verification of absence of tuberculosis (TB). 32-36 hours lecture and 96-108 hours laboratory. CSU. Offered Fall, Spring. [No prerequisite. Recommend successful completion of ENGL 50 OR ENGL 101.0; CHDV 100; CHDV 110; CHDV 150; CHDV 160; up to date TB clearance (within one year)]

CHDV 220 (formerly CLDDEV 20) The Mentor Teacher / Adult Supervision 2.0 Units
A study of the methods and principles of supervising student teachers/adults in early childhood programs. Emphasis on the role of experienced classroom teachers/supervisors who function as Mentors to teachers while simultaneously addressing the needs of children, parents and other staff. 32-36 hours lecture. CSU. (Prerequisites: CHDV 106 and CHDV 146))

CHDV 239 (formerly CLDDEV 39A) Administration of Children's Programs I 3.0 Units
Funding, licensing, planning, organizing, and managing a variety of programs for young children. The administrator's role, site development, on-going organization, staff relations, and working with parents and volunteers explored. Designed to meet Children's Center Supervision Permit requirements. 48-54 hours lecture. CSU. (Prerequisite: completion of State Department of Health required core courses (CHDV 106 and CHDV 146 or equivalent. It is recommended that students currently enrolled in this course be working in the field.)

CHDV 240 (formerly CLDDEV 39B) Administration of Children's Programs II 3.0 Units
This course explores the human relations aspect of administering children's programs. The emphasis will be placed on integration of early childhood philosophy into management practices, business/management skills, community relations, professional responsibilities related to child advocacy, labor relations and staff management. Multi-cultural awareness and implementation, mainstreaming issues and parent involvement will be included. This course is designed to fulfill three of the six semester units of administration required for the Children's Center Supervisor Permit. 48-54 hours lecture. CSU. (Prerequisite: Completion of the State Department of Health required core courses (CHDV 106 and CHDV 146 or equivalent. It is recommended that students currently enrolled in this course be working in the field.)

COMMUNICATION STUDIES

CMST 105 Intercultural Communication 3.0 Units
(formerly SPEECH 5)
A course designed for the student to learn relevant intercultural communication elements, factors, and theories. Students will learn and be evaluated on: describing their cultural roots, creating an identity collage, defining worldview and cultural values, analyzing an intercultural encounter, describing an intercultural communication context, and exploring a specific intercultural topic. Students will demonstrate proficiency in the above through exams, individual and group presentations, and essays. 48-54 hours lecture. CSU,UC. (No prerequisite.)

CMST 106 Interpersonal Communication
(formerly SPEECH 6) (CAN SPCH 8) 3.0 Units
A course which examines human communication theory and principles across a variety of contexts. The course emphasizes analysis of communication variables as well as skill development and application. 48-54 hours lecture. CSU, UC. (UC credit limitation). Offered Fall, Spring, Summer. (No prerequisite)

CMST 107 Family Communication 3.0 Units
(formerly SPEECH 7)
An introduction to human communication in the setting of the family. The goal is to help the student understand how, through communication, people develop, maintain, enhance, or destroy family relationships. Students will study variables and the process of communication as they affect the interaction of their families and develop insight that will make it possible to apply this knowledge. 48-54 hours lecture. CSU. Offered Fall, Spring, Summer. (No prerequisite)

CMST 108 Group Discussion
(formerly SPEECH 8) (CAN SPCH 10) 3.0 Units
Practical application of the processes involved in group discussion with an emphasis on problem solving and decision making. Attention to structured and unstructured situations. Principles applicable to groups found in schools, businesses, professions, and the family. Development of interpersonal skills for thoughtful participation in a democratic society. 48-54 hours lecture. CSU, UC. (UC credit limitation). Offered Fall, Spring. (No prerequisite)

CMST 109 Public Speaking
(formerly SPEECH 9) (CAN SPCH 4) 3.0 Units
A course designed for the student to learn how to prepare, organize, and deliver public speeches. Students will learn and be evaluated on: constructing a speaking outline, analyzing an audience, adapting to the occasion, and using effective speaking delivery techniques. Students will demonstrate proficiency in the above through the delivery of speeches in the classroom. 48-54 hours lecture. CSU, UC.. Offered Fall, Spring, Summer. (No prerequisite. Grade option)

CMST 120 Introduction to Interpreting
4.0 Units
This course introduces the field of American Sign Language interpreting and includes models of interpreting, ethical principles, and its history and development in modern times. Attention will be given to the development of necessary processing skills for consecutive interpretation. 64-72 hours lecture. CSU, UC. (Prerequisite: CMST 125. Grade Option.) This course may be taken four times.

CMST 121 Fingerspelling/Numbers I
(formerly SPEECH 21) 1.0 Unit
An introductory course that teaches the student the appropriate application of Fingerspelling and its production. The course will include strategies for improvement. Also included will be the articulation of loan signs and one to three digit numbers. Emphasis on both receptive and expressive fluency. 16-18 hours lecture. CSU. (No prerequisite)

CMST 122 American Sign Language I
(formerly SPEECH 22) 4.0 Units
An introduction to American Sign Language as it is used within deaf community. Students will study the basic structure and development of the language as well as Deaf Culture. Emphasis is placed on both receptive and expressive skills. 64-72 hours lecture. CSU, UC. (No prerequisite) This course may be taken two times.

CMST 123 American Sign Language II
(formerly SPEECH 23) 4.0 Units
A continuation in the study of American Sign Language as it is used within the Deaf Culture. Instruction is provided in the basic structure of the language. Emphasis is placed on both receptive and expressive skills. 64-72 hours lecture. CSU, UC. (Prerequisite: CMST 122) This course may be taken two times.

CMST 124 American Sign Language III
(formerly SPEECH 24) 4.0 Units
Continuation of development of skill in American Sign Language with emphasis on an intermediate level of comprehension and expression. Students will progress in their study of the structure and grammar of American Sign Language as well as Deaf Culture. Emphasis is placed on both receptive and expressive skills. 64-72 hours lecture. CSU, UC. (Prerequisite: CMST 123) This course may be taken two times.

CMST 125 American Sign Language IV
(formerly SPEECH 25) 4.0 Units
A continuation in the study of American Sign Language and the Deaf Community including its history and culture. Emphasis will be on receptive and expressive skills as they relate to narrating life events. Students will learn techniques such as role-shifting, use of space and classifiers in addition to appropriate non-manual behaviors. This course will prepare the student for entrance into an interpreter training program. 64-72 hours lecture. CSU. (Prerequisites: CMST 124) This course may be taken two times.

CMST 128 Special Topics
(formerly SPEECH 28)
See Special Topics listing (Variable units). CSU, UC

CMST 129 Independent Study
(formerly SPEECH 29)
See Independent Study listing (1-3 units). CSU

COMPUTER INFORMATION SYSTEMS

CIS 50 Computer Ethics 2.0 Units
This course is an introduction to the theories and issues of ethical behavior as applied to the exigencies of a rapidly changing, information-oriented, computer-driven society. Topics include ethical history, philosophies, and issues at the responsibility level of both corporate business and the individual. Various ethical theories are introduced and discussed. Numerous current and past case histories are presented. 32-36 hours lecture. (No prerequisite)

CIS 56 Project Management with Microsoft Management 3.0 Units
This course will provide the student with the skills necessary to manage projects using Microsoft Project. The student will be introduced to Gantt and PERT charts, the concept of a critical path, resource scheduling and leveling, and other concepts used in managing large projects. Efficient use of resources, people and equipment will be emphasized. 32-36 hours lecture and 48-54 hours laboratory. (No prerequisite)

CIS 64 Computer Mathematics 3.0 Units
Computer mathematics for the computer science major. Introduction to number bases, set theory, Venn diagrams, logic, Boolean algebra, algebraic expressions, exponents, linear and quadratic equations, matrices, mathematical sequences and series, linear programming and logarithmic functions. 48-54 hours lecture. Offered Fall. (Prerequisite: High school algebra or MATH 50 or equivalent)

CIS 67 Fundamentals of Networking 2.5 Units
This course presents a broad overview of the fundamentals of networking computers. It discusses in some detail various network topologies, architectures, industrial standards, standards-defining organizations, and the practical use of networks. Mainframe and microcomputer networks are discussed. 32-36 hours lecture and 24-27 hours laboratory. (No prerequisite) This course may be taken four times.

CIS 72 (formerly CIS 74) Novell NetWare 6 Basic Administration 2.5 Units
This course knowledge and skills needed to perform NetWare 6 network administration or system management tasks effectively. Participants who complete this course will be able to accomplish basic and fundamental network management tasks in a NetWare 6 network. This course is highly recommended for those seeking either the Certified NetWare Engineer (CNE) or the Enterprise Certified NetWare Engineer (ECNE) certification from Novell Corporation and for NetWare 6 users and NetWare administrators who are responsible for the day-to-day operational management of a NetWare 6 network. 32-36 hours lecture and 24-27 hours laboratory. (No prerequisite) This class may be taken four times.

CIS 79 (formerly CIS 82) Novell Directory Services Design and Implementation 2.5 Units
This course teaches network administrators, network designers, and networking consultants the skills needed to create a Novell Directory Services (NDS) design and implementation strategy. Students will complete an NDS design and strategy implementation schedule using templates that can be reused to create a design for their workplace. 32-36 hours lecture and 24-27 hours laboratory. CSU (Prerequisite: CIS 72) This course may be taken four times.

CIS 80 Operating Systems: Mac OS X 3.0 Units
This course introduces the Mac OS X operating system. Topics include the graphical user interface, OS X preferences, account management, spotlight, disk management, printing, networking, program installation and removal, system security, email, Internet access, display management, address book, calendaring, voice over IP, instant messaging, quicktime, and support. 32-36 hours lecture and 48-54 hours laboratory. (No Prerequisite) This course may be taken four times.

CIS 81 iLife Applications 3.0 Units
This course is designed for the beginning Apple user who wants to get the full use out of their computer's capability to create, modify and design digital images, music, videos (home movies) and podcasts. 32-36 hours lecture and 48-54 hours laboratory. (No Prerequisite) This course may be taken four times.

CIS 83 Programming in Python 4.0 Units
Python is a popular programming language that has taken a primary role in many companies including NASA, Google, Industrial Lights and Magic. Python uses an elegant syntax, making the programs easier to write and ready, which also makes it an ideal language for beginning programmers. The foundation that students achieve is applicable to other disciplines that may require some knowledge of computer programming such as digital animation, mathematics, and more advanced programming languages. It is assumed that the student has little or no experience with writing computer programs. 48-54 hours lecture and 48-54 hours laboratory. (No Prerequisite) This course may be taken four times.

CIS 90 Introduction to Unix Operating System 4.0 Units
This course introduces the Unix and Linux operating systems. Topics include the history of Unix, commands and utilities, file system structure, shells, graphical user interfaces, networking, text editing and shell programming. 48-54 hours lecture and 48-54 hours laboratory. (No Prerequisite) This course may be taken four times.

CIS 91A MySQL Admin A 2.0 Units
This course is designed to provide students with an introduction to the MySQL relational database management system. Students will learn how to design, install, configure and secure MySQL databases. The student should have prior experience with the fundamentals of databases. 24-27 hours lecture and 24-27 hours laboratory. (No Prerequisite)

CIS 91B MySQL Administration B 2.0 Units
This second course in MySQL database administration is designed to provide students with an advanced approach to current database administration issues in enterprise level databases. Topics include: transactions, multiple servers, replication, locking and administration interfaces. 24-27 hours lecture and 24-27 hours laboratory. (No Prerequisite) This course may be taken four times.

CIS 93 Perl 4.0 Units
This course is designed to provide students with an understanding of the Perl scripting language used in Unix and Linux systems. Students will learn how to design and implement dynamic scripts through strings, operators, variables, arrays, control structures, expressions, functions, file handles and database access controls. 48-54 hours lecture and 48-54 hours laboratory. (No Prerequisite) This course may be taken four times.

CIS 94 PHP (Hypertext Preprocessor) Programming 4.0 Units

This course is designed to provide students with an introduction to programming web-based applications using PHP. Students will learn how to design, code and implement dynamic web sites. This course will move the student from an understanding of XHTML to the development of powerful web applications that can be deployed over the Internet. 48-54 hours lecture and 48-54 hours laboratory. (No Prerequisite) This course may be taken four times.

CIS 95 PHP+MySQL Web Application Development 4.0 Units

This course focuses on providing students experience with advanced programming of web-based applications using PHP+MySQL. Students will learn how to design, code and implement data driven web sites. This course will move the student from an understanding of PHP (Hypertext Preprocessor) to the development of powerful web applications that can be deployed over the Internet or the intranet. 48-54 hours lecture and 48-54 hours laboratory. (No Prerequisite) This course may be taken four times.

CIS 96A Structured Query Language A Using MySQL 2.0 Units

This is the first of two courses in Structured Query Language using the MySQL database management system. Topics include concepts of relational databases and SQL, creating and using databases and performing queries. 24-27 hours lecture and 24-27 hours laboratory. (No Prerequisite) This course may be taken four times.

CIS 96B Structured Query Language B Using MySQL 2.0 Units

This is the second course in Structured Query Language using the MySQL relational database management system. Topics include: Joins, IF/Case statements, indexing, batch operations and locking strategies. 24-27 hours lecture and 24-27 hours laboratory. (No Prerequisite) This course may be taken four times.

CIS 97 XML Programming 4.0 Units

This course introduces students to the foundations that comprise the XML family of technologies. Topics include: well-formed XML syntax rules; validation of XML using DTDs and Schemata; introductory DOM and SAX Scripting; creating XML data islands on XHTML pages; using CSS, XSL, XSL-FO and XSLT to style XML content; move data to/from databases using XML; and several advanced topics. 48-54 hours lecture and 48-54 hours laboratory. (No Prerequisite) This course may be taken four times

CIS 101 (formerly CIS 1) Computer Literacy (CAN CSCI 2) 4.0 Units

This is a survey course which provides an overview of computer technology for multi disciplinary majors. Using laboratory projects supported by the lecture, the student gains "hands- on" familiarity with different operating systems, word processors, spreadsheets, database management systems, programming, networks and the use of the Internet (or the Information Superhighway). 48-54 hours lecture and 48-54 hours laboratory. CSU, UC. (No prerequisite)

CIS 104 (formerly CIS 4) Object-oriented Analysis and Design 3.0 Units

This is a first course in the object-oriented modeling and design, a new way of thinking about problems using models organized around real-world concepts. The fundamental object-oriented construct is the object, which combines both data structure and behavior in a single entity. Object-oriented models are useful for understanding complex problems, communicating with application experts, modeling enterprises, preparing documentation, and designing programs and databases. This course is a prerequisite to all object-oriented programming language courses for it provides a requisite baseline working knowledge of unique object-oriented concepts and structure such as classes, objects and methods, encapsulation, inheritance, polymorphism and message abstraction, and static virtual methods. 32-36 hours lecture and 48-54 hours laboratory. CSU. (No prerequisite, Grade Option)

CIS 105 Introduction to Systems Analysis (formerly CIS 5) 3.0 Units

Introduces the three major skills required to perform effectively as a beginner in a systems analysis environment. Defines the specific steps in the determination of new systems' requirements, system design, and the creative process used to select and make recommendations as to one or more solutions to system development. 48-54 hours lecture. CSU. Offered Spring. (No prerequisite)

CIS 106 (formerly CIS 6) Introduction to Computer Technology for Educators 4.0 Units

A survey course which provides an overview of computer technology for multi-disciplinary majors, but with emphasis on its role in educational settings. The course provides instruction in a variety of topics supported by hands-on laboratory work with operating systems, word processing, spreadsheets, databases, desktop publishing, programming, networks, and the Internet. Application and evaluation of computer technology in learning environments serves as the overall framework. See cross listing for ETEC 106. 48-54 hours lecture and 48-54 hourslaboratory. CSU (No prerequisite)

CIS 107 (formerly CIS 7) Introduction to The Internet for Educators 2.0 Units

A course for education students or current teachers to acquire the skills needed to effectively utilize the Internet in the classroom. Emphasis will be placed on computer-mediated communication with the World Wide Web. Students will become well versed in the use of Web browsers, FTP, newsgroups/asynchronous discussion, e-mail, and chat/synchronous discussion. See cross listing for ETEC 107. 24-27 hours lecture and 24-27 hours laboratory. CSU (No prerequisite)

CIS 108 (formerly CIS 8) Assembly Language Programming (CAN CSCI 10) 3.0 Units

Designed to train students to prepare and write the basic assembly language programs for microcomputer systems in both business and scientific applications. 32-36 hours lecture and 48-54 hours laboratory. CSU, UC. Offered Spring. (No prerequisite)

CIS 111 (formerly CIS 35) Multimedia Presentations 4.0 Units

Students gain experience in developing multimedia presentations while gaining an understanding of multimedia technologies. In acquiring "hands-on" experience in producing and presenting multimedia presentations, the student will also actively create audio files, full-motion, video clips, graphics, animation sequences, and the text used in the final production. Additional subjects which will be covered include the basic principles for effective communications, scripting, logical control of peripheral devices, and runtime packaging. 48-54 hours lecture and 48-54 hours laboratory. CSU. (No prerequisite)

CIS 120 Introduction to Macromedia Dreamweaver 4.0 Units

This course teaches students how to use the web-authoring tool Dreamweaver. Covered topics include Dreamweaver basics, website set-up, animation, multi-media, and more. 48-54 hours lecture and 48-54 hours laboratory. (No prerequisite. Grade Option.) This course may be taken two times.

CIS 121 Introduction to Flash 4.0 Units

Flash is an advanced tool for creating graphics, animation, multimedia components that can be incorporated into other software applications such as web pages, or can function on their own. This is a beginning course on Flash. It teaches students the Flash basics, graphics, texts,

layers, symbols, frames, animations, tweens, interactivity, action scripts, etc. 48-54 hours lecture and 48-54 hours laboratory. (No prerequisite. Grade Option.) This course may be taken two times.

CIS 124 (formerly CIS 24) Fundamentals of Data Communications 2.0 Units
This course presents the general computer user with a basic understanding of data communications with added emphasis on telecommunications. The course includes analog and digital transmission concepts, networks, protocols, operating systems, local area networks (LANs), network architectures, network topologies, security, error detection and correction codes. 32-36 hours lecture. CSU. (No prerequisite)

CIS 136 (formerly CIS 36) Introduction to the Internet 2.0 Units
This course of instruction is designed for the student or savvy business person who wants to acquire the skills needed to effectively interact and utilize the resources of the Internet and its newer component, the World Wide Web (WWW). By completing this course, a student will become well versed in the understanding and using of browsers and viewers, FTP (File Transfer Protocol), news groups, e-mail, and chat/conversation utilities. They will also be made aware of some of the other concerns relating to using the Internet, such as privacy and security issues. 24-27 hours lecture and 24-27 hours laboratory. CSU. (No prerequisite)

CIS 137 (formerly CIS 37) Introduction to HTML 2.0 Units
This course is designed for the student or business person who wants to acquire the skills needed to create a presence on the WWW (World Wide Web) in the form of a Web Page. The student will become conversant with HTML (Hypertext Mark-up Language) and able to use HTML for Web Authoring (designing, implementing, and maintaining). Several tools will be explored, such as but not limited to, text editors, WYSIWYG (what you see is what you get) editors, and tag editors. 24-27 hours lecture and 24-27 hours laboratory. CSU. (No prerequisite.)

CIS 138 (formerly CIS 38) Cooperative Education
See Cooperative Education listing (1-8 units). CSU

CIS 139 (formerly CIS 39) Windows XP for Power Users 4.0 Units
Students gain experience in the configuring and optimizing of Windows 95. Experience includes Control Panel programs and modification of the system settings. The use of Utility programs, Disk Defragmenter, Scandisk, and REGEDIT (registry editor). Additional subjects covered include installation, hardware detection, and troubleshooting system problems. Windows 95 networking and set up will be addressed. 48-54 hours lecture and 48-54 hours laboratory. CSU. (No prerequisite)

CIS 201 (formerly CIS 32A) C++ Module A 4.0 Units
An introduction to programming using the C++ language. This course is appropriate for those wishing to learn the principles of computer programming and to gain some initial experience with C++. 48-54 hours lecture and 48-54 hours laboratory. CSU, UC. (No Prerequisite. CIS 101 recommended)

CIS 202 (formerly CIS 32B) C++ Module B 4.0 Units
The second in the C++ series, this course teaches the student who is familiar with the language how to use its object-oriented features in depth. Subject matter includes: designing and implementing classes, abstract data types, overloading operators, inheritance, and polymorphism. 48-54 hours lecture and 48-54 hours laboratory. CSU, UC. (Prerequisites: CIS 201 with a minimum grade of "C")

CIS 205 (formerly CIS 42) JavaScript 4.0 Units
JavaScript is the only wide-spread programming language for web pages on virtually all browsers. By incorporation JavaScript into HTML documents, web page contents become dynamic, personalized and interactive. Even with server-side technology, such as ASP.NET and PHP, JavaScript is still a must since many features such as mouseover, etc., are not supported by any server-side programming. This course teaches students how to program using JavaScript from the beginning; it also prepares students for more advanced web development courses including ASP.NET and PHP. 48-54 hours lecture and 48-54 hours laboratory. CSU

CIS 206A (formerly CIS 44A) Programming JAVA Module A 2.0 Units
This is an introductory course for programming in Java. The course will cover the basics of the Java programing language and object oriented programming method. Some of the more advanced topics such as applets programming data structure implementation in Java will also be covered. 24-27 hours lecture and 24-27 hours laboratory. CSU. (No prerequisite) This course may be taken four times.

CIS 206B (formerly CIS 44B) JAVA Programming B 2.0 Units
This is a second course in Java programming. The course will review the basics of the Java language and object oriented programming. The main topics of the course include Java applet programming and networking with Java. 24-27 hours lecture and 24-27 hours laboratory. CSU. (Prerequisite: CIS 206A with a minimum grade of "C", Grade Option.)

CIS 210 (formerly CIS 33) Visual Basic Programming 4.0 Units
Visual Basic is the world's most popular programming language used for application development. This course is based on the latest VB.NET. With the .NET technology, VB is now a fully object-oriented programming language suitable not only for Windows applications, but also for Web applications. While retaining its advantages in ease of learning, efficiency at developing sophisticated applications, VB.NET has now added an array of powerful features such as Web forms, mobile controls, support for XML, full compatibility with other languages (such as C#, Visual C++, Cobol, NET), etc. Students will learn all the programming basics using VB.NET, as well as being exposed to topics such as Object-Oriented programming, Database programming, and Web programming. 48-54 hours lecture and 48-54 hours laboratory. CSU. (No prerequisite. Recommended: students should have at least one programming course in Pascal, Basic, C, or Fortran, college algebra and computer math.) This course may be taken three times.

CIS 211A (formerly CIS 13) Advanced VB Programming Module A: Advanced Topics 4.0 Units
This is an advanced programming course using VB.NET. The course focuses on developing Object-Oriented applications using the latest Microsoft .NET technology. Topics covered include .NET Framework and CLR, class implementation, inheritance, polymorphism, exception handling, multithreading, developing custom controls for Windows forms and Web forms, etc. 48-54 hours lecture and 48-54 hours laboratory. CSU (Prerequisite: CIS 210. Recommended: CIS 104) This course may be taken three times.

CIS 211B (formerly CIS 14) **Advanced VB Programming Module B: Database Programming** 4.0 Units

This is an advanced programming course using VB.NET. The course focuses on developing desktop/Web applications using Microsoft's new ADO.NET technology. ADO.NET, based on XML, provides platform interoperability and scalable data access. Topics covered include the .NET Framework, ADO.NET, SQL, DataSet, XML, ADO.NET classes libraries, Web Services, etc. 48-54 hours lecture and 48-54 hours laboratory. CSU (Prerequisites: CIS 210 and CIS 280, or equivalent) This course may be taken three times.

CIS 211C (formerly CIS 15) **Advanced VB Programming Module C: Web Programming 4.0 Units**

This is an advanced programming course using VB.NET. The course focuses on developing Web applications using Microsoft's ASP.NET technology. ASP.NET is a powerful server-based technology, designed to create dynamic Web sites and Web-based distributed applications, or corporate intranet applications. Topics covered include the .NET Framework, ASP.NET class libraries, Web forms, ASP.NET Server controls, ASP.NET Data Access. XML and Web Services, ASP.NET mobile controls, etc. 48-54 hours lecture and 48-54 hours laboratory. CSU (Prerequisites: CIS 210 and CIS 205, or equivalent. Recommended: CIS 261 and 262) This course may be taken three times.

CIS 240A (formerly CIS 40) **Windows Vista Professional 4.0 Units**

An introduction to operating system design and operation using Windows Vista Professional version. Topics include: the design and philosophy of the Windows vista operating system, the differences between various Windows Vista versions, user issues in Windows Vista such as using Vista's Graphical User Interface, and basic installation issues. Emphasis will be given to comparing Windows Vista Workstation and Windows 2003 Server. Hands-on experience will be stressed. 48-54 hours lecture and 48-54 hours laboratory. CSU. (Prerequisite: CIS 101 or equivalent) This course may be taken three times.

CIS 240B (formerly CIS 41) **Introduction to Microsoft Windows 2003 Server Administration 4.0 Units**

Students will learn how to administer a Windows NT Server system on a network. Topics include: installation, user management, security, performance issues, domains, World Wide Web and related services, using NT and other network operation systems, network printing, the NT registry, backups, and setting up applications. 48-54 hours lecture and 48-54 hours laboratory. CSU (Prerequisite: CIS 240A or equivalent). This class may be taken four times.

CIS 252 (formerly CIS 26) **NetWare 6 Advanced Administration 2.5 Units**

Learn the advanced skills involved in the administration of NetWare networks, including improving the performance of your network and server, managing Novell Directory Services (NDS) partitioning and replication, time synchronization strategies, and integrating NetWare 4 and NetWare 3. It is one of seven courses needed for CNE certification. 32-36 hours lecture and 24-27 hours laboratory. CSU. (Prerequisite: CIS 72 or equivalent) This course may be taken four times.

CIS 261 (formerly CIS 34A) **UNIX System Administration A 2.0 Units**

UNIX system administrators are responsible for the operation of UNIX systems—the most common server platform on the Internet. Learn how to setup, manage, and maintain UNIX systems. Topics include: the role of the system administrator in an organization, UNIX variants, installation, booting and shutting down, backups, managing users. 16-18 hours lecture and 48-54 hours laboratory. CSU. (Prerequisite: CIS 123 or equivalent)

CIS 262 (formerly CIS 34B) **UNIX System Administration B 2.0 Units**

This second UNIX system administration course covers advanced UNIX administration topics, including system security, setting up and managing Internet services such as Hypertext Transfer Protocol, File Transfer Protocol, and e-mail. 16-18 hours lecture and 48-54 hours laboratory. CSU. (Prerequisite: CIS 261 and CIS 67)

CIS 280 (formerly CIS 22) **Fundamentals of Database Management Systems 3.0 Units**

This course provides an in-depth knowledge of several different database management systems (DBMS) and an understanding of the basic relational, network, or hierarchical database structures which they use. Issues of privacy, security, protection, integrity, redundancy, distributed database concepts, data manipulation and query languages are covered. Students will learn how these concepts and facilities are implemented on common microcomputer-based DBMS products and will learn "hands-on" how these common features are implemented in a variety of such products. 32-36 hours lecture and 48-54 hours laboratory. CSU. (No prerequisite)

CIS 281 (formerly CIS 43) **Database Management 4.0 Units**

This course teaches students the concepts and implementation of a relational database model and object-oriented database model. This course covers the common languages used for data manipulation and information retrieval. The course is a practical approach to train students to analyze design and create databases for businesses and organizations. 48-54 hours lecture and 48-54 hours laboratory.CSU (Prerequisite: CIS 280 or equivalent)

CIS 287A (formerly CIS 45A) **Structured Query Language A 2.0 Units**

First module of manipulating data and databases using Structured Query Language (SQL). Topics include concepts of databases and SQL, creating and using databases, and performing queries. 16-18 hours lecture and 48-54 hours laboratory. CSU. (Prerequisite: CIS 280 with a minimum grade of "C")

CIS 287B (formerly CIS 45B) **Structured Query Language B 2.0 Units**

The second course teaching the management of data and databases using Structured Query Language (SQL). Topics include: working with multiple tables, data normalization, views, indexes, dealing with data problems, and improving the performance of data manipulation. 16-18 hours lecture and 48-54 hours laboratory. CSU. (Prerequisite: CIS 287A with a minimum grade of "C")

CIS 288A (formerly CIS 47A) **Oracle A 2.0 Units**

An introduction to using the Oracle relational database management system. This is the first of two modules. Topics include the structure, nature, and use of databases, working with database projects, dealing with the various data types, and querying databases. 16-18 hours lecture and 48-54 hours laboratory. CSU. (Prerequisite: CIS 280; Recommended: CIS 281)

CIS 288B (formerly CIS 47B) **Oracle B 2.0 Units**

This second course on Oracle continues instruction on the Oracle relational database management system. Topics include using database administration tools, querying databases, keeping data safe and secure, and using databases in group environments. 16-18 hours lecture and 48-54 hours laboratory. CSU. (Prerequisite: CIS 288A or equivalent)

CIS 290A **MS SQL Server Administration A**
(formerly CIS 46A) **2.0 Units**
The MS SQL Server is Microsoft's database server software. This course teaches students how to administer the database system using MS SQL Server. This course discusses the basics of client/server database computing, the planning and installation of SQL Server, and normal operation of SQL Server. 16-18 hours lecture and 48-54 hours laboratory. CSU. (Prerequisite: CIS 280 with a minimum grade of "C". Recommended Preparation: CIS 281)

CIS 290B **MS SQL Server Administration B**
(formerly CIS 46B) **2.0 Units**
The MS SQL Server is Microsoft's database server software. This course is the continuation of CIS 290A. It will review the basic features of SQL Server administration and then focus on advanced topics of using SQL Server such as performance and tuning. 16-18 hours lecture and 48-54 hours laboratory. CSU. (Prerequisite: CIS 290A with a minimum grade of "C")

COMPUTER INTEGRATED DESIGN AND GRAPHICS

CIDG 50 **Drafting Laboratory 1.0-4.0 Units**
Drafting laboratory provides the additional time, equipment, and instruction necessary to develop problem solving, board, or AutoCAD skills at each individual's own pace. Fifty-four hours of laboratory required for each unit of credit. (No prerequisite) This course may be taken four times.

CIDG 65 **3ds Max Advanced Effects and Compositing** **3.0 Units**
Students will learn advanced concepts and procedures required for creating high quality 3D special effects. Topics will include particle systems, space warps, and Reactor. Rendering techniques incorporating depth of field, motion blue, and anti-aliasing filters will also be discussed. Alpha channel compositing techniques will be addressed in detail. Students will also explore and analyze relevant issues pertaining to the computer animation industry. 32-36 hours lecture and 48-54 hours laboratory. (Prerequisite: CIDG 260.) This course may be taken three times.

CIDG 70 **Design for Graphic Artists** **3.0 Units**
This course covers the fundamental elements and principles of design. This course uses demonstration of the fundamentals through assignments and projects. Emphasis will be placed on developing techniques and vocabulary that will enable the student to problem solve and communicate ideas, concepts and solutions. Students will also learn how to properly critique design. 32-36 hours lecture and 48-54 hours laboratory. (No prerequisite) This course may be taken four times.

CIDG 71 **Survey of Computer Graphics Studio** **4.0 Units**
This course will introduce students to industry standard software packages used in visual communications. Students will be instructed in the basic use of draw, paint/photo, layout, multimedia, web, digital video, and 3D. Topics covered include: Operating systems basics, drawing and painting on the computer, digitizing and editing sound and video and designing for interactivity. 48-54 hours lecture and 48-54 hours laboratory. (No prerequisite) This course may be taken four times.

CIDG 72 **Computer Illustration** **3.0 Units**
This course covers the fundamental elements of illustration including history, design, color theory and appropriateness for specified use in the graphics industry. Students will create a series of illustrations using software techniques and skills developed through lectures, demonstration and assigned projects. 32-36 hours lecture and 48-54 hours laboratory. (No prerequisite. Grade Option) This course may be taken four times.

CIDG 73 **Typography and Layout** **3.0 Units**
In this course students will learn how to use type as a graphic design element using industry standard techniques and tools. Students will strengthen their use of type as a design element through a variety of projects ranging from elementary exercise to intermediate presentations. In addition, students will examine the history of type and typesetting, modern methodologies, principles and aesthetics of good typographic design. 32-36 hours lecture and 48-54 hours laboratory. (No prerequisite) This course may be taken four times.

CIDG 75 **Page Layout and Design** **3.0 Units**
This course introduces students to the computer as a page layout and design tool. Emphasis will be on using industry standard software to simplify the paste-up and pagination process when producing multi-page printed materials. Students will learn the terminology and techniques of page layout so that they may communicate within the industry. Class projects will develope the ability to work as a team to produce printed materials within time and technical constraints. 32-36 hours lecture and 48-54 hours laboratory. (No prerequisite) This course may be taken four times.

CIDG 77 **Print Production Processes** **3.0 Units**
A study of the processes used in the printing industry. Emphasis will be placed on terminology, practices, and techniques for effective communication with printing professionals. Class projects will develop the students' ability to design within the necessary parameters. 32-36 hours lecture and 48-54 hours laboratory. (No prerequisite) This course may be taken four times.

CIDG 79 **Multimedia and Web Design** **4.0 Units**
This course teaches graphic artist the tools and procedures for designing graphics for the computer screen. This course will give an overview of standard industry software used for creating multimedia presentation and web pages. This course does not focus on HTML or scripting language but is focused on the development of the visual content. 48-54 hours lecture and 48-54 hours laboratory. (No prerequisite. Grade Option) This course may be taken four times.

CIDG 90 **Fundamentals of Architecture and Structural Engineering** **3.0 Units**
This course covers the fundamentals of architecture design and structural engineering with an emphasis on structural calculations. These fundamentals include the requirements for building plans and the most recent Title 24 Energy code and the names and explanations of construction hardware. Structural calculations are performed using the MaxQuake and the MaxBean software programs. 48-54 hours lecture. (No prerequisite. Recommended preparation: Students will need to have working knowledge of AutoCAD [preferably two semesters]. Grade Option.) This course may be taken three times.

CIDG 101 **Introduction to Drafting**
(formerly CIDG 11) **3.0 Units**
This survey course will explore the basic techniques used in the drafting industry. The course will emphasize proper use of instruments, lettering, and line quality. Course includes work in the fields of architectural, mechanical, and computer aided drafting. 32-36 hours lecture and 48-54 hours laboratory. CSU Offered Fall. (No prerequisite)

CIDG 103 (formerly CIDG 3) Blueprint Reading for Construction 3.0 Units
A course designed to develop skills necessary to interpret both residential and commercial construction drawings and blueprints. 48-54 hours lecture. CSU Offered Fall. (No prerequisite)

CIDG 104 (formerly CIDG 4) Blueprint Reading for Industry 3.0 Units
A course designed to develop skills necessary to visualize and correctly interpret drawings and diagrams common to industry. 48-54 hours lecture. CSU Offered Spring. (No prerequisite)

CIDG 108 (formerly CIDG 8) Architectural Presentation 3.0 Units
A study of two common architectural presentation techniques: model making and illustration. Students will develop skill in creating architectural models using paper, mat board, wood, plastic, and styrene foam. The illustration portion of this course will include work with perspectives in pencil, watercolor, and airbrush. 32-36 hours lecture and 48-54 hours laboratory. CSU Offered Spring. (No prerequisite)

CIDG 110 (formerly CIDG 6A) Two Dimensional AutoCAD 3.0 Units
An introduction to the AutoCAD program including all necessary basic commands required for computer aided drafting. Students will master drawing setup, common draw, edit and viewing commands and plotting. Lectures and exercises are designed to provide a comprehensive knowledge of all basic computer drafting functions. 32-36 hours lecture and 48-54 hours laboratory. CSU (No prerequisite, Grade Option) This course may be taken two times.

CIDG 120 (formerly CIDG 6C) Solids Modeling and Three Dimensional CADD 3.0 Units
Solid Modeling and Three Dimensional CADD will introduce students to a new autodesk software package entitled INVENTOR. Students will understand the concepts involved in Parametric Modeling. Students will begin by constructing basic shapes and proceed to building intelligent solid models and create multi-view drawings. Assembly drawings, section views, auxiliary views, sheet metal drawings, and details will also be produced. Students will develop their drafting and computer skills through drawings and projects that emphasize teamwork and the design process. Students will also learn various hardware, software and peripheral components related to operating a CADD station. CSU (No prerequisite)

CIDG 138 (formerly CIDG 38) Cooperative Education
See Cooperative Education listing (1-8 units). CSU

CIDG 160 (formerly CIDG 26A) 3ds Max Fundamentals 3.0 Units
Students will learn the basics of 3D modeling, how to create and apply realistic textures, lighting principles and techniques, camera types and their appropriate usage, and fundamental keyframing procedures. Other topics to be covered include storyboards, the traditional principles of animation, current industry trends and issues pertaining to rendering output for different mediums (film, video, Internet, etc.). 32-36 hours lecture and 48-54 hours laboratory. CSU (No prerequisite) This course may be taken two times.

CIDG 210 (formerly CIDG 6B) Advanced Two Dimensional AutoCAD 3.0 Units
This course will explore the more advanced two-dimensional features of the AutoCAD program including entity filters, attributes, external reference files, paper space, and slide presentations. Projects include sectional description of compound shapes and developments. 32-36 hours lecture and 48-54 hours laboratory. CSU (No prerequisite) This course may be taken two times.

CIDG 230 (formerly CIDG 25A) Computer Aided Mapping I 3.0 Units
Introduction to computer aided mapping techniques commonly used by government and private industry. Course includes the hands-on application of the computer to develop track, parcel and utility maps, zoning overlays, and site plans. 32-36 hours lecture and 48-54 hours laboratory. CSU (Prerequisite: CIDG 110) This course may be taken two times.

CIDG 231 (formerly CIDG 25B) Computer Aided Mapping II 3.0 Units
This course will cover more advanced computer aided mapping techniques commonly used in the industry of civil engineering. Course is designed to develop skills necessary to create grading plans, roadway design, cross sections, and perform mathematical principles of slopes, grades and earthwork calculation. 32-36 hours lecture and 48-54 hours laboratory. CSU (Prerequisite: CIDG 230) This course may be taken two times.

CIDG 250 (formerly CIDG 53A) Architectural Computer Aided Design I 3.0 Units
This course is designed to develop computer drafting skills necessary to produce residential and commercial working and presentation drawings. Design principles will be explored through the use of the Auto CAD/AutoDesk Architectural program. 32-36 hours lecture and 48-54 hours laboratory. Offered Fall. CSU (Prerequisite: CIDG 110.)

CIDG 251 (formerly CIDG 53B) Architectural Computer Aided Design II 3.0 Units
This course will cover more advanced computer skills necessary to produce commercial and institutional working and presentation drawings. Basic and advanced design principles will be explored and implemented through the use of the Auto CAD program. 32-36 hours lecture and 48-54 hours laboratory. Offered Spring. CSU (Prerequisite: CIDG 250) This course may be taken two times.

CIDG 260 (formerly CIDG 26B) 3ds Max Advanced Modeling and Materials 3.0 Units
Students will learn more advanced modeling features of 3ds Max. Complex aspects of building materials and textures will be covered in depth. The course will culminate with students being introduced to the video game environment, having the opportunity create their own game level. The course will prepare students for work in the entertainment, commercial, and computer gaming industries. 32-36 hours lecture and 48-54 hours laboratory. CSU (Prerequisite: CIDG 160.) This course may be taken two times.

CIDG 261 (formerly CIDG 26C) 3ds Max Character Animation and Advanced Keyframing Techniques 3.0 Units
Students will learn advanced animation techniques including editing keyframes through Track View, animating with controllers and constraints, wiring parameters, and using hierarchies. Character animation will be addressed in depth. Character Studio and Bones will be utilized to build skeletal systems for both characters and creatures. The course will prepare students for work in the entertainment, commercial, and computer gaming industries. 32-36 hours lecture and 48-54 hours laboratory. CSU. (Prerequisite: CIDG 260) This course may be taken two times.

CONSTRUCTION AND MANUFACTURING TECHNOLOGY

CT 2 Assistant Property Management
(formerly CT 101) 1.0 Unit
This class covers basic aspects of property management. Topics covered include code of ethics, inspections, filings, services posting of notices, collections, small claims court filings, evictions, securities and deposits, basic bookkeeping, and landlord tenant relations and rights. 16-18 hours lecture. This course will not apply to the Associate Degree. (No prerequisite. Grade Option)

CT 60A/B/C/D Construction Laboratory
1.0-4.0 Units
A laboratory class to provide additional skill development in the following areas: electrical wiring, finish carpentry, heating and air conditioning, framing, plumbing and concrete and masonry construction. Students will complete contract projects. 48-54 hours laboratory per unit, per term. Offered every semester. (No prerequisite)

CT 101 Careers in Construction
(formerly CT 1) and Manufacturing 1.5 Units
This course is designed to provide the construction, manufacturing and drafting technology student with information and skills necessary to understand current job market needs and prepare a successful educational plan to obtain their desired goals. Students will develop an awareness of occupations and develop skills for seeking employment and completing job applications, resumes and interviews. 24-27 hours lecture. CSU (No prerequisite.)

CT 103 Construction Management
(formerly CT 3) 3.0 Units
Principles of management as they specifically relate to the construction industry. This course explores the relationship and importance of proper planning, estimating, contracting, financing and building. Also covered are leadership and supervisory skills, employer/employee relationships and safety. 48-54 hours lecture. CSU. Offered every 4th semester, Spring. (No prerequisite)

CT 104 Construction Law 3.0 Units
(formerly CT 4)
Principles of contracting, real estate and construction law. Course includes legal aspects of building codes, contractors' licenses, workmen's compensation, social security, state safety regulations and lien laws as they apply to the construction trade. 48-54 hours lecture. CSU. Offered every 4th semester, Fall. (No prerequisite)

CT 105 Technical Sketching 3.0 Units
(formerly CT 5)
A course designed to develop sketching skills and introduce sketching techniques currently used in the industrial and architectural fields. Includes principles of oblique, isometric and perspective sketching, including shading and shadows. 32-36 hours lecture and 48-54 hours laboratory. CSU. Offered Spring. (No prerequisite. Grade option)

CT 106 Materials of Construction
(formerly CT 6) 3.0 Units
A study of common materials used in residential and commercial construction. Course includes use and limitations of soil, paving materials, concrete, lumber, wall materials, roofing, insulation, siding, sheet material, electrical and plumbing materials and fixtures. This course will also explore the use of steel, aluminum and plastics in modern construction. 48-54 hours lecture. CSU. Offered every 4th semester, Fall. (No prerequisite)

CT 107 Technical Mathematics 3.0 Units
(formerly CT 7)
A review of basic arithmetic, fractions, decimals and percentages. Introduction to basic algebra and trigonometry as they apply to the manufacturing and construction trades. 48-54 hours lecture. Offered Fall. CSU (No prerequisite)

CT 108 Advanced Technical Math
(formerly CT 8) 3.0 Units
This course will include the practical applications of algebra, geometry and trigonometry. Class emphasis will be on the solution of technical problems commonly found in the fields of engineering, drafting, manufacturing and construction. 48-54 hours lecture. CSU. Offered every 4th semester, Spring. (No prerequisite)

CT 109 Construction Financing
(formerly CT 9) 3.0 Units
This course introduces the basic issues and concepts of construction finance. Course examines the procedures for evaluation of all types of real estate credit and is designed to enable borrowers to utilize their resources to obtain financing. 48-54 hours lecture. CSU. Offered every other Summer. (No prerequisite)

CT 110 Building Codes and Zoning
(formerly CT 10) 3.0 Units
Use of the Uniform Building Code and the various related state and local ordinances for plan checking and building compliance. Course includes a basic understanding of building codes and zoning as they apply to the construction and inspection of residential and light commercial buildings. 48-54 hours lecture. CSU. Offered every 4th semester, Fall or Summer. (No prerequisite)

CT 111A Uniform Building Code I
(formerly CT 11A) 3.0 Units
The first of a two part, in-depth study of the contents and applications of the Uniform Building Code and California amendments; emphasis on residential construction. This course includes building classifications by occupancy and type, engineering regulations and design requirements applicable to plan checking and structural building inspection. 48-54 hours lecture. Offered every 4th semester, Spring. (No prerequisite)

CT 111B Uniform Building Code II
(formerly CT 11B) 3.0 Units
An in-depth study of the Uniform Building Code and California amendments; emphasis on commercial applications. Course includes energy conservation standards, specialized commercial structures, public safety and standards for handicapped accessibility. 48-54 hours lecture. CSU. Offered every 4th semester, Fall. (No prerequisite)

CT 112 Uniform Mechanical Code
(formerly CT 12) 3.0 Units
This class is an in-depth study of the contents and applications of the Uniform Mechanical Code. Course covers the use of this code for plan checks and inspection of residential and commercial structures. 48-54 hours lecture. CSU. Offered every 4th semester, Spring. (No prerequisite)

CT 113 Uniform Plumbing Code
(formerly CT 13) 3.0 Units
This class is an in-depth study of the contents and applications of the Uniform Plumbing Code. Course includes underground and above ground water, gas and air pipe installations for residential and commercial structures. 48-54 hours lecture. CSU. Offered every 4th semester, Spring. (No prerequisite)

CT 114 National Electrical Code
(formerly CT 14) 3.0 Units
This class is an in-depth study of the contents and applications of the National Electrical Code. Course covers the use of the code for plan checks and inspection of residential and commercial structures. Plan reading, electrical theory, wiring methods and installation of electrical components and fixtures are also included. 48-54 hours lecture. CSU. Offered every 4th semester, Spring. (No prerequisite)

CT 115 Technical Office Procedures
(formerly CT 15) and Field Inspection 3.0 Units
Office organization, procedures and necessary paperwork pertinent to building and safety office management and inspection. Field inspection for completed building, zoning, health and safety ordinance applications. Course includes several field trips. 48-54 hours lecture. CSU. Offered every 4th semester, Spring. (No prerequisite.)

CT 116 Construction Safety 2.0 Units
(formerly CT 16)
An overview of industrial safety procedures as they relate to the construction job site. This course includes a study of common OSHA regulations and procedures. 32-36 hours lecture. CSU. Offered every 4th semester, Fall. (No prerequisite)

CT 119 Load Calculations and
Circuit Design 3.0 Units
This course is designed to develop the skills necessary to visualize and correctly interpret drawings, diagrams, blueprints, and schematics common to the electrical industry. Course includes branch and feeder circuit design and load calculations as they apply to residential, multi-family, commercial and industrial applications. 32-36 hours lecture and 48-54 hours laboratory. CSU (No prerequisite) This course may be taken four times.

CT 120A Electrical Wiring 4.0 Units
(formerly CT 20A)
Theory, procedure and techniques for electrical wiring of residential and light commercial construction. Topic areas include blueprint reading, power panels, wire sizing, conduit bending and installation, pulling and installation of wires, lighting and plug circuitry, designated circuits, underground and swimming pool wiring. 32-36 hours lecture and 96-108 hours laboratory. CSU. Offered every 4th semester, Fall. (No prerequisite)

CT 120B Commercial Wiring 4.0 Units
(formerly CT 20B)
Learn the techniques necessary for commercial wiring. Size conductors for motor, intermittent and continuous loads. Wire for single and three phase services. Course includes wiring techniques common to commercial applications, running circuits with flex, electrical metallic tubing, rigid and liquid tight conduits and use of common conductors, cables, boxes and raceways. Also included are transformers and motor load calculations, starters and over current protection devices. 32-36 hours lecture and 96-108 hours laboratory. CSU (Prerequisite: CT 120A) This class may be taken three times.

CT 121 Finish Carpentry 4.0 Units
(formerly CT 21)
Course covers use of hand and machine woodworking tools and techniques common to finish carpentry and cabinet making. Students will develop skill in safe and efficient operation of common tools, layout, cutting, assembly and finish of woodworking projects. 32-36 hours lecture and 96-108 hours laboratory. CSU. Offered every 4th semester, Spring. (No prerequisite)

CT 122A Heating and Air Conditioning
(formerly CT 22A) 4.0 Units
This course provides instruction for layout, installation and repair of common residential and light commercial heating and air conditioning systems. Heating and air conditioning theory and energy calculations will be treated in depth. Course also includes use of solar energy for heating and cooling. 32-36 hours lecture and 96-108 hours laboratory. CSU. Offered Spring. (No prerequisite) See cross listing for HVAC 122A.

CT 122B Commercial Refrigeration
(formerly CT 22B) 4.0 Units
Explore the more complex commercial and industrial uses of refrigeration, heating and air conditioning. Course covers installation and repair of the most common commercial refrigeration systems found in the food industry and industrial and manufacturing environments. Also included are computer controlled and central plant environmental systems, high and low pressure chillers, cooling towers and air handlers. 32-36 hours lecture and 96-108 hours laboratory. CSU (Prerequisite: CT 122A) See cross listing for HVAC 122B. This class may be taken three times.

CT 122C Heat Pump Fundamentals
and Controls 4.0 Units
This course explores electrical and mechanical circuitry fundamentals, along with theory, operation and application of heat pump systems used in residential and light commercial heating installations including the heat pump refrigeration cycle, reversing valves, defrost methods of supplemental heat, balance point, air flow, and heat pump thermostats. 48-54 hours lecture and 48-54 hours laboratory. CSU (No prerequisite) See cross listing for HVAC 122C. This class may be taken four times.

CT 123 Surveying 4.0 Units
(formerly CT 23)
A course designed to explore the principles and applications of surveying. Students will develop skill in the operation of surveying equipment used for measuring, leveling and locating of points. Course includes surveying techniques common to building and highway construction, general land surveying, hydrographic surveys and photogrammetric mapping. 32-36 hours lecture and 96-108 hours laboratory. CSU. Offered every 4th semester, Spring. (No prerequisite.)

CT 124 Plumbing 4.0 Units
(formerly CT 24)
This course provides instruction for layout and installation of residential and light commercial plumbing systems and fixtures. Rough and finish stages of plumbing will be introduced and students will become familiar with reading plans and calculating and constructing the plumbing system. 32-36 hours lecture and 96-108 hours laboratory. CSU. Offered every 4th semester, Fall. (No prerequisite)

CT 125 Concrete and Masonry
(formerly CT 25) Construction 4.0 Units
Course covers use of hand and machine tools and techniques common to residential and light commercial concrete and masonry construction. Plan reading, layout, forming, pouring of concrete, tilt-up and various finishing techniques will be introduced. Course also includes construction with brick, stone, concrete block, and other masonry shapes. 32-36 hours lecture and 96-108 hours laboratory. CSU. Offered Fall. (No prerequisite)

CT 126 Exploring Brick and Block
(formerly CT 26) 1.5 Units
This course includes techniques used for construction of brick and block walls, decorative brick patios, planter edging and concrete slabs, curbs and walks. Class covers information on concrete and mortar mixes and proper forming, pouring and finishing of concrete slab and wall footings. 16-18 hours lecture and 24-27 hours laboratory. CSU (No prerequisite) This course may be taken for a total of four times.

CT 127 Framing 4.0 Units
(formerly CT 27)
Course covers use of hand and machine tools and techniques common to rough carpentry and residential and light commercial framing. Students will develop skill in safe and efficient operation of common tools, layout techniques, cutting and assembly of wall, ceiling and roof framing, and installing sheathing and insulation. 32-36 hours lecture and 96-108 hours laboratory. CSU. Offered every 4th semester, Fall. (No prerequisite)

CT 129 Independent Study
See Independent Study listing (1-4 units). CSU

CT 130 Residential Remodeling
(formerly CT 29) 3.0 Units
Learn the skills and techniques necessary for remodeling of residential structures. Course includes project planning, estimation and layout. Gain experience in framing, plumbing, electrical drywall, floor and wall finishing and concrete with projects that include patio and deck construction, room additions and kitchen and bathroom remodeling. 32-36 hours lecture and 48-54 hours laboratory. CSU. (No prerequisite) This course may be taken for a total of four times.

CT 131 Microcomputers in Construction
(formerly CT 30) 4.0 Units
This course is designed to introduce the student to the potentials of the computer as it directly applies to the construction industry. Course includes instruction and practice in basic DOS, word processing, spread sheets, estimation programs and introductory computer-aided drafting. 48-54hours lecture and 48-54 hours laboratory.CSU. Offered Fall. (No prerequisite)

CT 132 Construction Estimation 3.0 Units
(formerly CT 32)
Methods of estimation including material and quantity take-offs and analysis. Course also includes estimation of material, labor and overhead costs, subcontractors' bids and common bidding practice for all aspects of residential and light commercial construction. 48-54 hours lecture. CSU. Offered every 4th semester, Fall. (No prerequisite.)

CT 133 Precision Estimation 3.0 Units
(formerly CT 33)
Learn how to speed up your estimating process and increase your accuracy using today's leading construction estimating software. Timberline Precision Estimation Plus allows take-off using quick, single and assembly methods. Course includes development and maintenance of your database. Create your own crews, add-ons, formulas and assemblies to meet your particular estimating needs. 32-36 hours lecture and 32-36 hours by arrangement. CSU (No prerequisite.) This course may be taken for a total of three times.

CT 136 HVAC Circuits and Controls
4.0 Units
This course explores electrical fundamentals common to the heating, ventilation, air conditioning and refrigeration fields. Course includes electrical theory, control circuitry and electronics, system supply circuitry and alternating and direct current troubleshooting. 48-54 hours lecture and 48-54 hours laboratory. CSU. (No prerequisite) See cross listing for HVAC 136. This course may be taken four times.

CT 137 Sheet Metal Fabrication
3.0 Units
This course will introduce the student to the fundamental elements, methods and principals of sheet metal design, fabrication and installation. Course includes air handling systems, gutters, flashings, coping, tanks and exhaust systems. Students will gain valuable hands-on skills in the proper use of metal working hand and machine tools through the completion of multiple projects. 32-36 hours lecture and 48-54 hours laboratory. CSU. (No prerequisite) This course may be taken four times.

CT 138 Cooperative Education
(formerly CT 38)
See Cooperative Education listing (1-8 units). CSU

CT 140 Construction Internship
(formerly CT 40) 4.0 Units
Gain valuable hands-on construction skills by participating in the creation and operation of a small construction business. Students will research the market, design the project, estimate the costs, develop a business plan, secure a construction loan, prepare a schedule and analyze the projects progress and perform customer service and sales. 64-72 hours lecture. CSU. (No prerequisite. Grade Option) This course may be taken four times.

CT 141 Construction Internship
(formerly CT 41) Laboratory 2.0-12.0 Units
This course is the laboratory component for CT 40 Construction Internship. Students will research, develop, construct and market a construction project using computers and common construction tools and equipment. Six hours weekly by arrangement per unit. CSU. (No prerequisite. Grade Option) This course may be taken four times.

CT 142 Renewable Energy 3.0 Units
This course explores methods of generation and use of renewable energy. Topics include renewable fuel based generators, fuel cells, wave and tidal generation, geothermal, wind turbines, photovoltaic, barometric pressure, and hydroelectric generation. Course also covers active and passive solar heating and cooling, alternate fuel vehicles and electric transportation. 48-54 hours lecture. CSU. (No prerequisite. Grade Option) This course may be taken four times.

CT 143A/B/C/D Renewable Energy
Laboratory 2.0-5.0 Units
This laboratory course explores methods of generation and use of renewable energy through actual projects. Additional projects include the creation of an active and passive solar heating and cooling system and exploration of alternate fueled and electric vehicles. 16-18 hours lecture and 48-54 hours laboratory per unit, per term. CSU. (No prerequisite. Corequisite: CT 142, Renewable Energy. Grade Option)

CT 148 Special Topics
(formerly CT 48)
See Special Topics listing (Variable units). CSU

CONSTRUCTION TECHNOLOGY MANUFACTURING

CTMF 120A Woodworking Tools and Equipment 2.0 Units
This course is designed to give the woodworking student an in-depth knowledge of common woodworking tools and equipment. Students will explore the safety, use and maintenance of saws, lathes, routers, planers, jointers, sanders and common power and hand tools used for basic woodworking projects. 32-36 hours lecture. CSU (No prerequisite) This course may be taken three times.

CTMF 120B Advanced Woodworking Tools and Equipment 2.0 Units
This course is designed to give the woodworking student an in-depth knowledge of the more advanced woodworking tools, equipment and operations. Students will explore the safety, setup, use and

maintenance of saws, lathes, routers, planers, jointers, sanders and common power and hand tools as used in advanced woodworking projects. Course also includes extensive coverage of tool sharpening. 32-36 hours lecture. CSU (Prerequisite: CTMF 120A.) This course may be taken four times.

CTMF 121A Woodworking 3.0 Units
(formerly CTMF 126A)
This is a beginning woodworking class. Topics covered include safety, tools, the composition of wood and its characteristics, beginning design and sketching, project planning, measuring and cutting, use of large and small power tools, and general woodworking techniques. Students will be expected to complete multiple projects as part of their grade. 32-36 hours lecture and 48-54 hours laboratory. CSU (No prerequisite. Corequisite CTMF 120A. Grade option.) This course may be taken two times.

CTMF 121B Advanced Woodworking
(formerly CTMF 126B) 3.0 Units
This is an advanced course in fine woodworking using techniques common to custom wood products, furniture making and wood art. Learn the artisan's techniques for wood joining, carving, turning and finishing by completing various wood projects. Course includes a study of common woods, tools and methods for shaping and finishing. 32-36 hours lecture and 48-54 hours laboratory. CSU (Prerequisite: CTMF 121A) This course may be taken for a total of four times.

CTMF 122A/B/C/D Advanced Wood Topics
3.0 Units
Come develop your skills and learn the methods and procedures necessary for completing an advanced woodworking project. One specific advanced woodworking project is selected as the focus for each semester. Check with the Construction Technology Department for the current project. Course may also include specialized techniques of turning, marquetry, parquetry, carving and intarsia. 32-36 hours lecture and 48-54 hours laboratory. CSU (Prerequisite: CTMF 121A Basic Woodworking. Grade option.) This course may be taken four times.

CTMF 127 Production Woodworking
(formerly CTMANF 27) 3.0 Units
This course covers techniques common to production woodworking and includes design and construction of custom jigs, fixtures and templates for drill presses, routers, saws and lathes. Students will gain experience with computer numerical controlled routers, surfacing sanders, airbag sanders and production fastening techniques and wood finishes while creating several commercial woodworking projects. 32-36 hours lecture and 48-54 hours laboratory. CSU (Prerequisite: CTMF 126A)

CTMF 129A Woodturning 3.0 Units
This introductory course will provide the woodworking student with information and skills necessary to successfully design, turn and finish typical woodturning projects. Course includes lathe, spindle, faceplate and drive chuck turning. Students will complete a variety of projects that can include pens and pencils, games and toy pieces, decorations, lamps, spindles, bowls and boxes. 32-36 hours lecture and 48-54 hours laboratory. CSU (No prerequisite. Corequisite CTMF 120A.) This course may be taken four times.

CTMF 129B Advanced Woodturning 3.0 Units
This advanced woodturning course includes green, seasoned and laminated wood and acrylic projects. Students will explore turning of large bowls and platters, maintaining natural edges, turning burls, proper box and lid construction, off center turning, chatter finishes and construction of turning fixtures, centers and drives. 32-36 hours lecture and 48-54 hours laboratory. CSU (Prerequisite: CTMF 129A, Woodturning. Grade option.) This course may be taken four times.

CTMF 130A Mechanical Desktop 3.0 Units
(formerly CTMANF 30A)
Develop your skill in creating accurate three-dimensional parametric models using Mechanical Desktop. Explore the exciting features of this program which includes parametric modeling, surfacing, model analysis, interference checking and assemblies. Learn how to export surface and design information to computer controlled mills and routers. This is an introductory class in Mechanical Desktop. 32-36 hours lecture and 32-36 hours by arrangement. CSU (Prerequisite: CIDG 110.) This course may be taken for a total of three times.

CTMF 130B Mechanical Desktop Advanced
(formerly CTMANF 30B) 3.0 Units
This advanced course in Mechanical Desktop includes a focused exploration of detailed models and complex assembly models. Students will explore the full features of the Mechanical Desktop package including fasteners, shaft and gear generation and creation of motion based, skin and derived surfaces. Both localized and externalized assemblies will be created and analyzed for interference and engineering characteristics. 32-36 hours lecture and 32-36 hours by arrangement. CSU (Prerequisite: CTMF 130A)

CTMF 131A Mastercam 3.0 Units
(formerly CTMANF 31A)
Learn the techniques of numerical controlled programming using Mastercam software. Generate three-dimensional models and learn how to create parts, molds, and fixtures using integrated solids, surfaces and wireframes. Unite the software with the machine and create milled or routed three-dimensional parts. 32-36 hours lecture and 32-36 hours by arrangement. CSU (No prerequisite.)

CTMF 131B Mastercam Advanced 3.0 Units
(formerly CTMANF 31B)
This advanced course includes an in-depth study of the more complex features of Mastercam. Students will create geometry and toolpaths for complex three-dimensional and surface models for mills, routers, lathes and engraving machines. Programming of multi-axis and mill-turn machines will be explored. 48-54 hours lecture and 32-36 hours by arrangement. CSU (Prerequisite: CTMF 131A.) This course may be taken three times.

CTMF 140 Manufacturing Internship
(formerly CTMANF 40) 4.0 Units
This course will provide the construction, drafting and manufacturing technology student with hands-on job skills and experience common to the manufacturing industry. 64-72 hours lecture. CSU (No prerequisite. Grade Option.) This course may be taken three times.

CTMF 141 Manufacturing Internship
(formerly CTMANF 41) Laboratory 2.0-12.0 Units
This course is the laboratory component for CTMF 140 Manufacturing Internship. Students will research, design, manufacture and market a project using computers and common manufacturing equipment. CTMF 140 must be taken concurrently. Six weekly hours by arrangement per unit. CSU (No prerequisite. Grade Option.) This course may be taken three times.

CONSTRUCTION TECHNOLOGY MAINTENANCE

CTMT 120 (formerly CTMANT 20) Residential Maintenance and Repair 4.0 Units
This class covers all major aspects of preventative maintenance and repair for residential and light commercial buildings. Topics covered include but are not limited to repairing roofing, plumbing, electrical framing, insulation, drywall, painting, concrete, flooring, safety, tools, heating and cooling, etc. as they apply to the maintenance and repair industry. 48-54 hours lecture and 48-54 hours laboratory. CSU (No prerequisite. Grade Option)

CTMT 121 (formerly CTMANT 21) Plumbing Repair 3.0 Units
This class covers most aspects of residential and light commercial plumbing repair. Topics covered include but are not limited to plumbing tools, water supply systems, drainage systems, drainage problems, faucets and valves, piping, soldering and threading, water heating systems, plumbing fixtures, pricing, billing, and inventory management, as they apply to the plumbing repair business. 32-36 hours lecture and 48-54 hours laboratory. CSU (No prerequisite. Grade Option)

CTMT 122 (formerly CTMANT 22) Electrical Repair 3.0 Units
This class covers most aspects of residential and light commercial electrical repair. Topics covered included but are not limited to electrical tools, electrical theory, wiring systems electrical materials, electrical services, troubleshooting electric circuits, low voltage circuits, appliances and motors, and mathematics for electricians. T 32-36 hours lecture and 48-54 hours laboratory. CSU (No prerequisite. Grade Option)

CTMT 123 (formerly CTMANT 23) Custodial Maintenance 4.0 Units
This course covers the major aspects of custodial and janitorial work. Course includes general cleaning techniques, cleaning equipment use and maintenance, cleaning chemicals, window care, maintaining hard floors, carpet and upholstery care, chemical hazards, Cal OSHA regulations, and handling of infectious waste as they apply to the janitorial industry. 48-54 hours lecture and 48-54 hours laboratory. CSU (No prerequisite. Grade Option)

CTMT 129 (formerly CTMANT 29) Small Engines and Light Vehicles 3.0 Units
This class covers the fundamentals of small internal combustion engines, and their uses in light vehicles. Topics covered will include but are not limited to theory of small internal combustion engines, service, troubleshooting, repair, small engine applications, and light vehicle design. 32-36 hours lecture and 48-54 hours laboratory. CSU (No prerequisite. Grade Option) This course may be taken three times.

CONSTRUCTION TECHNOLOGY PUBLIC WORKS

CTPW 111 (formerly CTPBWK 11) Introduction to Public Works 3.0 Units
Introduction to techniques, materials and equipment used in Public Works maintenance and construction. Meets the standards of the American Public Works Association, Street Superintendents' Association and Inspectors' Association. 48-54 hours lecture. CSU. Offered every 3rd semester. (No prerequisite)

CTPW 112 (formerly CTPBWK 12) Plan Reading for Public Works 3.0 Units
Reading and interpreting plans related to public works, water, storm drain, and sewage facility projects. Basic survey methods, symbols, mathematical conversions, and determination of slope and grade. 48-54 hours lecture. CSU. Offered every 4th semester, Fall. (No prerequisite)

CTPW 113 (formerly CTPBWK 13) Public Works Inspection 3.0 Units
General public works inspection techniques. Includes Portland Cement and asphalt concretes, soils, base and subgrade, safety, contracts, and specifications. Responsibilities of the contractor, engineer, agency, and inspector. 48-54 hours lecture. CSU. Offered every 4th semester, Spring. (No prerequisite)

CTPW 114 (formerly CTPBWK 14) Public Works Administration 3.0 Units
An introduction to the organizational concepts used by the Public Works department. Includes typical organization, management concepts, political considerations, planning, budget management and public relations. 48-54 hours lecture. CSU. Offered every 3rd semester. (No prerequisite.)

CTPW 115 (formerly CTPBWK 15) Street and Highway Construction 3.0 Units
Equipment, materials, and methods employed in the construction, inspection, and maintenance of streets and highways. Includes Portland Cement concrete; surface drainage; traffic signs; safety and safe practices, highway design; laws, codes and ordinances; management principles; budget preparations; equipment maintenance records; underground utilities; surveying and staking. 48-54 hours lecture. CSU. Offered every 4th semester, Fall. (No prerequisite)

CTPW 116A (formerly CTPBWK 16A) Water Distribution Systems I 3.0 Units
Water distribution systems operation. Fundamentals of water production, quality, and system operation. Includes piping, services, pumps, reservoirs, mathematics, and basic hydraulics. Preparation for Grades I and II Water Distribution Operator Certification. 48-54 hours lecture. CSU. Offered every 4th semester, Fall. (No prerequisite)

CTPW 117 (formerly CTPBWK 17) Portland Cement Concrete 3.0 Units
Portland Cement concrete design and uses. Covers transporting, placing, curing, and testing Portland Cement concrete. Applications and construction methods employed. 48-54 hours lecture. CSU. Offered every 4th semester, Spring. (No prerequisite)

CTPW 118 (formerly CTPBWK 18) Solid Waste Management 3.0 Units
Methods used in collection of solid waste materials. Includes equipment, scheduling, and customer relations. Ultimate disposal of solid waste matter as well as projections concerning future collection and disposal operations. Special emphasis on municipal resource recovery, salvaging, and recycling. 48-54 hours lecture. CSU. Offered every 4th semester, Spring. (No prerequisite)

CTPW 119 (formerly CTPBWK 19) Wastewater Management 3.0 Units
Comprehensive examination of wastewater management, impact of waste contributions from home and industry, effects of wastewater treatment, water reclamation and by-product disposal. 48-54 hours lecture. CSU. Offered every 4th semester, Fall. (No prerequisite)

DEVELOPMENTAL STUDIES

DVST 1 Language Analysis Development
(formerly DEV 60A) 3.0 Units
This course is designed for students with language-based learning disabilities. It includes both perceptual and neurological deficit stimulation therapy as well as a multisensory, direct instructional, cognitive approach to analyzing the internal components and the rules that govern both the decoding and encoding processes involved in reading and spelling. Many of the activities will enhance a student's reasoning ability and comprehension of both the written and spoken word. This course will not apply to the Associate Degree. 32-36 hours lecture and 32-36 hours by arrangement. (No prerequisite) This course may be taken four times.

DVST 2 Language Analysis Development
(formerly DEV 60B) 3.0 Units
This course is specifically designed for students with language-based learning disabilities. It includes both perceptual and neurological deficit stimulation therapy as well as a multisensory, direct instructional, cognitive approach to analyzing the internal components and the rules that govern both the decoding and encoding processes involved in reading and spelling. Many of the activities will enhance a student's reasoning ability and comprehension of both the written and spoken word. This course will not apply to the Associate Degree. 32-36 hours lecture and 32-36 hours by arrangement. (No prerequisite) This course may be taken four times.

DVST 3 Language Analysis Development
(formerly DEV 60C) 3.0 Units
This course is specifically designed for students with language-based learning disabilities. Relational patterns within sentences and paragraphs are analyzed and coupled with reasoning skills in order to enhance verbal comprehension of both written and spoken language. Specific language activities designed to stimulate auditory and visual perception and memory are included. A structured, interactive, multisensory approach is used. This course will not apply to the Associate Degree. 32-36 hours lecture and 32-36 hours by arrangement. (Prerequisite: GUID 16) This course may be taken four times.

DVST 4 Mathematical Reasoning
(formerly DEV 60D) 3.0 Units
This course is designed to stimulate the visual, auditory and cognitive deficit areas which may interfere with student's ability to problem solve with mathematical vocabulary and concepts and internalize basic math facts. An integrative, interactive, highly structured approach is used in this course. This course will not apply to the Associate Degree. 32-36 hours lecture and 32-36 hours by arrangement. Credit/No Credit (Prerequisite: GUID 16) This course may be taken four times.

DIGITAL ANIMATION

See Computer Integrated Design and Graphics
See Media Arts

ECONOMICS

ECON 101 Principles of Economics: Macro
(formerly ECON 1A) (CAN ECON 2) 3.0 Units
Introduction to economic theory and analysis with emphasis on fiscal and monetary policy, capitalism, national income, employment, money, economic stability, economic growth and achievements emphasizing the macro-economic approach. The purpose is to provide students with an introduction into major issues facing the world economies, exposing students to the methods that economists use to study and solve those issues and economic policy problems of the 21st century. 48-54 hours lecture. CSU,UC. Offered Fall, Spring, Summer. (No prerequisite.)

ECON l02 Principles of Economics: Micro
(formerly ECON lB) (CAN ECON 4) 3.0 Units
Introduction to economic theory and analysis with emphasis on basic concepts, the economics of business organizations and resource allocation, domestic, international, and world economics. Emphasizes the micro-economic approach. 48-54 hours lecture. CSU, UC. Offered Fall, Spring. (No prerequisite)

ECON 128 Special Topics
(formerly ECON 28)
See Special Topics listing (Variable units). CSU

ECON 129 Independent Study
(formerly ECON 29)
See Independent Study listing (1-3 units). CSU

EDUCATION

EDUC 101 Introduction to Teaching
(formerly EDUC 1) 3.0 Units
An introduction to teaching as a career and to education as a social institution. The crucial issues facing education in contemporary American society are considered in the framework of the democratic way of life. Special attention is given to issues in educational technology, as well as to the goals, curriculum, and methods of elementary education. The opportunities, challenges, and requirements of teaching as a profession are presented. This course is not designed to be a course in professional education. 48-54 hours lecture. CSU. UC. (No prerequisite)

EDUC 138 Cooperative Education
(formerly EDUC 38)
See Cooperative Education (1 - 8 units). CSU

EDUCATIONAL TECHNOLOGY

ETEC 51 Introduction to Educational
(formerly ETEC 30) Technology 3.0 Units
This course examines technology from three integrated perspectives: technology as a tool, a medium, and a setting for learning. Students will extensively use Internet tools as they survey a variety of strategies for integrating technology into the classroom. The course will also instruct students on the basic methods and strategies for creating Web-based learning activities. Students will have the opportunity to create projects relevant to their educational setting. 48-54 hours lecture. (No prerequisite)

ETEC 70 (formerly ETEC 40) **Leadership in Educational Technology** **3.0 Units**
This course defines and details constructivist leadership, framing that leadership in terms of educational technology. Students will apply these concepts to their own settings through introductory understandings of knowledge management and virtual learning. Students will have the opportunity to formulate technology rollout and training plans specific to their educational organizations or fields. 48-54 hours lecture. (No prerequisite)

ETEC 90 (formerly ETEC 50) **Educational Technology Internship** **2.0 Units**
This course provides students with valuable experience in educational settings by partnering them with teachers or other professional educators to assess needs, collaborate on possible solutions, support implementations, and evaluate outcomes. Students will also benefit from working within a community of practice during their internships. 16-18 hours lecture and 48-54 hours laboratory. (No prerequisite, Credit/No credit)

ETEC 106 (formerly ETEC 20) **Introduction to Computer Technology for Educators** **4.0 Units**
A survey course which provides an overview of computer technology for multi-disciplinary majors, but with emphasis on its role in educational settings. The course provides instruction in a variety of topics supported by hands-on laboratory work with operating systems, word processing, spreadsheets, databases, desktop publishing, programming, networks, and the Internet. Application and evaluation of computer technology in learning environments serves as the overall framework. See cross listing for CIS 106. 48-54 hours lecture and 48-54 hours laboratory. CSU (No prerequisite)

ETEC 107 (formerly ETEC 21) **Introduction to the Internet for Educators** **2.0 Units**
A course for education students or current teachers to acquire the skills needed to effectively utilize the Internet in the classroom. Emphasis will be placed on computer-mediated communication with the World Wide Web. Students will become well versed in the use of Web browsers, FTP, newsgroups/asynchronous discussion, e-mail, and chat synchronous discussion. See cross listing for CIS 107. 48-54 hours lecture and 48-54 hours laboratory. CSU (No prerequisite)

ELECTRONICS AND COMPUTER TECHNOLOGY

ELCT 5 (formerly ELCT 105) **CET Exam Preparation** **2.0 Units**
Covers all electronic circuits required by the Electronics Technicians Assn. International for successful completion of the Certified Electronic Technician examination. Includes DC and AC circuits, filters, thyristors, transistors, diodes, power supplies, and voltage regulators; also covers test equipment used in electronics including voltmeters, ammeters, oscilloscope frequency meters, and VTVM's's. This course will not apply to the Associate Degree. 32-36 hours lecture. Offered Spring. (No prerequisite)

ELCT 6 (formerly ELCT 106) **FCC License Preparation** **2.0 Units**
Designed for students enrolled in Electronics Communications Systems. Topics include Element 3 Examination (General Radio Telephone) - provisions of laws, treaties and regulations, radio operating procedures and practices; technical matters including fundamentals of electronics technology and maintenance techniques. This course will not apply to the Associate Degree. 32-36 hours lecture. Offered Spring. (No prerequisite)

ELCT 7 (formerly ELCT 107) **A+ Certification Examination Preparation** **2.0 Units**
The A+ Certification Examination Preparation course is designed to help the student pass the A+ Certification Test as quickly and easily as possible. The course consists of three main elements: (1) a test simulation and review software program that provides practice tests with realistic questions, (2) an A+ Certification Program "Student Guide," and (3) access to a 5800 page reference library consisting of ten textbooks. This course will not apply to the Associate Degree. 16-18 hours lecture and 48-54 hours laboratory. (No prerequisite) This course may be taken four times.

ELCT 50 **A+ Operating Systems Technologies** **4.0 Units**
This course is designed to prepare students to take the A+ Operating Systems Technologies Examination. Topics will include coverage of operating systems fundamentals for DOS, Windows 9X and Windows 2000; knowledge of installing, configuring and upgrading Windows 9X and Windows 2000; and how to diagnose and troubleshoot common problems relating to Windows 9X and Windows 2000. This course will cover knowledge of network capabilities of Windows and how to connect to networks on the client side. 48-54 hours lecture and 48-54 hours laboratory. (No prerequisite. Grade Option) This course may be taken four times.

ELCT 51 **C++ Programming for Electronics and Computer Technology** **4.0 Units**
This course is designed to introduce students to C++ programming for scientific applications in engineering technology through lecture and lab. Topics will include writing C++ routines for analysis of electrical and electronics circuits, real time data acquisition and analysis, modeling of electronics components, interfacing with LabView for data collection and processing, interfacing with MathCAD and Workbench. 48-54 hours lecture and 48-54 hours laboratory. (No prerequisite. Grade Option) This course may be taken four times.

ELCT 53 **Electronic Communication Principles** **4.0 Units**
Study of all relevant aspects of modern communication principles. Topics include amplitude modulation transmission and reception, single-sideband communications, frequency modulation transmission and reception, television, and communications techniques. 48-54 hours lecture and 48-54 hours laboratory. Offered Fall. (No prerequisite)

ELCT 54 **Electronic Communication Systems** **4.0 Units**
A study of modern communication systems. Topics include digital and data communications, transmission lines, wave propagation, antennas, wave guides and radar, microwave and lasers, and fiber optics. 48-54 hours lecture and 48-54 hours laboratory. Offered Spring. (No prerequisite)

ELCT 57 **Technical Mathematics For Electronics I** **3.0 Units**
This course is designed to provide a basis for a clear mathematical understanding of the principles of DC electricity and electronics and their analysis. Covered are algebra, equations, power of 10, units and dimensions, special products and factoring, algebraic fractions, fractional equations, graphs, simultaneous equations, determinants and matrices, exponents and radicals, and quadratic equations. 48-54 hours lecture. Offered Fall, Spring. (No prerequisite)

ELCT 58 Technical Mathematics For Electronics II 3.0 Units
This course is designed to provide a basis for a clear mathematical understanding of the principles of AC electricity and electronics and their analysis. Covered are inequalities, series, angles, trig functions, solution of right triangles, trig identities and equations, plane vectors, periodic functions, phasor algebra, and logarithms. 48-54 hours lecture. Offered Spring, Summer. (No prerequisite)

ELCT 59 Technical Calculus For Electronics I 3.0 Units
This course is designed for students who are preparing for careers in electronics, electricity, computers, and related technical fields. Topics include fundamental concepts, introduction to calculus for electronics, functions, rates, limits, graphic differentiation, basic operations, derivatives, differentials, maxima and minima, and integrals. 48-54 hours lecture. Offered Fall. (No prerequisite) This course may be taken two times.

ELCT 60 Technical Calculus For Electronics II 3.0 Units
This course in technical calculus for electronics continues the study of functions and further operations. Topics includes trig functions, logarithmic and exponential functions, hyperbolic functions, partial derivatives, integration techniques, double integrals, infinite series, MacLaurin series, Taylor series, Fourier series, and introduction to differential equations. 48-54 hours lecture. Offered Spring. (No prerequisite) This course may be taken two times.

ELCT 61 (formerly ELCT 76) Basic Maintenance of Personal Computers 4.0 Units
This hands-on course is designed to provide non-technical personal computer (PC) users with the skills necessary to service and upgrade PCs. Activities include: computer assembly and disassembly, disk drive removal and installation, and memory expansion with integrated circuit (IC) chips. Installation and check out of special functions boards, such as FAX/modem, also will be demonstrated. Lectures describing the PC and its components are augmented with computer-aided individualized instruction modules covering selected electronic principles related to the PC. Satisfies computer industries A+ certification requirements. 32-36 hours lecture and 24-27 hours laboratory and 40 hours by arrangement. (No prerequisite)

ELCT 62 (formerly ELCT 95) Personal Computer (PC): Servicing 3.0 Units
This hands-on course is designed to provide the student skills to work service, maintain, upgrade, and optimize personal computers. Activities include: computer disassembly, component identification, using diagnostic software, configuring the computer, troubleshooting methods, hard drive removal and installation, floppy drive removal and installation, troubleshooting a malfunctioning computer, and introduction to advanced troubleshooting techniques. Satisfies computer industries A+ certification requirements. 96-108 hours individualized instruction. (No prerequisite)

ELCT 63 (formerly ELCT 96) Personal Computer (PC): Troubleshooting 3.0 Units
This course is a continuation of ELCT 95, Personal Computing Servicing. This hands-on course is designed to provide comprehensive troubleshooting down to the component level. Topics include: computer circuits, central processing unit (CPU) and support circuits, system monitors, input/output (I/O), system and secondary cache memory, video, disk drives and their control, and troubleshooting techniques. 96-108 hours individualized instruction. (No prerequisite)

ELCT 65 PC Monitors 3.0 Units
This hands-on course covers the fundamentals of troubleshooting and repairing PC monitors. Major topics include: signal inputs, external adjustments, components and circuit identification, power supply, video, vertical, and horizontal drive circuits, and troubleshooting, The student will utilize multimeters, signal generators, and oscilloscopes to troubleshoot various monitor faults. This course meets the objectives of the PC monitor section of the A+ certification examination. 96-108 hours individualized instruction. (No prerequisite)

ELCT 69 Network Topologies and Cabling 2.0 Units
This course provides both the technical instruction and the practical maintenance skills required to identify and layout common network topologies, and the type of cabling required for each. The course also includes hands-on projects configuring both a bus and star network, constructing the appropriate cables, installing the proper connectors, and testing the system using standard testing equipment. 64-72 hours individualized instruction. (No prerequisite)

ELCT 70 PC Operating Systems 3.0 Units
This course provides the student with the necessary background working with MS DOS 6.22 and MS Windows 3.11 for Workgroups to successfully pursue the A+ certification program. This is a self paced program that utilizes computer aided instruction (CAI) as the principle instruction tool. 96-108 hours individualized instruction. (No prerequisite)

ELCT 71 Principles of Digital Logic and Circuits 4.0 Units
This course covers semiconductors for digital circuits, digital logic circuits and digital integrated circuits; introduces Boolean Algebra, flip-flops and registers, sequential logic circuits and combinational logic circuits. Students learn how digital circuits are used in semiconductor memories; how data is converted from analog-to-digital and digital-to-analog formats; and how to troubleshoot digital circuits. 48-54 hours lecture and 48-54 hours laboratory. Offered Fall. (No prerequisite)

ELCT 73 Microprocessor Principles 4.0 Units
This course covers computer number systems and codes, computer arithmetic, programming, the internal register, structure of the 6800 and 6808 microprocessors, microprocessors interfacing to RAM, ROM, and various input/output devices, input and output data operations through a peripheral interface adapter, and applications of the PIA. 48-54 hours lecture and 48-54 hours laboratory. Offered Spring. (No prerequisite)

ELCT 78A Cisco Networking Academy I 4.0 Units
Introduces the student to the computer network terminology, design principles, topology and protocols. Topics will include Open System Interconnection (OSI) model and industry standards, network topologies, Internet Protocol (IP) addressing, networking components, and basic network design. Satisfies Cisco Certified Network Associate (CCNA) certification exam requirements. 48-54 hours lecture and 48-54 hours laboratory. (Prerequisite: ELCT 77A or ELCT 61)

ELCT 78B Cisco Networking Academy II 4.0 Units
An introductory course on Cisco router configuration and Cisco's routing protocols. Topics will include Router elements (RAM, ROM, CDP, SHOW), methods of flow control used in networking, control router passwords, and Cisco IOS software commands for router startup. Satisfies Cisco Certified Network Associate (CCNA) certification exam requirements. 48-54 hours lecture and 48-54 hours laboratory. (Prerequisite: ELCT 78A)

ELCT 78C Cisco Networking Academy III 4.0 Units
A continuation of Cisco Networking Academy II, covering Virtual Local Area Networks (VLANS) and network switching. Topics will include Interwork Packet Exchange (IPS) address encapsulation types, Interwork Packet Exchange (IPS) access lists and Service Access Points (SAP) filters to control basic Novell traffic, Local Area Network (LAN) segmentation using bridges, Local Area Network (LAN) using routers, and benefits of Virtual Local Area Network (VLAN). Satisfies Cisco Certified Network Associate (CCNA) certification exam requirements. 48-54 hours lecture and 48-54 hours laboratory. (Prerequisite: ELCT 78B)

ELCT 78D Cisco Networking Academy IV 4.0 Units
A continuation of Cisco Networking Academy III covering basic Wide Area Networking, Frame Relay, Integrated Services Digital Network (SDN) and Wide Area Network security. Topics will include Wide Area Network Services, Frame Relay terms and feature, configuring Frame Relay, Local Management Interface (LMI), maps and sub-interfaces, Wide Area Network (WAN) data Cisco routers, and Integrated Services Digital Network (ISDN) networking. Satisfies Cisco Certified Network Associate (CCNA) certification exam requirements. 48-54 hours lecture and 48-54 hours laboratory. (Prerequisite: ELCT 78C)

ELCT 78E Cisco Networking Academy V 4.0 Units
This is the first of a four course series to prepare students for Cisco's CCNP certification exam. Topics covered include an overview of scalable internetworks, managing IP traffic, configuring queuing to manage traffic, routing protocols, overview, extending IP addresses using VLSMs, configuring OSPF in a single area, interconnecting multiple OSPF areas, configuring enhanced GRP, optimizing routing update operation and configuring BGP. 48-54 hours lecture and 48-54 hours laboratory. (Prerequisite: ELCT 78D. Grade Option) This course my be taken four times.

ELCT 78F Cisco Networking Academy VI 4.0 Units
This is the second course of a four course series designed to prepare students for Cisco's CCNP certification. This course will cover the subject of Remote Access. Topics will include the following: an overview of Wide Area Networks (WAN), modems and asynchronous connections, Point to Point Protocol (PPP), Integrated Services Digital Network (ISDN), dial-on-demand routing (DDR), Dialer Profiles, X.25, Frame Relay and Frame Relay Traffic Shaping, WAN Backup Technologies, Queuing and Compression, Network Address Translation (NAT), Authentication, Authorization and Accounting (AAA). 48-54 hours lecture and 48-54 hours laboratory. (Prerequisite: ELCT 78D. Cisco's Networking Academy IV) This course my be taken four times.

ELCT 78G Cisco Networking Academy VII 4.0 Units
This is the third of a four course series designed to prepare students for Cisco's CCNP certification. This course will cover the subject of Multilayer Switching. Topics will include the following: Gigabit Ethernet, Switch Administration, Spanning-Tree Protocol, Inter-Virtual Local Area Network (VLAN) Routing, Multilayer Switching (MLS), Cisco Express Forwarding (CEF, Hot Standby Router Protocol, Virtual Trunking Protocol (VTP), Multicasting and Security. 48-54 hours lecture and 48-54 hours laboratory. (Prerequisite: ELCT 78C.) This course may be taken four times.

ELCT 78H Cisco Networking Academy VIII 4.0 Units
This is the fourth and last course of a four course series designed to prepare students for Cisco's CCNP certification. This course will cover trouble shooting and diagnostics of advanced and complex network topologies. Topics will include: Routing protocols (RIP, EIGRP, OSPF, ISIS and BGP4), Catalyst Switches, Campus TCP/IP connectivity, VLANs, Giga Ether Channel, HSRP, Port Security, SNMP, multicasting, QoS, ISDN, Frame Relay, X.25 and POTS. 48-54 hours lecture and 48-54 hours laboratory. (Prerequisite: ELCT 78D.) This course may be taken four times.

ELCT 78I Fundamentals of Networking Security 4.0 Units
This course is designed for network professionals interested in securing the network infrastructure. The course focuses on securing the network at the perimeter router through the use of the PIX Security Appliance. The Fundamentals of Network Security prepares candidates for the Cisco Firewall Specialist Certification as well as the foundation to the Virtual Private Network (VPN) Specialist Certification, Intrusion Detection System Specialist (IDS) Certification, Cisco Certified Security Professional (CCSP) Certification, Cisco Certified Security Certification (CCSP) and Information Systems Security (INFOSEC) Professional Certification. 48-54 hours lecture and 48-54 hours laboratory. (Prerequisite: ELCT 78D.) This course my be taken four times.

ELCT 78J Fundamentals of Wireless LANs 4.0 Units
The Wireless Local Area Network (LAN) course focuses on the design, planning, implementation, operation and troubleshooting of wireless LANs. It covers a comprehensive overview of the technologies, security and the best design practices with particular emphasis on hands on skills in the area of wireless setup and troubleshooting. Topics include: Wireless LAN (WLAN) setup and troubleshooting, 802.11 (a, b and g) technologies, WLAN site surveys, resilient WLAN design and installation, WLAN security, and Vendor inoperability strategies. The course also prepares network professionals for "Cisco Wireless LAN Support Specialist" certificate. 48-54 hours lecture and 48-54 hours laboratory. (Prerequisite: ELCT 78D.) This course my be taken four times.

ELCT 79A Microsoft Certified Systems Engineer 4.0 Units
This is the first of a series of courses required for Microsoft MCSE certification. Topics will include installing Windows 2000 Professional, installing Windows 2000 by using Windows 2000 Server Remote Installation Services (RIS), deploy service packs, manage and troubleshoot access to shared folders, manage shared printers, configure Advance Power Management (APD), encrypt data by using Encrypting Files System (EFS), manage hardware profiles, and configure and troubleshoot TCP/IP protocol. 48-54 hours lecture and 48-54 hours laboratory. (No prerequisite. Grade Option.) This course may be taken four times.

ELCT 79B Microsoft Certified Systems Engineer II 4.0 Units
The second in a series of courses required for Microsoft MCSE certification. Topics include: installing and configuring Microsoft Windows 2000 server; unattended installation of Windows 2000 server; Microsoft Windows 2000 file systems and advanced file systems; active directory services; administering Microsoft Windows 2000 server; administering print services; network protocols and services; routing and remote access services; Microsoft Windows 2000 security; monitoring and optimization; Microsoft Windows 2000 application servers. 48-54 hours lecture and 48-54 hours laboratory. (No prerequisite Recommended: ELCT 79A Microsoft Certified Systems Engineer. Grade Option)

ELCT 80 Fiber Optics Cabling 3.0 Units
This course is designed to introduce students to fiber optic communications, transfer equipment and cabling. Students will explore fiber optics theory, operation of transfer equipment, assembly and repair of fiber optic cabling. 96-108 hours individualized instruction. (Prerequisite: ELCT 69)

ELCT 81 Soldering Theory and Techniques 1.0 Unit
This hands-on course is designed to provide the student basic soldering theory and techniques. Topics include: soldering theory, types of soldering irons, soldering iron tips, soldering guns, solder connections, and unsoldering techniques. Course includes construction project. 32-36 hours individualized instruction. (No prerequisite)

ELCT 83 Small Office/Home Office (SOHO) Networking 4.0 Units

Small Office/Home Office (SOHO) course is designed for persons with little or no background in networking technologies to setup, operate, maintain and troubleshoot office/home Local Area Network (LAN). Topics include: Networking Components Identification and Installation, Installing, Configuring and Troubleshooting Basic Local Area Networks, wireless Networking, Internet Access and Sharing, SOHO Network Security and Virus Protection, Microsoft Windows 2000/XP Network configuration and Resource Sharing, Video Conferencing for Telecommuters, and VoIP Networking. 48-54 hours lecture and 48-54 hours laboratory. (No prerequisite. Grade Option.) This course my be taken four times.

ELCT 84 Computer Networking 3.0 Units

Students learn how to formulate network specifications, install, and maintain local area computer networks (LAN). Topics and activities include: fundamentals and protocols of data communications and communication architectures, selection, preparation, and installation of LAN cabling, network operating systems, and troubleshooting. Students will install and configure modems, connect telephone lines, operate modems, and transfer files. Satisfies computer industries A+ certification requirements. 96-108 hours individualized instruction. (No prerequisite)

ELCT 85 Optoelectronics: Fiber Optics 3.0 Units

This high-technology laboratory course demonstrates the use of fiber optics in a wide range of applications including office copy machines, biomedical instruments, telephone communications, aircraft equipment, consumer products and motor vehicles. Topics include: operation and application of light emitters, detectors, fiber optic cables and associated hardware, data transfer, bar code scanning, and contactless switching. 96-108 hours individualized instruction. (No prerequisite)

ELCT 86 Optoelectronics: Lasers 3.0 Units

Continuation of ELCT 85. This high technology laboratory course emphasizes the principles and applications of lasers as used in telecommunications, consumer electronics, biomedical electronics, and industry. Topics include: Principles of lasers, laser optics, drive and modulation circuits, lasers and fiber optics links, and audio video subcarrier modulation. 96-108 hours individualized instruction. (No prerequisite)

ELCT 87 Industrial Electronics: Industrial Control Systems, Devices and Circuits 3.0 Units

This course is designed to provide the student an opportunity to study a wide range of applications of electronics found in industrial automation and robotics. Topics include: operational amplifiers, linear integrated circuits, generators and motors, control devices and circuits, transducers, programmable logic controllers (PLCs), PLC functions, ladder logic, programming and applications. 96-108 hours individualized instruction. (No prerequisite)

ELCT 88 Industrial Electronics: Industrial Process Control Applications 3.0 Units

This course is designed to demonstrate a wide variety of electronic control systems and circuits which are controlled both manually and by use of the programmable logic controller (PLC). Topics include: motors and generators, control devices, timing control, motor control, counting, position control, servomechanisms, and applications and troubleshooting. 96-108 hours individualized instruction. (No prerequisite).

ELCT 91 Microprocessor Interfacing 3.0 Units

This course is designed to give the student a practical working knowledge of interfacing a microprocessor with external sensing and activator systems. Topics include microprocessor basics, buses, address decoding, 68HC1 I chip structure and internal features, instruction timing, switch decoding, interfacing with displays and adapters, I/O control techniques, data communications, serial/parallel conversion, interfacing to RAM, EPROMs, analog-to-digital and digital-to-analog devices. Offered Fall, Spring, Summer. 96-108 hours individualized instruction. (No prerequisite)

ELCT 92 Microprocessor Applications 3.0 Units

Continuation of Microprocessor Interfacing. This course concentrates on specific applications related to instrumentation and physical measurement. Activities include constructing a microprocessor-controlled digital multimeter (DMM), thermometer, light meter, and photometer. The student will analyze how strain gauges are used to measure force. The student will design and construct a microprocessor/step motor interface and control circuit. 96-108 hours individualized instruction. (No prerequisite)

ELCT 97 Telecommunications: Digital Communications 3.0 Units

This high technology laboratory course is designed to provide a broad background in the use of digital devices used in telephony, as well as in general digital communications. Emphasis is placed on the telephone industry, both wireless and fiber optics telecommunications, and synthetic speech. Topics include: digital communications, the subscriber telephone, the central office, and digitized speech. 96-108 hours individualized instruction. (No prerequisite)

ELCT 99 Telecommunications: Microwave Communications 3.0 Units

This high technology laboratory course is designed to provide a broad background in the use of microwave transmitters, receivers, microwave components, and horn antennas. Emphasis is placed on microwave communication links. Topics include: voice, narrow band, audio wideband, television, video, fiber optics interfaces, pulse code modulation, and multiplexing signals. 96-108 hours individualized instruction. (No prerequisite)

ELCT 110 Survey of Computer Technology (formerly ELCT 10) 3.0 Units

This course is intended for students who have a general interest in electronics and computer technology, history, and applications. Topics include electronics and computer technology, basic theory of electricity and magnetism, production of electricity and magnetism, control of the electron, electronic and computer components, tools of the trade, troubleshooting, electronic and computer math, applications and operating software. 48-54 hours lecture. CSU. (No prerequisite)

ELCT 131 D.C. Circuit Theory and Analysis (formerly ELCT 31) 4.0 Units

An in-depth analysis of DC theory and circuit operation. Topics include applications of Ohm's Law, Kirchhoff's Laws and their applications to series, parallel and series-parallel circuits, voltage dividers and bridge circuits, magnetism, electromagnetic induction, and network theorems, and an introduction to alternating voltages and currents. 48-54 hours lecture and 48-54 hours laboratory. CSU. Offered Fall, Spring. (No prerequisite)

ELCT 132 A.C. Circuit Theory and Analysis
(formerly ELCT 32) 4.0 Units
An in-depth analysis of AC circuit theory and circuit operation. Topics include the characteristics of inductors and capacitors and their response in AC circuits, RC and RL time constants, alternating current circuits, complex number analysis, network analysis for AC circuits, resonance, filters. 48-54 hours lecture and 48-54 hours laboratory. CSU. Offered Spring, Summer. (No prerequisite)

ELCT 133 Solid State Devices and Circuits
(formerly ELCT 33) 4.0 Units
Semiconductor theory, algebraic and graphical analysis of semiconductor devices. To include bi-polar and field effect transistors, DC stability design and analysis, small signal parameters and AC equivalent circuits, class A and B power amplifiers, class C and other amplifiers, and frequency effects. 48-54 hours lecture and 48-54 hours laboratory. CSU. Offered Fall. (No prerequisite)

ELCT 134 Solid State Circuit Analysis
(formerly ELCT 34) 4.0 Units
Course focuses on linear-integrated circuits and their use in the design of circuits and instruments. Topics include operational amplifier theory and linear circuits, nonlinear OP-Amp circuits, regulated power supplies, oscillators and timers, thyristors, frequency domain, and frequency mixing. 48-54 hours lecture and 48-54 hours laboratory. CSU. Offered Spring. (No prerequisite)

ELCT 138 Cooperative Education
(formerly ELCT 38)
See Cooperative Education (1 - 8 units). CSU

ELCT 148 Special Topics
(formerly ELCT 48)
See Special Topics listing (Variable units). CSU

ENGLISH

ENGL 6 Basic Reading and Writing
(formerly ENGL 166) 5.0 Units
This is a basic reading and writing course designed to build reading comprehension at both literal and inferential levels and to build proficiency in the basics of writing expository prose. A minimum of three hours per week must be completed in the Writing Center, plus tutoring or other activities as recommended by the instructor. 64-72 hours lecture and 48-54 hours laboratory. This course will not apply to the associate degree. Offered Fall, Spring, Summer. (Prerequisite: BSKL 2.) or eligibility as determined by VVC assessment. This course may be taken two times.

ENGL 8 Reading Improvement
(formerly ENGL 58) 3.0 Units
The course emphasizes the improvement of vocabulary and reading comprehension skills. Course work focuses on comprehension, analysis and evaluation of textbooks and other pre-college level reading materials. Assignments develop study strategies such as textbook marking, test taking and concentration. 48-54 hours lecture. This course will not apply to the associate degree. (No prerequisite)

ENGL 10.0 Laboratory in Writing 1.0 Unit
This course is designed to provide opportunities for students in all segments of the college community to develop their writing skills. Emphasis is on the one-to-one tutorial approach, computer-assisted instruction, and work composing/processing. 48-54 hours laboratory. This course does not apply to the Associate Degree. (No prerequisite. Credit/No Credit.) This course may be taken four times.

ENGL 50 Writing Fundamentals 4.0 Units
A practical writing course emphasizing expository writing, including planning, organizing, composing short essays, reading a variety of college preparatory texts, and editing for punctuation, diction, usage and sentence structure. 64-72 hours lecture. Offered Fall, Spring, Summer. (Prerequisite: ENGL 6 or eligibility as determined by VVC assessment.)

ENGL 50L Laboratory-Enhanced Study for English 50 1.0 Unit
A Laboratory enhanced study concurrent with English 50 for students participating in the Student Support Services program. A practical course supplementing the process and function of expository writing, including a review of spelling, punctuation, diction, usage, and sentence structure. Eight to nine hours lecture and 16-18 hours individualized instruction. (Prerequisites: completion of ENGL 6 with a "C" or better, or Assessment Placement, and referral by Student Support Services. Credit/No Credit) This course may be taken two times.

ENGL 59 Effective Reading and Study Skills 3.0 Units
This reading course focuses on comprehension, retention, and reproduction of main ideas and significant details. Application of reading skills, rate of comprehension, vocabulary, critical thinking, and study skills. 48-54 hours lecture. Offered Fall, Spring, Summer. (Prerequisite: ENGL 6 with a grade of "C" or better or eligibility as determined by VVC assessment.) This course may be taken two times.

ENGL 61 Theory and Practice of Tutoring Writing 3.0 Units
This course is designed to provide students with exposure to the theoretical concepts and understanding of the issues and practices relevant to the role of tutoring writing through observing, reading, and discussing the relationship between the writing, his/her writing, the tutor, the classroom teacher, and the classroom environment. 48-54 hours lecture. (Prerequisite: ENGL 101 with a grade of "C" or better. Grade Option) This course may be taken four times.

ENGL 62 Writing Tutor Workshop 1.0 Unit
This is an interactive course that analyzes the techniques of tutoring writing. Students will examine the role of writing tutors in one-on-one conferences, discuss tutoring theory, and observe tutors in the Writing Center and/or composition instructors in the classroom. Though this class is meant to prepare students to tutor writing, any student wishing to improve his/her writing skills will benefit from this course. 16-18 hours lecture. (Prerequisite: ENGL 101 with a grade of "C" or better. Credit/No Credit.) This course may be taken four times.

ENGL 65 College Grammar 2.0 Units
This course provides intensive college-level work on grammar, punctuation, and mechanics, providing practice and practical applications. 32-36 hours lecture. (Prerequisite: ENGL 6. Grade Option.) This course may be taken two times.

ENGL 101.0 English Composition and Reading 4.0 Units
(CAN ENGL 2)
This course is designed to develop skills in analytical reading and expository writing. It will place particular emphasis on the research process, including the principles and methods of research and composing the research paper. 64-72 hours lecture. CSU, UC. Offered Fall, Spring, Summer. (Prerequisite: Completion of ENGL 50 with a grade of "C" or better or eligibility as determined by VVC assessment.)

ENGL H101 Honors Composition and
(formerly ENGL H1A) Reading 4.0 Units
This course emphasizes the basic approaches to writing that will be necessary in college: research, textual analysis, critical applications and discussion of texts and ideas. The class demands greater depth of research and discussion, and emphasizes the seminar approach to learning. 64-72 hours lecture. CSU, UC. (Prerequisite: Completion of ENGL 50 with a grade of "C" or better.)

ENGL 102.0 Composition and Literature
(formerly ENGL 1B) (CAN ENGL 4) 3.0 Units
An introduction to the genres of literature including short story, poetry, drama, and novel. Further training in writing especially about literature. 48-54 hours lecture. CSU, UC. Offered Fall, Spring, Summer. (Prerequisite: Completion of ENGL 101.0 with a grade of "C" or better.)

ENGL H102 Honors Composition and
(formerly ENGL H1B) Literature 3.0 Units
Further training in writing and introduction to the short story, novel, poetry, and drama. The honors seminar will deepen students' insights into literature and into the process of writing about it. 48-54 hours lecture. CSU, UC. (Prerequisite: Completion of ENGL 101.0 with a grade of "C" or better.)

ENGL 104 Critical Thinking and Composition
(formerly ENGL 2) 3.0 Units
This course is designed to develop the student's critical thinking, reading and writing skills beyond the level achieved in English l01.0. It will focus primarily on the analysis and evaluation of expository and argumentative discourse and on writing analytical and argumentative essays. 48-54 hours lecture. CSU, UC. (Prerequisite: ENGL l01.0 with a grade of "C" or better or eligibility as determined by VVC assessment.)

ENGL H104 Honors Critical Thinking and
(formerly ENGL H2) Composition 3.0 Units
This course is designed to develop the student's critical thinking, reading, and writing skills beyond the level achieved in ENGL 101.0. 48-54 hours lecture. CSU,UC (Prerequisite: completion of ENGL 101.0 with a grade of "C" or better or eligibility as determined by VVC assessment.)

ENGL 109 Creative Writing 3.0 Units
(formerly ENGL 9) (CAN ENGL 6)
Principles of creative expression. Topics may cover fiction, poetry, creative nonfiction, and/or drama. 48-54 hours lecture. CSU,UC. Offered Fall and Spring. (No prerequisite. ENGL 101.0 recommended. Grade Option.) This course may be taken four times.

ENGL 112 Technical Writing 3.0 Units
(formerly ENGL 12)
Principles of effective writing in a variety of formats to suit specific technical audiences. Clarity and accuracy in written communication situations are stressed. Topics include formal and informal reports, special business letters, instructions, and proposals. Designed to simulate the technical writer's job. 48-54 hours lecture. CSU. (Prerequisite: ENGL l01 with a grade of "C" or better)

ENGL 116 Authors of the Theatre 3.0 Units
(formerly ENGL 16)
A survey of playwrights from the Greeks to the present. The selected plays are read, discussed, and analyzed. It is both AA and BA applicable. 48-54 hours lecture. CSU, UC. Offered Fall. See cross listing for TA 116. (No prerequisite)

ENGL 128 Special Topics
(formerly ENGL 28)
See Special Topics listing (Variable units). CSU, UC

ENGL 129 Independent Study
(formerly ENGL 29)
See Independent Study (1-3 units). CSU

ENGL 138 Cooperative Education
(formerly ENGL 38)
See Cooperative Education listing (1-8 units). CSU

ENGL 149 Critical Reading and College
(formerly ENGL 49) Study Skills 3.0 Units
Formerly College Reading.
A college reading course emphasizing interpretive, analytical, and evaluative abilities required for academic reading; college vocabulary, research, and study skills. 48-54 hours lecture. CSU. Offered Fall, Spring, Summer. (Prerequisite: ENGL 59 with a grade of "C" or better)

ENGL 162 Native American Literature
(formerly ENGL 31) 3.0 Units
An introduction to Native American literature from the oral tradition to contemporary writing. Study of myths and legends, traditional oral narratives and songs, transitional forms such as oration and autobiography, and written genres (poem, short story, novel). 48-54 hours lecture. CSU, UC. (No prerequisite; ENGL l02 is recommended.)

ENGL 210 Fiction Writing 3.0 Units
(formerly ENGL 10)
Principles of writing advanced fiction, focusing on the short story and the novel. 48-54 hours lecture. CSU, UC (Prerequisite: ENGL 109. Grade Option.)

ENGL 211 Poetry Writing 3.0 Units
A workshop-style course which includes a review of forms, poetic techniques, and revision strategies. 48-54 hours lecture. CSU, UC. (Prerequisite: ENGL 109. Grade Option.) This course may be taken four times.

ENGL 220 Modern Fiction 3.0 Units
(formerly ENGL 20)
Twentieth century literature, chiefly of England and the United States, emphasizing novels and short stories. 48-54 hours lecture. CSU, UC. (Prerequisite: ENGL l02 with a grade of "C" or better)

ENGL 225 Poetry 3.0 Units
(formerly ENGL 25)
British and American poetry with consideration of versification, structure, imagery, diction, themes, and genres. 48-54 hours lecture. CSU, UC. (Prerequisite: ENGL l02 with a grade of "C" or better)

ENGL 230 Survey of American
(formerly ENGL 30A) Literature 1600-1865
(CAN ENGL 14) 3.0 Units
A survey of exemplary items in the origin and development of American thought and culture from 1600 to 1865. Designed to provide an understanding and appreciation of American literary achievements through study of the works of writers including Bradford and Bradstreet, Edwards and Wheatley, Franklin, Irving, Poe, Stowe and Emerson. Also includes a study of Native-American folk tales and slave narratives. 48-54 hours lecture. CSU, UC. (Prerequisite: Completion of ENGL 102 with a grade of "C" or better)

ENGL 231 Survey of American Literature
(formerly ENGL 30B) 1865 to Present 3.0 Units
A survey of exemplary items in the origin and development of American thought and culture from 1865 to the present. Designed to provide an understanding and appreciation of American literary achievements through study of the works of great writers including Whitman, Dickinson, Twain, Frost, Welty, Thurber, Tan and others. 48-54 hours lecture. CSU, UC. (Prerequisite: Completion of ENGL 102 with a grade of "C" or better)

ENGL 232 Chicano/a and Latino/a
(formerly ENGL 32) Literature 3.0 Units
Introduction to the Mexican/American/Latino/a cultural experience through literary analysis of fiction, poetry, drama, and the essay. Studies literature in the context of literary/historical-political growth of Mexican/American/Latino/a identity and of current theories of analyzing multicultural writings. 48-54 hours lecture. CSU, UC. (Prerequisite: English 101)

ENGL 233 African American Literature
(formerly ENGL 33) 3.0 Units
An introductory survey course of African American oral and written literary traditions with consideration of historical and cultural roots. 48-54 hours lecture. CSU, UC. (Prerequisite: ENGL 102 with a grade of "C" or better)

ENGL 235 Children's Literature 3.0 Units
(formerly ENGL 35)
A survey of children's literature, emphasizing folktales, narrative fiction, poetry and some non-fiction works. Also includes the history and development of literature and illustration for children, the selection of materials for various age groups, and literature and the media. 48-54 hours lecture. CSU. Offered Spring. (Prerequisite: ENGL 101 with a grade of "C" or better)

ENGL 240/241 World Literature 3.0-3.0 Units
(formerly ENGL 40A-B)
Masterpieces in translation from earliest times through the Renaissance (240), and from the Neoclassical to modern times (241). 48-54 hours lecture. CSU, UC. ENGL 240 offered Fall semester every third year starting Fall 1990. (Prerequisite: ENGL 102 with a grade of "C" or better)

ENGL 245 Survey of English Literature
(formerly ENGL 46A) (CAN ENGL 8) 3.0 Units
A survey of major writers from the Middle Ages to 1800, including an examination of language development, historical backgrounds, and literary trends; special consideration of Chaucer, Spenser, Marlowe, Shakespeare, Bacon, Donne, Milton, Dryden, and Pope. 48-54 hours lecture. CSU, UC. (Prerequisite: ENGL l02 with a grade of "C" or better)

ENGL 246 Survey of English Literature
(formerly ENGL 46B) (CAN ENGL 10) 3.0 Units
A survey of major British writers of poetry, drama, fictional and nonfictional prose from 1800 to the present. 48-54 hours lecture. CSU, UC. (Prerequisite: ENGL l02 with a grade of "C" or better)

ENGL 247 Shakespeare 3.0 Units
(formerly ENGL 47)
An introduction to Shakespeare's work through a study of his principal plays and sonnets. 48-54 hours lecture. CSU, UC. (Prerequisite: ENGL l01.0 with a grade of "C"or better)

ENGLISH AS A SECOND LANGUAGE (ESL)

VVC offers a wide variety of noncredit ESL classes at lower levels, from low beginning to advanced level. Please consult the Class Schedule for a description of these classes, along with times and locations.

ESL 3 Low Beginning Reading and Writing 4.0 Units
Students at this level demonstrate little or no competence in communicating through writing and little or no control of vocabulary, grammar and sentence structure. Course is designed to teach students basic alphabet and phonics, and to read and write simple stories. Students will copy text and/or generate words or simple phrases; develop awareness of appropriate word choice or correct form; write simple sentences in thematic units. 48-54 hours lecture and 48-54 hours laboratory hours. This course will not apply to the Associate Degree. (No prerequisite. Credit/No Credit) This course may be taken two times.

ESL 5 Beginning Listening and Speaking 3.0 Units
This course is designed for the non-native speaker of English who has no ability or very little competence in speaking and listening. Emphasis is on developing students' ability to listen and understand basic English. Nonverbal social customs are taught; nonverbal behavior and cross-cultural communication are taught implicitly through modeling, interaction and demonstration. 32-36 hours lecture and 48-54 hours laboratory. This course will not apply to the Associate Degree. (No prerequisite. Credit/No Credit) This course may be taken two times.

ESL 12A Basic Computer Literacy 1.0 Unit
This is a two-part course in ESL Computer Literary for non-native speakers of English. The focus of the course is to develop language skills related to computer usage. Students will learn computer uses for ESL courses and education purposes. 16-18 hours lecture. This course will not apply to the Associate Degree. (No prerequisite. Credit/No Credit) This course may be taken three times.

ESL 12B Basic Computer Literacy 1.0 Unit
This is the second in a series of ESL Computer Literary for beginners. The focus of the course is to expand on basic computer knowledge for ESL educational purposes. 16-18 hours lecture. This course will not apply to the Associate Degree. (No prerequisite. Credit/No Credit) This course may be taken three times.

ESL 13 High Beginning Reading and Vocabulary 3.0 Units
This course is designed for the non-native speakers of English with some competence in reading and vocabulary. The course focuses on reading abilities through the enhancement of vocabulary skills and cultural awareness. Emphasis is placed on developing a life-long ability to read for pleasure. American culture is introduced through newspapers, folk tales, short stories and cross-cultural readers. 48-54 hours lecture. This course will not apply to the Associate Degree. (No prerequisite. Credit/No Credit) This course may be taken two times.

ESL 23 Pre-Intermediate Reading
(formerly ESL 154) and Vocabulary 2.0 Units
This course focuses on development and practice of fundamental reading and vocabulary skills to prepare students who plan to continue their post-secondary education. Reading skills include understanding new vocabulary in context and scanning for specific information. Students read simplified texts on academic and vocational subjects. 32-36 hours lecture. This course will not apply to the Associate Degree. (No prerequisite. Credit/No Credit) This course may be taken two times.

ESL 25 Pre-Intermediate Speaking
(formerly ESL 153) and Listening 3.0 Units
This course focuses on fundamental speaking and listening skills for ESL students who have a basic knowledge of common English words and phrases. Students learn to understand short, spoken passages, including questions and warnings. Speaking skills include describing familiar situations and events and giving basic information on the telephone. 32-36 hours lecture and 48-54 hours laboratory. This course will not apply to the Associate Degree. (No prerequisite. Credit/No Credit.) This course may be taken two times.

ESL 27 Pre-Intermediate Writing
(formerly ESL 116D) and Grammar 2.0 Units
This course focuses on fundamental writing and grammar skills for ESL students who have a basic knowledge of common English words, phrases, and structure. Students write at the sentence and paragraph level. They learn to organize ideas and edit for grammar, spelling, and punctuation. 32-36 hours lecture. This course will not apply to the Associate Degree. (No prerequisite. Credit/No Credit.) This course may be taken two times.

ESL 30A Intermediate Pronunciation I 1.0 Unit
This is the first of a two-part series of Intermediate Level Pronunciation courses. It is designed for non-native speakers of English who would like to improve their oral communication skills for better employment opportunities; to increase self-confidence in occupational, social, and academic settings. This class will focus on introducing basic sounds, intonation, and rhythm of the English language. Emphasis is on oral fluency and individual accuracy. 16-18 hours lecture. This course will not apply to the Associate Degree. (Prerequisites: Completion of ESL 23 or ESL 25. Credit/No Credit.) This course may be taken two times.

ESL 30B Intermediate Pronunciation 1.0 Unit
This is the second of a two-part series of Intermediate Level Pronunciation courses. The course designed for low intermediate students whose speech is causing communicative difficulties at work, at school or in social situations. Students improve oral fluency for better employment opportunities and increase self-confidence in occupational, social, and academic settings. Students practice listening, rhythm, intonation, and pronunciation. Emphasis is placed on oral fluency and individual accuracy. 16-18 hours lecture. This course will not apply to the Associate Degree. (Prerequisites: Completion of ESL 23 or ESL 25. Credit/No Credit.) This course may be taken two times.

ESL 33 Reading and Vocabulary
(formerly ESL 103) 3.0 Units
A reading course for low intermediate ESL students emphasizing main ideas, outlining, and vocabulary in context. This course will not apply to the Associate Degree. 32-36 hours lecture and 48-54 hours laboratory. (No prerequisite. It is recommendation that students should already have basic skills in decoding information and understanding at a literal level. They should be able to read and understand short, authentic texts such as letters and instructions. Credit/No Credit) This course may be taken three times.

ESL 34 (formerly ESL 104) **High Intermediate Reading and Vocabulary** **3.0 Units**

This class is a continuation of ESL 33. Skills include comparing and contrasting main characters, determining cause and effect, and predicting the story outcome. 32-36 hours lecture and 48-54 hours laboratory. This course will not apply to the Associate Degree. (Prerequisite: Successful completion of ESL 33, or have a satisfactory score on the ESL placement test, or instructor recommendation. Credit/No Credit) This course may be taken three times.

ESL 35A (formerly ESL 35) **Low Intermediate Listening and Speaking** **3.0 Units**

This course focuses on speaking and listening skills for students at intermediate level of English. Students practice telephone and face-to-face conversations. They learn to express common courtesies such as thanking and apologizing. They use strategies to listen to and understand new words. 32-36 hours lecture and 48-54 hours laboratory. This course will not apply to the Associate degree. (No prerequisite. Credit/No Credit.) This course may be taken two times.

ESL 35B (formerly ESL 36) **High Intermediate Listening and Speaking** **3.0 Units**

This course focuses on speaking and listening skills for students at high intermediate level of English. Students practice a variety of conversational and listening strategies and engage in discussions. Through role play, and simulation exercises, students learn to express opinions and reach agreement. 32-36 hours lecture and 48-54 hours laboratory. This course will not apply to the Associate degree. (No Prerequisite. Credit/No Credit.) This course may be taken two times.

ESL 37 (formerly ESL 111) **Intermediate Grammar** **3.0 Units**

Students at this level learn and apply rules of English grammar and structure for use in oral and written communication. This course provides practice in areas such as common verb tenses, question forms, and expressions of ability, permission and advice. This course will not apply to the Associate Degree. 48-54 hours lecture. (No prerequisite. Grade Option) This course may be taken four times.

ESL 37A **Low Intermediate Writing and Grammar** **3.0 Units**

This course helps students at low intermediate level develop writing and grammar skills appropriate for educational and personal success. Students write short compositions on familiar topics. They learn to apply principles of grammar as they write. 32-36 hours lecture and 48-54 hours laboratory. This course will not apply to the Associate Degree. (No prerequisite. Credit/No Credit.) This course may be taken two times.

ESL 37B **High Intermediate Writing and Grammar** **3.0 Units**

This course helps students at high intermediate level develop writing and grammar skills appropriate for educational and personal success. Students write short compositions on a variety of topics. They learn to apply principles of grammar as they write. 32-36 hours lecture and 48-54 hours laboratory. This course will not apply to the Associate Degree. (No prerequisite. Credit/No Credit.) This course may be taken two times.

ESL 38 (formerly ESL 112) **High Intermediate Grammar** **3.0 Units**

Students at high intermediate level learn and apply rules of English grammar and structure for use in oral and written communication. This course provides practice in areas such as description using adjectives and adverbs, use of gerund and infinitive forms of verbs, certain modals, and nouns and articles. This course will not apply to the Associate Degree. 48-54 hours lecture. (No prerequisite. Grade Option) This course may be taken four times.

ESL 43 **Low Advanced Reading and Vocabulary** **3.0 Units**

This is the first of two courses designed for non native speakers of English who are approaching advanced level of proficiency in reading English. Emphasis is on further developing reading and vocabulary skills. Students are introduced to a variety of reading genres, word structure, vocabulary, and reading strategies. This course will not apply to the Associate Degree. 48-54 hours lecture. (No prerequisite. Credit/No Credit only.) This course may be taken two times.

ESL 47 (formerly ESL 113) **Advanced Grammar** **3.0 Units**

Students at advanced level learn and apply rules of English grammar and structure for use in oral and written communication. This course provides review practice and expanded study of verb tenses, gerunds and infinitives, modals, and tag questions. This course will not apply to the Associate Degree. 48-54 hours lecture. (No prerequisite. Grade Option) This course may be taken four times.

ESL 48 (formerly ESL 114) **High Advanced Grammar** **3.0 Units**

Students at high advanced level learn and apply rules of English grammar and structure for use in oral and written communication. This course provides review practice and expanded study of phrasal verbs and introduces passive forms, conditional statements, adjective clauses, and indirect speech. This course will not apply to the Associate Degree. 48-54 hours lecture. (No prerequisite. Grade Option) This course may be taken four times.

FIRE TECHNOLOGY

FIRE 1 Fire Command 1C - I-Zone Fire Fighting for Company Officers 2.0 Units

The course is designed around the responsibilities of the Company officer at a wildland/urban interface incident. It will bring the structural Company Officer out of the city and into the urban/interface incident. In other words, from his or her comfort zone into an area that could very well be quire unfamiliar. This course is required for Fire Officer Certification by the Office of the State Fire Marshal. 32 hours lecture and six hours laboratory. This course will not apply to the Associate Degree. (Prerequisite: FIRE 72, Fire Command 1A and FIRE 66, I-200 Basic ICS. State mandated.) This course may be taken four times.

FIRE 3A (formerly FT 117) Certified Volunteer Fire Fighter 3.0 Units

The course, the first of two courses, is designed to prepare the student with information and skill development necessary to perform the tasks of a certified volunteer fire fighter within California. Provides a foundation of information and skill development necessary to enter college level courses in fire technology and/or a career in the fire service. Students must complete FIRE 3A and FIRE 3B to qualify for state certificate. 32-36 hours lecture and 64-72 hours laboratory. This course will not apply to the Associate Degree. (Prerequisite: Must pass sport participation examination prior to entrance into class. State mandated. Grade Option.)

FIRE 3B (formerly FT 117) Certified Volunteer Fire Fighter 3.0 Units

The second of two courses, is designed to prepare the student with information and skill development necessary to perform the tasks of a certified volunteer fire fighter within California. Provides a foundation of information and skill development necessary to enter college level courses in fire technology and/or a career in the fire service. Students must complete FIRE 3A and FIRE 3B to qualify for state certificate. 32-36 hours lecture and 64-72 hours laboratory. This course will not apply to the Associate Degree. (Prerequisite: Must pass sport participation examination prior to entrance into class. State mandated. Grade Option.)

FIRE 4A (formerly FT 97) Fire Fighter II Academy 1.5 Units

This is a series of lectures and manipulative drills designed to enhance and improve the fire fighter student's skills in fire behavior, forcible entry, vehicle fire fighting, flammable gases and liquids fire fighting techniques, handling massive casualty incidents and performance testing techniques. Designed for today's paid call and career fire fighter seeking full-time employment and/or advancement within a public or private fire protection organization. 16-18 hours lecture and 32-36 hours laboratory. This course will not apply to the Associate Degree. (Prerequisite: FFI status, or completion of FFI Academy [FIRE 95], or recommendation of training officer from a fire protection organization. Credit/No Credit.) This course may be taken four times.

FIRE 4B (formerly FT 68.25) Response to Terrorism 1.0 Unit

This course will introduce the fire fighter student to the basic concepts for first awareness at the scene of a potential or actual terrorist incident and discusses safety and survival tactics. 16-18 hours lecture. This course will not apply to the Associate Degree. (No prerequisite. Credit/No Credit)

FIRE 5B (formerly FT 88) Fire Command 2B-Management of Major Hazardous Materials 2.0 Units

This course prepares the fire fighting student with the information necessary to successfully manage a major hazardous materials incident within their jurisdiction. Areas of discussion include: information and data bases for hazardous materials; organizations, agencies and institutions involved with hazardous materials response and research; planning for your community's hazardous materials problems; legislation, litigation and liabilities of hazardous materials responses. 32-36 hours lecture. This course will not apply to the Associate Degree. (No prerequisite)

FIRE 5C (formerly FT 89) Fire Command 2C-High Rise Fire Tactics 2.0 Units

This course prepares the fire fighter student to manage a fire in small and large high rise buildings. Topics of discussion include: pre-fire planning; building inventory; problem identification; ventilation methods; water supply; elevators; life safety; fire fighting strategy and tactics; application of Incident Command System (ICS); and specific responsibilities of fire ground personnel. Case studies and simulation are features. Applicable to large and small fire departments. 32-36 hours lecture. This course will not apply to the Associate Degree. (No prerequisite)

FIRE 5D (formerly FT 103) Incident Command System - Scene Manager 1.5 Units

This course provides important information needed for operating as a scene manager (incident commander) within the Incident Command System (ICS). Subjects include: incident briefing, incident planning, incident management, unified command, and incident demobilization. 24-27 hours lecture. This course will not apply to the Associate Degree. (No prerequisite)

FIRE 5E Strike Team Leaders,Dozers (S-335) 1.0 Unit

This course prepares the fire fighter student to work as a strike team leader in charge of a task force or strike team of dozers for wild land fire control within the incident command system. This fire fighter course discusses duties, responsibilities, procedures and materials involved in the operation of the dozer strike team and the function of the strike team leader. National Wild Land Coordinating Group certified. Certification fee $5. This course will not apply to the Associate degree. 16-18 hours lecture. This course will not apply to the Associate Degree. (Prerequisites: ICS-100, 200, 300/State mandated. Credit/No Credit) This course may be taken four times.

FIRE 5F Inmate Fire Crew Supervisor 3.0 Units

This course prepares the fire fighter student with the skills and information necessary to work within the Incident Command System (ICS) as an inmate fire crew supervisor. Responsibilities, duties and materials required to operate and manage an inmate fire crew are presented. Wild land fire tactics and strategies for hand crews and hand crew fire safety are feature. National Wild Land Coordinating Group certified. $5.00 certification fee. 32-36 hours lecture and 32-36 hours laboratory. This course will not apply to the Associate Degree. (Prerequisites: FIRE 66, FIRE 86, ICS-100, 200, 300/State Mandated. Credit/No Credit) This course may be taken four times.

FIRE 5G S-356 Supply Unit Leader 1.0 Unit

This course provides the fire fighter student with information to perform the tasks of the Supply Unit Leader within the Incident Command system (ICS). CDF certified. Northwest Coordinating Group approved. 16-18 hours lecture. This course will not apply to the Associate Degree. (Prerequisites: I- 300, S-301. State Mandated. Credit/No Credit) This course may be taken four times.

FIRE 5H Food Unit Leader 1.5 Units

This course prepares the fire fighter student with the skills and information necessary to work within the Incident Command System (ICS) as a food unit leader. Responsibilities, duties and materials required to operate and manage a food unit are presented. National Wild Land Coordinating Group certified. 16-18 hours lecture and 12 hours laboratory. This course will not apply to the Associate Degree. (Prerequisite: FIRE 66, FIRE 86, ICS-100, 200, 300/State mandated. Credit/No Credit) This course may be taken four times.

FIRE 5I Ground Support Unit Leader 2.0 Units
This course prepares the fire fighter student to work as a ground unit leader within the Incident Command System (ICS). Responsibilities of the ground unit leader, procedures and materials involved with the operation and function of the ground support unit are discussed. National Wild Land Coordinating Group certified. Certification fee is $5. 32-36 hours lecture. This course will not apply to the Associate degree. (Prerequisite: FIRE 86/State mandated. Credit/No Credit) This course may be taken four times.

FIRE 5.1J Volunteer Fire Officer's Academy 2.0 Units
This course is designed to provide the information and skills necessary for the fire fighter/and or driver operator who desire to promote to the rank of company officer; for company officers who desire to remain current with innovative management, leadership and human relations techniques; and for training officers who are responsible for teaching and developing officers and future officer candidates. This course is designed for the fire fighter student with essential fire fighter skills. 32-36 hours lecture. This course will not apply to the Associate degree. (No prerequisite) This course may be taken three times.

FIRE 6A (formerly FT 63.1) Basic Fire Engine Operation Academy, CDF 3.5 Units
This course provides the student with the information and skills to safely drive and operate fire apparatus and fire pumps and provide initial attack incident control capabilities according to California Department of Forestry standards and policies. 48-54 hours lecture and 64-72 hours laboratory. This course will not apply to the Associate Degree. (Prerequisites: Successful completion of Basic Forest Firefighter course, valid class B (commercial or firefighter) California Driver's license with Tank and Air Brake Endorsements; successful completion of Hazardous Materials First Responder, Operational. State mandated. Credit/No Credit.) This course may be taken four times.

FIRE 6B Fire Attack I: Set Standard For Excellence on the Fire Ground 1.0 Units
Fire Attack I is designed to provide the fire fighter with the latest information, tactics and strategies for combating structural fire incidents. Focus is on the decisions and responsibilities the first arriving company officer must consider to successfully mitigate the incident. This class will not apply to the Associate degree. 16-18 hours lecture. (Prerequisites: Employment with a recognized fire protection agency in a position of company officer or acting company officer, or enrollment within the fire officer certification program accredited by California Fire Services Training and Education System (CFSTES) or National Fire Protection Association (NFPA) Standard 1021, Fire Officer Professional Standards. Grade Option) This class may be taken four times.

FIRE 6C Leadership Fundamentals 2.0 Units
This course is designed to prepare the fire fighter student within the California Department of Forestry to take a new position of company officer by providing skills in supervision and management. Topics include motivation, communication, discipline, leadership, time management and team building. This course will not apply to the Associate degree. 32-36 hours lecture. (No prerequisite. Credit/No Credit) This course may be taken again only with a grade of "D" or lower.

FIRE 7 (formerly FT 116) First Responder - Medical 2.0 Units
This course provides manipulative and technical instruction in emergency care procedures, including examining the victim, observing the surroundings, maintaining an airway, controlling bleeding, treating shock, childbirth emergencies, performing manual lifts and carries, and interfacing with emergency medical technicians and paramedics. This course meets present public safety emergency care requirements for fire service personnel. 32-36 hours lecture and ten hours laboratory. This course will not apply to the Associate Degree. (No prerequisite. Credit/No Credit)

FIRE 7A (formerly FT 117) First Responder Medical, Refresher 1.0 Unit
A 24-hour refresher course approved by the State Board of Fire Services and California State Fire Training for Recertification of first responders to medical emergencies. 16-18 hours lecture and eight-nine hours laboratory. This course will not apply to the Associate Degree. (No Prerequisite. Credit/No Credit) This course may be taken four times.

FIRE 8B (formerly FT 118) Emergency Medical Technician, Refresher 0.5 Unit
A 24-hour refresher course for fire service students who require recertification for Emergency Medical Technician I, State Fire Marshal or Fire Service certificates who do not operate ambulances or transport patients. Course approved by the State Board of Fire Services and State Fire Marshal's office. Eight-nine hours lecture and 16-18 hours laboratory. This course will not apply to the Associate Degree. (Prerequisite: Must possess valid EMT I, State Fire Marshal's certificate-State regulation. Credit/No Credit) This course may be taken four times.

FIRE 8C (formerly FT 81A) EMT-ID, Defibrillation 0.5 Unit
This course will provide the Emergency Medical Technician (EMT 1) training in the skill of defibrillation (D). Course content is based on California State Department of Health requirements, as delineated in title 22 of the California Administrative Code, Division 9, Chapter 2, Section 10064. Eight-nine hours lecture. This course will not apply to the Associate Degree. (Prerequisites: possess a current Basic Care Life Support (BCLS) card, possess certification as an EMT 1, and be currently employed with an approved EMT I D provider. State mandated. Credit/No Credit)

FIRE 9 (formerly FT 114) Fire Control III, Structural Fire Fighting, Instructor 2.0 Units
This 32-hour course prepares the fire fighter student to manage and conduct a state certified Fire Control III training exercise. Designed for fire department training officers and training staff, this course assumes a basic knowledge of fire fighting skills and organizational concepts. 32-36 hours lecture. This course will not apply to the Associate Degree. (No prerequisite. Credit/No Credit)

FIRE 9A (formerly FT 115) Fire Control IV, Oil and Gas Fire Fighting Techniques 0.5 Unit
This course provides the fire fighter student with live fire situations to gain skills and experience in combating fires involving liquefied petroleum gas and flammable liquids. Subjects include flammable liquid fire behavior, safety on the fire ground, extinguishing agents, flammable liquid/gas transportation vehicles, waterflow requirements and actual fire extinguishing exercises. A basic knowledge of fire fighting skills and knowledge plus access to appropriate safety equipment and clothing is presumed. Eight-nine horus lecture. This course will not apply to the Associate Degree. (No prerequisite. Credit/No Credit)

FIRE 10 (formerly FT 101) Fire Fighter Skills Maintenance 4.0 Units
A series of lectures and manipulative drills designed to provide maintenance of skills learned, including updates in technology relating to fire department organization, hoses, ladders, tools and equipment, salvage, fire chemistry, extinguishers and agents, fire control, prevention, arson, crowd and traffic control, mutual aid, communications, fire safety and emergency rescue techniques. 32-36 hours lecture and 96-108 hours laboratory. This course will not apply to the Associate Degree. (Prerequisite: FIRE 100 and FIRE 90 or FIRE 95 or equivalent. Employment as career fire fighter or paid call fire fighter recommended)

FIRE 10A **Skills Maintenance For Paid**
(formerly FT 102) **Call Fire Fighter** **1.5 Units**
A series of lectures and manipulative drills designed to provide maintenance of skills learned, including updates in technology relating to fire department organization, hoses, ladders, tools and equipment, salvage, fire chemistry, extinguishers and agents, fire control, prevention, arson, crowd and traffic control, mutual aid, communications, fire safety and emergency rescue techniques. 16-18 hours lecture and 32-36 hours laboratory. This course will not apply to the Associate Degree. (No prerequisite)

FIRE 10B **Wildland Fire Fighter's Skills**
(formerly FT 59.1) **Maintenance** **1.5 Units**
This course provides the fire fighter student with new information and skill development to maintain efficiency and effectiveness as a wildland fire fighter. New protocols, procedures and equipment are presented and student demonstrates proficiency in using tools, tactics and strategies for fire control. 16-18 hours lecture and 24-27 hours laboratory. This course will not apply to the Associate Degree. (Prerequisites: Employment as a wildland fire fighter or fire fighter serving a community with wildland or interface fire conditions. State mandated. Credit/No Credit.) This course may be taken four times.

FIRE 10C **Company Officer's Skills**
(formerly FT 98.1) **Maintenance** **1.5 Units**
This course provides the fire fighter company officer student with new information and skill development to maintain efficiency and effectiveness as a company officer and fire fighter. New policies, procedures and equipment are presented and student demonstrates proficiency in using tools, tactics and strategies for managing personnel, budgets and legal responsibilities in today's fire service. 16-18 hours lecture and 24-27 hours laboratory. (Prerequisites: Employment as a fire company officer in a modern fire service agency. State mandated. Credit/No Credit) This course may be taken four times.

FIRE 10D **Hand Crew Fire Fighter Skills**
(formerly FT 60.2) **Maintenance** **1.5 Units**
This course provides the fire fighter student with new information and skill development to maintain efficiency and effectiveness as a wildland hand crew fire fighter. New policies, procedures and equipment are presented and student demonstrates proficiency in using tools, tactics and strategies for constructing and maintaining a fire line and other related fire control tactics and operations. CDF certified. 16-18 hours lecture and 24-27 hours laboratory. This course will not apply to the Associate Degree. (Prerequisites: Employment as a hand crew fire fighter with a modern fire service agency. State mandated. Credit/No Credit.) This course may be taken four times.

FIRE 11 **Low Angle Rescue** **1.0 Unit**
(formerly FT 110)
This course is designed to equip the student with the information, techniques and methods for utilizing rope, webbing, hardware friction devices, and litters in low angle rescue situations. Topics include rope and related equipment, anchor systems, safety lines, stretcher lashing and rigging, mechanical advantage, single line and two line rescue systems. This course is designed for the fire fighter student with essential fire fighting skills. 16-18 hours lecture. This course will not apply to the Associate Degree. (No prerequisite. Credit/No Credit)

FIRE 11A **Rescue Systems I** **1.5 Units**
The 40-hour State Fire Rescue Systems I course is designed to provide the student with the ability to apply basic search and rescue skills, approach rescue situations safely and understand the organizational concerns at a structural collapse incident. Upon completion of the course, the student will receive a California State Fire Marshals Certificate, which is the basic requirement for other rescue classes. This course will not apply to the Associate degree. 24-27 hours lecture and 16-18 hours laboratory. (No prerequisite. Credit/No Credit) This course may be taken again only with a grade of "D" or lower.

FIRE 11B **Confined Space Awareness**
0.5 Unit
This course provides the fire fighter student with the definitions and conditions that constitute a confined space situation. Information on how those conditions create hazards and impact the fire fighter plus principles of confined space safety are featured. This course will not apply to the Associate degree. Eight-nine hours lecture. (No prerequisite. Credit/No Credit) This course may be taken again only with a grade of "D" or lower.

FIRE 15 **S-244, Field Observer/**
(formerly FT 168.15) **Display Processor** **1.5 Units**
This course provides the fire fighter student with the information to perform the duties, responsibilities, procedures and to utilize the appropriate materials when acting as the field observer/display processor within the Incident Command System (ICS). North West Coordinating Group certified. 24-27 hours lecture and 16-18 hours laboratory. This course will not apply to the Associate Degree. (Prerequisites: FIRE 60G. State mandated. Credit/No Credit)

FIRE 16 **Technical Specialist, Crew**
(formerly FT 168.16) **1.0 Unit**
This course provides the fire fighter student with the information to perform the position of Technical Specialist for hand crews when operating within the Incident Command System (ICS). California Department of Forestry certified. 16-18 hours lecture and 24-27 hours laboratory. This course will not apply to the Associate Degree. (Prerequisites: FIRE 66.1. State mandated. Credit/No Credit) This course may be taken four times.

FIRE 17 **Basic Fire Crew, Captain**
(formerly FT 168.17) **2.0 Units**
This course is designed for the recently appointed fire crew captain assigned to camp programs. The course will focus on group dynamics, supervision techniques, recognizing gang symbology and signals, Department of Corrections regulations, fire crew configurations and tactics. CDF certified. 32-36 hours lecture. This course will not apply to the Associate Degree. (Prerequisite: Appointment to the fire crew captain position. State mandated. Credit/No Credit) This course may be taken four times.

FIRE 18 **Class A Foam Operations**
(formerly FT 168.18) **1.0 Unit**
This course is an introduction to Class A fire fighting foams used on wildland fires. Classroom principles and field application techniques are featured. CDF certified. 16-18 hours lecture. This course will not apply to the Associate Degree. (Prerequisites: FIRE 80. State mandated. Credit/No Credit) This course may be taken four times.

FIRE 20 **I-333 Strike Team Leader, Crew**
(formerly FT 120) **1.0 Unit**
This course will provide the fire fighter student with the information necessary to perform as a strike team leader in charge of a hand crew at wildland fire suppression operations. 16-18 hours lecture. This course will not apply to the Associate Degree. (No prerequisite.) This course may be taken four times.

FIRE 21 **California Department of Forestry**
(formerly FT 121) **Firing Officer S-234** **1.5 Units**
This course is designed to train fire fighter supervisors who have a need to know how to set a fire or backfire to accomplish fire containment and control in wildland fire suppression. 24-27 hours lecture and 16-18 hours laboratory. This course will not apply to the Associate Degree. (No prerequisite.) This course may be taken four times.

FIRE 21A **Firing Methods and Procedures**
(formerly FT 121.1) **1.5 Units**
This course provides the fire fighter student with information about firing techniques and related firing devices used in wild land fire suppression. Incudes basic safety instructions and procedures to follow when immediate and unplanned back firing or burning out of an area is deemed necessary for wild land fire control. CDF certified. North West Coordinating Group approved. 24-27 hours lecture. This course will not apply to the Associate Degree. (Prerequisites: FIRE 66, FIRE 80A. State mandated. Grade Option)

FIRE 26 **S-205, Interface Operations**
(formerly FT 168.26) **1.0 Unit**
This course is designed to prepare the fire fighter student with the skills and techniques to fill the training needs for initial attack commanders and company officers confronting wild land fires that threaten life, property, and improvements within the interface areas of southern California. Topics include: size-up, initial strategy and action plan, structure triage, action plan assessment, public relations and safety. 12 hours lecture and 12 hours laboratory. This course will not apply to the Associate Degree. (No prerequisite. Credit/No Credit) This course may be taken four times.

FIRE 27 **S-403, Information Officer**
(formerly FT 168.27) **2.0 Units**
This course is designed to prepare the fire fighter student with the skills and techniques to fill the Incident Command System (ICS) position of Information Officer. Topics include duties and responsibilities of the Information Officer, working with the media, working with the public and other agencies. 32-36 hours lecture. This course will not apply to the Associate Degree. (Prerequisite: FIRE 66 and FIRE 86. State mandated. Credit/No Credit) This course may be taken four times.

FIRE 28 **I-342, Document Unit Leader**
(formerly FT 168.28) **0.5 Unit**
This course is designed to provide skills that enable the fire fighter student to perform the position of Document Unit Leader within the Incident Command System (ICS). Procedures of the Document Unit Leader, responsibilities and materials required are presented. Eight-nine hours lecture. This course will not apply to the Associate Degree. (No prerequisite. Credit/No Credit) This course may be taken four times.

FIRE 29 **S-430, Operations Section Chief**
(formerly FT 168.29) **2.0 Units**
This course is designed to prepare the fire fighter student with the skills and techniques to fill the Incident Command System (ICS) position of Operations Section Chief. Topics discussed include: information gathering, interaction with the command staff and general staff, incident action plan development, operation period briefing, daily schedule, and demobilization. 32-36 hours lecture. This course will not apply to the Associate Degree. (Prerequisite: I-300, S290, Certification as Strike Team Leader or Division Supervisor. State mandated. Credit/No Credit) This course may be taken four times.

FIRE 30 **Instruction Techniques for**
(formerly FT 130) **Company Officers** **1.0 Unit**
A National Fire Academy course for fire fighter students who want to improve their skills in training fire fighters and students of fire safety including the public. Applies toward National Fire Protection Association Standard 1041, Professional Qualifications of Fire Service Instructors. 16-18 hours lecture. This course will not apply to the Associate Degree. (No prerequisite.) This course may be taken four times.

FIRE 30A **National Fire Academy Public**
(formerly FT 131) **Fire Education Planning** **1.0 Unit**
This National Fire Academy course is designed to provide the fire fighter student with the information and concepts to provide a successful public fire safety education program within their community. 16-18 hours lecture. This course will not apply to the Associate Degree. (No prerequisite.) This course may be taken four times.

FIRE 33 **Fire Line Emergency Medical**
(formerly FT 181) **Technician (EMT) Academy**
1.0 Unit
This course is designed to prepare the fire fighter EMT to safely operate at a major wild land fire incident at the fire line location. Topics discussed include duties and responsibilities of the fire line EMT, equipment needs, helicopter safety, incident command system organization, and review of treatment for common fire line injuries and use of makeshift aids. Twelve hours lecture and 12 hours laboratory. This course will not apply to the Associate Degree. (Prerequisites: Current EMT certification and employment in public or private fire service organization. State mandated. Credit/No Credit) This course may be taken four times.

FIRE 40 **Fire Fighter**
(formerly FT 140) **Entrance Examination**
Techniques **3.0 Units**
This course is designed to prepare the student to take and successfully pass the entrance level fire fighter examination process. Topics discussed include: seeking employment opportunities, the application process, the various examinations given to applicants, oral interviews, and other aspects of the examination process. 48-54 hours lecture. This course will not apply to the Associate Degree. Offered Fall, Spring (No prerequisite. Grade Option) This course may be taken two times.

FIRE 40A **Fire Fighter Physical Agility**
(formerly FT 141) **Entrance Examination**
Techniques **1.0 Unit**
This course is designed to prepare the student to take and successfully pass the entrance level fire fighter physical agility examination through physical conditioning and specificity training. Emphasis on physical conditioning and exercise. 48-54 hours lecture. This course will not apply to the Associate Degree. Offered Fall, Spring. (No prerequisite. Credit/No Credit) This course may be taken four times.

FIRE 40F **Building Construction for**
(formerly FT 111) **Fire Suppression**
Forces/Wood/Ordinary **1.0 Unit**
This course provides the fire fighter student with the principles of wood and ordinary construction as they apply to the fire service. The primary emphasis is on improving the fire fighters ability to ensure fire safety on the fire ground by recognizing common causes and indicators of building failure, collapse and other hazards related to building construction. Designed to improve the operational effectiveness of the fire officer and fire fighter by being able to predict the overall reaction of a building to fire conditions. 16-18 hours lecture. This course will not apply to the Associate Degree. (No prerequisite. Credit/No Credit)

FIRE 50 **Fire Service Supervision -**
(formerly FT 50) **Increasing**
Personal Effectiveness **1.0 Unit**
This National Fire Academy course is designed to increase the fire fighter student's effectiveness as a manager and a leader by presenting current research on management, leadership, stress, and time management and explaining how to adapt this information to their own specific management context. Accredited by State Fire Marshal's Office. 16-18 hours lecture. (No Prerequisite. Credit/No Credit) This course may be taken four times.

FIRE 51 (formerly FT 51) **Fire Service Supervision - Increasing Team Effectiveness** **1.0 Unit**

This National Fire Academy approved course is designed to increase the student's effectiveness as team leaders and members of the fire service by demonstrating how communication, motivation, counseling, and the principles of conflict resolution and group dynamics can be used to promote efficient group functioning and members satisfaction. Accredited by State Fire Marshal's Office. 16-18 hours lecture. (No Prerequisite. Credit/No Credit) This course may be taken four times.

FIRE 52 (formerly FT 52) **Commanding the Initial Response** **1.0 Unit**

This National Fire Academy course is designed to give the fire fighter student information and skills necessary to establish command, perform size-up, develop and implement an action plan, transfer command, and organize an incident using an effective command system. Accredited by State Fire Marshal's Office. 16-18 hours lecture. (No Prerequisite. Credit/No Credit) This course may be taken four times.

FIRE 53 (formerly FT 53) **Hazardous Materials First Responder Operational Decontamination** **0.5 Unit**

This course provides the student with the information and skills to safely and competently decontaminate people and equipment at a hazardous materials (haz mat) incident. California Specialized Training Institute (CSTI) certified. Meets federal and state requirements as listed in 29 CFR 1910.120 (q), CCR 5192 (q), NFPA472. $10.00 fee for CSTI certificate. Eight-nine hours lecture. (Prerequisite: FIRE 82A. Credit/No Credit)

FIRE 54 (formerly FT 54) **Fire Command 2E** **2.0 Units**

This course prepares the fire fighter student to manage the large wildland fire incident. Topics of discussion include: California's wildland fire problem, fire safety, weather effects, wildland fuel behavior, attack methods, using support equipment, strategy and tactics, air attack operations, and using maps. Simulation is featured. Chief Officer certified. 32-36 hours lecture. (No prerequisite. Credit/No Credit) This course may be taken four times.

FIRE 55 (formerly FT 55) **Fire Instructor 2A** **2.5 Units**

This course is designed to provide the fire technology student the skills to evaluate students. Topics include: construction of written (technical knowledge) and performance (manipulative skills) tests, as well as test planning, test analysis, test security, and evaluation of test results to determine instructor and student effectiveness. Essential course for writing valid, objective tests. 40-45 hours lecture. (Prerequisite: FIRE 70 and FIRE 71. State mandated. Grade Option) This course may be taken two times.

FIRE 56 (formerly FT 56) **Fire Instructor 2B** **2.5 Units**

This course is designed for the fire technology student who require skills leading groups of people in staff meetings, group discussions, and training sessions to solve problems, determine objectives, generate new ideas and provide instruction to subordinates. 40-45 hours lecture. (No prerequisite. Grade Option) This course may be taken two times.

FIRE 58 **Introduction to Emergency Management** **4.0 Units**

This course provides the history, terminology, goals and mission of the Emergency Management occupation and profession. The roles, responsibilities, lines of authority and characteristics of effective program managers are presented. Professional associations, federal support programs, model state practices and functional activities are also discussed. 64-72 hours lecture. (No Prerequisite. Grade Option)

FIRE 58A **Community Disaster Planning** **4.0 Units**

This course provides the student with the information and details to develop a community or company disaster plan. Topics of discussion include: developing a disaster plan for a company or community, developing a hazard analysis and capability assessment, building consensus, leveraging political assets to insure community readiness, and the process of adoption and revision. Students also will receive certificates from the Federal Emergency Management Agency (FEMA): IS-15, Special Event Contingency Planning; IS-3, Radiological Emergency Preparedness; IS-324, Community Hurricane Planning; IS-11, Animals in Disasters, Community Planning. 64-72 hours lecture. (No Prerequisite. Grade Option)

FIRE 58B **Emergency Management Response** **4.0 Units**

This course provides the student with the information and details of coordinating and operating a community emergency operations center (EOC). How to coordinate the resources of a community or company, identify specific threats, and the operational requirements of an EOC are presented. Students will also receive certificate of completion from the Federal Emergency Management Agency (FEMA): IS-275, The Role of the EOC in Community Preparedness, Response and Recovery; IS-271, Anticipation of Weather and Community Risk; IS-301, Radiological Emergency Response; Q-534, Emergency Response to Terrorism; IS-288, Managing Volunteer Resources. 64-72 hours lecture. (No Prerequisite. Grade Option)

FIRE 58C **Emergency Management Recovery** **4.0 Units**

This course provides the student with the information and details of making the transition from response to recovery to a company disaster. Case studies examine mass fatality management, earthquakes, flooding and terrorism incidents. Students receive certificates of completion from the Federal Emergency Management Agency (FEMA): IS-7, Citizens Guide to Disaster Assistance; IS-208, State Disaster Management; IS-600, Special Considerations for FEMA Public Assistance Projects; IS-630, Introduction to the Public Awareness Process. 64-72 hours lecture. (No Prerequisite. Grade Option)

FIRE 58D **Introduction to Mitigation for Disasters** **4.0 Units**

This course provides the student with the information and details to plan and implement mitigation strategies for a community or business. Mitigation includes all activities that improve a community or business's survivability from an identified threat. Identifying needs, obtaining funding and executing mitigation programs are the objectives of this course. Students also will receive certificates of completion from the Federal Emergency Management Agency (FEMA): IS-393, Introduction to Mitigation; IS-394, Mitigation for the Homeowner; IS-8, Building for the Earthquake of Tomorrow; IS-9, Managing Floodplain Development. 64-72 hours lecture. (No Prerequisite. Grade Option)

FIRE 59 (formerly FT 59) **Basic Wildland Fire Fighter Academy** **3.0 Units**

This course presents information and skill development to students seeking employment and a career with a wildland fire agency. Certificates awarded to successful graduates are applicable to all state and federal wildland fire agencies. North West Coordinating Group (NWCG) certified. California Department of Forestry (CDF) certified. 32-36 hours lecture and 48-54 hours laboratory. (No prerequisite. Credit/No Credit. Recommended preparation: Good attitude and willingness to work hard.)

FIRE 60B Advanced Incident Command
(formerly FT 66.2) System, I-400 1.0 Unit
This course will emphasize large scale organization development, roles and relationships of the primary command staff; the planning, operational, logistical and fiscal considerations related to command of a large and complex incident. Fire Service Training and Education Program (FSTEP) certified. There is a $5.00 fee for certificate. 16-18 hours lecture. (Prerequisites: FIRE 66.1, or employment within a recognized fire service agency at the rank of company officer or above. State mandated. Credit/No Credit)

FIRE 60C Incident Safety Officer, S-401
(formerly FT 68.8) 1.5 Units
This course prepares the fire fighter student to work as a safety officer within the Incident Command System, with emphasis on unsafe and hazardous conditions at emergency scenes. Fire Service Training and Education Program (FSTEP) certified. There is a $5.00 fee for certificate. 24-27 hours lecture. (Prerequisites: FIRE 66.1, FIRE 80A, FIRE 6OE or employment within a recognized fire service agency at the rank of company officer or above. State Mandated. Credit/No Credit)

FIRE 60E Division/Group Supervisor,
(formerly FT 66.3) S-339 1.0 Unit
This course will provide the information necessary to support the specific tasks of the Division/Group Supervisor position within the Incident Command System. North West Coordinating Group certified. 16-18 hours lecture. (Prerequisites: FIRE 60G, FIRE 66, FIRE 86. State Mandated. Credit/No Credit). This course may be taken four times.

FIRE 60F ICS-334 Strike Team
(formerly FT 68) Leader-Engine 1.0 Unit
This course describes and explains the basic responsibilities of an Engine Strike Team Leader. Topics of discussion include: the strike team concept; types of strike teams; pre-incident responsibilities; assembly and travel; incident arrival; check-in; assigned/available status; out-of-service status; demobilization/release. 16-18 hours lecture. (No prerequisite, Credit/No Credit)

FIRE 60G Incident Commander, Initial
(formerly FT 68.2) Attack, S-200 1.0 Unit
This course provides information and techniques to prepare the fire fighter student to command an initial attack at a wildland fire and incorporate resources effectively. North West Coordinating Group (NWCG) certified. 16-18 hours lecture. (Prerequisites: FIRE 66, FIRE 80. State mandated by California Fire Service Training and Education (CFSTES) and Incident Command system (ICS) by NWCG, or experience as a fire fighter working within the ICS. Credit/No Credit)

FIRE 60H Incident Commander, Extended
(formerly FT 68.3) Attack, S-300 1.0 Unit
This course will provide the fire fighter student the information necessary to command an incident that goes beyond the initial attack stage and incorporates additional resources. North West Coordinating Group certified. 16-18 hours lecture. (Prerequisites: FIRE 60G, FIRE 66, FIRE 86. State mandated. Credit/No Credit)

FIRE 61 Rescue Practices 3.0 Units
(formerly FT 61)
Rescue practices will provide training for emergency service personnel in reaching victims injured in collisions, cave-ins, collapse, or inaccessible areas such as mountainous terrain. Course includes training in both light and heavy auto extrication and packaging victims for transport; recovery of victims of earth collapse such as trench rescue; basic repelling techniques and use of the basket stretcher. 32-36 hours lecture and 48-54 hours laboratory.

FIRE 61A Medical Unit Leader, S-359
(formerly FT 68.6) 0.5 Unit
This course prepares the fire fighter student to work as a medical unit leader within the Incident Command System. Responsibilities, procedures and materials involved with the operation and function of the Medical Unit are discussed. North West Coordinating Group certified. Eight-nine hours lecture. (Prerequisites: FIRE 81 and FIRE 66.1. State mandated. Credit/No Credit)

FIRE 61B Basic Air Operations, S-270
(formerly FT 68.7) 1.0 Unit
This course will provide the fire fighter student with a survey of uses of aircraft in fire suppression and how to conduct themselves in and around aircraft. Management policies, regulations, and procedures which govern aviation operations in fire suppression will be examined. Aircraft tactical capabilities, logistical uses and specifications for helicopter landing areas are discussed. North West Coordinating Group certified. 16-18 hours lecture. (Prerequisite: FIRE 66. State mandated. Credit/No Credit)

FIRE 61C Helispot Manager, S-272 0.5 Unit
(formerly FT 68.9)
This course will provide the fire fighter student with an overview and the information about responsibilities, procedures and materials required to function as a Helispot Manager within the Incident Command System. North West Coordinating Group certified. Eight-nine hours lecture. (Prerequisite: FIRE 60G. State Mandated. Credit/No Credit)

FIRE 61D Resource Unit Leader/
(formerly FT 68.10) Demobilization Unit Leader
2.0 Units
This course prepares the fire fighter student to work as a resource unit leader/demobilization unit leader within the Incident Command System. The responsibilities, duties and materials required to function in this position are discussed. North West Coordinating Group certified. 32-36 hours lecture. (Prerequisites: FIRE 61E and FIRE 66.1. State mandated. Credit/No Credit)

FIRE 61E Check In/Status Recorder, S-248
(formerly FT 68.12) 0.5 Unit
This course will provide the fire fighter student with the information required to function in the position of Check In/Status Recorder within the Resources Unit of the Incident Management System (ICS). North West Coordinating Group certified. Eight-nine hours lecture. (Prerequisite: FIRE 60G. State mandated. Credit/No Credit)

FIRE 61F Staging Area Manager 0.5 Unit
(Formerly FT 68.13)
This course will provide the fire fighter student with information about the duties, responsibilities and materials required to function as a staging area manager. Fire Service Training Education Program (FSTEP) certified. Eight-nine hours lecture. (Prerequisite: FIRE 60G, S-200. Credit/No Credit)

FIRE 61G Fire Line Emergency
Medical Technician (EMT)
(formerly FT 68.11) 0.5 Unit
This eight hour course is designed to prepare the fire fighter, Emergency Medical Technician to safely operate at a major wildland fire incident at the fire line location. Course covers duties and responsibilities of the Fire Line EMT; equipment needs, helicopter safety, the Incident Command System (ICS) organization, review of treatments for common fire line injuries, and use of makeshift aids.Eight-nine hours lecture. (Prerequisites: FIRE 81, current EMT--I certification (state mandated per CFSTES policy), employment as a fire fighter in a public or private fire service organization. Credit/No Credit) This course may be taken four times.

FIRE 63 Apparatus Driver/Operator IA
(formerly FT 63) 1.5 Units
This course is designed to provide the student with information on driver techniques for emergency vehicles and techniques of basic inspection and maintenance for emergency vehicles, including actual driving exercises under simulated emergency situations. 24-27 hours lecture and 16-18 hours laboratory. (No prerequisite) This course may be taken three times.

FIRE 64 Apparatus Driver/Operator IB
(formerly FT 64) 1.5 Units
This course is designed to provide the student with information on driver techniques for emergency vehicles and techniques of inspection, operation of fire pumps, including actual driving and pumping of water under simulated emergency exercises. 24-27 hours lecture and 16-18 hours laboratory. (No prerequisite) This course may be taken three times.

FIRE 65 Basic Wildland Fire Control
(formerly FT 60) 2.0 Units
Basic wildland hand-crew training. The course covers fire suppression organizations, fire behavior, meteorology, suppression techniques, and safety. Meets federal fire agencies requirements for employees and mutual aid cooperators. 28 hours lecture, and 16-18 hours laboratory. Offered Spring. (No prerequisite)

FIRE 65O Campbell Prediction System
1.0 Unit
This course is designed for the fire fighter and fire officer who want to know why, when and where wildland fire behavior will change, and how to make these predictions to apply safe and effective tactics or evacuate a dangerous area and learn a system to effectively communicate these predictions to others. California Department of Forestry certified. 16-18 hours lecture. (No prerequisite. Credit/No Credit) This course may be taken four times.

FIRE 66 Introduction to Incident
(formerly FT 66) Command 1.0 Unit
This course provides an introduction to, and an overview of the Incident Command System and introduces the participants to the NIMS (National Interagency Incident Management System). 16-18 hours lecture. (No prerequisite)

FIRE 67 Trench Rescue 0.5 Unit
(formerly FT 67)
This course is designed to provide hands on techniques for fire service personnel to effect a rescue at an excavation or trench cave-in. Topics include: critical considerations while responding to trenching emergencies; evaluation of cave-in scenes; basic life support procedures and temporary protection for victims; specialized tool usage; shoring techniques; and below grade rescue safety procedures. Eight-nine hours lecture. (No prerequisite)

FIRE 69 Building Construction for
(formerly FT 69) Fire Protection 3.0 Units
This course is the study of the components of building construction that relates to fire safety. The elements of construction and design of structures are shown to be key factors when inspecting buildings, preplanning fire operations, and operating at fires. The development and evolution of building and fire codes will be studied in relationship to past fires, in residential, commercial, and industrial occupancies. 48-54 hours lecture. (No prerequisite)

FIRE 70 Instructor IA - Instructional
(formerly FT 70) Techniques Part I 2.0 Units
This is the first of a two-course series and is the standard State Board of Fire Services accredited course as offered in community colleges. Topics include the occupational analysis, course outlines, concepts of learning, levels of instruction, behavioral objectives, using lesson plans, the psychology of learning, and evaluation of effectiveness. Activities include student teaching demonstrations. This course applies to Fire Officer, Fire Instructor I, and Public Education Officer I certifications. 32-36 hours lecture. (No prerequisite)

FIRE 71 Instructor 1B - Instructional
(formerly FT 71) Techniques Part 2 2.0 Units
This is the second in a two-course series and is the standard State Board of Fire Services accredited course as offered in community colleges. Topics include preparing course outlines, establishing levels of instruction, constructing behavioral objectives and lesson plans, instructional aid development, fundamentals of testing and measurements, tests planning, evaluation techniques and tools. Activities include student teaching demonstrations. This course applies to Fire Officer, Fire Instructor I, and Public Education Officer II certifications. 32-36 hours lecture. (No prerequisite)

FIRE 72 Fire Command IA -
(formerly FT 72) Command Principles for
Company Officers 2.0 Units
This course provides the instruction and simulation time to the participants pertaining to the initial decision and action processes at a working fire. The course includes areas of discussion on the fire officer, fire behavior, fireground resources, operations and management. This course applies to Fire Officer certification. 32-36 hours lecture. Offered Fall. (No prerequisite)

FIRE 73 Fire Command IB - Hazardous
(formerly FT 73) Materials Command Principles
for Company Officers 2.0 Units
This course provides instruction in tactics and strategies and scene management principles for incidents involving hazardous materials. The course includes areas of discussion on identification and hazard mitigation, decontamination, protective clothing, environmental concerns, and legal issues. This course applies to Fire Officer certification. 32-36 hours lecture. (No prerequisite. FIRE 66 recommended)

FIRE 74 Fire Prevention IA -
(formerly FT 74) Fire Inspection
Practices 2.0 Units
This course provides a broad, technical overview of fire prevention codes and ordinances, inspection practices, and key hazards. Some areas of discussion include flammable and combustible liquids and gases, explosives, fireworks, extinguishing systems and others. This course applies to Fire Officer, Fire Prevention Officer I, and Public Education Officer I certifications. 32-36 hours lecture. (No prerequisite)

FIRE 74C Fire Prevention 2A 2.5 Units
This course provides the most up-to-date information on laws and regulations pertaining to systems, description, installations and problems relating to fire protection systems. This course is specifically designed for in-service fire department personnel wishing to complete their State Fire Training (SFT) Fire Protection Specialist certification requirements. 40-45 hours lecture. [Prerequisite: Completion of SFT Fire Prevention Officer Certification Track (July 2006). Grade Option.] This course may be taken three times.

FIRE 74D Fire Prevention 2B 2.5 Units
This course provides the participants with extensive, in depth information about the fire and life safety standards of buildings as they relate to Tiles 19 and 24. Topics for discussion include: Types of construction, construction methods and materials, interior finishes, roof coverings, occupancy and more. 40-45 hours lecture. [Prerequisite: Completion of State Fire Training (SFT) Fire Prevention Officer Certification Track (July 2006). Grade Option.] This course may be taken three times.

FIRE 74E Fire Prevention 2C 2.5 Units
This course introduces the participants to unique and unusual prevention challenges. Topics include: Industrial ovens, cleaning and finishing processes, welding, refrigeration systems, medical gases, fireworks, and special extinguishing systems. 40-45 hours lecture. [Prerequisite: Completion of State Fire Training (SFT) Fire Prevention Officer Certification Track (July 2006). Grade Option.] This course may be taken three times.

FIRE 75 Fire Prevention lB -
(formerly FT 75) Code Enforcement 2.0 Units
This course focuses on the ordinances and statutes that pertain to fire prevention practices in California. Some topics of discussion include building construction and occupancy, evacuation procedures, inspection reports, and processing plans. This course applies to Fire Officer, Fire Prevention Officer I, and Public Education Officer I certifications. 32-36 hours lecture. (No prerequisite)

FIRE 76 Management 1- Supervision
(formerly FT 76) for Company Officers 2.0 Units
This course is designed to prepare or enhance the first line supervisor's ability to supervise subordinates. It introduces key management concepts and practices utilized in the California Fire Service. The course includes discussions about decision making, time management, leadership styles, personnel evaluations, and counseling guidelines. This course applies to Fire Officer certification. 32-36 hours lecture. (No prerequisite)

FIRE 77 Investigation lA - Fire Cause
(formerly FT 77) and Origin Determination
2.0 Units
This course provides the student with an introduction and basic overview of fire scene investigation. Provides information on fire scene indicators, and introduces fire service personnel to the concepts of fire investigation. Applies to Fire Officer and Fire Investigator I certification. 32-36 hours lecture. (No prerequisite)

FIRE 78 Fire Prevention lC - Flammable
(formerly FT 78) Liquids and Gases 2.0 Units
This course provides the students with information on how to safely store, handle, dispense and transport flammable liquids and gases. Topics of discussion include: bulk handling and storage requirements, transportation of flammable and combustible liquids and gases, fire code requirements for storage outdoors, indoors, inside special rooms and portable container requirements. Applies towards Fire Prevention Officer I certification. 32-36 hours lecture. (No prerequisite)

FIRE 79 Fire Investigation lB 2.0 Units
(formerly FT 79)
This course provides the participants with information to achieve a deeper understanding of fire investigation. This course builds on FIRE 77 Investigation IA and adds topics of discussion including the juvenile fire setter, report writing, evidence collection and preservation procedures. 32-36 hours lecture. (No prerequisite)

FIRE 80 Introduction to Wildland
(formerly FT 68.1) Fire Behavior, S-190 0.5 Unit
This course will familiarize the student with the basic concepts and components of wildland fire behavior. North West Coordinating Group (NWCG) certified. Eight-nine hours lecture. (No prerequisite. Credit/No Credit)

FIRE 80A Intermediate Wildland
(formerly FT 68.4) Fire Behavior, S-290 2.0 Units
This course will present to fire fighting students the skills and information necessary to prepare them for safe and effective operations at wildland fires. Meets the training requirements to work in the Incident Command System (ICS) Operations Section, as a Single Resource or Strike Team Leader. North West Coordinating Group (NWCG) certified. 32-36 hours lecture and eight-nine hours laboratory. (Prerequisites: FIRE 80. State mandated by California Fire Service Training and Education (CFSTES) and Incident Command System by North West Coordinating Group, or experience as a fire fighter working within the ICS. Credit No/Credit)

FIRE 80B Wildland Fire Suppression
(formerly FT 68.5) Tactics, S-336 2.0 Units
This course will provide the fire fighter student the information necessary to operate within the Operations Section of the Incident Command System. North West Coordinating Group certified. 32-36 hours lecture. (Prerequisites: FIRE 80A, FIRE 66. State mandated. Credit/No Credit)

FIRE 81 Emergency Medical Technician I
(formerly FT 81) 8.0 Units
The first phase of training in the Emergency Medical Technician I career for fire fighters and other emergency first responders. Covers all techniques of emergency medical care considered the responsibility of the Emergency Medical Technician I. Course emphasizes the development of student skills in recognition of symptoms of illness and injuries and proper procedures of emergency care. Course includes certification in professional CPR (Cardio Pulmonary Resuscitation). Approved by the California State Fire Marshal's Office and the State Board of Fire Services. Certificate from Fire Service Training and Education Program (FSTEP) awarded. 120 hours lecture and 28 hours laboratory. (Prerequisite: Students must complete TB test and provide copy of immunization records prior to clinical training.) This course my be repeated.

FIRE 81B EMT-I, Continuing Education
(formerly FT 81.4) Recertification 0.5 Unit
This course provides the student with the information skills development and testing requirements for recertification qualification for Emergency Medical Technician 1 and qualifies for Continuing Education credit. Four hours lecture and 12 hours laboratory. (Prerequisite: EMT-1. State and county mandated. Credit/No Credit.) This course may be taken four times.

FIRE 82 Hazardous Materials First
(formerly FT 82) Responder Awareness 0.5 Unit
This course is designed to provide the student with information essential to those people who are likely to be first responders at hazardous materials incidents. Designed to meet federal and state requirements for awareness training for employees handling and using hazardous materials. Eight hours lecture and one hour laboratory. (No prerequisites) This course may be taken three times.

FIRE 82A Hazardous Materials
(formerly FT 80) First Responder
Operational 1.5 Units
To provide participants who are likely first responders with the necessary awareness of safe and competent hazardous materials response techniques. Participants shall also be able to provide safe identification and assessment evaluation, as well as select safe containment and protective actions to mitigate the hazardous materials incident whenever safety and resource capabilities permit. 24-27 hours lecture. Offered Fall, Spring. (No prerequisite) This course may be taken four times.

FIRE 83 Fire Management 2C, Labor
(formerly FT 83) and Personnel
Management 2.0 Units
This course provides the fire fighter student with knowledge and insight into fire fighting personnel, human resources, and diversity management. Legal mandates, labor relations, and related areas are explored with a focus on human resource management and individual employee development strategies. 32-36 hours lecture. (No prerequisites)

FIRE 84 (formerly FT 84) **Fire Command 2A-Command Tactics at Major Fires 2.0 Units**

This course is designed to provide the student with the management techniques and use of the Incident Command System (ICS) necessary for the efficient and safe command of large fires, multiple alarms and emergencies requiring large numbers of personnel and apparatus. Features simulation and case studies to develop management and command skills. Applies to Chief Officer Certification. California Fire Service Training and Education System (CFSTES) approved. 32-36 hours lecture. (No prerequisite)

FIRE 85 (formerly FT 85) **Fire Management 2A-Organizational Development and Human Relations 2.0 Units**

This course provides the student with information on how to make the transition from supervisor to manager. Topics of discussion include internal and external influences; personality traits of fire fighters; managing human relations; group dynamics; conflict solution and more. This course applies to Chief Officer Certification. California Fire Service Training and Education System (CFSTES) approved. 32-36 hours lecture. (No prerequisite)

FIRE 86 (formerly FT 86) **Intermediate Incident Command System (ICS) 1.5 Units**

This course expands the fire fighting student's knowledge of ICS and how to expand the system to fit the emergency and adds air operations and the control and management of these resources to the ICS system. 24-27 hours lecture. (Prerequisite: FIRE 66 or experience as a fire fighter using the ICS system. Credit/No Credit)

FIRE 87 (formerly FT 87) **Fire Management 2E 2.0 Units**

Designed for Fire Chief Officers, Company Officers and functional managers, this course provides an overview of current issues and concepts of today's modern fire service. Topics include: governmental relations, changing "settings/policy formation," program management, personnel/labor relations, and the legal environment. 32-36 hours lecture. (No prerequisite)

FIRE 90 (formerly FT 90) **Paid Call Fire Fighter Academy 3.0 Units**

The Paid Call Fire Fighter Academy will provide basic training for individuals interested in becoming a Paid Call Fire Fighter. Students must attend a mandatory orientation. 32-36 hours lecture hours and 48-54 hours laboratory. Offered Fall, Spring. (Prerequisite: Without the required physical strength and stamina to safely operate and control fire service tools, equipment and apparatus the student poses an undue risk to him/herself and to other fire technology students. Physical fitness requirements include strong back, torso, and legs and arms with flexibility and agility. Good hand and eye coordination plus the ability to remain calm under conditions of stress and personal discomfort are essential. Physical medical exam equal to sport physical or a pre employment physical is required to determine if the student has a disqualifying injury or condition that would result in an injury or accident to the student.)

FIRE 91 (formerly FT 91) **Fire Control 5 1.5 Units**

This course provides the fire fighter student with the information, methods and techniques necessary for providing crash fire rescue services (CFR) at airports. Subjects include: Utilizing conventional fire and specialized apparatus, CFR extinguishing agents, types of aircraft, standby procedures and operations at airports. Actual fire fighting and simulation is featured. 24-27 hours lecture and 16-18 hours laboratory. (No prerequisite. Credit/No Credit) This course may be taken four times.

FIRE 93 (formerly FT 93) **Fire Management 2D, Master Planning 2.0 Units**

This course provides participants with information and discussion centering around program planning, master planning, forecasting, system analysis, system design, policy analysis, and other tropics. Applies to Chief Officer certification. State Fire Marshal accredited, 32-36 hours lecture. (No prerequisite) This course may be taken four times.

FIRE 94 (formerly FT 94) **Fire Command 2D, Planning for Large Scale Disasters 2.0 Units**

The principles of disaster planning and the role of the fire department are discussed. Emergency Operation Centers (EOC), the role of Federal Emergency Management Administration (FMA), mutual aid, legal considerations, and mitigation techniques are topics covered. Case studies are examined and simulation exercises are feature. 32-36 hours lecture. (No prerequisite) This course may be taken four times.

FIRE 95 (formerly FT 95) **Basic Fire Academy 10.0 Units**

Introduction to basic fire fighting theory and skills; study of the characteristics and behavior of fire; practice in fundamental fire suppression activities, with special attention on safety, first aid, and rescue procedures. 112 hours lecture and 208 hours laboratory. Offered Spring. (No prerequisite)

FIRE 98 **Fire Company Officer's Academy (formerly FT 98) 1.5 Units**

This forty-hour course is designed for the fire fighter student in order to provide students with a brief but comprehensive overview of the responsibilities of a fire department company officer. Emphasizes fundamental techniques of personnel management, supervision and leadership. Topics covered include: motivating, coaching and counseling subordinates; basic fire ground principles; and fire ground tactics and strategies at the company officer level. 24-27 hours lecture and 16-18 hours laboratory. (No prerequisite)

FIRE 99 (formerly FT 99) **Chief Officer's Workshop 1.0 Unit**

This course provides the fire fighter student with current topics and challenges facing the fire service and chief officer's as supervisors. Topics include legal issues resulting from hazardous materials incidents, emergency medical protocols, terrorism, current management policies and procedures. CDF certified. 16-18 hours lecture. (Prerequisites: I-300, S-430, S-400. State mandated. Credit/No Credit) This course may be taken four times.

FIRE 100 (formerly FT 30) **Fire Protection Organization 3.0 Units**

Provides an introduction to fire protection; career opportunities in fire protection and related fields; philosophy and history of fire protection; fire loss analysis; organization and function of public and private fire protection services; fire departments as part of local government; laws and regulations affecting fire service; fire service nomenclature; specific fire protection functions; basic fire chemistry and physics; introduction to fire protection systems and fire strategy and tactics. 48-54 hours lecture. CSU. Offered Fall, Spring. (No prerequisite)

FIRE 101 (formerly FT 31) **Fundamentals of Fire Service Operations 3.0 Units**

Provides the student with the fundamentals of fire department organization, management, and resources, and emphasizes the use of those resources to control various emergencies. 48-54 hours lecture. CSU. (No prerequisite)

FIRE 102 Fire Prevention Technology
(formerly FT 32) 3.0 Units
This course provides fundamental information regarding the history and philosophy of fire prevention, organization and operation of a fire prevention bureau, use of fire codes, identification and correction of fire hazards, and the relationship of fire prevention with fire safety education and detection and suppression systems. 48-54 hours lecture. CSU. Offered Fall, Spring. (No prerequisite)

FIRE 103 Fire Protection Equipment
(formerly FT 35) and Systems 3.0 Units
This course provides information relating to the features of design and operation of fire detection and alarm systems, heat and smoke control systems, special protection and sprinkler systems, water supply for fire protection and portable fire extinguishers. 48-54 hours lecture. CSU. (No prerequisite)

FIRE 104 Fire Behavior and Combustion
(formerly FT 37) 3.0 Units
This course will study the theory and fundamentals of how and why fires start, spread, and are controlled; an in-depth study of fire chemistry and physics, fire characteristics of materials, extinguishing agents, and fire control techniques. 48-54 hours lecture. CSU. (No prerequisite)

FIRE 105 Fire Apparatus and Equipment
(formerly FT 39) 3.0 Units
Fire apparatus design, specifications, and performance capabilities; effective utilization of apparatus in fire service emergencies. 48-54 hours lecture. CSU. (No prerequisite)

FIRE 106 Fire Company Organization and
(formerly FT 40) Management 3.0 Units
Review of fire department organization, fire company organization, study of leadership and supervision with emphasis on communications, training, fire prevention, records and reports, and problem solving. 48-54 hours lecture. CSU. (No prerequisite)

FIRE 107 Fire Investigation 3.0 Units
(formerly FT 41)
A study of the cause and origin of any and all types of fires (accidental, incendiary, and suspicious); and law relating to fire investigation. Recognizing, collecting, and preserving evidence, interviewing witnesses and suspects, arrest and detention procedures, court procedures and giving a testimony. 48-54 hours lecture. CSU. (No prerequisite)

FIRE 108 Fire Hydraulics 3.0 Units
(formerly FT 43)
Review of applied mathematics; hydraulics laws as applied to the fire service; application of formulas and mental calculation to hydraulics and water supply problems.48-54 hours lecture. CSU. (No prerequisite)

FIRE 109 Wildland Fire Control 3.0 Units
(formerly FT 45)
A course designed to provide employed firemen or fire science majors with a fundamental knowledge of the factors affecting wildland fire prevention, fire behavior, and control techniques. 48-54 hours lecture. CSU. (No prerequisite)

FIRE 121 Fire Management 2 B 2.0 Units
(formerly FT 21)
This course is designed to provide information and insight into the cyclical nature of budgeting and financial management. As a management course, the student will be presented with the essential elements of financial planning, budget preparation, budget justification, and budget controls. This course applies to Chief Officer Certification. 32-36 hours lecture. CSU. (No prerequisite) This course may be taken three times.

FIRE 138 Cooperative Education
(formerly FT 38)
See Cooperative Education listing (1-8 units). CSU

FIRE 148 Special Topics
(formerly FT 48)
See Special Topics listing (Variable units). CSU

FIRE 149 Independent Study
(formerly FT 49)
See Independent Study listing (1-3 units). CSU

FRENCH

FREN 101 Elementary French 5.0 Units
(formerly FRENCH 1)
Basic structures of French language, inductive presentation of grammar, simple composition. Emphasis placed on the spoken language. 80-90 hours lecture. CSU, UC. Offered Fall. (No prerequisite)

FREN 102 Elementary French 5.0 Units
(formerly FRENCH 2)
Continuation of FREN 101 stressing review of basic structures, more advanced grammar, spoken and written communication. 80-90 hours lecture. CSU, UC. Offered Spring. (Prerequisite: FREN 101)

FREN 103 Intermediate French 3.0 Units
(formerly FRENCH 3)
Continuation of FREN 102 with grammar review and expansion, introduction to simple literary texts, spoken and written communication. 48-54 hours lecture. CSU, UC. Offered Fall. (Prerequisite: FREN 102)

FREN 104 Intermediate French
(formerly FRENCH 4) (CAN FREN 10) 3.0 Units
Continuation of FREN 103 with further grammar review and expansion, reading of simple literary texts, spoken and written communication. 48-54 hours lecture. CSU, UC. Offered Spring. (Prerequisite: FREN 103)

FREN 125 Conversational French
(formerly FRENCH 25) 3.0 Units
An introduction to the French language using situations the visitor will commonly encounter. Introduction to simple French structures and grammar with emphasis on the spoken language. 48-54 hours lecture. CSU. (No prerequisite. Grade Option)

FREN 128 Special Topics
(formerly FRENCH 28)
See Special Topics listing (Variable units).

FREN 129 Independent Study
(formerly FRENCH 29)
See Independent Study listing (1-3 units).

GEOGRAPHY

GEOG 101 Physical Geography 3.0 Units
(formerly GEOG 1) (CAN GEOG 2)
Fundamental geographical concepts are studied. Emphasis is on the physical world, its components and interrelationships, as well as current geographic issues. Topics include earth/sun relationships and seasons, weather and climate, earthquakes and volcanoes, rocks and minerals, oceans and coastlines, glaciers, and landform distribution. Also included are introductory methods of map interpretation. 48-54 hours lecture. CSU,UC Offered Fall, Spring, Summer, Winter. (No prerequisite.)

GEOG 101L Geography Laboratory 1.0 Unit
(formerly GEOG 1L)
(CAN GEOG 6 when taken with GEOG 1)
An interactive exploration of earth's weather and climate, vegetation and soils, rocks and minerals, earthquakes and volcanoes. Tectonic forces are studied as relating to landform destruction and creation. Gradational forces are studied as relating to the processes of water, wind and ice. 48-54 hours laboratory. CSU,UC Offered Fall, Spring, Summer.

GEOG 102 Cultural Geography
(formerly GEOG 2) (CAN GEOG 4) 3.0 Units
An examination of human activities on the surface of the earth as exhibited by various cultures. Worldwide variations in land-use systems, settlement patterns, economic activities, political and religious institutions, languages, and the numbers and movement of human populations are explored. Geographic analysis will be used to examine the similarities and differences of these worldwide variations. 48-54 hours lecture. CSU, UC. Offered Fall, Spring, Summer, Winter. (No prerequisite)

GEOG 103 Geography of California
(formerly GEOG 3) 3.0 Units
A regional study of the physical and cultural processes that have shaped California's geography. Variations in the physical landscape and its relationship with human settlement patterns and economic activities will be explored. There will be emphasis on topics relevant to California such as urbanization, immigration, recreation impact, coastal ecosystems, water and air pollution, conservation, and physical disasters. California's unique position within the Pacific Rim will also be examined. 48-54 hours lecture. CSU, UC. (No prerequisite)

GEOG 110 Introduction to GIS in the Social Sciences 3.0 Units
GIS basics and applications to the Social Sciences are explored, including terminology, mapping and problem solving. Current GIS software applications and GPS navigational systems are utilized. 48-54 hours lecture. CSU (No prerequisite.)

GEOG 120 Meteorology-AMS Weather Studies 4.0 Units
A comprehensive study of meteorological principles which focus on real-time weather situations. Maps and graphics of current weather data illustrate the basic components of weather, such as temperature, pressure, wind, precipitation and severe weather phenomena, including tornadoes and hurricanes. 48-54 hours lecture and 48-54 hours laboratory. CSU (No prerequisite.)

GEOG 128 Special Topics
(formerly GEOG 28)
See Special Topics listing (Variable units). CSU. UC.

GEOLOGY

GEOL 101 Physical Geology
(formerly GEOL 1) (CAN GEOL 2) 4.0 Units
A study of the factors and processes that have created and shaped the earth's surface, the geologic structures that comprise it, and the minerals and rocks that form it. Field trips are scheduled to areas of representative local geology. 48-54 hours lecture and 48-54 hours laboratory. CSU, UC. Offered Fall, Spring. (No prerequisite)

GEOL 102 Historical Geology 4.0 Units
(formerly GEOL 2)
A study of the chronological development of the surface of the earth and of the corresponding evolution of life. Of vital importance to the course is a thorough understanding of the concepts of geologic time, biological classification, and evolution. Emphasis is placed on historical development of North America. 48-54 hours lecture and 48-54 hours laboratory. CSU, UC. Offered Spring. (No prerequisite)

GEOL 103 Geology of California 3.0 Units
(formerly GEOL 3)
A survey of the physical and historical geology of the 12 distinct geologic provinces of the state. Greatest emphasis is placed on the most important structural, scenic, and economic details of each region, and upon the provinces of Southern California. 48-54 hours lecture. CSU, UC. Offered Fall. (No prerequisite)

GEOL 109 Geology of the Western
(formerly GEOL 9) National Parks 3.0 Units
A survey course describing the geological features of the national parks and monuments of the Western United States, illustrating why these areas serve as important preserves of such features. 48-54 hours lecture. CSU. Offered Fall and Spring. (No prerequisite)

GEOL 128 Special Topics (formerly GEOL 28)
See Special Topics listing (Variable units). CSU

GEOL 129 Independent Study (formerly GEOL 29)
See Independent Study listing (1-3 units). CSU

GERMAN

GERM 101 Elementary German 5.0 Units
(formerly GERMAN 1)
Inductive presentation of German language fundamentals: pronunciation, structure, simple composition, culture. Emphasis placed on using and understanding the spoken language. 80-90 hours lecture. CSU, UC (No prerequisite)

GERM 102 Elementary German 5.0 Units
(formerly GERMAN 2)
Continuation of GERM 101 stressing review of basic structures, introduction of more advanced grammar, spoken and written communication in authentic cultural contexts.80-90 hours lecture. CSU, UC (Prerequisite: GERM 101 or equivalent)

GERM 125 Conversational German
(formerly GERMAN 25) 3.0 Units
An introduction to the German language using situations the visitor will commonly encounter. Introduction to simple German structures and vocabulary with emphasis on the spoken language. 48-54 hours lecture. CSU (No prerequisite)

GERM 128 Special Topics
See Special Topics listing (Variable units). CSU, UC.

GERM 129 Independent Study
See Independent Study listing (1-3 units). CSU.

GUIDANCE

GUID 10 Support Class for Learning
(formerly GUID 101) Disabled Students 1.0 Unit
Designed as a support class for students with diagnosed learning disabilities. Techniques for handling the social and emotional aspects of learning disabilities will be discussed. 16-18 hours lecture. This course will not apply to the Associate Degree. Offered Fall, Spring. (No prerequisite. Credit/No Credit) This course may be repeated.

GUID 50 College Success 1.0 Unit
(formerly GUID 4G)
A survey course designed to enable the student to learn and apply the techniques of effective study and to provide orientation to and familiarity with procedures, services, and common problems encountered by students. It includes a survey of the learning process, time management, the development of the techniques of note taking, understanding textbooks, techniques for remembering, test taking, preparation for exams, and the use of campus resources. 16-18 hours lecture. Offered Fall, Spring. (No prerequisite. Credit/No Credit) This course may be taken two times.

GUID 51 Orientation to College 0.5 Unit
This class is designed to orient students to the college's programs, services, procedures, facilities, and standards. In addition, it acquaints students with career and transfer information, and provides basic guidelines for effective study. Eight-nine hours lecture. (No prerequisite. Credit/No Credit)

GUID 59 Special Issues in Personal
(formerly GUID 4C) Development 1.0-2.0 Units
A series of short-term offerings developed in response to the common interest of special groups. Opportunities for an examination of the elements associated with particular issues of personal development and for group interaction on various topics of student concern. Offered Fall, Spring. (No prerequisite. Credit/ No Credit) This course may be taken four times.

GUID 64 Orientation (EOPS) 0.5 Unit
(formerly GUID 4I)
This class is designed to orient EOPS students to the college's functions, programs, services, procedures, campus facilities, transfer and career information. Additionally, it will acquaint students with performance expectations. Eight-nine hours lecture. (No prerequisite. Credit/No Credit)

GUID 66 Peer Advising Techniques
(formerly GUID 6) 3.0 Units
This course is designed to provide program advising skills, catalog, registration and scheduling information as well as helping skills that will prepare peer advisors to assist other students. 48-54 hours lecture. (No prerequisite Credit/No Credit)

GUID 70 Alternative Learning Strategies
3.0 Units
This course provides students with learning disabilities the opportunity to identify and understand their individual learning profile. This course investigates the learning process, and introduces specific learning disability terms, concepts, and different learning modalities. Instruction is provided in alternative learning strategies and study techniques. 48-54 hours lecture. (No prerequisite. Learning Disabilities eligibility process recommended prior to enrollment. Credit/No Credit)

GUID 75 Career Orientation
(formerly GUID 80) for the Disabled 1.0 Unit
This course is designed to offer disabled students a practical orientation in career selection and development of skills in job placement. 16-18 hours lecture. (No prerequisite. Credit/No Credit)

GUID 100 Career and Life Planning
(formerly GUID 4E) 2.0 Units
This group guidance course is designed to assist students in the career and life planning process through consideration of individual needs, personality, interests, abilities, and values. Emphasis will be placed on personal growth through assessment, career research, goal setting and decision making. 32-36 hours lecture. CSU. (No prerequisite. Credit/No Credit) This course may be taken two times.

GUID 101 First Year Experience 3.0 Units
This comprehensive course integrates personal growth, academic and career success with problem solving, critical and creative thinking. The course focuses on the following topics: life management, goal setting, career decision making, educational planning, college requirements and expectations, instructor-student interaction, cultural diversity, health maintenance, stress management, campus resources, learning styles, and strategies including lecture note-taking, test taking, and concentration. 48-54 hours lecture. (No prerequisite. Grade Option.)

GUID 105 Personal and Career Success
(formerly GUID 5) 3.0 Units
This intensive course is designed to assist students in obtaining the skills and knowledge necessary to identify and reach their personal goals and achieve college and career success. Topics covered include: self-awareness, goal-setting, motivation and discipline, memory development, time management, oral and written communication skills, study skills, diversity, financial planning, and an orientation to college life. See cross listing for PSYC 105. 48-54 hours lecture. CSU. (No prerequisite. Grade Option.)

GUID 107 Learning Strategies and
(formerly GUID 7) Study Skills 3.0 Units
This survey course assists students in assessing attitude, motivation, learning styles, and personality attributes that are necessary to the successful transition into college. Students will integrate this self awareness with theories and strategies that focus on the attainment of life long success in academic, professional and personal development. Topics include time management, study skills, test preparation, educational goal setting and planning, maintaining a healthy life style, and critical thinking skills. 48-54 hours lecture. CSU. (No prerequisite)

HEALTH

HLTH 102 Contemporary Problems in Personal and Community Health
(formerly ALDH 102/PE 102) 3.0 Units
An introductory course emphasizing the scientific basis for making rational decisions on contemporary health problems of personal and social significance. Course includes personal nutrition, fitness, reproduction, and disease control. The course also includes a review of other current issues of community health. 48-54 hours lecture. CSU, UC. Offered Fall, Spring. (No prerequisite, Grade Option)

HEATING, VENTILATION, AIR CONDITIONING/ REFRIGERATION

SEE CONSTRUCTION AND MANUFACTURING TECHNOLOGY

HISTORY

HIST 50 United States History 3.0 Units
A survey of American social, political, and economic institutions from colonial origins to recent times. Course specifically designed for fulfillment of requirements of high school diploma and for non-transfer students. 48-54 hours lecture. (No prerequisite. Grade option)

HIST 55 History of the Victor Valley 3.0 Units
This course will draw on a large body of source material and information gathered over a long span of years in the community as well as recently acquired and discovered material to trace the development and changes of life-styles and ways of life from one generation to another. There will be some attempt to tie local developments to national trends and events while also attempting to discover what is unique and significant about the experience of living in the high Mojave Desert during the era from 1850 to the present. 48-54 hours lecture. Offered Spring. (No prerequisite. Grade option)

HIST 103 World History to 1500
(formerly HIST 3A) (CAN HIST 14) 3.0 Units
To a greater extent than ever before, American citizens and their country are interdependent on the rest of the world, and not just the so-called "Western World." We need to see ourselves as part of a world community—even if seen through a Western perspective. This course surveys the various civilizations of the world up to 1500 AD, stressing the inter-connectedness of various cultures even in ancient times. There will be an attempt to explore the "common denominators" among the several great civilizations, also stressing such universal issues as freedom. There is considerable emphasis on the Greek, Roman, and other civilizations most influential to us, while also dealing with the other civilizations and their inter-relationships. 48-54 hours lecture. CSU, UC. Offered Fall, Spring. (No prerequisite)

HIST 104 World History Since 1500
(formerly HIST 3B) (CAN HIST 16) 3.0 Units
Course will cover the period of 1500 to the 1980's and will focus on the making of the modern world. Inter-locking themes will include the discovery of the New World and the rise of Capitalism, the resistance to this new economic system by the non-white world, the spread of Imperialism and the division of the world in the "core" (industrial) and "peripheral" (non-industrial) nations of the First and Third World. National revolution and rebellion especially in the 20th century will be examined as well as the end of the "Third World" and the rise of the Pacific Rim as a model of national and economic development. 48-54 hours lecture. CSU, UC. Offered Fall, Spring. (No prerequisite)

HIST 115 History of California 3.0 Units
(formerly HIST 20)
A survey of the history and geography of California. The course will cover all aspects of the development of what is today known as California, including those contributions made by Indians, Spanish, Mexican, and early Anglo inhabitants. Special emphasis will be laid upon critical issues of the present. This course satisfies in part the California history requirement for teachers in the primary grades. 48-54 hours lecture. CSU, UC. (No prerequisite)

HIST 117 History of the United States to 1876 3.0 Units
(formerly HIST 17A) (CAN HIST 8)
American Civilization through the Civil War era. Native American and European antecedents will be studied. Colonial and revolutionary periods will be analyzed as well as the formation of a new nation. Gender and race issues will be examined in the light of nation building. 48-54 hours lecture. CSU,UC (UC credit limitation). Offered Fall, Spring, Summer. (No prerequisite.)

HIST H117 Honors History of the United States to 1876 3.0 Units
(formerly HIST H17A) (CAN HIST 8)
American civilization, primarily focusing on the British colonies and the US, through the Civil War era. Native American, African and European antecedents will form part of the class. Students will analyze the colonial and revolutionary periods, as well as the Declaration of Independence and the Constitution in the formation of a new nation. The class examines gender and race issues in light of nation building and American culture. Honors classes will take students further into the course material with additional reading, in-class debates and graded roundtable discussion, and a term paper which involved both primary and secondary sources. 48-54 hours lecture. CSU,UC (UC credit limitation.) (No prerequisite. HIST 50 recommended.)

HIST 118 History of the United States
(formerly HIST 17B) from 1876
(CAN HIST 10) 3.0 Units
A survey of the history of the United States from 1876 to the present. The course will focus on economic, political and social history in order to understand the casual factors that created the United States. Gender and ethnic history will be examined in light of the development of the United States and how diverse groups contributed to the historical reality of the United States. 48-54 hours lecture. CSU, UC (UC credit limitation). Offered Fall, Spring, Summer. (No prerequisite)

HIST H118 Honors History of the
(formerly HIST H17B) United States from
1876 (CAN HIST 10) 3.0 Units
A survey of American history since Reconstruction after the Civil War with emphasis upon those social, political, and economic factors which most shaped modern America. The honors format will be implemented, including a greater amount of outside reading material and more class time devoted to discussion of that material—with consequently much less actual treatment of the basic textbook, which honors students will be expected to grasp adequately on their own. Particular attention will be focused on the varying viewpoints and interpretations of the important historic questions. 64-72 hours lecture. CSU, UC (UC credit limitation). (No prerequisite)

HIST 128 Special Topics
(formerly HIST 28)
See special Topics listing (Variable units). CSU, UC.

HIST 129 Independent Study
(formerly HIST 29)
See Independent Study (1-3 units). CSU

HIST 130-131 Latin American History
(formerly HIST 8A-B) 3-3.0 Units
A political, social, and cultural history of the Americas, both North and South, from earliest origins to the present. Includes study of the foreign relations of the American republics. The first semester (130) deals with the colonial era and the second semester (131) with the national period. Emphasis is placed on Mexico and the Caribbean area plus the major nations of South America. 48-54 hours lecture. CSU, UC. HIST 130 offered Fall, HIST 131 offered Spring. (No prerequisite)

HIST 145 PTK Study Topic Seminar
(formerly HIST 45) 1.0 Unit
This is a lecture series based on the Phi Theta Kappa International honor society study topic for each year. Faculty members will be invited to speak on their areas of expertise as they relate to those study topics. 16-18 hours lecture. CSU, UC. (No prerequisite. Credit/No Credit). This course may be taken four times.

HIST 153 **African American History**
(formerly HIST 13) **3.0 Units**
The progression of the Black American's slave experience to the present. Emphasis on the struggle for social, political, and economic parity. 48-54 hours lecture. CSU, UC. Offered Fall, Spring. (No prerequisite)

HIST 155 **Women in United States History**
(formerly HIST 14) **3.0 Units**
Basic background in U.S. history will be assumed and helpful. History of women in the United States from the colonial era to the present. Emphasis on changing roles women have played in society, family, and work. 48-54 hours lecture. CSU, UC. Offered Fall, Spring, Summer. (No prerequisite)

HIST 157 **History of the Indians**
(formerly HIST 16) **of the United States** **3.0 Units**
A survey history of Native America from the time of contact (1500) to the present. Course will focus on Indians of North American, but will also focus to a lesser degree on American tribes, civilizations, and kingdoms of South America and Hawaii. The anthropological background, settlement patterns, erosion of traditional culture and values conquests by whites, genocide, the theft of the West by whites , the reservations system, the tragedy of Native America today and the rise of Native American militancy will be just some of themes covered in the courses. 48-54 hours lecture. CSU, UC. Offered Fall, Spring. (No prerequisite)

HONORS COURSES

CHEM H100 **Honors Introductory Chemistry**
(formerly CHEM H10) **(CAN CHEM 6)** **6.0 Units**
A foundation in the fundamental concepts, theories, and methodologies of Introductory Chemistry is highly recommended. Critical thinking and analytical skills will be used to develop problem-solving strategies used in Chemistry. Emphasis will be on the use of communication and information technologies in the analysis and presentation of experimental data. 64-72 hours lecture and 96-108 hours laboratory. CSU, UC. Offered Fall.

CHEM H206 **Honors Introductory**
(formerly CHEM H6) **Chemistry II**:
Organic Chemistry **5.0 Units**
Modern organic synthesis, biotech, and pharmaceutical laboratories assess the feasibility of their proposed syntheses using computer generated models of target compounds. Current trends in modern research indicate a growing dependence on computational chemistry. This program will extend topics covered in CHEM 106 into basic concepts of computational chemistry. Emphasis will be on molecular modeling techniques, acquisition, processing, and presentation of experimental data. 64-72 hours lecture and 96-108 hours laboratory. CSU, UC

CHEM H207 **Introductory Chemistry III:**
Biochemistry Honors **5.0 Units**
The application of molecular modeling techniques to biological marmomolecules. Computer generate force-fields and molecular graphics will be used to study structural geometry, potential energy surfaces, energy gradients, bond energies, and bond angles. Confirmation analyses will be performed to gain a practical understanding of the advantages and limitation of molecular modeling.64-72 hours lecture and 96-108 hours laboratory. CSU, UC. Offered Fall.

ENGL H101 **Honors Composition and**
Reading **4.0 Units**
(formerly ENGL H1A)
This course emphasizes the basic approaches to writing that will be necessary in college: research, textual analysis, critical applications and discussion of texts and ideas. The class demands greater depth of research and discussion, and emphasizes the seminar approach to learning. 64-72 hours lecture. CSU, UC. (Prerequisite: Completion of ENGL 50 with a grade of "C" or better.)

ENGL H102 **Honors Composition and**
Literature **3.0 Units**
(formerly ENGL H1B)
Further training in writing and introduction to the short story, novel, poetry, and drama. The honors seminar will deepen students' insights into literature and into the process of writing about it. 48-54 hours lecture. CSU, UC. (Prerequisite: Completion of ENGL 101.0 with a grade of "C" or better.)

ENGL H104 **Honors Critical Thinking and**
Composition **3.0 Units**
(formerly ENGL H2)
This course is designed to develop the student's critical thinking, reading, and writing skills beyond the level achieved in ENGL 101.0. 48-54 hours lecture. CSU,UC (Prerequisite: completion of ENGL 101.0 with a grade of "C" or better or eligibility as determined by VVC assessment.)

HIST H117 **Honors History of the United**
States to 1876 **3.0 Units**
(formerly HIST H17A) **(CAN HIST 8)**
American civilization, primarily focusing on the British colonies and the US, through the Civil War era. Native American, African and European antecedents will form part of the class. Students will analyze the colonial and revolutionary periods, as well as the Declaration of Independence and the Constitution in the formation of a new nation. The class examines gender and race issues in light of nation building and American culture. Honors classes will take students further into the course material with additional reading, in-class debates and graded roundtable discussion, and a term paper which involved both primary and secondary sources. 48-54 hours lecture. CSU,UC (UC credit limitation.) (No prerequisite. HIST 50 recommended.)

HIST H118 **Honors History of the**
(formerly HIST H17B) **United States from**
1876 (CAN HIST 10) **3.0 Units**
A survey of American history since Reconstruction after the Civil War with emphasis upon those social, political, and economic factors which most shaped modern America. The honors format will be implemented, including a greater amount of outside reading material and more class time devoted to discussion of that material—with consequently much less actual treatment of the basic textbook, which honors students will be expected to grasp adequately on their own. Particular attention will be focused on the varying viewpoints and interpretations of the important historic questions. 64-72 hours lecture. CSU, UC (UC credit limitation). (No prerequisite)

MATH H105 **Honors College Algebra**
(formerly MATH H5) **(CAN MATH 10)** **4.0 Units**
A math course for the well-prepared student. Honors MATH 105 will include the study of exponents and radicals, theory of quadratic equations, simultaneous quadratic equations, complex numbers, equations of higher degree, inequalities, logarithmic and exponential equations, binomial theorem, matrices and determinants, partial fractions, sequences and series. 64-72 hours lecture. CSU, UC (UC credit limitation). (No prerequisite)

MATH H120 Honors Introduction to Statistics 5.0 Units

Basic statistical techniques, design and analysis for both parametric and non-parametric data are included. Descriptive statistics are included. Graphing techniques of illustrating the data are covered. Probability is covered. Inferential statistics included are estimation and hypothesis testing, chi-square, analysis of variance, and regression. Applications are drawn from a variety of fields. In addition, the Honors component will include the design of surveys, probability testing, and a research project. 80-90 hours lecture. CSU, UC)

MATH H226 Honors Analytic Geometry
(formerly MATH H26A) and Calculus
(CAN MATH 18) 6.0 Units

As an introduction to the calculus of single variables, students will develop the concept of limit, apply limits to functions to determine if they are continuous, and find the derivative and determine integrals. Students will study the properties of the derivative and integral, their relationship to each other given by the Fundamental Theorem of Calculus and some applications to the real world. 96-108 hours lecture. CSU, UC. Offered Fall, Spring. (Prerequisite: MATH 104 and 105 completed with a grade of "C" or better.)

MATH H227 Honors Analytic Geometry
(formerly MATH H26B) and Calculus
(CAN MATH 20) 6.0 Units

The calculus of logarithmic, exponential, trigonometric and hyperbolic functions, integration techniques, L'Hopital's Rule, improper integrals, infinite series, conic sections, parametric equations, and polar coordinates. In addition, the honors component will include reading proofs, writing complete proofs from sketches of proofs, and applying techniques learned to real-life problems. 96-108 hours lecture. CSU, UC (Prerequisite: MATH 226 with a grade of "C" or better.)

MATH H228 Honors Analytic Geometry
(formerly MATH H26C) and Calculus
(CAN MATH 22) 6.0 Units

Vectors and the geometry of space, vector-valued functions, the calculus of functions as several variables, multiple integration, Green's Theorem, divergence theorem, Stoke's Theorem, and applications. In addition, the honors component will include reading proofs, writing complete proofs from sketches of proofs, and apply techniques learned to real-life problems. 96-108 hours lecture. CSU, UC (Prerequisite: MATH 227 with a grade of "C" or better.)

PHYS H204 Honors Engineering Physics
(formerly PHYSICS H1D) (Light and Modern Physics)
(CAN PHYS 14 and
CAN PHYS SEQ B) 4.0 Units

The nature and propagation of light, reflection and refraction, interference, diffraction, gratings and spectra, polarization, elements of quantum physics, waves and particles. 48-54 hours lecture and 48-54 hours laboratory. CSU, UC (UC credit limitation). Offered Spring semester in odd-numbered years. (Prerequisite: PHYS 203)

POLS H102 Honors American Government
(formerly POL SCI H1B) and Politics
(CAN GOVT 2) 4.0 Units

Examines the workings of our complex system of American government, including national, California state, and local levels (with emphasis on the national level). This survey will focus on the historical and contemporary development of our Constitution, political institutions, citizen participation, politics, and policies. Critical analysis of classical and contemporary scholarly texts and political oratory will be used extensively to examine the American political experience. 64-72 hours lecture. CSU, UC (UC credit limitation). (No prerequisite)

PSYC H101 Honors Introductory Psychology
(formerly PSYCH H1A) (CAN PSY 2) 4.0 Units

This course provides instruction in the nature of human behavior and a consideration of theories and principles pertaining to the topics of research design and experimentation, perception, emotions and motivation, personality, social psychology, psychopathology, human development, learning, cognition and memory. Includes essential features of the biological and neurological basis of behavior. 64-72 hours lecture. CSU, UC (Eligibility for ENGL 101 recommended)

PSYC H110 Honors Developmental
(formerly PSYC H10) Psychology 4.0 Units

This course includes the theories, methods, and research findings regarding biosocial, cognitive, and psychosocial development of the individual from conception through adulthood, including death, dying, and bereavement. 64-72 hours lecture. CSU Offered Fall, Spring, Summer. (Eligibility for ENGL 101 recommended and satisfactory completion of PSYC 101.)

INDEPENDENT STUDY

IND STUDY 129-149-99 Independent Study
(formerly IND STUDY 29-49-99) 1.0-3.0 Units

Individual study, research, or other projects under instructor guidance. Written reports and periodic conferences required. Content and unit credit to be determined by student/instructor conferences and/or departmental recommendation. Designed to provide an opportunity for qualified students to do individual study in a selected area of a subject field. The student may take up to a maximum of six units of Independent Study course work in a particular discipline. Instructor is responsible for providing advice and guidance as required, and for evaluating student performance. (Prerequisite: Formulation of a written statement of purpose acceptable to the instructor and demonstration of sufficient background and skill to undertake the project)

Units are awarded according to the following formula of time committed to the course:

1 unit	54 hours per semester
2 units	108 hours per semester
3 units	162 hours per semester

CSU may limit the number of Independent Study units accepted.

UC maximum credit allowed: three and one-third semester credits per term, six units total, in any or all appropriate subject areas combined. Granting of course credit contingent upon an evaluation of the course outline by a UC campus.

JOURNALISM

JOUR 106 Introduction to Photojournalism
(JOURN 6) 2.0 Units
This lab class is an introduction to the basics of photojournalism including basic photography skills, digital imaging, processing, composition, and production of written news stories. See cross-listing for Photography 6. 96-108 hours laboratory. CSU. (No prerequisite) This course may be taken two times.

JOUR 108 Fundamentals Of Journalism
(formerly JOURN 8) 4.0 Units
The student will learn basics of news and feature reporting and writing while producing the RamPage student newspaper. Topics covered: interviewing techniques, legal/ethical issues, writing strategies. Students produce the campus newspaper using computers and learn about career opportunities. 48-54 hours lecture and 48-54 hours laboratory. CSU. (Prerequisite: ENGL 50 with a grade of "C" or better.)

JOUR 108L Journalism Lab 1.0-3.0 Units
(formerly JOURN 8L)
This is a laboratory-only class which requires prior completion of Journalism 8. The student will learn advanced techniques of writing and editing. The student will learn and practice the basics of desktop publishing and increase their overall and increase their overall responsibility in production and distribution of the Victor Valley College student newspaper. 48-54 hours laboratory. CSU. (Prerequisite: JOUR 108 with a grade of "C" or better.) This course may be taken four times.

JOUR 128 Special Topics
(formerly JOURN 28)
See Special Topics listing (Variable units). CSU

JOUR 129 Independent Study
(formerly JOURN 29)
See Independent Study listing (1-3 units). CSU

JOUR 138 Cooperative Education
(formerly JOURN 38)
See Cooperative Education listing (1-8 units). CSU

LATIN

LATN 101 Elementary Latin 5.0 Units
This course introduces the Latin language and the culture and history of the ancient Roman people. Students complete intensive work on grammar and vocabulary. Special emphasis is given to translating Latin fluently and accurately into English. 80-90 hours lecture and 16-18 hours laboratory. CSU, UC. (No prerequisite. Grade option.) This course may be taken two times.

LATN 102 Elementary Latin 5.0 Units
This course is a continuation of Latin 101. Students study the Latin language and the culture of the ancient Roman people. Students complete intensive work on grammar and vocabulary and apply this knowledge to passages from ancient authors, including Julius Caesar's Gallic Wars. Special emphasis is given to translating Latin fluently and accurately into English.80-90 hours lecture and 16-18 hours laboratory. CSU, UC. (Prerequisite: LATN 101. Grade option.) This course may be taken two times.

MATHEMATICS

MATH 10 Basic Mathematics Skills
(formerly MATH 167) 3.0 Units
This course covers the basic operations applied to whole numbers, fractions (including mixed numbers) and decimals. Prime factorization, least common multiple, ratio and proportion, similar triangles, averages; graphs and tables, square roots, the Pythagorean theorem, measurement, operations on signed-numbers and solutions of simple linear equations are also covered. 48-54 hours lecture. This course will not apply to the Associate Degree. Offered Fall, Spring, Summer, Winter. (No prerequisite)

NOTE: Students seeking a refresher of math skills may also enroll in Basic Skills Math 12A, 12B, 12C and 12D. The course descriptions for these one-unit courses are found under "Basic Skills." Students may also take these courses concurrently with Math 10 or Math 12.

MATH 12 Pre-Algebra 3.0 Units
(formerly MATH 159)
Signed number arithmetic, order of operations, algebraic expressions, solving equations, and factoring. This course will not apply to the Associate Degree. 48-54 hours lecture. Offered Fall, Spring, Summer, Winter. (Prerequisite: MATH 10 with a grade of "C" or better or eligibility as determined by VVC assessment.)

MATH 50 Elementary Algebra 4.0 Units
Signed-number arithmetic, square roots, order of operations, algebraic expressions, solving equations, factoring, graphs of linear equations and solving systems of equations. 64-72 hours lecture. Offered Fall, Spring, Summer, Winter. (Prerequisite: MATH 10 or MATH 12 with a grade of "C" or better or eligibility as determined by VVC assessment.)

MATH 50A Elementary Algebra I 3.0 Units
This course covers a review of arithmetic operations with whole, decimal, fractional and signed numbers, exponential notation, percentages, and order of operations. Algebraic expressions, solving and graphing linear equations and inequalities, polynomial operations and polynomial factoring are also covered. Successful completion of MATH 50A and MATH 50B is equivalent to successful completion of MATH 50. 48-54 hours lecture. (Prerequisite: MATH 10 with a grade of "C" or better or placement by VVC assessment.)

MATH 50B Elementary Algebra II 3.0 Units
This course is a continuation of MATH 50A - Elementary Algebra I. The course covers topics including rational expressions, graphing linear inequalities, systems of equations, radical expressions and equations, and solutions to quadratic by different methods. Successful completion of MATH 50A and MATH 50B is equivalent to successful completion of MATH 50. 48-54 hours lecture. (Prerequisite: MATH 50A with a grade of "C" or better.)

MATH 50L Laboratory-Enhanced Study
for Math 50 1.0 Unit
A laboratory enhanced study concurrent with Math 50 for students participating in the Student Support Services program. A practical course supplementing instruction in signed number arithmetic, square roots, order of operations, algebraic expressions, solving equations, factoring, graphs of linear equations and solving systems of equations. Eight-nine hours lecture and 16-18 hours individualized instruction. (Prerequisites: completion of MATH 10 with a "C" or better, or Assessment Placement, and referral by Student Support Services. Credit/No Credit) This course may be taken two times.

MATH 60 Geometry 4.0 Units
This course covers Euclidean plane geometry and the development of logical thinking; it also develops visualization skills including congruence, similarity, parallel lines, circle properties, and constructions. 64-72 hours lecture. (Prerequisite: MATH 50 with a grade of "C" or better and ENGL 50 with a grade of "C" or better or eligibility as determined by VVC assessment. Grade Option.)

MATH 70 Building Mathematical Experiences for Children K-8 3.0 Units
This course emphasizes the development of explorations in mathematics appropriate for the school-age child. The course covers the sequence of topic acquisition, motivating concepts, disguising repetition, project development, group appropriate activities, evaluation techniques and building mathematical materials. 32-36 hours lecture and 48-54 hours laboratory. (No prerequisite. Grade Option) This course may be taken four times.

MATH 71 Guided Discoveries Practicum 2.0 Units
This course is a laboratory course that provides opportunity to those interested in teaching elementary school, or being a teacher's aide in mathematics, to gain experience preparing and presenting guided experiences for students of elementary age. 96-108 hours laboratory. (No prerequisite. Grade Option) This course may be taken four times.

MATH 90 Intermediate Algebra 4.0 Units
(formerly MATH 3)
This course is designed to serve as a preparation for the study of College Algebra, Statistics, Trigonometry and other college mathematics courses. Topics include review of the real number system, an introduction to imaginary and complex numbers, the solution of first degree, quadratic and systems of equations, polynomials, rational expressions, exponents and radicals, graphs of functions (both linear and nonlinear) and of relations, and exponential and logarithmic functions. 64-72 hours lecture. Offered Fall, Spring, Summer, Winter. (Prerequisite: MATH 50 with a grade of "C" or better or eligibility as determined by VVC assessment.)

MATH 104 Trigonometry (CAN MATH 8)
(formerly MATH 4) 4.0 Units
Topics for this preparatory course for calculus include trigonometric functions and equations, solutions for both right and oblique triangles, trigonometric forms of complex numbers and De Moivre's Theorem. Course content also includes verification of trigonometric identities, inverse trigonometric functions, half and multiple angles, vectors and their applications, parametric equations, polar coordinates and polar equations. 64-72 hours lecture. CSU. Offered Fall, Spring, Summer, Winter. (Prerequisite: MATH 90 with a grade of "C" or better.)

MATH 105 College Algebra (CAN MATH 10)
(formerly MATH 5) 4.0 Units
The course offers a review of real numbers, real number exponents, and factoring polynomials. The course also covers equations and inequalities, solutions to systems of equations and inequalities, solutions to equations and inequalities involving absolute value, graphing relations and functions, matrices, determinants of matrices, and matrix algebra. Complex numbers, the real and complex zeros of polynomials, the zeros of exponential, rational and radical functions, the conic sections, sequences, mathematical induction and the binomial theorem are also covered. 64-72 hours lecture. CSU, UC credit limitation). Offered Fall, Spring, Summer, Winter. (Prerequisite: MATH 90 with a grade of "C" or better or eligibility as determined by VVC assessment.)

MATH H105 Honors College Algebra
(formerly MATH H5) (CAN MATH 10) 4.0 Units
This course covers all the topics of the regular MATH 105 course, but the topics are covered in greater depth. Exponents and radicals, theory of quadratic equations, simultaneous quadratic equations, complex numbers, equations of higher degree, inequalities, logarithmic and exponential equations, binomial theorem, matrices and determinants, partial fractions, sequences and series. 64-72 hours lecture. CSU, UC (UC credit limitation). (No prerequisite)

MATH 119 Finite Mathematics 3.0 Units
This course covers linear functions and modeling, matrix operations (addition, subtraction, multiplication and inverses), systems of linear equations, introductory linear programming, mathematics of finance, counting techniques. Probability theory, descriptive statistics and distributions, and Markov chain are also covered. 48-54 hours lecture. CSU, UC. (Prerequisite: MATH 90 with a grade of "C" or better.)

MATH 120 Introduction To Statistics
(formerly MATH 20) (CAN STAT 2) 4.0 Units
This course covers basic statistical techniques including design and analysis for both parametric and non-parametric data. Descriptive statistics included are measures of central tendency and measures of dispersion. Graphical techniques of illustrating the data are covered. Probability and its application to inferential statistical procedures is covered. Inferential statistics included are estimation and hypothesis testing, chi-square, analysis of variance and regression. Applications are drawn from a variety of fields. 64-72 hours lecture. CSU, UC. Offered Fall, Spring, Summer, Winter. (Prerequisite: MATH 90 with a grade of "C" or better.)

MATH H120 Honors Introduction to Statistics 5.0 Units
Basic statistical techniques, design and analysis for both parametric and non-parametric data are included. Descriptive statistics are included. Graphing techniques of illustrating the data are covered. Probability is covered. Inferential statistics included are estimation and hypothesis testing, chi-square, analysis of variance, and regression. Applications are drawn from a variety of fields. In addition, the Honors component will include the design of surveys, probability testing, and a research project. 80-90 hours lecture. CSU, UC.

MATH 128 Special Topics (formerly MATH 28)
See Special Topics listing (Variable units). CSU, UC.

MATH 129 Independent Study (formerly MATH 29)
See Independent Study listing (1-3 units). CSU

MATH 132 The Ideas Of Math
(formerly MATH 32) (CAN MATH 2) 3.0 Units
Sets and their application to permutations, combinations, binomial theorem, correspondence, countability, finite probability measures, and expectation with optional topics in geometry (Euclidean and non-Euclidean, tessellations and fractals) or beginning calculus (derivative and antiderivative of simple polynomial functions. 48-54 hours lecture. CSU, UC. Offered Spring, Fall, Summer, Winter. (Prerequisite: MATH 90 with a grade of "C" or better or eligibility as determined by VVC assessment.)

MATH 138 Cooperative Education(formerly MATH 38)
See Cooperative Education listing (1-8 units). CSU

MATH 216 Business Calculus 4.0 Units
This course is designed for students majoring in Business and Economics. Topics covered include functions and relations, limits and continuity, differentiation, applications of differentiation, integration, and applications of integration. NOTE: MATH 216 - Business Calculus and MATH 226 - Calculus and Analytic Geometry I are not the same class. 64-72 hours lecture. (Prerequisite: MATH 105 or MATH 119.)

MATH 226 Analytic Geometry and Calculus
(formerly MATH 26A) 5.0 Units
This class offers an introduction to the calculus of single variables. Topics covered include limits, using limits of functions to determine continuity, finding derivatives and integrals of functions, basic

properties of derivatives and integrals, the relationship between derivatives and integrals as given by the Fundamental Theorem of Calculus, an applications. 80-90 hours lecture. CSU, UC. Offered Fall, Spring. (Prerequisites: Both MATH 104 and 105 with a grade of "C" or better.)

MATH H226 (formerly MATH H26A) Honors Analytic Geometry and Calculus (CAN MATH 18) 6.0 Units

As an introduction to the calculus of single variables, students will develop the concept of limit, apply limits to functions to determine if they are continuous, and find the derivative and determine integrals. Students will study the properties of the derivative and integral, their relationship to each other given by the Fundamental Theorem of Calculus and some applications to the real world. In addition, the honors component will include reading proofs, writing complete proofs from sketches of proofs, and applying techniques learned to real-life problems. 96-108 hours lecture. CSU, UC. (Prerequisite: MATH 104 and 105 completed with a grade of "C" or better.)

MATH 227 (formerly MATH 26B) Analytic Geometry and Calculus (CAN MATH 20) 5.0 Units

This class covers the calculus of logarithmic, exponential, trigonometric and hyperbolic functions, integration techniques, L'Hopital's Rule, improper integrals, infinite series, conic sections, parametric equations, and polar coordinates. 80-90 hours lecture. CSU, UC. Offered Fall, Spring. (Prerequisite: MATH 226 with a grade of "C" or better.)

MATH H227 (formerly MATH H26B) Honors Analytic Geometry and Calculus (CAN MATH 20) 6.0 Units

The calculus of logarithmic, exponential, trigonometric and hyperbolic functions, integration techniques, L'Hopital's Rule, improper integrals, infinite series, conic sections, parametric equations, and polar coordinates. In addition, the honors component will include reading proofs, writing complete proofs from sketches of proofs, and applying techniques learned to real-life problems. 96-108 hours lecture. CSU, UC (Prerequisite: MATH 226 with a grade of "C" or better.)

MATH 228 (formerly MATH 26C) Analytic Geometry and Calculus (CAN MATH 22) 5.0 Units

This class covers vectors and the geometry of space, vector-valued functions, the calculus of functions as several variables, multiple integration, Green's Theorem, divergence theorem, Stoke's Theorem, and applications. 80-90 hours lecture. CSU, UC. Offered Fall. (Prerequisite: MATH 227 with a grade of "C" or better.)

MATH H228 (formerly MATH H26C) Honors Analytic Geometry and Calculus (CAN MATH 22) 6.0 Units

Vectors and the geometry of space, vector-valued functions, the calculus of functions as several variables, multiple integration, Green's Theorem, divergence theorem, Stoke's Theorem, and applications. In addition, the honors component will include reading proofs, writing complete proofs from sketches of proofs, and apply techniques learned to real-life problems. 96-108 hours lecture. CSU, UC (Prerequisite: MATH 227 with a grade of "C" or better.)

MATH 231 (formerly MATH 31) Linear Algebra 3.0 Units

An introduction to linear algebra that compliments advanced courses in calculus. Topics include systems of linear equations, matrix operations, determinants, vectors and vector spaces, eigenvalues and eigenvectors and linear transformations; with orthogonality, inner product spaces and numerical methods if time permits. 48-54 hours lecture. CSU, UC. Offered Spring. (Prerequisite: MATH 105 with a grade of "C" or better.)

MATH 270 (formerly MATH 27) Differential Equations (CAN MATH 24) 3.0 Units

This course covers elementary differential equations, solutions of first order equations, linear equations with constant coefficients, simultaneous linear systems, series solutions, the Laplace transformation, and applications to physics and engineering. 48-54 hours lecture. CSU, UC. Offered Spring. (Prerequisite: MATH 227 with a grade of "C" or better)

MEDIA ARTS

MERT 50 (formerly MEART 40) Principles of Animation 3.0 Units

This course investigates the fundamental principles of 3D animation. The student will explore the historical development of the animation industries, preproduction, 3D modeling and the basics of 3D animation. Repetition of this course provides the opportunity for increased skill development. 32-36 hours lecture and 48-54 hours laboratory. (No prerequisite. ART 125, ART 133A, or CIS 101 are recommended. Grade Option.) This course may be taken three times.

MERT 51 (formerly MEART 41) Intermediate Modeling and Animation with SoftImage XSI 3.0 Units

This course uses a guided digital studio approach in a close analysis of the practical production skills and techniques in 3D modeling and animation. Students will complete a combination of exercises, individual and group projects. 32-36 hours lecture and 48-54 hours laboratory. (Prerequisite: MERT 50. Grade Option.) This course may be taken three times.

MERT 52 (formerly MEART 42) Digital Character Animation 3.0 Units

This course is an advanced study in digital character animation and feature-length digital media production. This course explores the relationships between anatomy, motion, weight, and timing through a balanced combination of exercises, individual and group projects. 32-36 hours lecture and 48-54 hours laboratory. (Prerequisite: MERT 50. Grade Option.) This course may be taken three times.

MERT 53 (formerly MEART 43) Advanced Animation with SoftImage XSI 3.0 Units

This course is a close analysis of animation programming applications to automate 3D animation production. Course topics include programmed modeling, deformation, posing and kinematics. 32-36 hours lecture and 48-54 hours laboratory. (Prerequisite: MERT 52. Grade Option.) This course may be taken three times.

MERT 56 Photoshop for Animators 3.0 Units

Students will learn the concepts and procedures required for creating high quality texture maps and imagery for use in 3D computer animation. Topics will include basic and advanced editing techniques, managing tone and color, layer management, optimization strategies and the use of filters. Compositing techniques will be addressed in detail. Relevant issues dealing with the pre-production process, and industry trends and analysis will also be discussed. 32-36 hours lecture and 48-54 hours laboratory. (No prerequisite. Grade Option.) This course may be taken three times.

MERT 74 (formerly MEART 24) Digital Video Production 3.0 Units

This course introduces digital video production techniques. Course topics include the operation of digital camcorders, lighting, sound equipment and post production digital editing suites, and the principles of aesthetics of film and video editing. 32-36 hours lecture and 48-54 hours laboratory. (No prerequisite. ART 133, CIS 101 are recommended. Grade Option.) This course may be taken four times.

MICROBIOLOGY

See Biology.

MUSIC

MUSC 100 Introduction to Music 3.0 Units
(formerly MUSIC 10)
This course is a general introduction to the art of music, its nature, history, materials and vocabulary. The course examines the historical and contemporary value of music to the individual and society. Consideration will also be given to structural organizations of music composition and the characteristic styles of historical periods and important individuals. 48-54 hours lecture. CSU, UC. Offered Fall, Spring. (No prerequisite)

MUSC 101 Fundamentals Of Music
(formerly MUSIC 1) 3.0 Units
A beginning study of the basic elements of music, including pitch and rhythm recognition, key signatures, intervals, time signatures, and major and minor scales and simple triads. Useful to those wishing to learn to sight read or play an instrument. 48-54 hours laboratory. CSU, UC. Offered Fall, Spring. (No prerequisite)

MUSC 102 Music Theory Diatonic Practice,
(formerly MUSIC 2A) Part I 3.0 Units
Comprehensive theory musicianship study centering on basic four part diatonic harmonic practices. Use of triads in root position in all major and minor modes, principles of voice leading including doubling, spacing, voice ranges, part crossings, basic harmonic progression, and melodic construction. Emphasis on written and aural analysis, and creative application of concepts to musical composition. Stresses programmed instruction supported by computer and electronic teaching aids in an interactive classroom environment. Required for those majoring in music and useful to those desiring to write or arrange music for any purpose 32-36 hours lecture and 48-54 hours laboratory. CSU, UC. Offered Fall, Spring. (Prerequisite: MUSC l01 or equivalent information as demonstrated by pretest; concurrent enrollment in MUSC 104)

MUSC 103 Music Theory Diatonic Practice,
(formerly MUSIC 2B) Part II 3.0 Units
Continuation of MUSC 102, comprehensive theory musician-ship study centering on basic four-part diatonic harmonic practices. Use of triads in all positions, principles of voice leading, harmonic progression, non-harmonic tones, and melodic construction. Emphasis on written and aural analysis, and creative application of concepts to musical and electronic teaching aids in an interactive classroom/lab environment. Required for those majoring in music and useful to those desiring to write or arrange music for any purpose. 32-36 hours lecture and 48-54 hours laboratory. CSU, UC. Offered Fall, Spring. (Prerequisite: MUSC 101 or equivalent information as demonstrated by pretest; concurrent enrollment in MUSC 105)

MUSC 104 Sight Singing/Ear Training
(formerly MUSIC 4A) Laboratory, Level I 1.0 Unit
Self paced comprehensive individualized training in sight singing, developing mastery in rhythmic sight reading and playing, pitch matching and matching notation to inner hearing, and notating rhythmic and melodic dictation. Drill and practice through computer generated exercises using Music Lab software on the student's own computer and practice and testing in the college Music Computer Lab. Additional practice in small group sessions as needed. Student will pass five quiz levels in each of eight skills on the computer to receive credit for the appropriate course section. This course is open to anyone desiring to learn basic practical music reading skills; it is required of students taking Music Theory 102. 48-54 hours laboratory. CSU, UC. (No prerequisite) (Credit/No Credit)

MUSC 105 Sight Singing/Ear Training
(formerly MUSIC 4B) Laboratory, Level II 1.0 Unit
Self paced, competency based, comprehensive individualized training in sight singing, developing mastery in rhythmic sight reading and playing, pitch matching and matching notation to inner hearing, and notating rhythmic and melodic dictation. Drill and practice through computer generated exercises using Music Lab software on the student's own computer and practice and testing in the college Music Computer Lab. Additional practice in small group sessions as needed. Student will pass five quiz levels in each of eight skills on the computer to receive credit for the appropriate course section. This course is open to anyone desiring to learn basic practical music reading skills; it is required of students taking Music Theory 104. 48-54 hours laboratory. CSU, UC. (Prerequisite: MUSC 103) (Credit/No Credit)

MUSC 110 Elementary Piano
(formerly MUSIC 15A) (CAN MUS 22 = 15 A-B) 1.0 Unit
This course offers practical keyboard facility, sight reading, elementary improvisation and harmonization of folk melodies, and performance of simple piano selections. Useful to those desiring to learn to play the piano, organ or electronic keyboards. 48-54 hours laboratory. CSU, UC. (UC credit limitation). Offered Fall, Spring. (No prerequisite)

MUSC 111 Elementary Piano
(formerly MUSIC 15B) (CAN MUS 22 = 15 A-B) 1.0 Unit
This course is a continuation of MUSC 15A and offers practical keyboard facility, sight reading, elementary improvisation and harmonization of folk melodies, and performance of simple piano selections. Useful to those desiring to learn to play the piano, organ or electronic keyboards. 48-54 hours laboratory. CSU, UC. Offered Fall, Spring. (No prerequisite)

MUSC 116 Music In America 3.0 Units
(formerly MUSIC 12)
A survey of music in American life and culture from colonial times to the present, including both popular and art music styles. 48-54 hours lecture. CSU, UC. (No prerequisite)

MUSC 117 History of Jazz 3.0 Units
(formerly MUSIC 13)
A survey of jazz from 1900 to the present, including what jazz is, African and European heritages, blues, Dixieland, ragtime, boogie woogie, swing, bop, cool, funky, gospel, third stream, jazz/rock, and free form. Lectures and structured listening and viewing. 48-54 hours lecture. CSU, UC. (No prerequisite)

MUSIC 118 Survey of Rock and Roll
(formerly MUSIC 14) 3.0 Units
This course will discuss the unfolding of rock and roll as a modern musical genre. It will also discuss societal influence on its development as well as its impact on modern society. Other styles of contemporary commercial music will be discussed and analyzed within the general historical scope of this survey. 48-54 hours lecture. CSU, UC. Offered Fall, Spring. (No prerequisite)

MUSC 120A Applied Music Voice 1.0 Unit
(formerly MUSIC 18A)
Coordinates the development of the music major's performance proficiency in their primary instrument. A minimum of fifteen half hour lessons per semester with a teacher approved by the Music Department and at least two and one half hours of individual practice, either on or off campus. Payment for lessons will be worked out directly between the teacher and student. All applied students will perform on faculty/student recitals and/or juried exam. 48-54 hours laboratory. CSU, UC. Offered Fall, Spring. (Prerequisite: For music transfer students. Declared music major. Demonstrated performance ability or potential on the instrument in question at an acceptable proficiency level, as demonstrated by audition. Audition criteria can be obtained from the Music Department.) This course may be taken four times.

MUSC 120B Applied Music Piano 1.0 Unit
(formerly MUSIC 18B)
Coordinates the development of the music major's performance proficiency in their primary instrument. A minimum of fifteen half hour lessons per semester with a teacher approved by the Music Department and at least two and one half hours of individual practice, either on or off campus. Payment for lessons will be worked out directly between the teacher and student. All applied students will perform on faculty/student recitals and/or juried exam. 48-54 hours laboratory. CSU, UC. Offered Fall, Spring. (Prerequisite: For music transfer students. Declared music major. Demonstrated performance ability or potential on the instrument in question at an acceptable proficiency level, as demonstrated by audition. Audition criteria can be obtained from the Music Department.) This course may be taken four times.

MUSC 120C Applied Music Guitar 1.0 Unit
(formerly MUSIC 18C)
Coordinates the development of the music major's performance proficiency in their primary instrument. A minimum of fifteen half hour lessons per semester with a teacher approved by the Music Department and at least two and one half hours of individual practice, either on or off campus. Payment for lessons will be worked out directly between the teacher and student. All applied students will perform on faculty/student recitals and/or juried exam. 48-54 hours laboratory. CSU, UC. Offered Fall, Spring. (Prerequisite: For music transfer students. Declared music major. Demonstrated performance ability or potential on the instrument in question at an acceptable proficiency level, as demonstrated by audition. Audition criteria can be obtained from the Music Department.) This course may be taken four times.

MUSC 120D Applied Music Upper Strings
(formerly MUSIC 18D) 1.0 Unit
Coordinates the development of the music major's performance proficiency in their primary instrument. A minimum of fifteen half hour lessons per semester with a teacher approved by the Music Department and at least two and one half hours of individual practice, either on or off campus. Payment for lessons will be worked out directly between the teacher and student. All applied students will perform on faculty/student recitals and/or juried exam. 48-54 hours laboratory. CSU, UC. Offered Fall, Spring. (Prerequisite: For music transfer students. Declared music major. Demonstrated performance ability or potential on the instrument in question at an acceptable proficiency level, as demonstrated by audition. Audition criteria can be obtained from the Music Department.) This course may be taken four times.

MUSC 120E Applied Music Low Strings
(formerly MUSIC 18E) 1.0 Unit
Coordinates the development of the music major's performance proficiency in their primary instrument. A minimum of fifteen half hour lessons per semester with a teacher approved by the Music Department and at least two and one half hours of individual practice, either on or off campus. Payment for lessons will be worked out directly between the teacher and student. All applied students will perform on faculty/student recitals and/or juried exam. 48-54 hours laboratory. CSU, UC. Offered Fall, Spring. (Prerequisite: For music transfer students. Declared music major. Demonstrated performance ability or potential on the instrument in question at an acceptable proficiency level, as demonstrated by audition. Audition criteria can be obtained from the Music Department.) This course may be taken four times.

MUSC 120F Applied Music High Brass
(formerly MUSIC 18F) 1.0 Unit
Coordinates the development of the music major's performance proficiency in their primary instrument. A minimum of fifteen half hour lessons per semester with a teacher approved by the Music Department and at least two and one half hours of individual practice, either on or off campus. Payment for lessons will be worked out directly between the teacher and student. All applied students will perform on faculty/student recitals and/or juried exam. 48-54 hours laboratory. CSU, UC. Offered Fall, Spring. (Prerequisite: For music transfer students. Declared music major. Demonstrated performance ability or potential on the instrument in question at an acceptable proficiency level, as demonstrated by audition. Audition criteria can be obtained from the Music Department.) This course may be taken four times.

MUSC 120G Applied Music Low Brass
(formerly MUSIC 18G) 1.0 Unit
Coordinates the development of the music major's performance proficiency in their primary instrument. A minimum of fifteen half hour lessons per semester with a teacher approved by the Music Department and at least two and one half hours of individual practice, either on or off campus. Payment for lessons will be worked out directly between the teacher and student. All applied students will perform on faculty/student recitals and/or juried exam. 48-54 hours laboratory. CSU, UC. Offered Fall, Spring. (Prerequisite: For music transfer students. Declared music major. Demonstrated performance ability or potential on the instrument in question at an acceptable proficiency level, as demonstrated by audition. Audition criteria can be obtained from the Music Department.) This course may be taken four times.

MUSC 120H Applied Music Reeds 1.0 Unit
(formerly MUSIC 18H)
Coordinates the development of the music major's performance proficiency in their primary instrument. A minimum of fifteen half hour lessons per semester with a teacher approved by the Music Department and at least two and one half hours of individual practice, either on or off campus. Payment for lessons will be worked out directly between the teacher and student. All applied students will perform on faculty/student recitals and/or juried exam.48-54 hours laboratory. CSU, UC. Offered Fall, Spring. (Prerequisite: For music transfer students. Declared music major. Demonstrated performance ability or potential on the instrument in question at an acceptable proficiency level, as demonstrated by audition. Audition criteria can be obtained from the Music Department.) This course may be taken four times.

MUSC 120I Applied Music Woodwinds
(formerly MUSIC 18I) 1.0 Unit
Coordinates the development of the music major's performance proficiency in their primary instrument. A minimum of fifteen half hour lessons per semester with a teacher approved by the Music Department and at least two and one half hours of individual practice, either on or off campus. Payment for lessons will be worked out directly between the teacher and student. All applied students will perform on faculty/student recitals and/or juried exam. 48-54 hours laboratory. CSU, UC. Offered Fall, Spring. (Prerequisite: For music transfer students. Declared music major. Demonstrated performance ability or potential on the instrument in question at an acceptable proficiency level, as demonstrated by audition. Audition criteria can be obtained from the Music Dept..) This course may be taken four times.

MUSC 120J Applied Music Percussion
(formerly MUSIC 18J) 1.0 Unit
Coordinates the development of the music major's performance proficiency in their primary instrument. A minimum of fifteen half hour lessons per semester with a teacher approved by the Music Department and at least two and one half hours of individual practice, either on or off campus. Payment for lessons will be worked out directly between the teacher and student. All applied students will perform on faculty/student recitals and/or juried exam. 48-54 hours laboratory. CSU, UC. Offered Fall, Spring. (Prerequisite: For music transfer students. Declared music major. Demonstrated performance ability or potential on the instrument in question at an acceptable proficiency level, as demonstrated by audition. Audition criteria can be obtained from the Music Department.) This course may be taken four times.

MUSC 122 Beginning Voice Production (formerly MUSIC 41) 1.0 Unit
Fundamental techniques of proper voice production including healthy use of the voice for speaking and singing. Teaches proper relaxation and support techniques, speech intensification, vocal freedom and resonance, and emotional support for the singing and speaking process. Designed to meet the needs of those who use their voices for solo and/or ensemble singing or in such vocally intense activities as teaching, group leading, sales, coaching, or for those taking courses in speech communication and acting. 48-54 hours laboratory. Offered Fall, Spring. CSU, UC. (No prerequisite)

MUSC 123 Intermediate Voice Class (formerly MUSIC 42) 1.0 Unit
Application of the vocalization techniques of Music 41 to the study of vocal performance. Attention to diction, tone color, song styles and interpretation. Some basic instruction in Italian, French or German diction. Intensive solo performance in a wide range of musical styles. Useful to anyone desiring to continue the development of the singing voice and performance potential. Repetition of the class provides opportunity for increased skills development. 48-54 hours laboratory. CSU, UC. Offered Fall, Spring. (Prerequisite: MUSC 122 or equivalent skills, i.e. formal basic instruction in fear control, proper body relaxation, breath support, vocal focus and some experience in solo vocal performance.) This course may be taken four times.

MUSC 124 Beginning Guitar 1.0 Unit (formerly MUSIC 60A)
This course offers the study and performance of music for the beginning guitarist. It gives the student with no knowledge of guitar performance the opportunity to learn basic reading skills through simple guitar pieces. Some public performance will be required. 48-54 hours laboratory. CSU, UC. Offered Fall, Spring. (No Prerequisite.)

MUSC 125 Beginning Guitar 1.0 Unit (formerly MUSIC 60B)
This course offers further study and performance of music for the beginning guitarist. It gives the student with minimal knowledge of guitar performance the opportunity to learn basic reading skills through simple guitar pieces. Some public performance will be required. 48-54 hours laboratory. CSU, UC. Offered Fall, Spring. (No prerequisite)

MUSC 126 Guitar Ensemble 1.0 Unit (formerly MUSIC 63)
This course offers the study and performance of music for guitar ensemble. It gives the student with basic knowledge of guitar performance skill the opportunity to perform in an ensemble setting. Some public performance will be required. Repetition provides for increased skill development. 48-54 hours laboratory. CSU, UC. (Prerequisite: Student must audition.) This course may be taken four times.

MUSC 128 Special Topics (formerly MUSIC 28)
See Special Topics listing (Variable units). CSU, UC.

MUSC 129 Independent Study (formerly MUSIC 29)
See Independent Study listing (1-3 units).

MUSC 130 Women's Choir 1.0 Unit (formerly MUSIC 20)
A treble choir of female voices to perform repertoire from all styles and periods of music written or arranged for treble choir. Emphasis on the development of the total choral musicianship skills of each singer within the group context. Choir will perform at various college and community functions. 48-54 hours laboratory. CSU, (UC credit pending) (No prerequisite. Credit/No Credit) This course may be taken four times.

MUSC 131 The College Singers 3.0 Units (formerly MUSIC 21)
A select chamber choral ensemble of mixed voices to perform at various college and community functions. Repertoire includes significant choral music from all periods of music history, including motets and madrigals, part songs, masses and cantatas with orchestra, 20th century choral songs, and spirituals, vocal jazz and Broadway arrangements. Music is most often performed in the original languages. Emphasis on development of the total choral musicianship skills of each singer. Group may tour out of state or to Europe. 32-36 hours lecture and 48-54 hours laboratory. CSU, UC. Offered Fall, Spring. (Prerequisite: Solo audition. Applicant should possess strong basic choral/vocal skills and experience in choral singing i.e. ability to sing on pitch with a well supported, clear choral tone; strong ear able to retain and accurately recall parts learned; basic sight reading skills; team player willing to take direction. Number of singers accepted in any section may be limited by the requirements of part balance and the repertoire planned for that semester.) (Grade option) This course may be taken four times.

MUSC 132 Master Arts Chorale 1.0 Unit (formerly MUSIC 55)
A large choral ensemble dedicated to the performance of major choral works from all musical periods, often with orchestra. Group may tour from time to time in the United States and abroad. Membership open by audition to all students as well as to members of the community. 48-54 hours laboratory. CSU, UC. Offered Fall, Spring. (Prerequisite: Solo audition to determine ability to match pitch, sing in tune, carry a harmony part, level of music reading. Prior choral experience in a high school, college/university, community or church choir desirable.) (Credit/No Credit) This course may be taken four times.

MUSC 134 Musical Theatre Lab 1.0 Unit (formerly MUSIC 22A-B-C-D)
Preparing the vocal and instrumental music for the college's musical productions. Participation as major leads, supporting roles, chorus or orchestra members as determined by audition. Enrollment in B, C, and D provides the opportunity for increased skill development. 48-54 hours laboratory. CSU, UC. Offered Spring. (Prerequisite: Demonstrated ability at an acceptable level of proficiency, as evidenced by audition. Grade option) This course may be taken four times.

MUSC 135 Beginning Band 0.5 Unit (formerly MUSIC 25)
This course will be a study and performance of standard elementary band literature composed for the beginning and intermediate level wind and percussion literature. Proper breathing and phrasing techniques will be emphasized along with specific instrument performance technique. 24-27 hours laboratory. CSU (Prerequisite: Student must audition. Credit/No Credit.) This course may be taken four times.

MUSC 136 College Symphonic Band (formerly MUSIC 34) 1.0 Unit
This course will emphasize the performance of standard college wind literature. Proper playing and performance technique will be stressed. Warm-up skills will be developed along with scale studies and rhythmic refinement. At least two public performances will be required. 48-54 hours laboratory. CSU, UC. Offered Fall, Spring. (Prerequisite. Student must audition. Credit/No credit) This course may be taken four times.

MUSC 138 Cooperative Education (formerly MUSIC 38)
See Cooperative Education listing (1-8 Units). CSU

MUSC 139 Studio Band 1.0 Unit (formerly MUSIC 31)
This course provides playing experience in the field of dance, jazz and popular music, including at least two public performances a semester. Improvisation skills, sight reading skills, ear training skills, and

performance practice skills will be emphasized. 48-54 hours laboratory. CSU, UC. Offered Fall, Spring. (Prerequisite: Student must audition. Credit/No Credit) This course may be taken four times.

MUSC 140 Studio Singers
(formerly MUSIC 33) 1.0 Unit
A select vocal ensemble dedicated to the study and performance in jazz styles arranged for vocal jazz ensemble. Appearances at public and private functions will be made throughout the year. Subsequent enrollment in additional semesters will provide the student an opportunity for additional skill and competency development with the subject matter. 48-54 hours laboratory. CSU, UC. (Prerequisite: Student must audition. Credit/No Credit) This course may be taken four times.

MUSC 141 Jazz Rock Combo 1.0 Unit
(formerly MUSIC 32)
This course applies the beginning principles and skills for jazz performance within the jazz combo medium. Improvisation, music theory, stylistic interpretation and ensemble are applied to the appropriate level for the individual student. Public performance is included as a course requirement. 48-54 hours laboratory. CSU, UC. (Prerequisite: Student must audition. Credit/No Credit) This course may be taken four times.

MUSC 143 Beginning String Ensemble
(formerly MUSIC 61A) 0.5 Unit
This course will be a beginning study and performance of standard string orchestra literature composed for the beginning string player. Proper left hand position (excluding the use of third position), beginning bow techniques, appropriate performance practices will be emphasized. 24-27 hours laboratory. CSU, UC. Offered Fall, Spring. (Prerequisite: Students must audition for this ensemble. Alternative course is MUSC 137. Credit/No Credit.) This course may be taken four times.

MUSC 144 Preludium String Ensemble
(formerly MUSIC 62) 0.5 Unit
This course will be an intermediate study and performance of standard string orchestra literature composed for the intermediate string player. Proper left hand position (excluding the use of third position), intermediate bow techniques, appropriate performance practices will be emphasized. 24-27 hours laboratory. CSU (Prerequisite: Student must audition for this ensemble. Alternative course is Music 137. Credit/No Credit.) This course may be taken four times.

MUSC 145 College Symphony Orchestra
(formerly MUSIC 35) 0.5 Unit
This course will be a study and performance of standard full orchestral literature for the beginning and intermediate string, wind and percussion player. Emphasis will be on ensemble skills, ear training and performance practices. 24-27 hours laboratory. CSU, UC (Prerequisite: Student must audition.) This course may be taken four times.

MUSC 147 Brass Choir 0.5 Unit
(formerly MUSIC 37)
This course will explore brass choir literature and performance through the baroque up to the 21st century. Specific technical skills will be addressed including breathing, phrasing, tonguing and ornamentation practices. Public performances are required. 24-27 hours laboratory. CSU, UC (Prerequisite: Student must audition. Credit/No credit) This course may be taken four times.

MUSC 202 Advanced Theory
(formerly MUSIC 3A) Chromatic Practice 3.0 Units
The study of chromatic harmonic practices, including all types of seventh chords, dominant seventh and leading tone seventh functions, secondary dominants and secondary leading tone chords, altered non harmonic tones, modulation to closely related keys, and borrowed chords. Continued development of basic musicianship skills, including visual and aural seventh chord recognition, rhythmic reading, melodic, contrapuntal and harmonic dictation. Emphasis on individualized programmed instruction, including the use of computers, small group and other interactive teaching aids. 32-36 hours lecture and 48-54 hours laboratory. CSU, UC. Offered Fall, Spring. (Prerequisite: Completion of MUSC 102; concurrent enrollment in MUSC 203)

MUSC 203 Sight Singing/Ear Training
(formerly MUSIC 4C) Laboratory, Level III 1.0 Unit
Self paced, competency based, comprehensive individualized training in sight singing, developing mastery in rhythmic sight reading and playing, pitch matching and matching notation to inner hearing, and notating rhythmic and melodic dictation. Drill and practice through computer generated exercises using Music Lab software on the student's own computer and practice and testing in the college Music Computer Lab. Additional practice in small group sessions as needed. Student will pass five quiz levels in each of eight skills on the computer to receive credit for the appropriate course section. This course is open to anyone desiring to learn basic practical music reading skills; it is required of students taking Music Theory 202. 48-54 hours laboratory. CSU, UC. (Prerequisite: MUSC 105) (Credit/No Credit)

MUSC 204 Advanced Theory Chromatic
(formerly MUSIC 3B) Practice, Part II 3.0 Units
Extends the concepts in MUSC 3A through use of foreign modulations, borrowed and augmented chords, neopolitan and other sixth chords, chromatic third relation harmony and ninth, eleventh and thirteenth chords. Continued development of basic musicianship skills, including visual and aural seventh chord recognition, rhythmic reading, melodic, contrapuntal and harmonic dictation. 32-36 hours lecture and 48-54 hours laboratory. CSU, UC. Offered Fall, Spring. (Prerequisite: Completion of MUSC 202)

MUSC 205 Sight Singing/Ear Training
(formerly MUSIC 4D) Laboratory, Level IV 1.0 Unit
Self paced comprehensive individualized training in sight singing, developing mastery in rhythmic sight reading and playing, pitch matching and matching notation to inner hearing, and notating rhythmic and melodic dictation. Drill and practice through computer generated exercises using Music Lab software on the student's own computer and practice and testing in the college Music Computer Lab. Additional practice in small group sessions as needed. Student will pass five quiz levels in each of eight skills on the computer to receive credit for the appropriate course section. This course is open to anyone desiring to learn basic practical music reading skills; it is required of students taking Music Theory 204. 48-54 hours laboratory. CSU, UC. (Prerequisite: MUSC 203) (Credit/No Credit)

MUSC 210 Intermediate Piano 1.0 Unit
(formerly MUSIC 16A)
This course offers the continued development of keyboard facility from including harmonization of given melodies using appropriate intermediate accompaniments, furthered exploration of piano repertoire and related skills, styles and technical exercises. Two octave major and minor scales, arpeggios, and harmonization skills will be explored. 48-54 hours laboratory. CSU, UC. Offered Fall, Spring. (No prerequisite)

MUSC 211 Intermediate Piano 1.0 Unit
(formerly MUSIC 16B)
This course offers the continuation and development of practical keyboard facility from accompaniments, exploration of piano repertory and related stylistic and technical exercises. The study of basic elements of music, including pitch and rhythm recognition, key signatures, intervals, time signatures, major and minor scales, and simple triads. Useful to those wishing to learn to sight read or play an instrument, and for those who wish to write music. 48-54 hours laboratory. CSU, UC. Offered Fall, Spring. (No prerequisite)

NURSING

NURS 138 Cooperative Education
(formerly NURS 38)
(See Cooperative Education 1-8 units). CSU

NURS 148 Special Topics (formerly NURS 48)
See Special Topics listing (Variable units).

NURS 149 Independent Study (formerly NURS 49)
See Independent Study listing (1-3 units).

NURS 220 Pharmacology and Nursing
(formerly NURS 20) Management 2.0 Units
This course is a nursing class about the study of drug therapy to prevent, diagnose, or cure disease processes or to relieve signs and symptoms of diseases. It includes content specific to the registered nurse and utilization of the nursing process to fulfill nursing responsibility in medication management of clients. 32-36 hours lecture. CSU (Prerequisite: Admission to the Nursing Program as required by BRN.)

NURS 221 Nursing Process 1 10.0 Units
(formerly NURS 21)
An introduction to the Victor Valley College Associate Degree Nursing Program and the nursing profession. Emphasis is on the Nursing Process and fundamentals of nursing; including risk management, health promotion, psycho-social aspects, electrolyte and acid-base management, and the perioperative experience practiced in various clinical settings and the classroom laboratory. 90 hours lecture and 270 hours laboratory. CSU. (Prerequisite: Anatomy, Physiology, and Microbiology completed with a "C" or better. (Corequisite: NURS 220)

NURS 222 Nursing Process 2 9.0 Units
(formerly NURS 22)
The Nursing Process applied to family nursing and the childbearing family, the adaptations of nursing care for various stages of growth and development, and the nursing management required in common adult conditions; e.g., nutritional, tissue perfusion, elimination. 72 hours lecture and 270 hours laboratory. CSU (Prerequisite: NURS 220 and NURS 221)

NURS 223 Nursing Process 3 9.0 Units
(formerly NURS 23)
The Nursing Process applied to critical care areas, psychiatric/mental health and complex geriatric care. Emphasis will be on client adaptation in chronic and acute illness. 72 hours lecture and 270 hours laboratory. CSU (Prerequisite: NURS 222)

NURS 224 Nursing Process 4 9.0 Units
(formerly NURS 24)
The Nursing Process applied with a holistic view to multi-system problems with a comprehensive approach in the hospital and community setting. Clinical experience demonstrates the use of legal, ethical, and leadership principles, and the ability to function with minimum supervision as a preceptor. 72 hours lecture and 270 hours laboratory. CSU (Prerequisite: NURS 223)

NURS 225 Licensed Vocational Nurse
(formerly NURS 25) (LVN) to Registered Nurse
(RN) Transition Course 1.0 Unit
A transition course with emphasis on role development for the Licensed Vocational Nurse (LVN) entering the VVC Registered Nurs e (RN) program. Includes concepts of nursing process, Nursing Practice Act, critical thinking, problem solving, and skill proficiency. 16-18 hours lecture. CSU. (Prerequisites: Current California Licensure as an LVN and Physiology and Microbiology [Mandated - State of California].)

NURS 226 Critical Cardio Respiratory
(formerly NURS 26) Nursing 2.0 Units
This optional nursing course provides an introduction to critical care nursing environment. Pathophysiology, diagnosis, treatment and nursing implication for patients in the critical care area will be discussed. This course will benefit primarily students going into their third semester of nursing as well as other medical personnel with medical, surgical or cardiac care background. 32-36 hours lecture. CSU. (Prerequisites: NURS 222 and/or licensed as a Registered Nurse or Licensed Vocational Nurse. Grade Option.)

NURS 245 Nursing Leadership
(formerly NURS 45) and Management 3.0 Units
Leadership and management techniques used in various health care settings, with emphasis on problem solving within the changing role of nursing as it relates to patient care and professional relationships. 32-36 hours lecture and 48-54 hours laboratory. (Prerequisite: NURS 223 or equivalent with a "C" or better, or permission of the Nursing Program Director). Contact Nursing Dept. Offered intermittently.

NURS 246 Patient Assessment 2.0 Units
(formerly NURS 46)
An overview of patient assessment skills, including physical, psychological and sexual aspects. 32-36 hours lecture. (No prerequisite). Contact Nursing Dept. Offered intermittently.

OCEANOGRAPHY

OCEA 101 Oceanography 3.0 Units
(formerly OCEAN 10)
An introduction to the marine environment. Methods and techniques of exploration, physics, and chemistry of the oceans; adaptation of organisms; significance of the marine environment to man. A general survey of the major aspects of oceanography; history, topography and geography, geology, chemistry, physics, meteorology, biology, and resource management. 48-54 hours lecture. Offered Fall and Spring. CSU, UC. (No prerequisite)

PHILOSOPHY

PHIL 101 Introduction To Philosophy
(formerly PHILOS 6) (CAN PHIL 2) 3.0 Units
Introduction to the field of philosophy through a discussion of enduring questions about the nature of existence, knowledge, and value. 48-54 hours lecture. CSU, UC. Offered Fall, Winter, Summer, Spring (No prerequisite. Recommend ENGL 50 or eligibility for ENGL 101.0)

PHIL 108 Contemporary Moral Issues
(formerly PHILOS 8) (CAN PHIL 4) 3.0 Units
Introduction to moral philosophy. Study of ethical theories and their application to contemporary moral issues in the areas of bio-medical practice, law and violence, sexuality, social and economic justice, the environment, and business conduct. 48-54 hours lecture. CSU, UC. Offered Fall, Spring. (No prerequisite. Eligibility for ENGL 101 recommended)

PHIL 109 Introduction to Logic
(formerly PHILOS 9) (CAN PHIL 6) 3.0 Units
Introduction to the study and practice of reasoning: argument analysis and evaluation, induction, deduction, fallacies, categorical logic, propositional logic. Assignments require use of the computer. 48-54 hours lecture. CSU, UC. Offered Fall, Winter, Spring, Summer. (No prerequisite.)

PHIL 117 Philosophy of Religion 3.0 Units
Introduction to philosophic issues raised by religious belief and practice; the existence and nature of God, the nature and possibility of religious knowledge, the meaning of religious language, and concepts of immortality and human destiny. Special attention is given to conflicts between religion and science, competing claims for religious truth, the feminist critique of traditional religion, and the relevance of religion for social ethics. 48-54 hours lecture. CSU, UC. Offered Fall, Spring. (No prerequisite. Eligibility for ENGL 101.0 recommended.) See cross listing for RLST 117.

PHIL 120 Ancient and Medieval Philosophy 3.0 Units
(formerly PHILOS 20A)
Introduction to the major movements and figures of Western Philosophy in the ancient and medieval periods: the Pre-Socratics, Socrates, The Sophists, Plato, Aristotle, Augustine, Anselm, and Aquinas. 48-54 hours lecture. CSU,UC. Offered Fall. (No prerequisite. Eligibility for ENGL 101.0 recommended.)

PHIL 121 Introduction to Modern and
(formerly PHILOS 20B) Contemporary Philosophy 3.0 Units
Survey of the main issues and thinkers in European thought since the Renaissance: Continental Rationalism, British Empiricism, Kant, Hegel, Marx, Utilitarianism, Nietzsche, Pragmatism, Analytic Philosophy, and Existentialism. Introduction to post-colonial African and Latin American philosophy and to recent feminist thought. 48-54 hours lecture. CSU, UC. Offered Spring. (No prerequisite: Eligibility for ENGL 101 recommended.)

PHIL 128 Special Topics
(formerly PHILOS 28)
See Special Topics listing (Variable units). CSU, UC.

PHIL 129 Independent Study
(formerly PHILOS 29)
See Independent Study listing (1-3 units).

PHIL 207 Introduction to Critical Thinking
(formerly PHILOS 7) 3.0 Units
Study and practice in critical thinking and advanced English composition: analysis, evaluation, and formulation of arguments; critical study of texts; and composition of critical essays. Application of critical thinking and writing skills to topics in the areas of values and religion. See cross listing for RLST 207. 48-54 hours lecture. CSU,UC. Offered Fall, Spring. (Prerequisite: ENGL 101.0)

PHOTOGRAPHY

PHOT 50 Commercial Photographic
(formerly PHOTO 50) Applications 2.0 Units
This course will introduce the application of photographic imaging to the commercial marketplace. It will stress the use of photography as it applies to the graphic design field as well as portraiture, product and editorial applications. Business principles of this field will also be covered. 16-18 hours lecture and 24-27 hours laboratory. (No prerequisite) This course may be taken three times.

PHOT 51 Environmental Photography
(formerly PHOTO 51) 3.0 Units
This course will cover basic camera exposure and composition for a variety of outdoor settings. Topics include: landscape photography, animal photography, flower photography, sports photography, macro photography and outdoor portraits. The uses and understanding of filters, flash and film. Some field trips will be required. 32-36 hours lecture and 48-54 hours laboratory. (No prerequisite) This course may be taken four times.

PHOT 52 Introduction to Photoshop
(formerly PHOTO 52) 3.0 Units
This course will introduce the basics of Adobe PhotoShop and its application to digital photography utilizing the Macintosh and PC platforms. 32-36 hours lecture and 48-54 hours laboratory. (No prerequisite) This course may be taken three times.

PHOT 53 Basic Photographic Lighting
(formerly PHOTO 53) Techniques 3.0 Units
This course will introduce the student to the fundamentals of lighting and its application to imaging processes. A broad range of topics will be covered that include portraiture, product and commercial applications. 32-36 hours lecture and 48-54 hours laboratory. (No prerequisite) This course may be taken two times.

PHOT 54 Portfolio Design 2.0 Units
This course will present visual problems for the student to solve for the purpose of creating a traditional and digital portfolio. 24-27 hours lecture and 24-27 hours laboratory. (No prerequisite. PHOT 100 and PHOT 101 recommended.) This course may be taken four times.

PHOT 100 Beginning Photography 3.0 Units
This is a course that introduces the basics of black and white photography. Technical and conceptual topics will be covered. Students will furnish their own cameras with manual controls. 32-36 hours lecture and 48-54 hours laboratory. CSU,UC. Offered Fall, Spring. (No prerequisite. Grade Option.) This course may be taken four times.

PHOT 101 Intermediate Photography
(formerly PHOTO lB) 3.0 Units
This course will concentrate upon the use of 35mm format cameras. The use of exposure meters, lighting techniques, and black and white filters, RC and fiber base papers will be incorporated with individual projects. 32-36 hours lecture and 48-54 hours laboratory. CSU, UC. Offered alternate semesters. (No prerequisite)

PHOT 103 Alternative Imaging Process
(formerly PHOTO 3) 3.0 Units
This course emphasizes special effects that may be gained by manipulation of black and white photo-sensitive materials and hand coloring. 32-36 hours lecture and 48-54 hours laboratory. CSU. Offered alternate years. (No prerequisite)

PHOT 105 Portraiture 3.0 Units
(formerly PHOTO 5)
Designed for the digital photographer who wishes to specialize in the field of portraiture. The course will cover studio and outdoor portrait techniques as well as elements of fashion photography. 32-36 hours lecture and 48-54 hours laboratory. CSU. (No prerequisite) This course may be taken two times.

PHOT 106 Introduction to Photojournalism
(formerly PHOTO 6) 2.0 Units
This lab class is an introduction to the basics of photojournalism including basic photography skills, digital imaging, processing, composition, and production of written news stories. See cross-listing for JOUR 106. 96-108 hours laboratory. CSU. (No prerequisite.) This course may be taken two times.

PHOT 129 Independent Study
(formerly PHOTO 29)
See Independent Study listing (1-3 units). Offered Fall, Spring.

PHOT 138 Cooperative Education
(formerly PHOTO 38)
See Cooperative Education listing (1-8 units). CSU

PHYSICAL EDUCATION

GENERAL PHYSICAL EDUCATION COURSES

PE 76 Athletic Training III 2.0-6.0 Units
In this course, students will provide the pre-participation, on-site first aid and event maintenance for fall/winter/spring sports programs at VVC (baseball, basketball, football, golf, soccer, softball, tennis, volleyball and wrestling.) Experience will include but is not limited to, prophylactic taping and padding, immediate first aid, monitoring vital signs, completion of accident forms, proper use of universal biohazard precautions, supervision of safe playing conditions and coaching techniques, recognition of medical emergencies, assisting other medical personnel as needed, game preparation and pre-participation medical screenings. See cross listing for ALDH 76. 108-324 hours laboratory. (Prerequisite: PE 141 or ALDH 141, Athletic Training I, or equivalent.) This course may be taken four times.

PE 77 Athletic Training IV 2.0-6.0 Units
In this course, students will provide the care to athletes involved in fall/winter/spring sports programs at VVC (baseball, basketball, football, golf, soccer, softball, tennis, volleyball and wrestling.) Experience will include but is not limited to development and implementation of rehabioitation protocols. Use of modalities including, whirlpool, ultrasound, ice, Emergency Medical Services, hydrocolator, Range of Motion exercises, joint mobilization, strengthening exercises (isokinetic, isotonic, isometric), cardiovascular conditioning and proprioceptive exercises. See cross listing for ALDH77. 108-324 hours laboratory. (Prerequisite: PE 141 or ALDH 141, Athletic Training I, or equivalent.) This course may be taken four times.

PE 101 Introduction to Exercise Science and Kinesiology 3.0 Units
An introduction and orientation to the discipline of Kinesiology. It includes an analysis of the importance of physical activity in daily life, the relationship between physical activity and the discipline of Kinesiology. The course surveys the general knowledge base of the discipline as reflected in the major sub-disciplines and reviews selected ideas in each, showing how they contribute to our understanding of the nature and importance of physical activity. In addition this course explores career opportunities and the developmental history of the discipline using critical analysis and comparative analysis of literature, philosophy, and scientific research. 48-54 hours lecture. CSU,UC. (No prerequisite. Grade Option.)

PE 103 History and Appreciation of Dance 3.0 Units
The origin, growth, and development of dance (in all forms) will be researched. A study of dances originating in many areas of the world will be covered. The class will research who, when, where, and how each dance originated. The class will trace dance from its origin to modern times. 48-54 hours lecture. CSU,UC. (No prerequisite. Grade Option.)

PE 104 Psychology of Physical
(formerly PE 42) Performance 3.0 Units
An introduction to the discipline of sports psychology for students with no previous background in the field. Topics include: orientation to sports psychology, individual differences and sport behavior, social environmental and sports behavior, and intervention techniques and sport behavior. 48-54 hours lecture. CSU (No prerequisite)

PE 105 Developmental Movement for
(formerly PE 47) Children Ages 0-11 3.0 Units
This course provides a comprehensive overview of theories and methods relating to the development of a physical education program for children ages 0-11 years including children with special needs and abilities. Emphasis is on the application of principles of physical growth and development to the teaching and acquisition of specific physical skills. The course curriculum is consistent with the California State Department of Education Physical Education Framework. 48-54 hours lecture. CSU (No prerequisite)

PE 128 Special Topics
(formerly PE 28)
See Special Topics listing (Variable units). CSU UC.

PE 140 Care and Prevention of Injuries
(formerly PE 53) Related to Physical Activity
3.0 Units
An introduction to the principles and processes of athletic training. Study of the components of training: preventive techniques, injury recognition and classification, management processes, emergency techniques, rehabilitation processes, body part labeling and functions, and drug/tobacco usage by athletes. Focus is on the broad basis of caring for the athlete's injuries by utilizing methods, objectives, and information from physical education and biological sciences. 48-54 hours lecture. Offered Fall, Spring. CSU, UC. (No prerequisite)

PE 141 Athletic Training I 3.0 Units
(formerly PE 30)
Introduction to principles of athletic training, including prevention, evaluation, treatment and rehabilitation of common athletic injuries. 40-45 hours lecture and 24-27 hours laboratory. CSU. UC. See cross listing for ALDH/41. Offered Fall, Spring. (No prerequisite. Interest and/or experience in athletics and sports recommended.)

PE 142 Athletic Training II 3.0 Units
(formerly PE 31)
This course will build on the students basic knowledge of human anatomy and athletic injuries. Topics will include emergency procedures, current health concerns of the athlete, protective devices, advanced taping techniques and injury management. See cross listing for ALDH 142. 48-54 hours lecture and 16-18 hours laboratory. CSU. UC. (Prerequisite: PE 141 or ALDH 141 Athletic Training I, or equivalent.)

PE 150 Lifetime Fitness Concepts
(formerly PE 43) 1.0-2.0 Units
Designed to help the students understand the role of physical fitness in daily living. Covers the "how" and "why" of physical activity. Acquaints the student with the structure of the human body and its functions in relation to physical activity. Students will learn to evaluate their own fitness needs and design a program for present and future needs.16-18 hours lecture for one unit or 24-27 hours lecture and 24-27 hours laboratory. CSU. Offered Fall, Spring, Summer. (No prerequisite. Credit/Grade option)

PE 160 Physical Fitness 1.0 Unit
(formerly PE 6A)
An exercise course designed to emphasize fitness by offering the student a variety of exercises and aerobic work which can be used to maintain fitness throughout life. Repetition provides the opportunity for increased skill development. 48-54 hours laboratory. CSU, UC (UC credit limitation). Offered Fall, Spring, Summer. (No prerequisite. Credit/Grade option) This course may be taken four times.

PE 162 Weight Training 1.0 Unit
(formerly PE 6C)
Techniques of weight training. The principles of strength development, proper nutrition, the physiology of muscle tissue, and safety. Exercises emphasizing strength, endurance, and flexibility. Repetition of the course provides the opportunity for increased skill development. 48-54 hours laboratory. CSU, UC (UC credit limitation). Offered Fall, Spring, Summer. (No prerequisite. Credit/Grade option) This course may be taken four times.

PE 163 Weight Lifting II 1.0 Unit
(formerly PE 6D)
A weight lifting course for those students who have been consistently participating in a weight lifting program for 6-12 months for approximately three hours a week. This course is designed to emphasize continued individual growth in the areas of body building, body sculpturing and strength at an intermediate or above level. Repetition of the course provides the opportunity for increased skill development. 48-54 hours laboratory. CSU, UC (UC credit limitation). Offered Fall, Spring. Credit/Grade option. This course may be taken four times.

PE 164 Aerobic Weight Training 1.0 Unit
(formerly PE 6E)
Aerobic Weight Training combines strength and cardiovascular fitness training into a comprehensive weight training program that has as its major objective the development of all-around fitness. It offers measurable benefits to muscular strength, muscular endurance, body composition, flexibility, and cardiovascular/ aerobic fitness. Repetition of the course provides the opportunity for increased skill development. 48-54 hours laboratory. CSU, UC (UC credit limitation). Offered Fall, Spring, Summer. (No prerequisite. Credit/Grade option) This course may be taken four times.

PE 165 (formerly PE 10A) Basketball 1.0 Unit
An introduction to the basic skills, rules, and strategies of basketball, including passing, catching, shooting, and dribbling. Repetition of the course provides the opportunity for increased skill development. 48-54 hours laboratory. CSU, UC (UC credit limitation). Offered Fall, Spring, Summer. (No prerequisite. Credit/ Grade option) This course may be taken four times.

PE 166 Volleyball 1.0 Unit
This course is designed to cover the basic rules , techniques and skills, game strategies, and highlights officiating points of volleyball. 48-54 hours laboratory. CSU,UC (UC credit limitation). (No prerequisite. Grade Option.) This course may be taken four times.

PE 168 Self Defense 1.0 Unit
(formerly PE 13)
An in-depth look into the skills of self defense. Defensive strategies to protect oneself from attack. Also, necessary steps to avoid attack. Designed for all ages. 48-54 hours laboratory. CSU, UC (UC credit limitation). Offered Fall, Spring, Summer. (No prerequisite. Credit/Grade option) This course may be taken four times.

PE 180 (formerly PE 2) Tennis 1.0 Unit
Presentation of the official doubles games. Includes forehand and backhand strokes, the serve, basic strategy, footwork, and etiquette. Repetition provides the opportunity for increased skill development. 48-54 hours laboratory. CSU, UC (UC credit limitation). Offered Fall, Spring, Summer. (No prerequisite. Credit/ Grade option) This course may be taken four times.

PE 181 (formerly PE 7) Golf 1.0 Unit
An introduction to the basic skills, rules, and strategies of golf. Repetition of the course provides the opportunity for increased skill development. 48-54 hours laboratory. CSU, UC (UC credit limitation). Offered Fall, Spring, Summer. (No prerequisite. Credit/Grade option) This course may be taken four times.

PE 182 Softball 1.0 Unit
(formerly PE 10C)
Softball techniques and strategies. 48-54 hours laboratory. CSU, UC (UC credit limitation). Offered Fall, Spring, Summer. (No prerequisite. Credit/Grade option) This course may be taken four times.

PE 184 Baseball 1.0 Unit
(formerly PE 10G)
Baseball techniques and strategies. 48-54 hours laboratory. CSU, UC (UC credit limitation). Offered Fall, Spring, Summer. (No prerequisite. Credit/Grade option) This course may be taken four times.

PE 185 Football Techniques and
(formerly PE 10H) Conditioning 2.0 Units
Course will include drills and exercises to develop the skills, techniques, and conditioning essential for participation in intercollegiate football. 96-108 hours laboratory. CSU, UC (UC credit limitation). Offered Fall, Spring, Summer. (No prerequisite. Grade option) This course may be taken four times.

PE 190 Yoga 1.0 Unit
This course is an introduction to basic yoga practices and principles. Instruction includes classifications of yoga postures as well as guided relaxations and breathing practices. The benefits of yoga include increased flexibility, strength, balance, body awareness and stress reduction. This course is designed for students of all ages and fitness levels. 48-54 hours laboratory. CSU. (No prerequisite. Grade Option.) This course may be taken four times.

PE 266 Advanced Volleyball 1.0 Unit
(formerly PE 11B)
Designed for the advanced student who may wish to compete or coach at a competitive level. Advanced techniques in defensive and offensive skills and strategies will be covered. Rules and a variety of competition formats will be discussed and used. 48-54 hours laboratory. CSU, UC. (No prerequisite) This course may be taken four times.

DANCE COURSES

PEDA 152 Dance Choreography I 2.0 Units
(formerly PE 26A)
This course is designed to introduce students to the basic elements of dance choreography. Choreography students will work in solo and small groups by using concepts of space, time, and energy to investigate and explore the basic elements of dance. 16-18 hours lecture and 48-54 hours laboratory. CSU, UC (No prerequisite. Grade option) This course may be taken four times.

PEDA 153 Dance Choreography II 2.0 Units
(formerly PE 26B)
This course is designed to introduce students to the advanced elements of dance choreography. Choreography students will work in solo and small groups by using concepts of space, time, and energy to investigate and explore the advanced elements of dance. 16-18 hours lecture and 48-54 hours laboratory. CSU, UC (No prerequisite. Grade option) This course may be taken four times.

PEDA 160 Beginning Tap 1.0 Unit
(formerly PE 21C)
Development of basic knowledge and skill in tap dancing, commonly used in musical productions and theater. See cross listing for TA 160. 48-54 hours laboratory. CSU (No prerequisite. Credit/Grade option) This course may be taken four times.

PEDA 161 Intermediate Tap 1.0 Unit
(formerly PE 21D)
Development of intermediate knowledge of skill in tap dancing, commonly used in musical productions and theater. See cross listing for TA 161. 48-54 hours laboratory. CSU (Prerequisite: Student may be required to audition and be approved by instructor for entrance to class. Credit/Grade option) This course may be taken four times.

PEDA 162 Ballroom Dance I 1.0 Unit
(formerly PE 22A)
Techniques, styles and rhythms of basic social dances from selected historical periods. Emphasis on exploring the movement characteristics of the dances through dancing. 48-54 hours laboratory. CSU, UC (No prerequisite. Credit/Grade option) This course may be taken four times.

PEDA 166 Ballet I 1.0 Unit
(formerly PE 36A)
Technique and style of beginning ballet dance. Emphasis on exploring the movement characteristics of ballet through dancing. See cross listing or TA 166. 48-54 hours laboratory. CSU, UC (No prerequisite. Grade option) This course may be taken four times.

PEDA 167 Ballet II 1.0 Unit
(formerly PE 36B)
Technique and style of secondary level II ballet dance. Emphasis on exploring the movement characteristics of level II ballet through dancing. See cross listing or TA 167. 48-54 hours laboratory. CSU, UC (No prerequisite. Grade option) This course may be taken four times.

PEDA 169 Alignment and Correctives I
(formerly PE 21P) 1.0 Unit
This beginning level course in alignment and corrective work is based on exercises and concepts developed by Joseph Pilates. The course will include mat work and apparatus work in the universal reformer and will emphasize alignment and balance of muscle groups though strengthening, stretching, breathing, and concentration. 48-54 hours laboratory. CSU (No prerequisite) This course may be taken four times.

PEDA 170 Jazz Dance I 1.0 Unit
(formerly PE 37A)
Technique and style of beginning jazz dance. Emphasis on exploring the movement characteristics of jazz through dancing. See cross listing or TA 170. 48-54 hours laboratory. CSU, UC (No prerequisite. Grade option) This course may be taken four times.

PEDA 171 Jazz Dance II 1.0 Unit
(formerly PE 37B)
Technique and style of level II jazz dance. Emphasis on exploring the movement characteristics of secondary level of jazz through dancing. See cross listing or TA 171. 48-54 hours laboratory. CSU, UC (No prerequisite. Grade option) This course may be taken four times.

PEDA 174 Modern Dance I 1.0 Unit
(formerly PE 39A)
Technique and style of beginning modern dance. Emphasis on exploring the movement characteristics of level I modern dance through dancing. See cross listing for TA 174. 48-54 hours laboratory. CSU, UC (No prerequisite. Grade option) This course may be taken four times.

PEDA 175 Modern Dance II 1.0 Unit
(formerly PE 39B)
Technique and style of secondary level II modern dance. Emphasis on exploring the movement characteristics of secondary level II modern dance through dancing. See cross listing or TA 175. 48-54 hours laboratory. CSU, UC (No prerequisite. Grade option) This course may be taken four times.

PEDA 176 Dance Rehearsal and
(formerly PE 41A) Performance I 1.0-3.0 Units
This course is designed to introduce students to the methods used for dance rehearsal and performance. Students will learn the etiquette of dance rehearsal and performance, develop skills needed for quick pick up in dance choreography, and performance skills needed for dance production purposes. Repetition of this course provides an increase of developed skills. 48-54 hours laboratory per unit, per term. CSU (No prerequisite. Grade option) This course may be taken four times.

PEDA 177 Dance Rehearsal and
(formerly PE 41B) Performance II 1.0-3.0 Units
This course is designed to introduce students to the methods used for dance rehearsal and performance. Students will learn the etiquette of dance rehearsal and performance, develop skills needed for quick pick up in dance choreography, and performance skills needed for dance production purposes. Repetition of this course provides an increase of developed skills. 48-54 hours laboratory per, unit per term. CSU (No prerequisite. Grade option) This course may be taken four times.

PEDA 178 Ballet Folklorico Dance I 1.0 Unit
This introductory course is designed so that students are exposed to the basic elements of Ballet Folklorico dance. Different techniques from various regions in Mexico will be covered. 48-54 hours laboratory. CSU. (No prerequisite. Grade Option.) This course may be taken four times.

PEDA 266 Ballet III 1.0 Unit
(formerly PE 36C)
Technique and style of intermediate level III ballet dance. Emphasis on exploring the movement characteristics of intermediate level III ballet through dancing. See cross listing or TA 266. 48-54 hours laboratory. CSU, UC (No prerequisite. Grade option) This course may be taken four times.

PEDA 270 Jazz Dance III 1.0 Unit
(formerly PE 37C)
Technique and style of intermediate level III jazz dance. Emphasis on exploring the movement characteristics of intermediate level III jazz through dancing. See cross listing or TA 270. 48-54 hours laboratory. CSU, UC (No prerequisite. Grade option) This course may be taken four times.

PEDA 271 Jazz Dance IV 1.0 Unit
(formerly PE 37D)
Technique and style of level IV jazz dance. Emphasis on exploring the movement characteristics of advanced level IV jazz through dancing. See cross listing or TA 271. 48-54 hours laboratory. CSU, UC (No prerequisite. Grade option) This course may be taken four times.

PEDA 274 Modern Dance III 1.0 Unit
(formerly PE 39C)
Technique and style of intermediate level III modern dance. Emphasis on exploring the movement characteristics of intermediate level III modern dance through dancing. See cross listing or TA 274. 48-54 hours laboratory. CSU, UC (No prerequisite. Grade option) This course may be taken four times.

PEDA 275 Modern Dance IV 1.0 Unit
(formerly PE 39D)
Technique and style of advanced level IV modern dance. Emphasis on exploring the movement characteristics of advanced level IV modern dance through dancing. See cross listing for TA 275. 48-54 hours laboratory.CSU, UC (No prerequisite. Grade option) This course may be taken four times.

ADAPTED PHYSICAL EDUCATION COURSES

APE 160 Adapted Physical Exercise
(formerly PE 5) 1.0 Unit
Individualized fitness program designed for those with limitations. Designed to maintain or increase fitness levels. Repetition of the course provides the opportunity for increased skill development. 48-54 hours laboratory. CSU, UC. (UC credit limitation). Offered Fall, Spring, Summer. (No prerequisite. Credit/Grade option) This course may be taken four times.

APE 166 Adapted Cardiovascular Training
(formerly PE 5P) 1.0 Unit
This course is designed to meet the needs of students who require restricted or modified activities. Individualized cardiovascular exercise programs will be performed by students with instruction covering the elements of physical fitness. Emphasis will be placed on cardiovascular training principles and techniques. 48-54 hours laboratory. CSU, UC (No prerequisite. Grade Option.) This course may be taken four times.

APE 167 Adapted Weight Training
(formerly PE 5Q) 1.0 Unit
This course is designed to meet the needs of students who require restricted or modified activities. Individualized exercise programs will be performed by students with instruction covering the elements of physical fitness through weight training. Emphasis will be placed on principles and techniques. 48-54 hours laboratory. CSU, UC (No prerequisite. Grade Option.) This course may be taken four times.

APE 169 Adapted "Zipper Club"
(formerly PE 5S) Cardiac Rehab 1.0 Unit
This course is designed to meet the needs of students with disabilities/special needs who require restricted or modified activities pertaining to the heart. Individualized exercise programs for cardiac rehab students will be performed with instruction covering the elements of cardiovascular fitness. Emphasis will be placed on principles and techniques. 48-54 hours laboratory. CSU, UC (No prerequisite. Grade Option.) This course may be taken four times.

APE 183 Adapted Walking for Fun Fitness
(formerly PE 5H) 1.0 Unit
This course is designed to meet the needs of students who require restricted or modified activities. Individualized cardiovascular exercise programs will be performed by students with instruction covering the elements of physical fitness. Emphasis will be placed on cardiovascular training principles and techniques through walking. 48-54 hours laboratory. CSU, UC (No prerequisite. Grade Option.) This course may be taken four times.

APE 185 Adapted Sports and Games
(formerly PE 5L) 1.0 Unit
The adapted sports and games course is designed to develop student's gross motor skills and to facilitate their participation in life-long activities enhancing improved fitness, self-esteem, and social interaction. Activities include but are not limited to bowling, softball, and frisbee. Fitness, rules, and sportsmanship will also be discussed. 48-54 hours laboratory. CSU, UC (No prerequisite. Grade Option.) This course may be taken four times.

PHYSICAL SCIENCE

PSCI 101 Principles Of Physical Science
(formerly PHY SCI 1) 3.0 Units
A general education course dealing with basic concepts of the physical sciences including astronomy, geology, meteorology, and oceanography. 48-54 hours lecture. CSU, UC (UC credit limitation). Offered Fall, Spring. (No prerequisite)

PSCI 128 Special Topics
(formerly PHY SCI 28)
See Special Topics listing (Variable units). CSU, UC.

PSCI 138 Cooperative Education
(formerly PHY SCI 38)
See Cooperative Education listing (1-8 units). CSU

PHYSICS

PHYS 100 Introductory Physics 4.0 Units
(formerly PHYSICS 10)
An introduction to physics for students who have not had physics, or who have not had physics recently. Fundamental principles of mechanics, waves, heat, electricity and magnetism, light, atomic and nuclear physics. 48-54 hours lecture and 48-54 hours laboratory. CSU, UC (UC credit limitation). Offered Fall, Spring, Summer. (Prerequisite: MATH 50 with a grade of "C" or better.)

PHYS 128 Special Topics (formerly PHYSICS 28)
See Special Topics listing (Variable units). CSU, UC.

PHYS 129 Independent Study
(formerly PHYSICS 29)
See Independent Study listing (1-3 units). CSU

PHYS 138 Cooperative Education
(formerly PHYSICS 138)
See Cooperative Education listing (1-8 units). CSU

PHYS 201 Engineering Physics
(formerly PHYSICS 1A) (Mechanics Of Solids) (1A-B-C-HD: CAN PHYS SEQ B) 4.0 Units

Vectors, rectilinear motion, motion in a plane, particle dynamics, work and energy, conservation laws, collisions, rotational kinematics and dynamics. 48-54 hours lecture and 48-54 hours laboratory. CSU, UC (UC credit limitation). Offered Fall. (Prerequisite: High school physics, or PHYS 100, or equivalent; MATH 226. MATH 226 may be taken concurrently)

PHYS 202 Engineering Physics
(formerly PHYSICS 1B) (Mechanics Of Fluids,Heat and Sound) (1A-B-C-HD: CAN PHYS SEQ B) 4.0 Units

Equilibrium of rigid bodies, oscillations, gravitation, fluid statics and dynamics, waves in elastic media, sound, and thermodynamics. 48-54 hours lecture and 48-54 hours laboratory. CSU, UC (UC credit limitation). Offered Spring. (Prerequisite: PHYS 20l and MATH 227. MATH 227 may be taken concurrently)

PHYS 203 Engineering Physics (Electricity
(formerly PHYSICS 1C) and Magnetism) (CAN PHYS 12) and (1A-B-C-HD: CAN PHYS SEQ B) 4.0 Units

Charge and matter, the electric field, electric potential, capacitors and dielectrics, direct current and resistance, electromotive force and circuits, the magnetic field, inductance, magnetic properties of matter, electromagnetic oscillations, alternating currents, electromagnetic waves, and the Maxwell Equations. 48-54 hours lecture and 48-54 hours laboratory. CSU, UC (UC credit limitation). Offered Fall semester in even-numbered years. (Prerequisite: PHYS 202 and MATH 228. MATH 228 may be taken concurrently)

PHYS H204 Honors Engineering Physics
(formerly PHYSICS H1D) (Light and Modern Physics) (CAN PHYS 14) and (1A-B-C-HD: CAN PHYS SEQ B) 4.0 Units

The nature and propagation of light, reflection and refraction, interference, diffraction, gratings and spectra, relativity, elements of quantum physics, waves and particles. See Honors Program listing for further information on admission to the Honors Program. 48-54 hours lecture and 48-54 hours laboratory. CSU, UC (UC credit limitation). Offered Spring semester in odd numbered years. (Prerequisite: PHYS 203)

PHYS 221 General Physics
(formerly PHYSICS 2A) (CAN PHYS 2) 4.0 Units

Vectors, motion in one and two dimensions, particle dynamics, work and energy, conservation laws, collisions, rotational motion and dynamics, thermodynamics. 48-54 hours lecture and 48-54 hours laboratory. CSU, UC (UC credit limitation). Offered Fall semester in odd-numbered years. (Prerequisite: MATH 226. MATH 226 may be taken concurrently.)

PHYS 222 General Physics
(formerly PHYSICS 2B) (CAN PHYS 4) 4.0 Units

Electromagnetic theory, oscillations, waves, geometrical optics, interference and diffraction quantum physics, atomic and nuclear physics. 48-54 hours lecture and 48-54 hours laboratory. CSU, UC (UC credit limitation). Offered Spring semester in even-numbered years. (Prerequisite: General PHYS 221, MATH 227. MATH 227 may be taken concurrently.)

PHYSIOLOGY

See Biology.

POLITICAL SCIENCE

POLS 90A Model United Nations A 3.0 Units

This course introduces students to the theory and practice of international diplomacy through participation in Model United Nations simulations. The course focuses on the history, structure, and functions of the United Nations; international bargaining and diplomacy' conflict resolution; researching and writing position papers and resolutions; and public speaking. Students are not required to attend a Model United Nations Conference. 48-54 hours lecture. Offered Spring. (No prerequisite. Grade option) This course may be taken four times.

POLS 90B Model United Nations B 3.0 Units

This course introduces students to the theory and practice of international diplomacy through participation in Model United Nations simulations. The course focuses on the history, structure, and functions of the United Nations; international bargaining and diplomacy' conflict resolution; researching and writing position papers and resolutions; and public speaking. Students are not required to attend a Model United Nations Conference. 48-54 hours lecture. Offered Spring. (No prerequisite. Grade option) This course may be taken four times.

POLS 90C Model United Nations C 3.0 Units

This course introduces students to the theory and practice of international diplomacy through participation in Model United Nations simulations. The course focuses on the history, structure, and functions of the United Nations; international bargaining and diplomacy' conflict resolution; researching and writing position papers and resolutions; and public speaking. Students are not required to attend a Model United Nations Conference. 48-54 hours lecture. Offered Spring. (No prerequisite. Grade option) This course may be taken four times.

POLS 90D Model United Nations D 3.0 Units

This course introduces students to the theory and practice of international diplomacy through participation in Model United Nations simulations. The course focuses on the history, structure, and functions of the United Nations; international bargaining and diplomacy' conflict resolution; researching and writing position papers and resolutions; and public speaking. Students are not required to attend a Model United Nations Conference. 48-54 hours lecture. Offered Spring. (No prerequisite. Grade option) This course may be taken four times.

POLS 91A Individual Events 2.0 Units

Model United Nations individual events training for intercollegiate United Nations conferences and competitions. Instruction and direction for delegate training. Preparation for international current event debates, parliamentary debate and conflict resolution. Participate in conferences and competitions simulating policies and conflicts within the United Nations. 16-18 hours lecture and 32-36 hours individualized instruction. (No prerequisite. Grade Option.)

POLS 91B Individual Events 2.0 Units

Model United Nations individual events training for intercollegiate United Nations conferences and competitions. Instruction and direction for delegate training. Preparation for international current event debates, parliamentary debate and conflict resolution. Participate in conferences and competitions simulating policies and conflicts within the United Nations. 16-18 hours lecture and 32-36 hours individualized instruction. (No prerequisite. Grade Option.)

POLS 91C Individual Events 2.0 Units
Model United Nations individual events training for intercollegiate United Nations conferences and competitions. Instruction and direction for delegate training. Preparation for international current event debates, parliamentary debate and conflict resolution. Participate in conferences and competitions simulating policies and conflicts within the United Nations. 16-18 hours lecture and 32-36 hours individualized instruction. (No prerequisite. Grade Option.)

POLS 91D Individual Events 2.0 Units
Model United Nations individual events training for intercollegiate United Nations conferences and competitions. Instruction and direction for delegate training. Preparation for international current event debates, parliamentary debate and conflict resolution. Participate in conferences and competitions simulating policies and conflicts within the United Nations. 16-18 hours lecture and 32-36 hours individualized instruction. (No prerequisite. Grade Option.)

POLS 101 Introduction to Political Science
(formerly POL SCI 1A) 3.0 Units
An introduction to modern politics and the scope of political science as a discipline. Presents a comprehensive survey of the study of political science, modern political ideologies and movements, participation, institutions of government, political issues and foreign affairs of nation-states around the world. 48-54 hours lecture. CSU, UC. Offered Fall, Spring, Summer. (No prerequisite)

POLS 102 Introduction To American
(formerly POL SCI 1B) Government and Politics
(CAN GOVT 2) 3.0 Units
Analysis of the Constitution and study of its historical development. Surveys the powers, structure, and operation at the national, California state, and local levels with emphasis upon the national level. Examination of the causes, consequences, and possible solutions to important problems in contemporary America. 48-54 hours lecture. CSU, UC (UC credit limitation). Offered Fall, Winter, Spring, Summer. (No prerequisite)

POLS H102 Honors American Government
(formerly POL SCI H1B) and Politics (CAN GOVT 2)
4.0 Units
Examines the workings of our complex system of American government, including: national, California state, and local levels (with emphasis on the national level). This survey will focus on the historical and contemporary development of our Constitution, political institutions, citizen participation, politics, and policies. Critical analysis of classical and contemporary scholarly texts and political oratory will be used extensively to examine the American political experience. 64-72 hours lecture. CSU, UC (UC credit limitation). Offered Spring. (No prerequisite)

POLS 103 State and Local Government
(formerly POL SCI 3) 3.0 Units
An introduction to the study of the American political system at the state and local levels of government. Examines the workings of our complex system of federalism by focusing on contemporary state and local government institutions, citizen participation, political problems, politics, and policies. Emphasis is given to the analysis of California political issues, politics and government. 48-54 hours lecture. CSU. Offered Spring. (No prerequisite)

POLS 110 Contemporary World Affairs
(formerly POL SCI 10) 3.0 Units
An introduction to the analysis of the historical development and contemporary setting of political relations between and among nation-states, trans-national movements, and international organizations. Introduces the analytical approaches to the study of world affairs and theories of international conflict and cooperation. Explores the variety of governmental and non-governmental entities on the world stage today, their foreign policy goals and interests, and instruments and uses of power. Examines contemporary issues confronting the global community and the historical development and uses of international law and organizations. 48-54 hours lecture. CSU, UC. Offered Fall, Spring. (No prerequisite)

POLS 111 Global Issues 3.0 Units
(formerly POL SCI 11)
This course is a survey of contemporary international issues and international organizations. Topics, such as "terrorism," geopolitical relationships, and ethnic conflicts, will be examined within the context of the United Nations system and its related regional organizations. This course will assist students to prepare for Model United Nations conference competitions. Participation in the Model United Nations conference competitions is voluntary and not a requirement for this course. 48-54 hours lecture. CSU, UC. Offered Fall, Winter, Spring. (No prerequisite. Grade Option)
This course may be taken four times.

POLS 112 Comparative Government
(formerly POL SCI 2) 3.0 Units
An introduction to the comparative analysis of contemporary political systems and their environments around the world. Examines current political institutions, citizen participation, political problems, politics, and policies within these systems. Emphasis is given to selected nation-states in order to provide a broader, representative knowledge encompassing a variety of modern political systems and environments reflecting the geographic regions of the world. 48-54 hours lecture. CSU, UC. Offered Fall. (No prerequisite)

POLS 113 Politics of the Middle East
and North Africa 3.0 Units
This course will examine the Middle East and North Africa through a comparative politics perspective. This will include an examination of the following items: an overview of the region's histories, geographies, peoples, cultures, religions and languages; the fundamentals of the Islamic and Judaic belief systems; current events such as the Israeli-Palestinian conflict, the War in Iraq and other real potential geopolitical conflicts. 48-54 hours lecture. CSU, UC. (No prerequisite. Grade option) This course may be taken four times.

POLS 120 Leadership 2.0 Units
(formerly POL SCI 20)
This course is designed for any student interested in leadership within an organization. The course will assist students interested in campus leadership positions to identify effective leadership characteristics and their role in institutional maintenance and change. Focus will include (but is not limited to) developing leadership styles, needs assessment, policy, finance, public speaking, parliamentary procedure, comparative forms of collegial governmental process, communication skills, program, development and evaluative methods. 32-36 hours lecture and 15 hours laboratory. CSU. Offered Fall. (No prerequisite) This course may be taken four times.

POLS 128 Special Topics
(formerly POL SCI 28)
See Special Topics listing (Variable units). CSU, UC.

POLS 129 Independent Study
(formerly POL SCI 29)
See Independent Study listing (1-3 units).

POLS 130 (formerly POL SCI 30) **Introduction to Paralegal Studies** **3.0 Units**
This course introduces the student to the paralegal profession with an emphasis on the developing role of the paralegal in the American legal system. This survey course introduces legal terminology, techniques and concepts of legal research and writing, ethical rules for attorneys and paralegals, legal reasoning, and concepts of substantive areas of the law. Emphasis will be placed on the functions of a paralegal within a private law firm, within a government agency, as a business owner, and as a litigation assistant. 48-54 hours lecture. CSU. Offered Fall, Spring, Summer. (No prerequisite)

POLS 131 (formerly POL SCI 31) **Fundamentals of Litigation for Paralegals** **3.0 Units**
Examines the intricate working of the American court system and the role of the paralegal in litigation practice. This survey will focus on the litigation process that begins with a client interview, extends through the filing of a lawsuit, develops into discovery stage, takes final shape in the trial stage and ends in enforcement of a judgment or an appeal. Critical analysis of statutory and judicial rules for the conduct of litigation will be used extensively to provide a strong foundation for operating within the legal field. 48-54 hours lecture. CSU. Offered Fall. (No prerequisite)

POLS 133 (formerly POL SCI 33) **Legal Ethics for Paralegals** **3.0 Units**
This course examines the role of the paralegal in the rendering of legal services by attorneys to clients and the problematic matter of ethical rules that govern that relationship. The student will become familiar with the concept of the unauthorized practice of law, the criminal penalties such practice carries and the best means to avoid liability for it. Comprehensive study of the multiple categories of ethical rules will give the student a broad base from which to operate ethically and legally in the field of law. 48-54 hours lecture. CSU. Offered Spring. (No prerequisite)

POLS 134 (formerly POL SCI 34) **Family Law for Paralegals** **3.0 Units**
This course examines family law rules and procedures and the role of the paralegal in a family law practice. The student will become familiar with family law concepts including marital contracts, annulment, separation, dissolution, child custody and support, alimony, property divisions, adoption and tax consequences of family law procedures. Students will also become acquainted with current problems in family aw including the demise of marriage, homosexual marriages and adoptions and surrogate motherhood. 48-54 hours lecture. CSU. Offered Fall. (No prerequisite)

POLS 136 **Legal Writing for Paralegals** **3.0 Units**
This course provides the paralegal student with the development of good legal writing skills. Critical analysis of proper legal writing forms stressing logic, clarity and format will be used to shape the paralegal student's ability to produce such legal documents as correspondence, legal briefs, memorandum of law, pleadings, and appellate briefs. 48-54 hours lecture. CSU. (No prerequisite.)

POLS 137 **Beginning Legal Research for Paralegals** **3.0 Units**
This course provides the paralegal student with a beginning introduction to the sources and means of legal research. The course will focus on developing the student's ability to locate and use various types of legal authority including legal encyclopedias, constitutions, statutes, court opinions, administrative regulations, and appellate decisions. The student will be expected to learn and practice Shepardizing and citation checking skills. 48-54 hours lecture. CSU. (No prerequisite.)

POLS 139 **Wills and Trusts for Paralegals** **3.0 Units**
This course introduces the paralegal student to the laws of Wills, Trusts and Estates, including the creation of wills, testate succession, intestate succession, trust creation and arrangements, family protection, estate planning, probate courts, and estate taxes. 48-54 hours lecture. CSU. (No prerequisite.)

POLS 135 (formerly POL SCI 35) **Tort Law for Paralegals** **3.0 Units**
This course introduces the paralegal to the world of tort law ; takes them through the basic concepts that are the foundation of all tort cases (duty, breach of duty, negligence or willfulness, proximate cause, foreseeability and damages); presents the categories of tort litigation and finally covers the privileges and immunities that will defeat a tort lawsuit. 48-54 hours lecture. CSU. Offered Spring. (No prerequisite)

POLS 138 (formerly POL SCI 38) **Cooperative Education**
See Cooperative Education listing (1-8 units).

PSYCHOLOGY

PSYC 101 (formerly PSYCH 1A) **Introductory Psychology (CAN PSY 2)** **3.0 Units**
This course provides instruction in the nature of human behavior and a consideration of theories and principles pertaining to the topics of research design and experimentation, perception, emotions and motivation, personality, social psychology, psychopathology, human development, learning, cognition and memory. Includes essential features of the biological and neurological basis of behavior. 48-54 hours lecture. CSU, UC Offered Fall, Spring, Summer. (No prerequisite. Eligibility for ENGL 101 recommended)

PSYC H101 (formerly PSYCH H1A) **Honors Introductory Psychology (CAN PSY 2)** **4.0 Units**
This course provides instruction in the nature of human behavior and a consideration of theories and principles pertaining to the topics of research design and experimentation, perception, emotions and motivation, personality, social psychology, psychopathology, human development, learning, cognition and memory. Includes essential features of the biological and neurological basis of behavior. 64-72 hours lecture. CSU, UC Eligibility for ENGL 101 recommended.

PSYC 102 (formerly PSYCH 1B) **Introduction To Experimental Psychology** **3.0 Units**
The psychology experiment, critiques of published research, basic statistical procedures. Each student conducts and reports several experiments. 48-54 hours lecture. CSU, UC. (No prerequisite)

PSYC 103 (formerly PSYCH 3) **Personal and Social Adjustment** **3.0 Units**
Approaches to understanding of personality, the dynamics of personality, personal adjustment, mental hygiene. 48-54 hours lecture. CSU. (No Prerequisite. Grade option)

PSYC 105 (formerly PSYCH 5) **Personal and Career Success** **3.0 Units**
This intensive course is designed to assist students in obtaining the skills and knowledge necessary to identify and reach their personal goals and achieve college and career success. Topics covered include: self-awareness, goal-setting, motivation and discipline, memory development, time management, oral and written communication skills, study skills,diversity, financial planning, and an orientation to college life. See cross listing for GUID 105. 48-54 hours lecture. CSU. (No prerequisite. Grade Option.)

PSYC 108 (formerly PSYCH 8) **Identifying and Helping Survivors of Dysfunctional Families 3.0 Units**

This course explores the symptoms, theories, and dynamics of family dysfunction. Family dysfunction contributes to drug addiction, alcoholism, depression, promiscuity, unfulfilling relationships, co-dependency, family violence, stress disorders, and other psychopathologies. Theories and strategies of intervention and recovery for victims are presented emphasizing the breaking of destructive patterns and promotion of wellness. 48-54 hours lecture. CSU. Offered Fall, Spring. (No prerequisite)

PSYC 109 **Neuropsychlogical Basis of Behavior 3.0 Units**

The course relates states and behaviors such as addiction, cirdadian rhythms, emotion, learning, thought, memory, motivation, movement, reproduction, sensation and perception, sleep and abnormal behavior to the structure and function of the nervous system. The roles of medications/illicit drugs, hormones, exercise and nutrition are also examined. 48-54 hours lecture. CSU. (No prerequisite)

PSYC 110 (formerly PSYCH 10) **Developmental Psychology 3.0 Units**

This course includes the study of the theories, methods, and research findings regarding biosocial, cognitive, and psychosocial development of the individual from conception through adulthood, including death, dying, and bereavement. 48-54 hours lecture. CSU, UC (UC credit limitation). Offered Fall, Spring, Summer. (No prerequisite. Eligibility for ENGL 101 and satisfactory completion of PSYC 101 recommended.)

PSYC H110 (formerly PSYCH H10) **Developmental Psychology Honors 4.0 Units**

This course includes the study of the theories, methods, and research findings regarding biosocial, cognitive, and psychosocial development of the individual from conception through adulthood, including death, dying, and bereavement. 64-72 hours lecture. CSU, UC Offered Fall, Spring, Summer. Eligibility for ENGL 101 recommended and satisfactory completion of PSYC 101.

PSYC 111 (formerly PSYCH 11) **Introduction To Child Psychology 3.0 Units**

A study of the physical, intellectual, emotional, and social development of the child extending from the prenatal period through adolescence. 48-54 hours lecture. CSU, UC (UC credit limitation). (No prerequisite)

PSYC 121 (formerly PSYCH 21) **Human Sexuality and Intimacy 3.0 Units**

This is a survey course of human sexual and intimate behaviors throughout the life cycle. It includes the physiological, psychological, sociological, and theoretical approaches of human sexuality, the cultural legacy of human sexuality, variations of sexual behaviors and intimate relationships, sexuality throughout the life cycle, sexual disorders and related social issues. 48-54 hours lecture. CSU, UC. Offered Fall, Spring, Summer. (No prerequisite.)

PSYC 125 (formerly PSYCH 25) **Introduction To Counseling 3.0 Units**

An introduction to principles and practices of counseling concepts will be the primary focus. A systematic consideration of the basic skills and theories essential for effective counseling and problem solving. 48-54 hours lecture. CSU. (No prerequisite. PSYC 101 recommended.)

PSYC 128 **Special Topics (formerly PSYCH 28)**

See Special Topics listing (Variable units). CSU, UC.

PSYC 129 **Independent Study (formerly PSYCH 29)**

See Independent Study listing (1-3 units).

PSYC 133 (formerly PSYCH 33) **Introduction To Drug/Alcohol Studies 3.0 Units**

This course will provide a historical perspective on drug/alcohol abuse, its impact on the individual, the family, the community and society. Definitions of use, abuse, and addiction will be presented as well as the disease concept of addiction. The effectiveness and economics of various models of treatment and rehabilitation will be explored. 48-54 hours lecture. CSU, UC (UC credit limitation). (No prerequisite)

PSYC 138 (formerly PSYCH 38) **Cooperative Education**

See Cooperative Education listing (1-8 units). CSU

PSYC 204 (formerly PSYCH 4) **Social Psychology 3.0 Units**

The focus of this course is the relationship between the individual and society including such topics as social identity, conformity, obedience and deviance, attitudes and attitude change, attribution theory, persuasion, prejudice and stereotyping, aggression and prosocial behavior, interpersonal relationships, group dynamics, and conflict and conflict resolution. 48-54 hours lecture. CSU, UC. (Prerequisite: PSYC 101)

PSYC 213 (formerly PSYCH 13) **Abnormal Psychology 3.0 Units**

This course explores the history and classifications of psychological disorders, symptom criteria, clinical assessment, diagnosis, and the major theoretical treatment modalities. The Psychoanalytic, Cognitive-Behavioral, Humanistic, Biological, and Socio-Cultural theories are emphasized, How we define, assess, treat, and study psychological disorders from each theoretical perspective is the thematic focus of the course. A variety of class exercises are used to illustrate and understand the etiology, symptoms, diagnosis, and treatment of psychological disorders. 48-54 hours lecture. CSU, UC. (No prerequisite)

RELIGIOUS STUDIES

RLST 101 (formerly REL STS 1) **Introduction to Religious Studies 3.0 Units**

This course is an academic introduction to the primary forms of religion including religious experience,symbol, myth, ritual, and community. Application of historical, social scientific, and philosophical methods to phenomena drawn from a wide variety of religions. 48-54 hours lecture. CSU, UC. Offered Fall, Spring. (No prerequisite. Eligibility for ENGL 101.0 is recommended.)

RLST 105 **Religions of the Ancient Near East, the Hebrew Scriptures, and the Old Testament**
(formerly REL STS 5A) 3.0 Units

Introduction to the religious history of the ancient Near East. Historical study of the sources, contents, interpretation, and religious and historical significance of the Hebrew Scriptures and the Old Testament. 48-54 hours lecture. CSU,UC. Offered Fall, Spring. (No prerequisite. Recommend ENGL 50 or eligibility for ENGL 101.0.)

RLST 106 (formerly REL STS 5B) **Introduction to the New Testament and Early Christian Literature 3.0 Units**

Historical introduction to classical Mediterranean religion and culture. Comparative literary, historical, and sociological analysis of the New Testament and early Christian literature. 48-54 hours lecture. CSU, UC. Offered Fall, Spring. (No prerequisite. Eligibility for ENGL 101 recommended)

RLST 110 Religions of the Middle East and the West 3.0 Units
(formerly REL STS 10)
Survey of the history, beliefs, and practices of the major religious traditions of the Middle East and West; ancient Greek, Roman, Egyptian, Mesopotamian, and Persian religions; indigenous religions; Mesoamerican religions; Judaism; Christianity; Islam; new religious movements. 48-54 hours lecture. CSU,UC. Offered Fall, Spring. (No prerequisite. Recommend ENGL 50 or eligibility for ENGL 101.0.)

RLST 111 Religions of South and East Asia 3.0 Units
Survey of the history, beliefs, and practices of the major religions of East and South Asia: Hinduism, Buddhism, Jainism, Sikhism, Confucianism, Taoism, and Shinto. Discussion of modern challenges to traditional religion and the emergence of new religious movements inspired by Asian traditions. 48-54 hours lecture. CSU,UC. Offered Fall, Spring. (No prerequisite. Recommend ENGL 50 or eligibility for ENGL 101.0.)

RLST 113 Religion and Society 3.0 Units
This course examines the interaction between social forces and religious belief and practice. Contemporary American society and religious life are emphasized. Special topics include social aspects of evangelical religion, the interaction of religion and politics, religion and gender, and the impact of globalization. 48-54 hours lecture. CSU. Offered Fall, Spring. (No prerequisite. Eligibility for ENGL 101 recommended)

RLST 115 Religion In America 3.0 Units
(formerly REL STS 15)
Historical study of religion in America, including both its diversity and unifying factors. Major topics include Native American religion, Judaism, Roman Catholicism, Protestantism Christianity, African-American religion, American sects, metaphysical and occult religions, Asian religions, and religious dimension of public life, politics, and popular culture. 48-54 hours lecture. CSU, UC. Offered Fall, Spring. (No prerequisite. Eligibility for ENGL 101 recommended)

RLST 117 Philosophy of Religion 3.0 Units
Introduction to philosophic issues raised by religious belief and practice; the existence and nature of God, the nature and possibility of religious knowledge, the meaning of religious language, and concepts of immortality and human destiny. Special attention is given to conflicts between religion and science competing claims for religious truth, the feminist critique of traditional religion, and the relevance of religion for social ethics. 48-54 hours lecture. CSU, UC. Offered Fall, Spring. (No prerequisite. Eligibility for ENGL 101 recommended) See cross listing for PHIL 117.

RLST 207 Introduction to Critical Thinking 3.0 Units
Study and practice in critical thinking and advanced English composition: analysis, evaluation, and formulation of arguments; critical study of texts; and composition of critical essays. Application of critical thinking and writing skills to topics in the areas of values and religion. See cross listing for PHIL 207. 48-54 hours lecture. CSU,UC. Offered Fall, Spring. (Prerequisite: ENGL 101.0)

RLST 128 Special Topics
(formerly REL STS 28)
See Special Topics listing (Variable units). CSU, UC.

RLST 129 Independent Study
(formerly REL STS 29)
See Independent Study listing (1-3 units). CSU

RESPIRATORY THERAPY

RSPT 50 Polysomnography I 4.0 Units
Topics include sleep terminology, sleep structure and disorders, complete patient set-up and data acquisition. Students will also learn the basics of noninvasive treatments for certain sleep disorders. 48-54 hours lecture and 48-54 hours laboratory. (No prerequisite) This course may be taken four times.

RSPT 138 Cooperative Education
(formerly RSP THY 38)
See Cooperative Education listing (1-8 units). CSU

RSPT 149 Independent Study
(formerly RSP THY 49)
See Independent Study listing (1-3 units).

RSPT 230 Introduction to Respiratory
(formerly RSP THY 30) Therapy 3.0 Units
Introduces the student to respiratory therapy as a health science profession, including history, professional requirements, responsibilities, professional organizations, and credentialing of the respiratory care practitioner. Provides basic anatomy and physiology, physics and math, and basic cardio-pulmonary pathology in order to give the student a foundation of theory and application. 48-54 hours lecture. CSU. Offered Summer. (Prerequisite: MATH 50, CHEM 100, BIOL 100 or 107 and formal admission to the Respiratory Therapy Program)

RSPT 231 Orientation to the Basic
(formerly RSP THY 31) Fundamentals of Respiratory Therapy 10.0 Units
This course continues with a more advanced discussion of medical terminology, anatomy, physiology and cardiopulmonary pathology as it relates to the clinical applications of medial gas therapy, humidity and aerosol therapy, therapeutic and diagnostic modalities, and infection control. Students will be provided with an extensive orientation to the hospital environment and the administration of basic respiratory therapy to patients. 64-72 hours lecture and 324 hours laboratory. CSU. Offered Fall. (Prerequisite: RSPT 230 with a grade of "C" or better.)

RSPT 232 Patient Assessment
(formerly RSP THY 32) and Clinical Application of Respiratory Therapy 10.0 Units
This course is a more in-depth study of the theory and application of respiratory therapy. Its content includes airway management, pulmonary assessment, advanced cardiopulmonary physiology and the pharmacology associated with pulmonary patients. The student will spend 16 hours a week in the hospital administrating respiratory modalities to patients. 64-72 hours lecture and 288-324 hours clinical. CSU. Offered Spring. (Prerequisite: RSPT 231 with a grade of "C" or better)

RSPT 233 Intensive Respiratory Care
(formerly RSP THY 33) and Advanced Pulmonary Physiology 13.0 Units
A more advanced study of the theory and application of respiratory care. The content will include: mechanical life support, respiratory physiology, equipment utilized in the critical care unit, microbiology, arterial puncture and analysis, endo-tracheal intubation, and principles of advanced cardiac life support. 64-72 hours lecture and 54 hours laboratory plus 432 hours clinical. CSU. Offered Fall. (Prerequisite: RSPT 239, BIOL 211, BIOL 231, with a grade of "C" or better.)

RSPT 234 (formerly RSP THY 34) **Neonatal and Pediatric Respiratory Care and Related Pathophysiology 13.0 Units**

This course is a more advanced study of the theory and application of neonatal/pediatric respiratory care. The content will include: mechanical life support, respiratory pathophysiology, equipment utilized in the NICU/PICU, microbiology, umbilical line, capillary blood samples and analysis, endotracheal intubation, and principles of PALS and NRP. 64-72 hours lecture. 48-54 hours laboratory and 384-432 hours clinical CSU. Offered Spring. (Prerequisite: RSPT 233 and BIOL 221 with a grade of "C" or better)

RSPT 239 (formerly RSP THY 39) **Introduction To Continuous Mechanical Ventilatory Support 2.0 Unit**

This course introduces the principles of mechanical ventilation, allows hands-on experience with current ventilators, and reinforces therapeutic care. 16-18 hours lecture and 48-54 hours laboratory. Offered Summer. (Prerequisite: Completion of RSPT 232 with a "C" or better)

RSPT 241 (formerly RSP THY 41) **Basic Principles of Respiratory Therapy 5.0 Units**

A self-paced equivalent of RSPT 231 for students meeting the advanced placement criteria. Successful completion requires demonstration of mastery of the classroom, laboratory, and clinical objectives equivalent to RSPT 231. 160 hours laboratory. CSU. Offered Fall. (Prerequisite: Graduation from a one-year, CoARC accredited program; active CRT/RCP credential; and 1000+ hours of recent clinical experience.)

RSPT 242 (formerly RSP THY 42) **Patient Assessment and Clinical Application of Respiratory Care 5.0 Units**

A self-paced equivalent of RSPT 232 for students meeting the advanced standing criteria. Successful completion requires demonstration of mastery for the classroom, laboratory and clinical objectives equivalent to RSPT 232. 160 hours laboratory. CSU. Offered Spring. (Prerequisite: Graduation from a one-year, CoARC accredited program; active CRT/RCP credential; and 1000+ hours of recent clinical experience.)

RSPT 243 (formerly RSP THY 43) **Clinical Simulation 1.0 Unit**

This course will prepare individuals for the NBRC's WRRT and Clin Sim examinations. Those already certified (CRT) and designated registry eligible by NBRC will be able to review, evaluate, and improve their clinical assessment and decision-making skills and test taking skills. 16-18 hours lecture. Offered Spring. (Prerequisite: Satisfactory completion of RSPT 233 with a grade of "C" or better OR RCP/CRT credentials with "registry eligibility" as designated by the NBRC/RCB.)

RESTAURANT MANAGEMENT

RMGT 1 (formerly RES MGT 101) **Foodservice Training: Server 4.5 Units**

This course will provide the student the opportunity to meet the primary role of the server in a foodservice establishment †to meet the customer's dining needs while maintaining the systems of the restaurant to ensure continued high quality service to all customers and maximum profitability for the operation. These responsibilities are carried out through five functions which are implemented through a number of tasks. This course will not apply to the Associate Degree. 24-27 hours lecture and 156 hours laboratory. (No prerequisite. Credit/No Credit) This course may be taken three times.

RMGT 2 (formerly RES MGT 102) **Foodservice Training: Prep/ Line Cook 4.5 Units**

This course will provide the student with the basic and essential training as a prep/line cook. This training includes understanding culinary terminology, proper use of kitchen equipment and hand tools, as well as practical experience. This course will not apply to the Associate Degree. 24-27 hours lecture and 156 hours laboratory. (No prerequisite. Credit/No Credit) This course may be taken three times.

RMGT 3 (formerly RES MGT 103) **Foodservice Training: Host/ess 4.5 Units**

This course will provide the student the opportunity to develop the skills for a host/ess position. This includes the primary role to welcome the customer and begin the service experience in a positive way, while maintaining the systems of the restaurant to ensure continued high quality service to all customers and maximum profitability for the operation. This course will not apply to the Associate Degree. 24-27 hours lecture and 156 hours laboratory. (No prerequisite. Credit/No Credit) This course may be taken three times.

RMGT 4 (formerly RES MGT 104) **Foodservice Training: Busser 4.5 Units**

This course will provide the student with the basic and essential training as a busser to ensure a clean and comfortable dining environment while maintaining the systems of the restaurant to ensure high quality service to all customers and maximum profitability for the operation. This course will not apply to the Associate Degree. 24-27 hours lecture and 156 hours laboratory. (No prerequisite. Credit/No Credit) This course may be taken three times.

RMGT 5 (formerly RES MGT 105) **Foodservice Training: Cashier 4.5 Units**

This course will provide the student with the basic and essential training as a cashier in a foodservice establishment to meet the customer's dining needs, while maintaining the systems of the restaurant to ensure continued high quality service to all customers and maximum profitability for the operation. This course will not apply to the Associate Degree. 24-27 hours lecture and 156 hours laboratory. (No prerequisite. Credit/No Credit) This course may be taken three times.

RMGT 6 (formerly RES MGT 106) **Foodservice Training: Dishwasher 4.5 Units**

This course will provide the student with the basic and essential training as a dishwasher to secure clean and sanitary equipment used in the foodservice establishment while maintaining the systems of the restaurant to ensure high quality service and maximum profitability for the operation This course will not apply to the Associate Degree. 24-27 hours lecture and 156 hours laboratory. (No prerequisite. Credit/No Credit) This course may be taken three times.

RMGT 7 (formerly RES MGT 107) **Bakery and Pastry Training 4.5 Units**

This course will provide the student the opportunity to achieve maximum results in the development of baking skill and knowledge. The student will learn to produce breads of many types as well as a wide variety of desserts and pastries. This course will not apply to the Associate Degree. 24-27 hours lecture and 156 hours laboratory. (No prerequisite. Credit/No Credit) This course may be taken four times.

RMGT 8 (formerly RES MGT 108) **Catering Training 4.5 Units**

This course will provide the student the opportunity to understand the concepts involved in catering for banquets. This will include the objective of meeting the client's needs while maintaining the systems of the establishment to ensure continued high quality service and maximum profitability for the operation. This course will not apply to the Associate Degree. 24-27 hours lecture and 156 hours laboratory. (No prerequisite. Credit/No Credit) This course may be taken four times.

RMGT 9 Concepts in Sanitation 0.5 Units
The basic principles of sanitation and safety are explored for food service employees relative to the safe operation of equipment, as well as the preparation and service of food within any public and private food operation. This course is designed to meet current professional organization certification requirements and prepares the student for the National Food Certification examination (ServSafe). This course will not apply to the Associate Degree. 24-27 hours lecture. (No prerequisite. Credit/No Credit) This course may be taken four times.

RMGT 75 Understanding Fish and Shellfish 2.0 Units
This course will examine the professional techniques of identifying, purchasing, handling, storing and the marketing of fish and shellfish. It also includes identifying, cutting, filleting, and preparing various fish and seafood. 32-36 hours lecture. Offered Summer. (No prerequisite.) This course may be taken four times.

RMGT 76 Understanding Meats and Poultry 2.0 Units
This course will examine the professional techniques of identifying, purchasing, handling, and storing of various meats and poultry. It also includes identifying, cutting, filleting, and preparing various meats and poultry. 32-36 hours lecture. Offered Summer. (No prerequisite.) This course may be taken four times.

RMGT 80 Off-Premise Catering 2.0 Units
(formerly RES MGT 80)
This is a comprehensive course covering the fundamentals of catering, sales and marketing as they pertain to catering, and production of operations. Subjects covered include corporate catering, styles of service, finance, completion of necessary forms and paper work related to catering. 32-36 hours lecture and 12 hours laboratory. Offered Summer. (No prerequisite)

RMGT 81 Prep/Line Cook
(formerly RES MGT 81) 3.0 Units
This course will provide the student with basic and essential training as a prep/line cook. This training includes understanding culinary terminology, proper use of kitchen equipment and hand tools and practical training experience. 32-36 hours lecture and 48-54 hours laboratory. (No prerequisite.) Practical training experience is gained through activities performed in the lab.

RMGT 82 Customer Service 3.0 Units
This course will provide the student with the basic and essential training as a server. This training includes understanding customer service, interpersonal communication, identifying customer expectations, as well as payment procedures. Practical training experience is gained through activities performed in the lab. 32-36 hours lecture and 48-54 hours laboratory. (No prerequisite.)

RMGT 83 Kitchen/Dining Room Training 6.0 Units
This course will instruct the student in the different situations in a kitchen and dining room in the foodservice industry. Actual hands-on experience is gained as students learn by working in a foodservice operation. Advanced students will be required to be team leaders for beginning students in the lab. 32-36 hours lecture and 192-216 hours laboratory. (Prerequisites: RMGT 81, RMGT 82, RMGT 86, RMGT 87.)

RMGT 84 Kitchen/Dining Room Management 6.0 Units
This course will instruct the student to manage kitchen and dining room functions in a foodservice operation. While planning, organizing, coordinating, directing and controlling a foodservice operation, students will supervise teams as part of the training. 32-36 hours lecture and 192-216 hours laboratory. (Prerequisite: RMGT 83.)

RMGT 85 Advanced Restaurant Management 6.0 Units
This course will instruct the student to integrate concepts of management skills learned in previous courses. It introduces a more extensive range of techniques, ingredients, and recipes that all successful managers must understand relating to culinary change and innovation. 32-36 hours lecture and 192-216 hours laboratory. (Prerequisite: RMGT 84.)

RMGT 86 Food Service Sanitation 3.0 Units
This course provides the student with the safety and sanitation principles of foodservice. Areas explored include potential risks of food, employee and customer safety, the flow of food, sanitary facilities and pest management, as well as sanitation management. Students will then have the knowledge to assess risks, establish policies and train employees to assure a safe and sanitary foodservice operation. 48-54 hours lecture. (No prerequisite.) This course may be taken four times.

RMGT 87 Principles of Professional Cooking 3.0 Units
This course provides an understanding of cooking theory and develops a set of manual skills with the ability to apply these skills to a wide range of cooking styles and products. 48-54 hours lecture. (No prerequisite.)

RMGT 88 Management By Menu 3.0 Units
This course will provide the student with a comprehensive look at the menu and its uses in a foodservice operation. All aspects of menu planning from customer demographics to kitchen capabilities, to cost cards and menu analysis are discussed. 48-54 hours lecture. (No prerequisite.)

RMGT 89 Purchasing for Foodservice Managers 3.0 Units
This course will introduce the student to the purchasing function in the foodservice industry. Course content will include purchasing principles and procedures including ordering, contract administration and product specifications from a managerial prospective. 48-54 hours lecture. (No prerequisite.)

RMGT 90 Restaurant Marketing 3.0 Units
This course examines the concepts, principles and practices involved with marketing a foodservice operation. Students will gain an understanding of how to merchandise and market an establishment to meet the main objective of an operation. 48-54 hours lecture. (No prerequisite.)

RMGT 91 Controlling Foodservice Costs 3.0 Units
This course will provide the student with the basic cost control standards utilized by foodservice operations to maintain profitability and success. Students will gain an understanding of food costs as well as labor costs and ways to ensure prosperity and increased sales for a foodservice operation. 48-54 hours lecture. (No prerequisite.)

RMGT 92 Legal Aspects of Food Service
(formerly RES MGT 92) Management 3.0 Units
This course will provide the student a broad overview of the legal components of food service management. Basic components of hospitality law, regulations and civil rights, food service liability, safety, security, contracts and business law are discussed. 48-54 hours lecture. (No prerequisite.)

RMGT 93 Human Resources Management in theFoodservice Industry 3.0 Units
This course will provide the student the opportunity to explore human resources management and supervision in a foodservice operation. All facets of supervision as it applies to a foodservice operation will be discussed including recruiting, selection, training and development, staffing, benefit programs as well as legal guidelines for all employees. 48-54 hours lecture. (No prerequisite.)

RMGT 94 Hospitality and Restaurant Management 3.0 Units
This course provides the student with a comprehensive focus on what hospitality managers actually do and the most important challenges facing industry leaders today. The topics include leadership and management, planning, organizing, communication and decision making, motivation and control. 48-54 hours lecture. (No prerequisite.)

RMGT 120 Introduction to Nutrition
(formerly RES MGT 20) 3.0 Units
This course focuses on the fundamentals of carbohydrates, proteins, fats, vitamins, minerals, and their roles in human metabolism. It is specifically designed for individuals directing nutrition programs, hospitals, and care centers or those acquiring degrees in allied health, child development, or restaurant management, as well as interested homemakers. Selected nutrition topics include personalized and vegetarian nutrition, menu planning, marketing options and chemistry of nutrition. 48-54 hours lecture. CSU. (No prerequisite). See cross listing for CHEM 120. This course may be taken two times.

RMGT 138 Cooperative Education
(formerly RES MGT 38)
See Cooperative Education listing (1-8 units). CSU

SOCIOLOGY

SOC 50 Sociology of Parenting 3.0 Units
This course provides an introduction to the challenges, risks and changes caused by parenthood, the impact of parenting styles on the development of children, the effect of socio-cultural roles in parenting, and the dynamics of adult/child relationships. It further provides strategies, skills and resources to promote healthy family living. 48-54 hours lecture. (No prerequisite)

SOC 101 Introduction To Sociology
(formerly SOC 1) (CAN SOC 2) 3.0 Units
A survey of the various characteristics of social life, the process of social interaction and the tools of sociological investigation. Emphasis on culture, socialization, and basic institutions. 48-54 hours lecture. CSU, UC. Offered Fall, Spring, Summer. (No prerequisite)

SOC 102 American Social Problems
(formerly SOC 2) (CAN SOC 4) 3.0 Units
Identification and analysis of contemporary social problems in the United States. An attempt to establish criteria by which the educated layman can judge the probable effectiveness of various schemes for social betterment. 48-54 hours lecture. CSU, UC. (No prerequisite)

SOC 103 Marriage and Family Life
(formerly SOC 3) (CAN H EC 12) 3.0 Units
Courtship, choosing a mate, the engagement, factors in marital adjustment, parenthood, and related topics. 48-54 hours lecture. CSU. (No prerequisite)

SOC 107 The Ethnic Experience In
(formerly SOC 7) American Society 3.0 Units
A one-semester survey of the various ethnic minorities in American society and their contributions and special experiences as minorities. Emphasis on those current issues which have the most impact on American society. 48-54 hours lecture. CSU, UC. Offered Spring. (No prerequisite)

SOC 128 Special Topics
(formerly SOC 28)
See Special Topics listing (Variable units). CSU, UC.

SOC 129 Independent Study
(formerly SOC 29)
See Independent Study listing (1-3 units). CSU

SOC 138 Cooperative Education
(formerly SOC 38)
See Cooperative Education listing (1-8 units). CSU

SPANISH

SPAN 51 Conversational Spanish II 3.0 Units
This is the second of two courses covering the essentials of Spanish conversation. Intensive oral and aural practice in the language with the objectives of developing fluency and increasing vocabulary through the study of common cross-cultural situations. Introduction to more complex Spanish structures and grammar with emphasis on the spoken language. 48-54 hours lecture. (Prerequisite: SPAN 125. Grade Option.) This course may be taken three times.

SPAN 101 Elementary Spanish 5.0 Units
(formerly SPAN 1)
This course provides an introduction to the Spanish language and the culture of its speakers. Fundamentals of pronunciation, structure and Hispanic culture are studied to develop the ability to use and understand basic spoken and written Spanish. Special emphasis is given to development of oral and aural skills by use of the language lab. 80-90 hours lecture and 16-18 hours laboratory. CSU, UC. (No prerequisite)

SPAN 101A Fundamentals of Spanish IA
(formerly SPAN 1A) 3.0 Units
This course provides an introduction to the Spanish language and the culture of its speakers. Fundamentals of pronunciation, structure and Hispanic culture are studied to develop the ability to use and understand basic spoken and written Spanish. Special emphasis is given to development of oral and aural skills by use of the language lab. 48-54 hours lecture and 16-18 hours laboratory. CSU, UC. (No prerequisite)

SPAN 101B Fundamentals of Spanish IB
(formerly SPAN 1B) 3.0 Units
This course provides an introduction to the Spanish language and the culture of its speakers. Fundamentals of pronunciation, structure and Hispanic culture are studied to develop the ability to use and understand basic spoken and written Spanish. Special emphasis is given to development of oral and aural skills by use of the language lab. 48-54 hours lecture and 16-18 hours laboratory. CSU, UC. (Prerequisite: Completion of SPAN 101A with a “C” or better.)

SPAN 102 Elementary Spanish 5.0 Units
(formerly SPAN 2)
This course is a continuation of SPAN 101. Further study of fundamentals of pronunciation, structure and Hispanic culture to develop the ability to use and understand basic spoken and written Spanish. Use of language laboratory is required in order to continue the development of oral and aural skills. 80-90 hours lecture and 16-18 hours laboratory. CSU, UCCSU, UC. (Prerequisite: Completion of SPAN l01 or SPAN 101A and SPAN 101B.)

SPAN 103 Intermediate Spanish
(formerly SPAN 3) (CAN SPAN 8) 3.0 Units
A comprehensive review of the basic grammatical structure of Spanish, vocabulary building, development of conversation and composition skills, reading of literary and social interest. 48-54 hours lecture. CSU, UC. (Prerequisite: Completion of SPAN 102 or two years of high school Spanish)

SPAN 104 Intermediate Spanish
(formerly SPAN 4) (CAN SPAN 10) 3.0 Units
A continuation of a comprehensive review of the basic grammatical structure of Spanish, vocabulary building, development of conversation and composition skills, reading of literary and social interest. 48-54 hours lecture. CSU, UC. (Prerequisite: Completion of SPAN 103 or three years of high school Spanish)

SPAN 110 Spanish for Spanish Speakers
(formerly SPAN 10) 3.0 Units
Designed to fulfill the particular needs of bilingual students with special emphasis on the grammar of the language and the development of writing, reading and speaking skills. Conducted in Spanish. 48-54 hours lecture. CSU (No prerequisite. Recommended: Ability to speak Spanish.)

SPAN 125 Conversational Spanish I
(formerly SPAN 25) 3.0 Units
An introduction to the Spanish language using situations the student will commonly encounter. Introduction to simple Spanish structures and grammar with emphasis on the spoken language. 48-54 hours lecture. CSU. (No prerequisite) This course may be taken four times.

SPAN 128 Special Topics
(formerly SPAN 28)
See Special Topics listing (Variable units). CSU, UC.

SPAN 129 Independent Study
(formerly SPAN 29)
See Independent Study listing (1-3 units).

SPAN 130 Conversational Spanish for
(formerly SPAN 30) Healthcare Professionals I
3.0 Units
This course is directed towards the needs of nursing and healthcare students, as well as other medical and hospital personnel, who must communicate quickly and effectively with Spanish-speaking patients. Conducted in Spanish and English. 48-54 hours lecture. CSU. (No prerequisite)

SPAN 131 Conversational Spanish for
Healthcare Professionals II
3.0 Units
This course is a continuation of SPAN 130. It provides intermediate conversational skills for nursing and healthcare students as well as other medical and hospital personnel who must communicate quickly and effectively with Spanish-speaking patients. Conducted in Spanish and English. 48-54 hours lecture. (Prerequisite: SPAN 130 with a grade of "C" or higher or consent of instructor. Grade Option.) This course may be taken three times.

SPAN 135 Spanish for Business 3.0 Units
(formerly SPAN 35)
This course is designed to give students a foundation in Spanish business terminology and prepare them with the knowledge necessary to function in business and professional settings in Spanish speaking countries and where Spanish is used in the U.S. Emphasis will be placed on acquiring basic communication skills and specialized vocabulary for topics related to business and finance. Course is conducted mainly in Spanish. 48-54 hours lecture. CSU. (No prerequisite)

SPECIAL TOPICS

SPECIAL TOPICS 128-148-98 0.5-9.0 Units
(formerly SPECIAL TOPICS 28-48-98)
These courses are designed to permit investigation in depth of topics not covered by regular catalog offerings. Course content, hours, and unit credit to be determined by the instructor in relation to community/student interest and/or available staff. May be offered as a seminar, lecture, or laboratory class. Individual course descriptions approved by the Curriculum Committee are on file in Office of Instruction. Special Topics 28 and 48 transfer to CSU, UC. (UC maximum credit allowed: 3.3 semester units per term, 6 units total, in any or all appropriate subject areas combined. Granting of credit by a UC campus contingent on evaluation of course outline.) (Prerequisites for Special Topics courses will be in keeping with the California Administrative Code, Title V regulations on open classes, and any prerequisites will be based on terms of performance or specific knowledge necessary to successful performance in the class).

SPEECH COMMUNICATION

See Communication Studies.

THEATRE ARTS

TA 101 Introduction to Theatre
(formerly TA 1) (CAN DRAM 18) 3.0 Units
An introductory course of the history, the performers, the purpose, and the perspective of theatre. Students will be introduced to the basic forms of theatre and disciplines involved in producing a play. Emphasis is on defining and experiencing the role of theatre in society. 48-54 hours lecture. CSU, UC. Offered Fall, Spring. (No prerequisite)

TA 102 History of the Theatre 3.0 Units
(formerly TA 2)
A survey course designed to introduce the student to a history of the world's theatrical experiences from primitive times to the present. An examination of the physical theatre and methods of staging drama from the days of the caveman to theatre of the avant garde. 48-54 hours lecture. CSU. UC. Fall only. (No prerequisite)

TA 104 Oral Interpretation of Literature
(formerly TA 4) 3.0 Units
Understanding and practicing the skills of reading literature aloud, stressing the acquisition of vocal control skills for emphatic reading and the communication of the literary interpretation to an audience. Selections from the major forms of literature: prose, poetry, and drama. Improvement in vocal control skills and a wider appreciation of literature. 48-54 hours lecture. CSU, UC. Offered Fall, Spring, Summer. (No prerequisite)

TA 106 Beginning Acting
(formerly TA 6) (CAN DRAM 8) 3.0 Units
This course is designed to exercise the separate parts of the composite art of acting which include thought, emotion, and specific movement and vocal techniques. Emphasis is placed on pantomime and exercises culminating in scene work. The ultimate goal is to develop a firm foundation in basic acting techniques. 48-54 hours lecture. CSU, UC. Offered Fall, Spring. (No prerequisite)

TA 107 Intermediate Acting 3.0 Units
(formerly TA 7)
This course provides the student an opportunity to enhance acting skills, and to develop and intensify dramatic ability by advancing the understanding of skills presented in Beginning Acting. The student will be introduced to the process of analyzing character through lecture, demonstration, exercises, and the rehearsal and presentation of scenes from published texts. 48-54 hours lecture. CSU, UC. Offered Fall, Spring. (No prerequisite.)

TA 109 Rehearsal and Performance
(formerly TA 9) Studio 2.0 Units
This course will provide study and laboratory exploration in all aspects of play production involving the actor in order to develop his/her acting capabilities, skills, and discipline. The audition, preparation, and presentational phases of the acting process will be explored under the supervision and guidance of a faculty director. Productions will be presented for public performance. Enrollment is for the duration of the preparation and presentation phases of production. May be repeated four times for a maximum of twelve units. 16-18 hours lecture and 48-54 hours laboratory. CSU, UC. Offered Fall, Spring. (Prerequisite: Qualify for cast at open auditions. TA 106 recommended) This course may be taken four times.

TA 110 Principles of Design for Theatre
(formerly TA 10) 3.0 Units
An introductory course in design as applied to the theatre in the areas of lighting, costuming, makeup, set design, properties, and graphic art. Students will apply concepts of texture, line, space, color and perspective to the various design aspects in theatre through specific 2-D and 3-D exercises. 32-36 hours lecture and 48-54 hours laboratory. CSU, UC. (No prerequisite.)

TA 111 Technical Stage Production
(formerly TA 11) 2.0 Units
This course is designed as an introduction to the tasks and responsibilities of stage technicians and their contribution to the total aesthetic effect of a dramatic production. Stage managing, construction techniques, stage equipment use, and function of technical stage personnel are introduced to develop the student's design capabilities, skills, and discipline in stage production. Students will serve as technical stage crew members in Theatre Arts Department productions. 16-18 hours lecture and 48-54 hours laboratory. CSU, UC. Offered Fall, Spring. (No prerequisite.) This course may be taken three times.

TA 113 Stage Make-up 2.0 Units
(formerly TA 13)
A course designed to introduce the student to the basic techniques and materials of stage make-up. The student will demonstrate understanding through actual make-up application in both the classroom and as a member of the make-up crew for a specific departmental play production. 16-18 hours lecture and 48-54 hours laboratory. CSU. (No prerequisite) This course may be taken two times.

TA 115 Stagecraft 2.0-4.0 Units
(formerly TA 15)
An introductory course on the materials, tools, and procedures of all technical phases of scene production including construction, painting, rigging, placement and manipulation of stage scenery, the organization and management of stage activity, and stagecraft terminology. Students are introduced to the fundamentals of set design, construction, painting, and finishing. Course is designed for the beginner and may be repeated four times for a maximum of 16 units. Eight-nine hours lecture and 48-54 hours laboratory per unit per term. CSU, UC. Offered Fall, Spring. This course may be taken four times.

TA 116 Authors of the Theatre 3.0 Units
(formerly TA 16)
A survey of playwrights from the Greeks to the present. The selected plays are read, discussed, and analyzed. It is both AA and BA applicable. 48-54 hours lecture. CSU, UC. Offered Spring. See cross listing for ENGL 116. This course may be taken two times.

TA 117 Technical Theatre I:
(formerly TA 17) Lighting and Sound 3.0 Units
A basic course in theatre lighting and sound systems including electricity, instruments and lamps, light plots, sound recording, microphones, speakers, etc. Emphasis is on hands-on control and adjustment of equipment. 32-36 hours lecture and 48-54 hours laboratory. CSU, UC. Offered Fall. (No prerequisite. TA 115 is recommended to familiarize students with the theatre and its equipment)

TA 120 Costuming for the Theatre
(formerly TA 20) 2.0 Units
A basic course in the skills of costuming for the stage and the art of costume design. Repetitions of the course will introduce creation of specialty items, stylistic interpretations, crew management and organization responsibilities.16-18 hours lecture and 48-54 hours laboratory. CSU, UC (No prerequisite) This course may be taken four times.

TA 128 Special Topics
(formerly TA 28)
See Special Topics listing (Variable units). CSU, UC.

TA 129 Independent Study
(formerly TA 29)
See Independent Study listing (1-3 units). CSU

TA 138 Cooperative Education
(formerly TA 38)
See Cooperative Education listing (1-8 units). CSU, UC

TA 160 Beginning Tap 1.0 Unit
(formerly TA 21C)
Development of basic knowledge and skill in tap dancing, commonly used in musical productions and theater. See cross listing for PEDA 160. 48-54 hours laboratory. CSU, UC (No prerequisite. Grade option) This course may be taken four times.

TA 161 Intermediate Tap 1.0 Unit
(formerly TA 21D)
Development of intermediate knowledge of skill in tap dancing, commonly used in musical productions and theater. See cross listing for PEDA 161. 48-54 hours laboratory. CSU, UC (Prerequisite: Student may be required to audition and be approved by instructor for entrance to class. Grade option) This course may be taken four times.

TA 166 Ballet I 1.0 Unit
(formerly TA 36A)
Technique and style of beginning ballet dance. Emphasis on exploring the movement characteristics of ballet through dancing. See cross listing or PEDA 166. 48-54 hours laboratory. CSU, UC (No prerequisite. Grade option) This course may be taken four times.

TA 167 Ballet II 1.0 Unit
(formerly TA 36B)
Technique and style of secondary level II ballet dance. Emphasis on exploring the movement characteristics of level II ballet through dancing. See cross listing or PEDA 167. 48-54 hours laboratory. CSU, UC (No prerequisite. Grade option) This course may be taken four times.

TA 170 Jazz Dance I 1.0 Unit
(formerly TA 37A)
Technique and style of beginning jazz dance. Emphasis on exploring the movement characteristics of jazz through dancing. See cross listing or PEDA 170. 48-54 hours laboratory. CSU, UC (No prerequisite. Grade option) This course may be taken four times.

TA 171 Jazz Dance II 1.0 Unit
(formerly TA 37B)
Technique and style of level II jazz dance. Emphasis on exploring the movement characteristics of secondary level of jazz through dancing. See cross listing or PEDA 171. 48-54 hours laboratory. CSU, UC (No prerequisite. Grade option) This course may be taken four times.

TA 174 Modern Dance I 1.0 Unit
(formerly TA 39A)
Technique and style of beginning modern dance. Emphasis on exploring the movement characteristics of level I modern dance through dancing. See cross listing or PEDA 174. 48-54 hours laboratory. CSU, UC (No prerequisite. Grade option) This course may be taken four times.

TA 175 Modern Dance II 1.0 Unit
(formerly TA 39B)
Technique and style of secondary level II modern dance. Emphasis on exploring the movement characteristics of secondary level II modern dance through dancing. See cross listing or PEDA 175. 48-54 hours laboratory. CSU, UC (No prerequisite. Grade option) This course may be taken four times.

TA 266 Ballet III 1.0 Unit
(formerly TA 36C)
Technique and style of intermediate level III ballet dance. Emphasis on exploring the movement characteristics of intermediate level III ballet through dancing. See cross listing or PEDA 266. 48-54 hours laboratory. CSU, UC (No prerequisite. Grade option) This course may be taken four times.

TA 270 Jazz Dance III 1.0 Unit
(formerly TA 37C)
Technique and style of intermediate level III jazz dance. Emphasis on exploring the movement characteristics of intermediate level III jazz through dancing. See cross listing or PEDA 270. 48-54 hours laboratory. CSU, UC (No prerequisite. Grade option) This course may be taken four times.

TA 271 Jazz Dance IV 1.0 Unit
(formerly TA 37D)
Technique and style of level IV jazz dance. Emphasis on exploring the movement characteristics of advanced level IV jazz through dancing. See cross listing or PEDA 271. 48-54 hours laboratory. CSU, UC (No prerequisite. Grade option) This course may be taken four times.

TA 274 Modern Dance III 1.0 Unit
(formerly TA 39C)
Technique and style of intermediate level III modern dance. Emphasis on exploring the movement characteristics of intermediate level III modern dance through dancing. See cross listing or PEDA 274. 48-54 hours laboratory. CSU, UC (No prerequisite. Grade option) This course may be taken four times.

TA 275 Modern Dance IV 1.0 Unit
(formerly TA 39D)
Technique and style of advanced level IV modern dance. Emphasis on exploring the movement characteristics of advanced level IV modern dance through dancing. See cross listing or PEDA 275. 48-54 hours laboratory. CSU (No prerequisite. Grade option) This course may be taken four times.

WELDING

WELD 50 Introduction to Welding 2.0 Units
Beginning course in arc and oxyacetylene welding which covers safety practices, use of equipment, and oxyacetylene cutting. 16-18 hours lecture and 48-54 hours laboratory for 8 weeks. Fall, Winter, Spring and Summer. (No prerequisite)

WELD 51 Oxyacetylene Welding, Cutting, and Brazing 3.0 Units
Develops entry-level skills for the welder in gas welding, braze welding, and cutting. 32-36 hours lecture and 64-72 hours laboratory. Offered Fall, Spring. (No prerequisite)

WELD 52 Shielded Metal Arc Welding - Basic 3.0 Units
Develops entry-level shielded metal arc welding (SMAW) skills for the welder. 32-36 hours lecture and 64-72 hours laboratory.Offered Fall, Spring. (No prerequisite)

WELD 53 Shielded Metal Arc Welding - Advanced 4.0 Units
Develops advanced shielded metal arc welding skills. Specifically develops skills to produce high quality large multipass fillet welds and single-v-groove welds. 32-36 hours lecture and 96-108 hours laboratory. Offered Fall, Spring. (No prerequisite)

WELD 54 Preparation for Welder Certification 1.0 Unit
This course prepares the welder to take and pass the Los Angeles Department of Building and Safety written examination required for the L.A. City welding license. In addition, the performance requirements necessary to pass welder qualification tests under different codes are covered. 16-18 hours lecture. Offered Spring 4th Term. (No prerequisite)

WELD 57A Gas Tungsten Arc Welding - Basic 2.0 Units
Develops entry-level gas tungsten arc welding skills; setting up and adjusting equipment, and in position welding on mild steel, stainless steel, and aluminum. 16-18 hours lecture and 48-54 hours laboratory. 1st and 3rd Terms. (No prerequisite)

WELD 57B Gas Tungsten Arc Welding - Advanced 2.0 Units
Develops advanced gas tungsten arc welding skills in out-of-position welding on mild steel, stainless steel, and aluminum. 16-18 hours lecture and 48-54 hours laboratory. 2nd and 4th Terms. (No prerequisite)

WELD 58A Gas Metal Arc Welding - Basic 2.0 Units
Develops entry-level skills in gas metal arc welding. Specifically develops skills on all position groove and fillet welds, set-up, and adjustment of equipment. 16-18 hours lecture and 48-54 hours laboratory. lst and 3rd Terms. (No prerequisite)

WELD 58B Gas Metal Arc Welding - Advanced 2.0 Units
Develops advanced skills in gas metal arc welding. Specifically develops skills in single-v-groove butt joints in all positions and welder qualification practice.16-18 hours lecture and 48-54 hours laboratory. 2nd and 4th Terms. (No prerequisite)

WELD 59 Welding Symbols and Blueprint Reading 1.0 Unit
Develops a technical understanding of engineering drawings and use of information to communicate instructions from the designer to the welder and fitter to achieve design objectives. 16-18 hours lecture. Offered Fall 2nd Term. (No prerequisite)

WELD 60 A/B/C/D Welding Laboratory 1.0-2.0 Units
A laboratory class to develop skills in oxyacetylene welding, arc welding, gas tungsten arc welding, gas metal arc welding, or pipe welding. Fifty-one hours of laboratory experience qualifies for 1 unit of credit. Offered Fall, Spring and Summer. (No prerequisite)

WELD 98 Special Topics
See Special Topics listing (Variable units).

WELD 99 Independent Study
See Independent Study listing (1-3 units).

WELD 138 Cooperative Education (formerly WELD 38)
See Cooperative Education listing (1-8 units). CSU

NON-CREDIT CLASSES

BASIC SKILLS/ EDUCATIONAL UPGRADE

ACOM 12 Adult Literacy 0.00 Units
An open entry/open exit class designed for persons unable to read beyond the 4th grade level. Students will receive individualized instruction.

ACOM 30 Citizenship 0.00 Units
This class is designed to prepare eligible, legal permanent residents for naturalization. The class will focus on practicing listening, speaking, reading, and writing basic English literacy to pass the INS oral interview exam. The class gives a brief overview of American history and U.S. government. Students will practice dictation sentences, the 100 questions and responding correctly to the N400 form.

ACOM 35A-N Supervised Tutoring 0.00 Units
Open entry/open exit classes designed for students who need individualized instruction in the following areas:

ENGLISH AS A SECOND LANGUAGE NON-CREDIT (AENG)

AENG-10A English for Foreign Born 0.00 Units
This is an adult literacy course for all foreign born who are unable to read or write any language. Emphasis will be on learning to speak, read and write the English language.

AENG-10.1 ESL Low Beginning Speaking and Listening 0.00 Units
This class is for people who do not speak or understand any English. It will focus on oral skills required for managing everyday situations such as apartment problems, transportation, shopping, and medical emergencies. Frequent use of simulation and role play. Strong emphasis on vocabulary development, plus basic grammar.

AENG-10.2 ESL Low Beginning Reading and Writing 0.00 Units
This class is for people who do not read or write any English. It will focus on basic reading and writing skills. Students will learn to read and fill out everyday forms, such as job applications. They will learn the alphabet, basic vocabulary and spelling rules, and also basic grammar.

AENG-10.3 ESL High Beginning Speaking and Listening 0.00 Units
This class continues from AENG 10.1. It is for people who speak and understand a little English. Students will continue to learn new vocabulary and sentence patterns useful in everyday situations.

AENG-10.4 ESL High Beginning Reading and Writing 0.00 Units
This class continues from AENG 10.2. It is for people who read and write a little English. Students will continue to develop reading and writing skills useful for everyday situations, such as reading advertisements and finding and using sources of information.

AENG-10.4A Review Class for ESL Beginners 0.00 Units
This class is for people who completed beginning level English (AENG 10.1-10.4). Students practice reading, writing, listening, and speaking skills that they have already learned. The class focuses on practical, everyday situations such as shopping and work situations.

AENG-10.5 ESL Low Intermediate Speaking and Listening 0.00 Units
This class continues from AENG 10.3. It is for people who already speak and understand English fairly well. In this class students will also learn more sentence structure and grammar useful in a variety of everyday speaking and listening situations. Students will also be introduced to non-verbal communication, as well as certain idiomatic expressions. There will be a strong emphasis on simulation and role play.

AENG-10.6 ESL Low Intermediate Reading and Writing 0.00 Units
This class continues from AENG 10.4. It is for people who already speak and understand English fairly well. Students in this class will continue to develop reading and writing skills in English. They will continue learning grammar and spelling rules, and will write at the sentence level. They will learn to read and respond to simple stories and news articles, and other common forms of written material, such as instructions and simple warranties.

AENG-10.7 ESL High Intermediate Speaking and Listening 0.00 Units
This class is for people who already speak and understand English enough to describe everyday situations, problems, and needs. In this class students will learn more advanced vocabulary, idiomatic expressions, sentence structure, and grammar needed in a variety of specific everyday speaking and listening situations. There will be continued emphasis on simulation and role play.

AENG-10.7A ESL Intermediate Speaking I 0.00 Units
This class is for people who already speak and understand English enough to describe to describe familiar situations, problems, and needs. In this class students will learn more advanced vocabulary, idiomatic expressions, sentence structure, and grammar needed in a variety of communicative situations. Students develop speaking and listening skills needed for success in work and education.

AENG-10.7B ESL Intermediate Speaking II 0.00 Units
This class continues from AENG 10.7A. It focuses on English needed for specific formal situations at school and work such as expressing agreement/disagreement and confronting, and job interviews.

AENG-10.8 Intermediate Writing I 0.00 Units
This class is for people who can already read short texts and write at the paragraph level. They should already know basic rules of grammar and spelling. Students in this class will learn to write short compositions. They will continue to learn more complex grammar. This course is useful in preparation for the GED and for college-level writing courses.

AENG-10.9 Review Class for ESL Intermediates 0.00 Units
This class is for people who completed intermediate-level English (AENG 10.7-10.8). Students practice reading, writing, listening, and speaking skills that they have already learned. The class focuses on practical, everyday situations such as shopping and work situations. There will also be some focus on basic academic skills such as writing descriptive paragraphs.

AENG-10.10 Intermediate Writing II
0.00 Units

This class continues from AENG 10.8. Students write compositions on familiar and unfamiliar topcs, read short stories, and learn more advanced grammar. This course is useful in preparation for the GED and for college-level writing courses.

AENG-10.11 Grammar for ESL I
0.00 Units

First in a series of courses designed for ESL students to help them understand and apply rules of English grammar, syntax and punctuation. This course provides practice in such areas as correct use of certain verb tenses, and subject-verb agreement. This course is useful for GED preparation.

AENG-10.12 Grammar for ESL II
0.00 Units

Second in a series of courses designed for ESL students to help them understand and apply rules of English grammar, syntax and punctuation. This course provides practice in such areas as correct use of certain of passive forms, two-word verbs, and modal verbs. Course is useful for GED preparation.

AENG-10.13 Intermediate Reading
0.00 Units

This is an intermediate level reading class. Students develop such reading skills as finding a story's main idea, skimming, scanning, understanding vocabulary in context, and using a dictionary.

AENG-10.13A Low Intermediate Reading and Vocabulary 0.00 Units

A reading course for low intermediate ESL students emphasizing main ideas, outlining, and vocabulary in context. Students should already have basic skills in decoding information and understanding at a literal level. They should be able to read and understand short, authentic texts such as letters and instructions.

AENG-10.13B High Intermediate Reading and Vocabulary 0.00 Units

This class continues from AENG 10.3A. Skills include comparing and contrasting main characters, determining cause and effect, and predicting the story outcome. Successful completion of AENG 10.13A is recommended.

AENG-10.14 High Intermediate Grammar I (Grammar for ESL III) 0.00 Units

This course is a third in a series of four intermediate and advanced courses for non-native speakers of English. It is designed to help them develop grammar skills needed for success in education and everyday life. Students will be able to analyze and correctly use verb tenses and construct tag questions in English. They will be able to generate gerund and infinitive forms correctly. They will develop strategies to apply what they learn in the classroom to everyday situations.

AENG-10.15 High Intermediate Grammar II (Grammar for ESL IV)
0.00 Units

This course is the last in a series of four intermediate and advanced for non-native speakers of English. It is designed to help them develop grammar skills needed for success in education and everyday life. Students will be able to analyze and correctly use passive forms and construct tag questions in English. They will be able to generate gerund and infinitive forms correctly. They will develop strategies to apply what they learn in the classroom to everyday situations.

HOME ECONOMICS FOR THE HOMEMAKER (AHOM)

AHOM-10 Advanced Clothing Construction
0.00 Units

Learn how to handle more advanced fabrics, designer patterns and fitting problems.

AHOM-20 Beginning Clothing Construction
0.00 Units

Designed to teach sewing, equipment use and commercial patterns.

AHOM-30 Home Decorative Art 0.00 Units

Specializing in macrame and speed knitting. Designed for all ages over 18 including older adults.

AHOM-50 Sewing for the Family 0.00 Units

Features pattern fitting, use of sewing machine and technology for family clothing needs.

AHOM-60 Needlecraft/Design 0.00 Units

Specializing in basic stitches of knitting and crocheting. A class for beginners as well as intermediate and advanced students.

AHOM-70 Hand Crafted Items 0.00 Units

Craft and small quilting projects for home and personal use.

AHOM-75 Machine Quilting I 0.00 Units

A beginners class designed to teach strip sewing techniques of making quilts quickly and efficiently by machine.

AHOM-75.1 Machine Quilting II 0.00 Units

A continuation of Machine Quilting I for those who desire more complicated patterns of quilts by machine.

AHOM-82 Interior Design I 0.00 Units

A course in the study of color schemes, design, and other topics to introduce this career as well as to help homemakers beautify their home environment.

AHOM-90 Tailoring 0.00 Units

Modern tailoring techniques are applied to suits and coats for professional fit and appearance. Advanced clothing construction or equivalent recommended.

ADULT PHYSICAL FITNESS (ADPE)

ADPE-60 Physical Fitness 0.00 Units

An exercise course designed to emphasize fitness by offering the student a variety of exercises and aerobic work. Open to both men and women.

ADPE-61 Advanced Physical Fitness 0.00 Units

Advanced techniques of exercise through use of circuits, weights, walking, jogging and controlled exercises. This class is open to both men and women.

ADPE 80 Adult Tennis 0.00 Units

Tennis for adults is fun, offers excellent exercise, and a way to make friends while enjoying tennis. Enhance your tennis skills and quality of life.

PARENTING (APAR)

APAR-10 Foster Parenting 0.00 Units
This course is designed to ensure that children's basic needs are met. It will help parents learn to set and record realistic goals and expectations for their child's developmental progress. Students will learn how to effectively communicate with their children. This course will also cover topics such as boundary and limit setting, appropriate consequences , and ways to improve self-esteem.

APAR-20 Effective Parenting 0.00 Units
Learn how to meet and deal with the challenges today of raising children between the ages of 2 to 12 years old.

APAR-30 Single Parent Leadership Academy 0.00 Units
Designed as a leadership academy for students in the New Horizons Program. These classes will provide information and instruction on leadership training, present and future trends in the work force, non-traditional jobs for women, values and goal setting, debt management, health issues, cultural diversity, and success in the work place.

VOCATIONAL (AVOC)

AVOC-12 Food Service 0.00 Units
This course is designed to provide basic and essential training at the entry level for prep/pantry cook and waitress/waiter. Program will include on-the-job training. Certificates of completion will be issued upon successful completion of course.

AVOC-40 Bus Driver Education 0.00 Units
This course qualifies one to apply for a school bus driver's certificate. There is no behind the wheel training. This class consists of all classroom work.

AVOC-85 Personal Pattern Drafting I 0.00 Units
Students will learn basic fitting techniques by drafting a basic pattern from which other designs can be drafted. Commercial patterns will also be used.

X.
FACULTY AND STAFF

"Education should be directed to the full development of the human personality, to the strengthening of the human personality and to the strengthening of respect for human rights and fundamental freedoms."

-Jean Piaget
'To Understand Is To Invent'
Chapt 4, pg 87

VICTOR VALLEY COLLEGE FACULTY AND STAFF

FULL TIME ACADEMIC STAFF

Adell, Tim (1999)
Associate Professor, English
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M.L.S., University of Hawaii at Manoa
M.A., California State University, Long Beach

Alcorn, William (1969)
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M.S., University of Omaha

Allan, Peter (1997)
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B.S., Excelsior College, New York

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Jones, Scott (2003)
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Kaiser, Hinrich (2002)
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Marin, Traci (2003)
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Ed.D., U.S. International University, San Diego

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Rel.M., School of Theology at Claremont
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M.A., Kansas State University

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CLASSIFIED STAFF

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Allen, Monique (2007), Sign Language Interpreter I
Alsina, Eileen (2008), Instructional Program Specialist
Angulo, Kenneth (1998), Custodian
Aragon, Esperanza (2006), Office Assistant
Aragon, Linda (2007), Admissions & Records Technician, Bilingual
Aragues, Rhiannon (2004), Sign Language Services Interpreter II
Armstrong, Terrie (1997), Instructional Assistant
Arroyo-Barbosa, Valerie (2006), Instructional Assistant
Asendorf, Jessica (2007), Library Technician
Avila, Silvia (2004), Admissions and Records Technician, Bilingual
Bandringa, Pearl (2004), Accounting Technician II
Baumbusch, Craig (2007), Interim Chief, Campus Police
Bazurto, Theresa (1999), Clerical Technician II, DSPS
Bell, Galene (2008), Lab Aide
Bernor, Gary (1998), Communication Systems Technician
Board, Frederick (2006), Warehouse Delivery Worker
Brassfield, Cynthia (2001), Instructional Program Specialist
Browne, Aaron (1993), Book Division Coordinator
Buck, Patricia (2006), Administrative Secretary II
Burham, Sheila (2008), Help Desk Technician
Bustillos, Raina (2007), Payroll & Benefits Technician
Butler, Renay (2000), Administrative Secretary II
Caldwell, Sheree (1999),JTPA/CalWORKS Coordinator
Camarena, Anthony (2007), Campus Police Reserve Officer
Camarena, Yvonne (1998), Campus Police Specialist
Campos, Marena (2006), Switchboard Operator/Receptionist
Cardoza, Maria (2004), Admissions & Records Technician
Cardoza, Ted (2008), Custodian
Carlton II, William D (1997), Campus Police Officer
Carney, Jim (1999), Campus Police Officer
Carpenter, Malia (2005), Administrative Secretary I
Casler, Arthur (1997), Maintenance Worker
Castleman, Darlene, (1978-1998), Distinguished Service
Cera, Ernest (2007), Campus Police Reserve Officer
Chavez, Magdalen (2007), Human Resources Technician
Chavez, Rocio (2004), Senior Human Resources Analyst
Chesser, Deborah (2004), Deaf & Hard of Hearing Specialist
Chip, David (2002), Office Assistant
Christiansen, Julie (2000), Clerical Technician II
Christian, Nancy (1988), Performing Arts Center Technician
Clair, Mark (1999), Institutional Research Coordinator
Compton, Noanna (2000), Human Resources Technician
Comstock, James (2006), Inst. Network Computer Maint. Tech.
Conrad, Michelle (2001), Accounting Technician I
Cook, Jonathan (2003), Senior Instructional Assistant
Corbin, Rosaline (1999), Custodian
Cripps, Lisa (2006), Office Assistant
Cross, Douglas (1998), Senior Instructional Assistant
Crowley, J Kevin (2000), Course Management Administrator
DaCosta, Debra (1988), Accounting Specialist
Dance, Tamara (1990), Admissions & Records Specialist
Derryberry, Donna (1998), Administrative Secretary I
Dershem, Babette (2004), Instructional Media Svcs. Coordinator
Dove, Randy (2007), Grounds Maintenance Worker
Drew, Rebecca (1999), Curriculum & Scheduling Technician
Duarte, Elizabeth (2006), Upward Bound Program Coordinator
Durheim, Carl (2006), Bookstore Operations Assistant
Dwiggins, Steve (2007), Grounds Maintenance Worker
Elmore, Rebecca (2008), Career Pathways & Orientation Coord.
Espinoza, Jan (2001), Office Assistant
Etheridge, Jasper (1997), Campus Police Officer
Failing, Jeremy (2006), Sign Language Services Interpreter II
Finch, Tammy (2002), Grounds Maintenance Worker
Finch Jr., William (1984), Maintenance Worker
Flenna, Michael (1997), Custodian
Flenna, Peter (1997), Custodian
Ford, Carole, (1999), Senior Instructional Assistant
Foster, Sheri Nolan (1985), Director, Payroll and Benefits
Foxworthy, Doug (2000), Admissions & Records Specialist
Foxworthy, Diane (1996), Financial Aid Specialist
Ganapavarapu, Nag (2006), Senior Instructional Assistant
Garcia, Albert (2008), Inst. Network Computer Maint. Tech.
Garcia, Carly (2007), Sign Language Services Interpreter II
Garcia, Lilia (2007), Student Services Specialist II-Bilingual
Garcia, Stephen (1989), Director, Facilities Construction & Contracts
Garrett, Steven (2006), Custodian
Gatewood, Justin (2006), Webmaster
Gilbert, Thomas (2000), Network Manager
Gonzales, Salena (2004), Campus Police Officer
Gonzales, Susan (1991), Student Services Specialist II
Greene, Arlene (1988), M & O, Facilities Clerical Technician
Greulich, Bill (1989), Director, Marketing & Public Information
Guinotte, Christine (2001), Administrative Secretary I
Gummo, Patricia (1990), Laboratory Technician
Hannaman, Doug 1999), Lead Maintenance Worker
Harriman, Darrell, (1999), Electronics Lab Specialist
Hatchell, Brian (2006), Network Manager
Henning, Lorie (2001), Accounting Technician II
Herd, Brandy (2007), Sign Language Services Interpreter II
Hernandez, Ralph (2006), Grounds Maintenance Worker
Hernandez, Yvonne (2002), Senior Instructional Assistant
Hill, Carol (2006), Payroll & BenefitsTechnician
Hinojos, Susan (2002), Instructional Assistant
Hoppes, Joann (1997), Instructional Assistant
Howie, Brian (1997), Maintenance Worker
Huggins, LaDonna (2001), Office Assistant
Hughes, Hulon (2001), Grounds Maintenance Worker
Hultquist, Rose (2008), Upward Bound Program Coordinator
Hussing, Cathy (2007), Accounting Technician I
Hylton, Christopher (2005), Director, Maintenance & Operations
Isbell, Timothy (2007), Instructional Media Services Aide
Jacquez, Noreen (1999), Campus Police Officer
Janisko, Gina (1998), Financial Aid Specialist
Jasso, Evelyn (1998), Office Assistant
Jimenez, Susana (2006), Senior Instructional Assistant
Johnson, Kelley (2007), Director, Child Development Center
Jordan, Ernestine (2001), Financial Aid Specialist
Jordan, Pacita (2002), Office Assistant
Kagy, Margaret (1989), C.A.R.E. Specialist
Katnic, Laura (2001), Office Assistant
Kaur, Updesh (2000), CDC Permit Teacher
Kingman, Kelley (2006), Accounting Technician I
Kuhns, Troy (2006), Senior Instructional Assistant
Kwan, Michael (1997), Senior Instructional Assistant
Lares, Sonia (2003), Office Assistant
Larriva, Jennifer (2007), Research Analyst
Laveaux, B. Michelle (1997), Senior Instructional Assistant
Lee, Robert (2005), Senior Systems Analyst
Lewis, Nancy (2006), Accounting Technician I
Lexion, April (1986), Instructional Program Specialist
Lindley, Kyle (2008), Inst. Network Computer Maint. Tech.
Lockett, Erin (2008), Admissions & Records Specialist
Longway, Shirley (2006), Campus Police Officer
Loomis, Tim (2001), Maintenance Worker
Lough, Margie (1972-1998), Distinguished Service
Maciel, Denise (2005), Sign Language Services Interpreter I
Maldonado, Justin (2007), Campus Police Reserve Officer
Manriquez, Veronica (1997), Placement Specialist
Markegard, Therese (2006), Office Assistant
Marsh, Claudia (1973), Laboratory Technician
Martinez, Carlos (1997), Lead Custodian
Mata, Kathy (1998), Accounting Technician II
McComas, Annette (2000), Executive Assistant
McCoy, Joseph (2005), Sign Language Services Interpreter II
McCoy, Tonya (2006), Accounting Technician I
McDaniel, Linda (2002), Switchboard Operator/Receptionist
McDonald, Gabriel (2006), Sign Language Serv. Interpreter II
Melendez, Simon (1982-2000), Distinguished Service

Melendez, Delia (2002), Financial Aid Specialist, Bilingual
Mendez, Martha (2004), Financial Aid Technician
Mendoza, Hilda (2007), Admissions & Records Tech., Bilingual
Messer, Monty (1996), Lead Warehouse/Delivery Worker
Messer, Michelle (1999), Administrative Secretary II
Meyer, Scott (2006), Vehicle & Equipment Mechanic
Miller, Sam (1998), Custodian
Mohr, Diane (2002), Admissions & Records Technician
Montgomery Patricia (2001), Student Services Specialist II
Moon Greta (1990), Director, Admissions and Records
Moore-Talley, Joseph (2008), Custodian
Morales, Gisel (2007), Office Assistant
Morales, Xochitl (2006), Senior Instructional Assistant
Moreno, Christina (1997), Senior Systems Analyst
Moreno, Sandra (2001), Administrative Secretary II
Morgan, Rodrick (2007), Network Manager
Mount, Paul (1997), Custodian
Mulligan, B. Scott (1998), Printing Services Specialist
Murphy, Deanna (2000), Assistant Director, Auxiliary Services
Murray, James (2002), Financial Aid Specialist
Navarrete, Elaine (2005), Financial Aid Specialist
Navarro, Ray (1998), Senior Instructional Assistant
Niche, Eva (2001), Office Assistant
Nickerson, William (1997), Instructional Assistant
O'Brien, Janice (2006), Sign Language Services Interpreter II
O'Brien, Mary Jo (1983-2000) Distinguished Service
Olguin, Rosalie (2006), Administrative Secretary I
Orta, Josanna (2006), Budget Analyst
Osborne, Lori (1997), Admissions and Records Specialist II
Parmer, William (Tom) (2000), Custodian
Pearson, Eric (1981), Performing Arts Center Coordinator
Penland, Pamela (1997), Administrative Secretary I
Perdomo, Angela (2008),Auxiliary Services Assistant
Peterson, Deborah (2000), Senior Instructional Assistant
Potts, Deborah (2000), Community/Contract Education Coord.
Prewett, Deborah (2004), Auxiliary Services Specialist
Prieto, Angela (1977), Library Technician
Pringle, Mary (1984), Director, Fiscal Services
Pringle, Willie (1977), Director, Student Services
Pugliese, Reba (2006), Office Assistant
Pulido, Christy (2007), Sign Language Services Interpreter II
Quesada, Gabriela (2004), Student Services Specialist II
Ramirez, Blanca (2006), Sign Language Services Interpreter I
Randolph, Alfred (2004), Custodian
Rempfer, Maria (2001), Bookstore Operations Assistant
Reyes, Eddie (2000), Grounds Maintenance Worker
Reyes, Joanna (1999), Custodian
Reyes-Garcia, Renee (2003), Accounting Technician I
Reynoso Stultz, Adrienne (1998), CDC Associate Teacher
Richards, Robbie (2002),Financial Aid Specialist
Richardson, Chad (2007), Instructional Assistant
Richardson, Randy (2007), Campus Police Reserve Officer
Rickards, Alex (2006), Lead Grounds Maintenance Worker
Rivera, Fritzi (2006), Custodian
Rivera, Silvestre (2007) Campus Police Reserve Officer
Robillard, Teresa (1998), Clerical Technician II
Rodgers, Laurel (1990), Library Technician
Rodriguez, George (2000), Custodian
Rodriquez, Melina (2002), Clerical Technician I
Romberger, Robert (2006). Inst. Network Comp. Maint. Technician
Ruby, Peggy (1998), CDC Permit Teacher
Sandello, Margie (1993), Coordinator, Student Services
Sandoval, Mark (2006), Maintenance Technician
Scheetz, Marianne (2007), Office Assistant
Schneider, David (2006), Maintenance Locksmith
Selby, Suzan (2005), Instructional Program Specialist
Sewell, Robert A. (1994), Director, Auxiliary Services
Sharp, Ann Marie (2002), Administrative Secretary I
Short, Jerome (2002), Database Administrator
Singh, Kuki (2000), CDC Associate Teacher
Sisk Diana (2003), Senior Instructional Assistant
Snell-Gonzales, Shirley (2000), Administrative Assistant
Stalians, Jeff (2003), Senior Instructional Assistant
Stanford, Shirley (1993), Placement Specialist
Steinback, David (1995), Senior Instructional Assistant
Stockman, William (2006), Instructional Assistant
Stump, Carole (2003), Library Technician
Suderno, Jean (1997), Admissions and Records Technician
Sullivan, Eileen (1987), DSPS Specialist
Tascione, Ron (2005), Campus Police Officer
Tashima, Julia (1992), Director of Athletics/Athletic Trainer
Tejas, Stephen (2006), Instructional Assistant
Thompson, Ann (1968), Accounting Technician I
Thornhill, Elizabeth (2006), Administrative Secretary I
Tipples, Tammy (2007), Recycling Technician
Tran-Quang, Cam-Quynh (2005), Sr. Programmer/Software Develpor.
Tremblay, Julie (1997), Library Technician
Turner, Nancy (2004), DSPS Assistant/Interpreter
Ullger, Kendra (2004), Bookstore Operations Assistant
Vaughn, Audrey (2006), Administrative Secretary II
Vidana-Barda, Kevin (2008), College Recruiter
Vidana-Barda, Marie (1990), Senior Accounting Technician
Vigil, Donna (2007), Admissions & Records Technician
Von Ins, Joy (2006), Library Technician
Wack, Gerald (2002), Custodian
Walker, Frank (1998), Lead Warehouse Delivery Worker
Walton, Florine (2006), Administrative Secretary II
Whitney, Starla (2002), Environmental Studies Specialist
Wilkett, Nancy (1990), Custodian
Wilkin, Amy (1998), Athletic Trainer
Williams, Audrey (1983), EOPS Specialist
Willis, Carlita (2007), Sign Language Services Interpreter I
Willis, Correne (2006), Sign Language Services Interpreter II
Willis, Joel (2006), Sign Language Services Interpreter II
Winburn, David (2007), Campus Police Reserve Officer
Witt, Patricia (2006), Office Assistant
Wright, Sharon (1999), Accounting Technician II
Wyman, Nathaniel (2007), Sign Language Services Interpreter II
York, Arthur (2007), Campus Police Reserve Officer
Youngs, Albert (2000), Senior Instructional Assistant
Zachman, Amy (2007), Sign Language Services Interpreter II
Zamora, Francisco (2006), Grounds Maintenance Worker
Zhu, Yong (2005), Database Administrator
Zipp, Tanya (2007), Laboratory Technician

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“Education is a journey
Not a destination.”

-Olaf Snyder
1898-1983

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