

Las Positas College



*The Many Faces of Las Positas College*

2006-2008 Catalog

# Academic Calendar

## Fall 2006 Semester

August 21	Instruction Begins
August 26**	Instruction Begins – Saturday Classes
September 1	Last Day to ADD/DROP with No-Grade-of-Record (NGR) in-person(A&R)
September 2**	No Saturday Classes
September 4	Last Day to ADD/DROP via Class-Web
September 4*	Labor Day (No Instruction)
September 5	CENSUS DAY
September 22	Last Day to Apply for Credit/No Credit
October 27	Last Day to Apply for Graduation
November 1	60% Point for Financial Aid
November 9	Last Day to Withdraw with a “W” in person
November 10	Last Day to Withdraw with a “W” via Class-Web
November 10*	Veteran’s Day Holiday – No Instruction
November 11**	Saturday Classes Meet
November 22*-25*	Thanksgiving Recess – No Instruction
December 9**	Last Day of Saturday Classes
December 15	Last Day of Classes
December 16**	Final Examination–Saturday Classes
December 18-22	Final Examination Period

## Spring 2007 Semester

January 15*	Holiday – Martin Luther King, Jr.
January 16	Instruction Begins
January 20	Instruction Begins – Saturday Classes
February 2	Last Day to ADD/DROP with No-Grade-of-Record (NGR) in-person(A&R)
February 4	Last Day to ADD/DROP via Class-Web
February 5	CENSUS DAY
February 15	Last Day to Apply for Credit/No Credit
February 16*-19*	Presidents’ Weekend (no instruction)
March 29	60% Point for Financial Aid
March 30	Last Day to Apply for Graduation
April 6	Last Day to Withdraw with a “W” in-person and via Class-Web
April 9–14	Spring Break–No Instruction
May 12**	Last Day of Saturday Classes
May 18	Last Day of Classes
May 19**	Final Examination – Saturday Classes
May 21-25	Final Examination Period
May 26	Commencement

\*Holiday/All Employees

\*\*Saturday Only Classes

Note: The deadlines listed above refer to regular, full-term classes only. Alternate courses have varying deadlines posted in the lobby of the Admissions and Records Office, Building 700. You will also find deadlines on “CLASS-Web” or ask your instructor.

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## **DIRECTORY OF FREQUENTLY USED NUMBERS**

ACADEMIC SERVICES	925.424.1104
ADMISSIONS AND RECORDS	925.424.1550
BOOKSTORE	925.424.1812
BUSINESS OFFICE	925.424.1633
COMMUNITY EDUCATION	925.424.1467
COUNSELING CENTER	925.424.1400
DISABLED STUDENTS AND SERVICES (DSPS)	925.424.1510
EXTENDED OPPORTUNITY PROGRAM (EOPS)	925.424.1590
FAX (NO CHARGE)	925.443.0742
FINANCIAL AID	925.424.1581
FOUNDATION	925.424.1010
GENERAL INFORMATION	925.424.1600
LEARNING RESOURCES CENTER (LIBRARY)	925.424.1150
PRESIDENT	925.424.1003
STUDENT SERVICES	925.424.1406
TTY	925.424.1508

## *Welcome* to Las Positas College!



The next few years are going to be a time of unprecedented change at Las Positas College. Thanks to our generous community, we are building, expanding, and improving—literally on a daily basis.

Over the next five to eight years, we will be doubling our size. We will have twice as many facilities, and twice as many students. We already have begun that expansion with the addition of our new Physical Education complex, which houses a gymnasium with a 1,000 seat capacity. Future plans call for this beautiful complex to be surrounded by baseball and softball fields, a running track, and a pool. Our Multi-Disciplinary Building, to be completed in 2007, will provide more than 36,000 square-feet of classroom, lecture, and laboratory space. Following its development, College expansion will continue with construction of the

Center for the Arts and the Child Development Center.

This growth responds directly to our students and our community. Everything we offer—quality education, sports, performing arts, and cutting-edge technology—is driven by your needs, your values, and your future. Your success is the driving force behind our work and the inspiration for our change.

Please take some time to review this Catalog and see the many ways the College can meet your needs. Come watch us grow and join in our excitement for the future. We thank you for your support and know that, through our programs and services, we can give back to you, our community.

*Karen E. Halliday*

Karen E. Halliday, President



## Chabot-Las Positas Board of Trustees

The Chabot-Las Positas Board of Trustees governs the Chabot-Las Positas Community College District and is responsible for all policy decisions. The Board meets twice a month.

Name/Position	Area Represented	Year Elected
Arnulfo Cedillo, Ed.D., Secretary	Area 3 - Union City	1987, 1991, 1996, 2000
Isobel F. Dvorsky, President	Area 2 - San Leandro	2005
Donald L. "Dobie" Gelles	Area 4 - Castro Valley	1998
Hal G. Gin, Ed.D.	Area 6 - San Lorenzo	1985, 1989, 1993, 1998
Alison S. Lewis, Ph.D.	Area 1 - Hayward	1991, 1996, 2000
Barbara F. Mertes, Ph.D.	Area 7 - Livermore	2000
Carlo Vecchiarelli	Area 5 - Pleasanton	2004
Brigitte Kouakou	Chabot College Student Trustee	2005
Joshua Paul	Las Positas College Student Trustee	2005

## Trustees Emeriti

Lynn Carstensen	1996-2000	Edward E. Martins	1961-1967
E.J. "Jay" Chinn	1961-1985	Barry L. Schrader	1987-2000
Elva Cooper	1987-1996	Fredrick T. Sullivan	1961-1971
Fred M. Duman	1967-1991	Linda M. Tangren	1989-1998
Ann H. Duncan	1971-1984	William A. Tenney	1961-1967
Dorothy S. Hudgins	1967-1987	L. Arthur Van Etten	1961-1985
Lawrence R. Jarvis	1975-1987	Margaret R. Wiedman	1977-1989
James S. Martin	1969-1975		

## Administration

### District

Susan A. Cota, Ed.D., Chancellor  
 Lorenzo Legaspi, Vice Chancellor of Business Services  
 Joel L. Kinnamon, Ed.D, Vice Chancellor of Educational Services and Planning

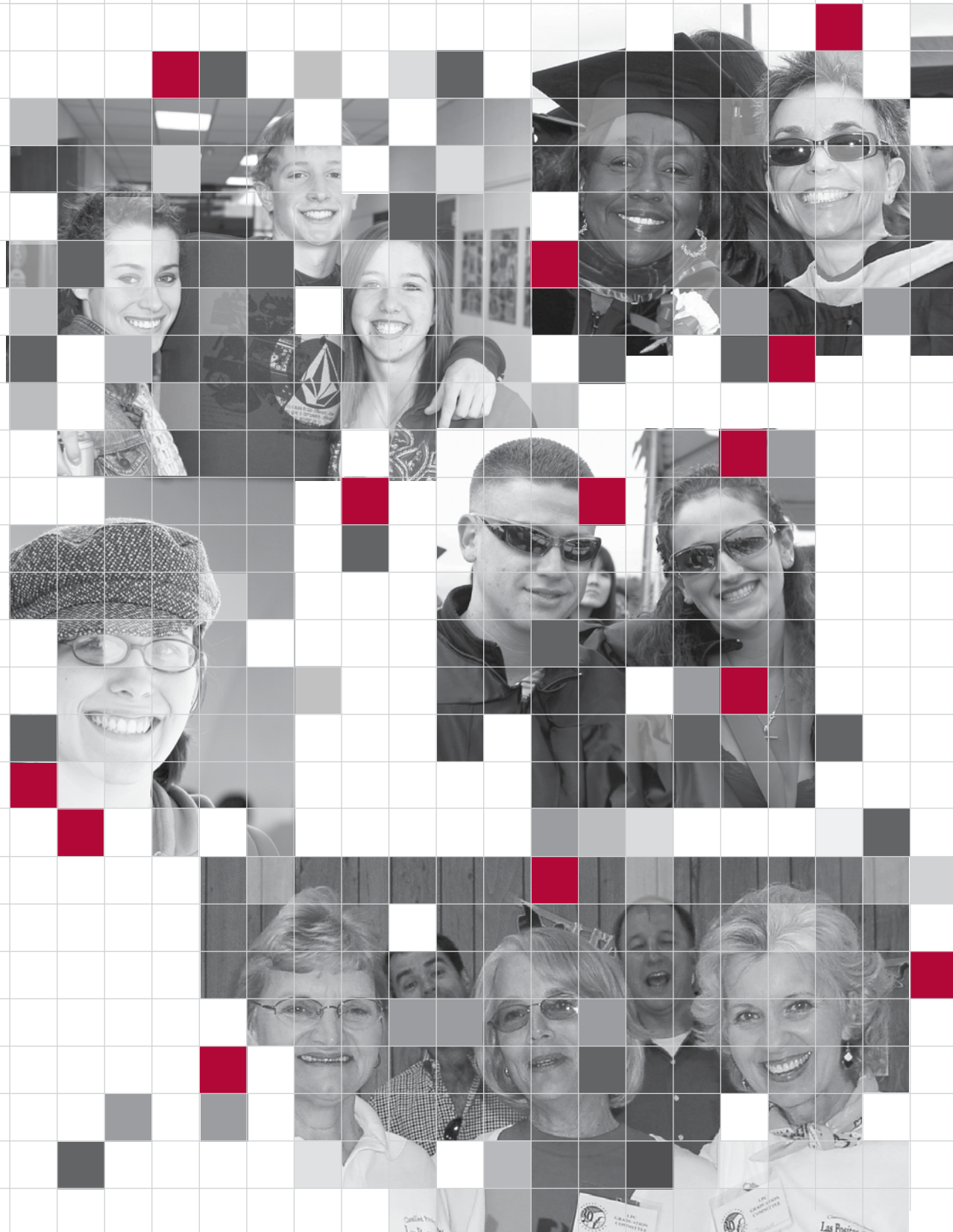
### Las Positas College

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 Ted Kaye, Ph.D., Chief Executive Officer, LPC Foundation

### Chabot College

Robert E. Carlson, Ed.D., President

# General Information



## Chabot-Las Positas Community College District

The Chabot-Las Positas Community College District has provided quality education to residents of the Bay Area for over forty-five years. The voters approved the formation of a "junior college district" on January 10, 1961 and the first board of trustees was elected on April 18, 1961.

Las Positas College is one of two separately accredited colleges in the Chabot-Las Positas Community College District. Las Positas College principally serves citizens from the communities of Dublin, Livermore, and Pleasanton, and several unincorporated areas including Sunol and north Livermore.

In addition to the traditional and vocational curriculum offered at the Colleges, the District conducts an active outreach program in contract education to help business, industrial and public organizations develop training programs tailored to meet their needs.

## Governance Structure

The California Community Colleges operate under the governance of the State Chancellor, the State Board of Governors appointed by the Governor, and local districts with their own locally elected governing boards. The California Community College's System Office and Board of Governors oversee the distribution of funds apportioned by the State Legislature for use by the Community Colleges. California's Community Colleges are organized into 72 community college districts. Each college within a district has a president or superintendent, and each district has its own elected board of trustees who apportion funds and governs the colleges within its district.

## Las Positas College

Las Positas College is located 40 miles southeast of San Francisco, amid one of California's fastest growing regions for business, science, and technology. Gently rolling hills and picturesque vineyards provide the scenic background for the college's 147-acre campus.

Las Positas College currently enrolls approximately 8,500 day and evening students. The College offers a two-year curriculum for students seeking career preparation, transfer to a four-year college or university, or personal enrichment. The College provides university transfer classes, retraining classes for those in need of employment or career advancement, a first-time educational opportunity for many adults, enrichment classes for those seeking a broader perspective, and vocational training for those entering the technical and para-professional workforce. Las Positas College excels in helping students transfer to the University of California system, the

California State University system, and other four-year colleges.

Students who come to the College can choose any of 24 Occupational Associate Degrees, 16 Transfer Associate Degrees, and 36 Certificate Programs. In addition, the College offers community education courses geared toward personal development and cultural enrichment.

Academic rigor is maintained in a friendly, personal atmosphere. Las Positas College faculty and staff are distinguished by their energy, creativity, and commitment to making a difference in the lives of the students they serve.

Las Positas College is fully-committed to supporting all Tri-Valley residents in their quest for education and advancement.

The campus is accessible from BART and Interstate 580. Students can take buses from the Pleasanton-Dublin BART station and from many locations in Livermore and Pleasanton. The College is proud of its exceptional safety record, which has made it one of the safest colleges in the Bay Area.

## Master Plan

Las Positas College began as an extension center of Chabot College in 1963, offering 24 classes and enrolling 810 students at Livermore High School and two other sites. By 1965, the program had expanded and moved to Granada High School in Livermore, it subsequently grew to include Amador and Dublin High Schools as well. The District purchased the Livermore site that same year, intending to develop a comprehensive community college. On March 31, 1975, "Valley Campus" opened as the Livermore Education Center of Chabot College.

Las Positas College has since developed into a fully accredited comprehensive institution. In 1988, the College was designated by the Board of Governors to be an independent college. Las Positas College received full accreditation on January 7, 1991 from the Accrediting Commission for Community and Junior Colleges.

The College has developed a comprehensive educational master plan to address the rapid growth and needs of the community and student population. The Physical Education complex, featuring a state-of-the-art gymnasium, opened its doors to students in Fall 2005. The Multi-Disciplinary Building, to be completed in 2007, will provide the College with more than 36,000-square-feet of classrooms, lecture and lab space. College expansion will continue with construction of the Center for the Arts and Child Development Center.

## About the College

Over the next ten years, Las Positas College is predicted to have 14,000 students. In preparation for this anticipated growth, the College initiated an intensive review and planning process to carefully assess its programs, services, and facilities. The resulting 2003-2010 Educational Master Plan sets the foundation for future planning and development. The plan calls for the addition of a new wing for the Science and Technology Building, playing fields for Physical Education, a Student Services building, and many classroom renovations.

### Mission of the California Community Colleges

By law, the California Community Colleges shall admit any person who is a high school graduate or equivalent thereof, or who is eighteen years of age or older, and who can profit from the instruction offered.

Primary missions of the colleges are to offer academic and vocational education at the lower division level. Another primary mission is to advance California's economic growth and global competitiveness through education, training, and services that contribute to continuous work force improvement. Essential and important functions of the colleges include: basic skills instruction and in conjunction with the school districts, instruction in English as a Second Language, adult noncredit instruction, and support services which help students succeed at the postsecondary level. Community Education is designated as an authorized function.

The Board of Governors shall provide leadership and direction in the continuing development of the California Community Colleges as an integral and effective element in the structure of public higher education in the state.



### Mission of Las Positas College

#### Mission Statement

The Mission of Las Positas College is to foster growth and success, both in its students and in its community. The College strives to fulfill this Mission by offering high-quality, comprehensive educational programs and services. It augments and strengthens its Mission by partnering with local businesses and organizations to promote the welfare of its students and the economic and social health of its service area.

Las Positas College:

- Enables students to transfer to baccalaureate-granting institutions;
- Prepares students for career entry and advancement;
- Provides basic skills and English as a Second Language instruction;
- Delivers quality, substantive student support services; and
- Fosters student success through committed, exceptional faculty and staff.

Las Positas College provides a strong instructional foundation for its students and aims to cultivate in them:

- The ability to think critically;
- An understanding and respect for difference and diversity;
- The ability to make humane, informed, and ethical decisions;
- The willingness to adapt to change in the workplace; and,
- The desire to participate in society as responsible citizens.

#### Values Statement

Las Positas College thrives as a teaching and learning community committed to integrity and excellence. To nourish this environment and the communities served, we:

- Promote and celebrate lifelong learning;
- Anticipate and meet the needs of the ever-changing workplace;
- Demonstrate social and environmental responsibility;
- Promote tolerance and mutual respect in a diverse community;
- Foster a climate of discovery and creativity; and,
- Hold firm to the belief that each of us makes an astonishing difference.



### Guiding Principles

Las Positas College is committed to excellence in everything it does. Therefore, we pledge to provide:

- Instruction and student support that are excellent, consistent and improved continually;
- Processes within the College that operate smoothly and purposefully;
- Meetings that are meaningful and effective and get things done;
- Facilities and equipment that are state-of-the-art, well-maintained and used effectively;
- An environment that is aesthetically pleasing for learning and working;
- A climate that promotes a positive learning and working environment for students, staff, faculty and community members;
- A tireless dedication to systemic self-review processes with prompt implementation of improvement;
- A partnership that anticipates and responds to the ever-changing needs of the communities that we serve; and,
- A culture that sincerely acknowledges, recognizes and appreciates a commitment to excellence.

### Las Positas College Philosophy

We, the faculty, staff, and administrators of Las Positas College, support the basic democratic tenets that all individuals be afforded opportunity to reach their highest human potential as responsible members of society and that all individuals be given an equal opportunity to prepare themselves to assume the privileges and responsibilities of self-governance in a world of diverse philosophical values and political practices.

We believe that the qualities of an educated person include knowledge, competency, mental and physical well being, concern for the environment, and respect for the dignity of diverse peoples and cultures.

We offer students the opportunity to participate actively in the educational process, to make significant choices, and to achieve increasing self-direction in an atmosphere in which the freedom to create and to explore ideas is encouraged and supported.

We also encourage and support creativity and innovation among faculty, staff and administrators whose values reflect those of the community and whose presence and leadership serve as models for students.

We support an environment that provides educational programs, learning resources and student services to a culturally rich and diverse student population. We are sensitive to students with varying needs, interests, physical abilities and learning differences or difficulties.

### Statement of the Objectives of the General Education Program

General education programs are accepted as a significant part of the program of studies in American colleges and universities. The term general education refers to a program of studies that introduces the student to areas of study that mature the mind, enrich family, and widen social and ethnic relationships. They develop skills and aptitudes that can aid the student in furthering personal and social usefulness, and in living in the environment as thinking and contributing citizens.

It is a program, furthermore, that activates the imagination, deepens the perspective of life, and gives life direction and purpose. The general education program is eminently well-suited to a democracy where every person is eligible to enjoy the cultural riches of the world and to become a useful citizen in dealing with local, national and world economics, and cultural, social and political problems.

### Las Positas College General Education Philosophy

A philosophy of general education addresses both a present reality and a future hope. The reality encompasses the practical elements a well-educated student should grasp early in education. The future hope will serve as a foundation to achieve insights into ethical problems and engage in lifelong learning, the hallmarks of educational excellence.

#### General Education

- Provides skills and proficiencies needed to succeed in an academic environment as well as in our continually changing world.
- Exposes students to core knowledge, concepts, and methodologies of the Arts, Humanities, and the Natural and Social Sciences.
- Develops students' appreciation for the cultures and history of the United States and prepares them to participate in our democracy.
- Familiarizes students with a diversity of viewpoints by exposing them to the history and cultures of other countries.
- Advances students' critical thinking skills, enabling them to access, examine, and assess issues and information.
- Hones students' reading, speaking, and writing skills, enabling them to communicate clearly, effectively, and creatively.
- Promotes the development of students' quantitative competencies, to strengthen analytical thinking, and gain the ability to evaluate and access informational technology.
- Increases students' understanding of the physical and biological sciences, the scientific method, and the reliability and limitations of scientific knowledge.



## About the College

- Deepens students' awareness of wellness and teaches the methods for and importance of maintaining physical and mental health.
- Encourages students to cultivate new interests and develop their abilities to search for answers, recognizing that an educated person understands how much more there is to learn.

### Accreditation

Las Positas College is a public, two-year community college accredited by the Accrediting Commission for Community and Junior Colleges of the Western Association of Schools and Colleges (3402 Mendocino Avenue, Santa Rosa CA 95304, 707.569.9177), an institutional accrediting body recognized by the Commission on Recognition of Postsecondary Accreditation and the U.S. Department of Education. The University of California, California State University, and private universities and colleges accept appropriate courses for transfer.

The College is approved for the training of veterans and for the education of foreign students.

### Statement of Compliance

Las Positas College maintains an atmosphere that is welcoming to all students and conducive to their academic and personal success. The College provides an environment free of all forms of harassment, in which all students and employees are treated with dignity and respect.

Las Positas College does not discriminate on the basis of race, color, national origin, gender, physical ability, religious belief or age in any of its policies, procedures or practices. Las Positas College is in full compliance with:

- Title VI of the Civil Rights Act (1964)  
—pertaining to race, color and national origin;
- Title VII of the Civil Rights Act (1964)  
—pertaining to religion and gender;
- Title IX of the Educational Amendments (1972)  
—pertaining to gender;
- Sections 503 and 504 of the Rehabilitation Act (1973)  
—pertaining to disability;
- Age Discrimination in Employment Act (1974)  
—pertaining to age; and
- Americans with Disabilities Act (1990)  
—pertaining to disability.

Limited English skills are not a barrier to programs and services of the College.

No person shall be subjected to sexual overtures or conduct—verbal, visual or physical—which is intimidating, hostile, offensive or unwelcome. Such conduct by employees or students is unacceptable and will not be tolerated by the College.

To inquire about the application of Non-Discrimination Policies contact:  
Sylvia Rodriguez  
Assistant Dean of Admissions and Records  
925.424.1542 or email: [srodriguez@laspositascollege.edu](mailto:srodriguez@laspositascollege.edu)

To inquire about the application of Sexual Harassment policies contact:  
Amber Machamer  
Director of Research and Planning  
925.424.1027 or email: [amachamer@laspositascollege.edu](mailto:amachamer@laspositascollege.edu)

To inquire about the application of Disability Issues and Student Concerns and Grievances contact:  
Pamela Luster  
Vice President of Student Services  
925.424.1405 or email: [pluster@laspositascollege.edu](mailto:pluster@laspositascollege.edu)

Inquiries may also be addressed to the United States Department of Education, Office of Civil Rights, San Francisco Office, Old Federal Building, 50 United Nations Plaza, Room 239, San Francisco CA 94102-4912, call 415.556.4275 or fax 415.437.7783.

### Changes in Rules and Policies

Although every effort has been made to assure the accuracy of the information in this Catalog, students and others who use this Catalog should note that laws, rules, and policies change from time to time and that these changes may alter the information contained in this publication. Changes may come in the form of statutes enacted by the Legislature, rules and policies adopted by the Board of Trustees of the Chabot-Las Positas College District, or by the Chancellor or designee of the institution.

### Internet Access

Access Las Positas College through the Internet at:  
[www.laspositascollege.edu](http://www.laspositascollege.edu)

## Admission

### Eligibility for Admission

Any person who is a high school graduate or equivalent thereof, or who is eighteen years of age or older and who can profit from the instruction offered, is eligible to apply for admission to Las Positas College.

### Ability to Profit from Instruction

Under the provisions of the California State Education Code and Governing Board Policy of this District, a student's ability to profit from the instruction offered shall be determined by evidence of the individual's:

- Ability to meet the demands of college instruction at Las Positas College;
- Ability to master, and proceed beyond, the minimum basic skill levels required for success in college education;
- Ability to show substantial progress in cognitive and affective learning in college courses; and
- Ability to show progress toward independent learning.

By this rule, the College shall determine whether a person is or is not capable of profiting from college instruction. The determination of ability to profit is a matter of composite professional judgment based upon available evidence. Additional information may be obtained from the Office of the Dean of Student Services, Building 700.

### Admission Procedures Application

An applicant may apply for admission to the College by one of the following methods:

- Completing an application online at [www.laspositascollege.edu](http://www.laspositascollege.edu);
- Submitting a completed application at the Office of Admissions and Records, Building 700;
- Mailing a completed application to Las Positas College, Office of Admissions and Records, 3033 Collier Canyon Road, Livermore, CA 94551.

It is only necessary to submit one application per academic year. An academic year is summer through spring.

Official transcripts of previous academic work at other institutions are required to assist students in reaching their educational objectives at Las Positas College. Transcripts are also required for students who are candidates for special admissions programs and/or services such as financial aid and scholarships, veteran's benefits, athletics, concurrent enrollment, and international student education.

### Admission with Advanced Standing

Credits earned at other accredited colleges or universities may be applied towards an AA or AS degree from Las Positas College upon receipt of official transcripts. Accreditation must have been listed in the Accredited Institutions of Higher Education manual. Credit may also be allowed for college-level United States Air Force Institute courses and for formal courses taken at military service schools if such credit is recommended in the American Council on Education Guide.

### Concurrent Enrollment Educational Opportunities for High School Students

Las Positas College provides the opportunity for high school students to enroll in college-level courses. Students who desire to participate in concurrent enrollment must be recommended by their high school principal and have written parental permission. There are course restrictions for high school students. Information on the Concurrent Enrollment Policy is available at the student's high school, and the Office of Admission and Records, Building 700, or the Counseling Center, Building 700.

The latest program information and deadlines for application and recommendation materials are available online at [www.laspositascollege.edu](http://www.laspositascollege.edu), at the local high schools, and at Office of Admissions and Records, Building 700, or the Counseling Center, Building 700. Students must complete the required enrollment materials each semester.

*Be Many Voices  
of Las Positas College*

"LPC means quality education, wonderful instructors, and the support system of the entire faculty. LPC enriches my life and has welcomed students returning to work after many years away. Everyone has an equal opportunity to learn. The student government is superb and the services are great. It is a real community."

—Judy, Tri-Valley Area

## Admission and Registration

### International Student Admission

Las Positas College is authorized under Federal Law to enroll non-immigrant alien students. International students (F-1 Visa) seeking admission to Las Positas College must first obtain an international student application packet from the Office of Admissions and Records, Building 700. The completed documents may then be mailed or faxed to the International Student Office. The application packet contains documents which upon completion:

- Provide evidence of having completed the equivalent of a United States high school education;
- Demonstrate the ability to read and write English at the 12th grade level (TOEFL test may be required). International students will be required to enroll in the English as a Second Language (ESL) program if the TOEFL and the College assessment results indicate limited English proficiency;
- Show means of adequate financial support and medical care;
- Provide evidence, (by means of a physical examination) certifying freedom from active tuberculosis;
- Demonstrate support from a local sponsor.

The number of international students admitted is contingent upon the College's ability to provide services as required. International students will be accepted for admission to Las Positas College at both the fall and spring semester of each academic year. Contact the International Student Program at 925.424.1540 for more information. For information on international student fees, refer to Catalog page 18, "Fees and Refunds," or consult the current Class Schedule.



### SEVIS – New electronic reporting system

SEVIS is a government database program, implemented on January 31, 2003, by the Bureau of Citizenship and Immigration Services (BCIS), formerly the Immigration and Naturalization Service (INS). The SEVIS program is a means by which the Bureau of Homeland Security can track certain non-immigrants such as F-1 or M-1 students based on the data provided by colleges and universities. Las Positas College is a BCIS certified institution and as such must provide data on F-1 or M-1 students and report any subsequent changes in status each semester to ensure the students full compliance with BCIS and College regulations.

### Residency Requirements for Admission

In determining tuition/enrollment fees, students fall under the following two categories:

#### I. Residents

Those who have legally resided in California for at least one year and a day prior to the first day of a new semester or session. State law requires that students give evidence of physical presence in California for one year and their intent to make California their home state for other than a temporary period. Non-citizens who meet residency requirements must provide documentation from the Bureau of Citizenship and Immigration Services (BCIS).

#### II. Non-residents (out-of-state and international students)

Those who do not meet the California residency requirements as previously outlined. Refer to Catalog, page 18, "Fees and Refunds."

A California Nonresident Tuition Exemption may be granted to certain non-resident students who meet the exemption requirements set forth in Assembly Bill 540. Contact the Office of Admissions and Records at 925.424.1500 for further information. All questions concerning residence status should be referred to the Office of Admissions and Records.

### Transcripts from Other Colleges

Students enrolled at Las Positas College who desire academic credit for courses taken at other accredited colleges/universities, must submit official transcripts of that work to the Office of Admissions and Records, Building 700. It is the student's responsibility to initiate a request to each institution asking that an official transcript of his/her work be sent directly to the Office of Admissions and Records, Las Positas College.

To be credited by Las Positas College, the course work must meet the following criteria:

- The course(s) must have been taken at an accredited college/university;
- The course(s) must be lower division;
- The course(s) must have been completed with a grade of "D" or higher. All transferred grades (including "F"s) will be used in the calculation of units attempted, units completed, and the grade point average;
- The content of the course(s) must be determined to be equivalent to the current Las Positas College course standards. The initial evaluation of course credit is done by the Records Evaluator under the supervision of the Assistant Dean of Admissions and Records, Registrar. The final responsibility for determining course equivalency is the discipline faculty.

### **Advanced Placement Program - College Entrance Examination Board (C.E.E.B.)**

Las Positas College grants credit for successful completion of the Advanced Placement Program of the College Entrance Examination Board (C.E.E.B.). Credit will not be posted on the student's permanent record until 12 units have been completed at Las Positas College with a grade point average of 2.0 or better. For further information regarding Advanced Placement policies and procedure, see Catalog page 38-39.

### **Concurrent Enrollment with University of California, Berkeley**

Students who have completed 20 transferable units at Las Positas College or Chabot College with a 2.4 cumulative Grade Point Average may be eligible to cross-register with University of California, Berkeley while completing coursework at Las Positas College. Students must be enrolled in 12 units between the two campuses and may enroll in one lower-division course (numbered 1-99 at UC, Berkeley). For further information contact the Career/Transfer/ Employment Center, Building 900 or the Counseling Office, Building 700.

### **Cross Registration with California State University, East Bay**

Students who have completed 20 transferable units at Las Positas College or Chabot College with a 2.0 cumulative Grade Point Average may be eligible to cross-register with California State University, East Bay while completing coursework at the College. Students who elect

to "cross-register" may enroll in courses at Cal State East Bay which are either: (1) upper division or (2) not offered at any time by Las Positas College. Students must be enrolled in a minimum of 6 units at Las Positas College and 12 units between the two campuses. For further information, contact the Career/Transfer/ Employment Center, Building 900 or the Counseling Office, Building 700.

### **Readmission from Dismissed Status.**

Students on dismissed status from Las Positas College must submit a "Petition for Readmission from Dismissed Status" form. In order to enroll in classes, the Dean of Student Services and Assistant Dean of Admissions and Records or designee must approve readmission. Petition forms are available at the Counseling Center, Building 700.



## Matriculation

### Matriculation Process

Matriculation is a partnership between the student and the Chabot-Las Positas Community College District for the purpose of aiding students in obtaining their educational goals. This partnership identifies the responsibilities of both the College and the student and describes how to reach those goals through the established programs, policies, and requirements currently in place.

The Chabot-Las Positas Community College District agrees to provide "A Plan of Success" to each student which includes: an admissions process; an orientation to the College's instructional programs, support services, and procedures; an assessment of basic educational skills and career goals; counseling/advising for course selection and for developing an individual educational plan; quality instruction; continuous follow-up on progress with referral to support services when needed; and institutional research and evaluation that monitors the effectiveness of all services provided.

The student agrees to express a broad educational intent upon admission and to declare a specific objective within a reasonable period of enrollment; attend classes and complete assigned work; confer with counselors/advisors to discuss choices; seek support services as needed to assist in completing course work; and maintain progress toward an educational goal according to standards set by the Chabot-Las Positas Community College District.

### Exemptions

Students who enroll in credit courses at the Chabot-Las Positas Community College District may be exempted from the matriculation components as listed below:

#### I. Orientation

- A. Non-matriculated students;
- B. Students who have earned a previous college degree;
- C. Students enrolling in only one performance course (i.e., acting, drawing) or activity course (i.e., physical education);
- D. Returning students who have attended a Las Positas College orientation session within the last two years.

#### II. Assessment

- A. Non-matriculated students are exempt with the exception of those students who plan to register in an

English, mathematics, and/or chemistry course.

B. Matriculated students exempt from the assessment requirements include:

1. Students who have earned a previous college degree;
2. Students currently enrolled at a four-year college or university who are not enrolling in English or mathematics courses;
3. Students enrolling in only one performance course (i.e., acting, drawing) or activity course (i.e., physical education);
4. Returning students who have completed the Chabot or Las Positas College assessment process within the last two years.

English, mathematics, and chemistry assessment testing requirements will be waived for students who have:

- Completed an assessment process at another institution (within the past two years) and have assessment results/scores available for review;
- Completed previous college work in mathematics, English, and/or reading and have provided transcripts or grade reports;
- Been individually assessed and tested through Disabled Students Programs and Services.

#### III. Counseling/Program Advisement

- A. Non-matriculated students;
- B. Students who have earned a previous college degree;
- C. Students enrolling in only one performance course (i.e., acting, drawing) or activity course (i.e., physical education);
- D. Students who have completed a Student Education Plan.

Any student who believes s/he is eligible for exemption from any of the Matriculation components may obtain an Exemption Form from the Counseling Center, Building 700. Students who are exempt from one or more of the Matriculation components are encouraged to participate in this process to enhance their success while enrolled at the College. Please Note: Exemptions are not a substitute/waiver for meeting course prerequisites. Students must present a transcript to the Counseling Center, Building 700, indicating prerequisites have been met through prior course completion.

Any student who believes s/he has been discriminated against in the Matriculation process (assessment, orientation, counseling advisement) may file a grievance with the Dean of Student Services, Building 700.



## Registration

### Registration Methods

Students may register for classes using the following methods:

- Via the Internet using CLASS-Web at [www.laspositascollege.edu](http://www.laspositascollege.edu); or
- In person at the Office of Admissions and Records, Building 700.

For detailed information on registration procedures refer to the current Class Schedule.

### Registration Information

#### I. New Students

Students who have never attended the Chabot-Las Positas Community College District will need to complete the following steps for registration:

- A. Complete and submit an "Application for Admission" to the Office of Admissions and Records;
- B. Complete the assessment process and obtain an orientation schedule;
- C. Attend an orientation session. Counseling services will be provided at each orientation session to assist students with program planning;
- D. New students will not receive an individual registration appointment date. Registration date is based on the date of application. Allow two business days for application processing.

#### II. Returning Students

Students who have not attended the Chabot-Las Positas Community College District during the past academic year will need to complete the following steps for registration.

- A. Complete and submit a new "Application for Admission" to the Office of Admissions and Records.
- B. Returning students on probation or dismissed status must obtain counselor advisement and approval before proceeding with registration.
- C. Returning students in exempt status may not be required to obtain counselor approval prior to registration. Exempt status does not exempt students from prerequisite requirements; see page 14 for exemptions.
- D. Returning students will not receive an individual registration appointment date. Registration date is based on the date of application. Allow two business days for application processing.

#### III. Continuing Students

Students who have attended the Chabot-Las Positas Community College District during at least one of the two most recent Fall/Spring semesters are considered continuing students. Registration appointment notices will automatically be mailed to all continuing students prior to the registration period.

Continuing students at Las Positas College will be assigned a registration priority number. The registration priority number is based on the following two factors:

- A. The total number of units completed at the Chabot-Las Positas Community College District followed by a random digit.
- B. The student's priority within the following groups:
  - Group 1 Those who have completed a Student Education Plan (SEP) (see page 13 for information on SEP), orientation, and the assessment components of the matriculation process;
  - Group 2 Those who have completed or are exempt from the matriculation process (assessment, orientation, counseling);
  - Group 3 Those who have completed 2 of the 3 matriculation components (assessment, orientation, counseling);
  - Group 4 Continuing students who do not fall under the previous three categories.

#### Payment Methods

Students have the option of paying fees by (1) credit card at the time of online registration; (2) mail; (3) bringing payment in person to the Office of Admissions and Records, Building 700. Students who may be eligible for financial aid and/or an enrollment fee waiver should contact the Financial Aid Office, Building 1500, prior to registration.



# Admission and Registration

## Student Identification Card

All students are **required** to carry a valid photo identification card with current validation sticker. This card is essential for use of library, computer lab, bookstore and other campus services. Cards may be obtained at the Office of Admissions and Records, Building 700, and should be carried at all times. The first card is free. A replacement fee will be charged for lost or stolen cards.

## Class Schedule

Before the beginning of each semester, a Class Schedule is published indicating courses to be offered—the time, the instructor, and the room assignment. Important instructions and information regarding admissions and registration are included in this publication. The Class Schedule is posted on the Las Positas College website and is available for purchase at the College Bookstore, Building 1300.

## Admissions Electronic Mail (e-mail)

Students and prospective students can contact Admissions to receive answers electronically from Admissions representatives at: [admissions@laspositascollege.edu](mailto:admissions@laspositascollege.edu)

## Registration Policies

### Open Enrollment

In accordance with District policy, all classes are open to enrollment and participation by any person who meets the academic prerequisites of the class and who is otherwise eligible for admission to Las Positas College.

### Enrollment Limits

Students are cautioned that some classes and programs may prove to be so popular or so limited by physical facilities and/or availability of qualified instructors that all students who apply cannot be accommodated.

## Prerequisites

### Course Prerequisites

Students wanting to enroll in a course with a prerequisite must satisfactorily complete that prerequisite before

they are allowed to register. A course has a prerequisite to ensure that a student has the appropriate body of knowledge to successfully take the course. Courses with a co-requisite require that a student either has taken the co-requisite before or is taking it at the same time as the courses.

Usually, a prerequisite is a course from a lower sequence of courses. For example: You may not enroll in Math 55 without first passing Math 65 with a "C" grade or better, or the equivalent. Usually, a co-requisite course is a lab or a course that provides supplemental instruction.

To see which courses have prerequisites and/or co-requisites refer to the individual course offerings in this Catalog or the LPC website at [www.laspositascollege.edu](http://www.laspositascollege.edu).

## Request for Course Substitution or Waiver of Program Requirement

Students who have had substantial prior experience related to the content of a college-level course, and who can present adequate evidence of their competence, may petition to have enrollment in that class waived without college credit for purposes of satisfying a program requirement. Courses considered for substitution must have been taken at an accredited institution. Petitions for course substitution or waiver of program requirements are available from the Counseling Center, Building 700. Approval of the request by the Dean of Student Services is required prior to completing registration. Approval shall be based on the following criteria:

1. Adequate evidence of competence as supported by transcripts, statements of employers, military or technical school certificates, etc.;
2. Statement from an instructor that the course reflects the appropriate subject matter and fulfills the necessary program requirements, and signature of the Division Dean to validate the course. Students shall be advised that courses waived receive neither unit nor grade credit and that other courses may be needed to satisfy the total number of units required to complete the program of study.

**Classification of Students Based on Unit Load**

The following classifications have been established based on unit load:

Full-time student	Registered for 12 or more units
Three-quarter time student	Registered for 9.0 to 11.5 units
Half-time student	Registered for 6.0 to 8.5 units

**Limitation on Unit Load**

Eighteen (18) units per semester are considered to be a maximum load for a student. In order to take more than the maximum, approval must be obtained from a counselor.

**Auditing**

Auditing is permitted only for the following specific classes: Senior Community Choir, Community Choir, and Chamber Music Ensemble. The fee to audit is \$15 per unit.

**Course Conflict/Course Overlap**

Students may not enroll in two classes that meet during any part of the same hour.

**Adding Classes**

For the first week of instruction only, the Office of Admissions and Records, Building 700, will continue to register students into "open" classes without instructor add cards. Beginning with the second week of the semester, courses may be added only with the permission of instructors. If space is available, the instructor will issue an ADD CARD containing an individual add authorization number. A student's add priority number is the total number of units completed at the Chabot-Las Positas Community College District followed by a random digit. Students with the highest priority number will receive an add authorization first. Refer to the current Class Schedule for add deadlines and procedures. Effective Summer/Fall 2005, returning students will have their priority number activated for the add period only. See the current Class Schedule for additional information.

**Withdrawing from Classes**

Students are responsible for officially withdrawing from classes by the deadline date listed in the current Class Schedule. There is no automatic withdrawal process. Failure to follow the proper withdrawal procedures may result in a grade of "F". Students may drop a course by CLASS-Web, or in person at the Office of Admissions and Records, Building 700.

Requests to withdraw from a class that are received by the "NGR" (No-Grade-of-Record) deadline will not appear on a student's academic transcript. If a student withdraws from a course after the "NGR" deadline but on or before

the "W" (withdrawal) deadline, a "W" will appear on their transcript. A "W" notation will not affect the student's grade point average; however, excessive "W" notations may affect (1) progress status, (2) status as a full-time student, (3) eligibility for financial aid and other benefits, or (4) athletic eligibility. Refer to the Class Schedule for important deadline dates.

**Extenuating Circumstance Withdrawal**

Class withdrawal after the twelfth week of instruction is permitted only on the grounds of verified extenuating circumstances (accident, illness, or other matters beyond the control of the student). A "W" will be granted only if the petition is approved and the class instructor verifies that the student is maintaining a passing grade of "D" or better (grade "CR" in CR/NC courses). Those students whose request for withdrawal is denied may choose to continue current class enrollment. Extenuating Circumstance Petition forms are available at the Office of Admissions and Records, Building 700.

**Military Withdrawal**

If a student is called to active military duty after the No-Grade-of-Record (NGR) period, s/he is entitled to military withdrawal (MW). Servicemen and women should provide copies of their military orders to the Assistant Dean of Admissions and Records, Building 700.

**Withdrawing from the College**

Students who intend to withdraw from the College must initiate withdrawal procedures for each class in which they are enrolled. Students are held accountable for clearing all obligations with the College including fees, library books, equipment, and lockers. The deadline for withdrawal from classes with a guaranteed symbol "W" is Friday of the twelfth instructional week. Refer to the Class Schedule for deadlines.



# Admission and Registration

## Instructors' Withdrawal Option

The instructor may drop students who miss the first meeting of a course. In addition, an instructor may initiate a drop if the student is absent for a total of four (4) consecutive or six (6) cumulative instructional hours and/or two (2) consecutive weeks of instruction.

## Repeating a Course

The College recognizes that the most recent completion of a course should most accurately reflect a student's academic progress. Therefore, students may repeat for credit those courses taken for which grades of D, F, or NC were received. The most recent grade (A, B, C, D, F, C/NC) received must be calculated into the GPA regardless of whether this grade is lower or higher than the original grade.

A student, by state law, is limited to ONE ATTEMPT to repeat a course for the purpose of raising a substandard grade (D, F, or NC) except as provided in this Catalog for specific courses or in cases of extenuating circumstances.

Certain courses designated by the Office of Academic Services may be repeated up to a maximum of three times. Students should consult the College Catalog.

When a student has repeated a course and earned a passing grade of A, B, C, D, or CR, s/he may petition the Assistant Dean of Admissions and Records to count, for grade point calculation only, the most recently earned grade. The "Petition For Use Of Most Recent Grade in a Repeated Class" is available at the office of Admissions and Records, building 700. Physical Education activity courses may not be repeated for a higher grade.

Students are advised that both the original and subsequent grade will remain on their transcript and that in transferring to another institution, they may be held responsible for all units attempted.



## Course Repetition: Special Circumstances

Students may not repeat a course in which they received a passing grade of A, B, or C. However, under specific conditions, the Dean of Student Services or designee may permit the repetition of courses for which a grade of "C" or better has been received. These conditions are:

- When the student's previous grade is, at least in part, the result of extenuating circumstances. Extenuating circumstances are verified cases of accident, illness or other circumstances beyond the control of the student;
- When a student should repeat a course because there has been a significant lapse of time since the student previously took the course;
- When it is necessary to meet a legally mandated training requirement as a condition of continued paid or volunteer employment.

California Education Code (Title V, Section 55763) states that grades awarded for courses repeated under these specific conditions shall not be counted in calculating a student's grade point average.

## College Transcripts

Students who desire transcripts of their academic record must submit a written request to the Office of Admissions and Records, Building 700, indicating the student's name used while attending, SSN or W identification number, and the number of transcripts requested and name and address of the designated recipient. Transcripts are provided only in response to a written request from the student. Official transcripts will be mailed directly to the designated recipient.

Copies of transcripts received from other colleges and universities cannot be forwarded to a third party. Students desiring such transcripts must request them directly from the issuing institution.

For information on transcript fees, refer to Catalog page 19, "Fees and Refunds."

## Fees are Subject to Change

Enrollment fees are regulated by the State budget. The college reserves the right to collect enrollment fee increases approved by the State Legislature from all students including those who have paid fees prior to the implementation of new rates.

## California Residents - Enrollment Fee

California residents, except those exempt by law, will be charged an enrollment fee of \$26.00 per unit for classes at Las Positas College. Updates to fee information will be made available at [www.laspositascollege.edu](http://www.laspositascollege.edu) or by contacting the Office of Admissions and Records, Building 700.

## Nonresident Tuition

Nonresidents of California are required to pay a tuition fee of \$163 per unit in addition to the enrollment fee and other college fees. A California Nonresident Tuition Exemption may be granted to certain non-resident students who meet the exemption requirements set forth in Assembly Bill 540. Contact the Office of Admissions and Records for further information.

## International Student Tuition

The tuition fee for international students, non-immigrant aliens and students on other types of visas is \$165 per unit in addition to the enrollment fee and other College fees. International students (F-1 Visa) are required to enroll and maintain a minimum of 12 units per semester.

## Payment of Fees

Enrollment each term is conditional upon full payment of fees/tuition. If fees are not paid, classes will be dropped according to the "non-payment" deadline dates listed in the Class Schedule and College web site.

## Failure to Pay

College financial obligations may result in the withholding of grades, transcripts, diplomas or registration privileges from any student who has been provided with written notice that he or she has failed to pay a proper financial obligation due to the College. Any item withheld shall be released when the student pays the financial obligation.

## Mailing Fee

An optional fee of \$3.00 will be assessed each semester to cover the cost of various mailings that students receive throughout the term (registration mailer, grade report, etc.).

## Health Services Fee

Las Positas College provides health services for students through a Student Health Center. In accordance with state community college regulations, all enrolled students will

be charged a mandatory Health Service Fee of \$13 per semester (except Summer Session). The only exceptions for this fee are as follows:

- Students taking classes held only on Saturday, at an off-campus site, or exclusively online;
- Students who rely only on prayer for healing in accordance with the teachings of a bona fide religious sect, denomination, or organization may see exemption from the fee and services. To apply for a waiver, students must provide a statement of such reliance from an official of the sect, denomination or organization.

Information on exemptions is available in the Office of Admissions and Records, Building 700.

## Associated Students Activities Fee

An optional fee of \$5.00 will be charged each semester. College clubs, scholarships, the Student Center, and other student-related services are supported in part by this fee.

## Student Representation Fee

A fee of \$1.00 will be assessed of all students each semester. This fee is used for any purpose related to representing students views with governmental bodies.

## Parking

Parking at Las Positas College is by permit only. Parking regulations are enforced from the first day of class. A daily permit can be purchased from dispensers located in the parking lots. A full-term permit may be purchased at the College Bookstore (or other designated location). The fees are as follows:

- Car - \$30.00;
- Motorcycle - \$15.00;
- Daily permits - \$2.00.

Parking fees for summer are different. Refer to the schedule of classes.

A reduced term parking fee of \$20.00 is available for students who receive a Board of Governors Waiver (enrollment fee waiver through Financial Aid).

## Print Fee Card

Use of a College computer lab requires the purchase of a Print Fee Card obtained from the Las Positas College Bookstore or vending machines. Discounted print cards can be purchased in the Bookstore.



### Refunds

#### Enrollment Fee Refund

Students who officially withdraw from classes during the NGR (No-Grade of Record) period (see Class Schedule for deadlines) shall be entitled to a full refund less a \$10 processing fee. Students must initiate a request for refund of enrollment fees for classes cancelled by the College. For cancelled classes, the \$10 processing fee is not charged. The refund policy complies with, and is based on, California law and the Education Code.

A refund will not be issued to students who withdraw from classes after the NGR deadline.

*Be Many Voices  
of Las Positas College*

"LPC is an integral part of my family's history. I attended many classes in art, math, science, and computer technology over the years, trying to reestablish my life after divorce. All three of my daughters, attended their first college classes in the 80s. Their years at LPC, helped them get into the university of their choice for their bachelor degrees in their junior years. They could not have gotten in so easily as freshman. I gratefully remember and thank the wonderful LPC teachers for all they contributed to my family, my career, and our life." —Joanne, anonymous

#### Non-Resident Tuition Refunds

Refund of tuition by reason of program reductions or withdrawal from the College will be made in accordance with the schedule indicated below.

- Withdrawal prior to the first day of instruction in a regular semester, term or session: 90% Refund
- Withdrawal during the first two weeks of instruction for a regular semester, term or session: 75% Refund
- Withdrawal after second week of instruction for a regular semester, term or session: No Refund

For further information concerning tuition charges and refunds, consult the current Class Schedule.

#### Tax Information

##### HOPE Scholarship and Lifetime Learning Credits

Students will receive from the Chabot-Las Positas Community College District a 1098T form noting all fees billed and scholarships awarded. The U.S. Department of Education's Office of Post Secondary Education oversees the HOPE Scholarship and Lifetime Learning tax credits. The "Taxpayer Relief Act of 1997" allows eligible taxpayers to claim a tax credit against their federal income tax for qualified education and related expenses.

Information about this tax program is available through [www.irs.gov](http://www.irs.gov), Publication 970 or [www.ed.gov](http://www.ed.gov). Interested parties with questions are directed to contact the IRS Office at 1.800.829.1040.

## Financial Aid

Financial aid is a means of assisting students in receiving a college education who would otherwise be unable to afford this opportunity. Selection of students to receive financial aid is based strictly on an analysis of family financial need, and is made without regard to age, sex, race, religion, national origin, or physical ability.

The Financial Aid Office, Building 1500, 925.424.1580 [e-mail: [lpcfinaid@laspositascollege.edu](mailto:lpcfinaid@laspositascollege.edu)], administers financial aid in accordance with federal and state regulations and policies. A full range of financial aid programs is offered including registration fee waivers, federal Pell Grants and Supplemental Educational Opportunity Grants (SEOG), state Cal Grants B and C, federal Stafford subsidized and unsubsidized student loans, federal WorkStudy job positions, an on-campus scholarship program and referrals to outside scholarship resources.

## Eligibility

To be eligible for most sources of financial aid, a student must be a U.S. citizen, permanent resident, or other eligible non-citizen; maintain satisfactory academic progress; register with Selective Service if required; demonstrate need; be working toward a declared approved major; have a high school diploma or GED or pass an independently administered examination approved by the Department of Education; and must not be in default on any student loan nor owe a refund on any grant.

## How to Apply

To apply for all federal and state sources of financial aid, students should complete the Free Application for Federal Student Aid (FAFSA). Applications are available in the Financial Aid Office, Building 1500, or students may apply online at [www.fafsa.ed.gov](http://www.fafsa.ed.gov). Las Positas College Title IV Code is 030357. A new FAFSA must be completed each school year. Students should apply as early as possible, preferably between January 1 and March 2 of the previous school year, for maximum aid consideration. Processing time from application to payment requires several weeks.

The federal government will e-mail or mail the student a 'Student Aid Report,' which indicates the application results. Once the College receives the student's FAFSA results electronically, students who qualify for a Pell Grant will be mailed a Missing Documentation letter, explaining what the student must do to complete their financial aid file in order to qualify for aid. Once a student has completed their file, they will be mailed an 'Award Letter' which indicates the amount of aid offered and expected disbursement dates. Students who have not received notification from the Financial Aid Office are encouraged

to follow up to determine the status of their aid application and an explanation of the results. The Financial Aid Handbook is posted online at [www.laspositascollege.edu/financialaid](http://www.laspositascollege.edu/financialaid).

## How Financial Need is Determined

The FAFSA allows the government to determine the Expected Family Contribution (EFC) for each student. The EFC is based on an impartial analysis of the student's total available resources. Financial need is determined by comparing the College's cost of attendance, available from the Financial Aid Office, with the student's Expected Family Contribution. Funds are distributed to students who indicate financial need through this process.

## Registration Fee Waivers

California's Board of Governors Waiver (BOGW) Program waives enrollment fees for qualified residents of California for the entire school year. Students may receive a waiver for any number of units, with no minimum. All students with some financial need qualify in addition to those who receive Aid to Families with Dependent Children or Temporary Assistance to Needy Families (AFDC/TANF), Supplemental Security Income or General Assistance. Students must submit a FAFSA for processing in order to establish eligibility, or current documentation of receipt of TANF/CalWORKs, SSI or General Assistance.

## How Grants are Determined

Grants are "gift aid" from the federal or state government that do not require repayment. Eligibility is determined from the results of the FAFSA in accordance with federal and state guidelines.



## Financial Aid

### Federal Pell and SEOG Grants

Federal Pell Grant award amounts vary depending on the Expected Family Contribution and the student's enrollment status. Currently awards range from \$400 to \$4050/year. Priority for Federal SEOG grants are given to full-time students who complete their files prior to June 1.

### Cal Grants

Students should file their FAFSA prior to March 2nd in order to qualify for a Cal Grant. Community college students who missed the March 2nd deadline may still apply by filing a FAFSA prior to September 2nd, and will be able to compete for remaining grants for community college students. In addition, each student must assure that a verification of grade point average be sent to the California Student Aid Commission. All students who have completed 16 units not including ESL or basic skills courses (as of the end of the previous semester) at Las Positas College will have their GPA automatically sent electronically. All other students should contact the Financial Aid Office, Building 1500, for assistance in determining which school or college is required to complete GPA verification for that individual. Students will be notified directly by the California Student Aid Commission if they have been awarded a Cal Grant. Students who receive a California Aid Report (CAR) form should submit it to the Financial Aid Office.

### Federal Workstudy

Students with unmet financial need may receive a grant to work on campus, or off campus in a community service position, as part of their financial aid package under the federal Workstudy program. Students should inquire about available positions at the Career/Transfer/Employment Center, Building 900.

### Stafford Student Loans Subsidized and Unsubsidized

Once financial need has been established, students enrolled at least half-time may apply for student loans. Students must maintain half-time enrollment in order to remain eligible for loans. Those with need may receive subsidized loans (government pays interest while in school); those without need may receive unsubsidized loans (student pays interest while in school). Loan limits are federally established and may never exceed a student's cost of attendance. Student loans do not need to be repaid until beginning six months after graduating or dropping below half-time. An entrance and exit counseling session or orientation is required for all loan students so that terms of the promissory note, avoidance and consequences of default, and student notification and responsibilities are very clearly understood. Contact the Financial Aid Office for further information.

### Satisfactory Academic Progress Policy

In order to remain eligible for continued federal and state grants and loans a recipient is required to maintain certain standards of progress known as a Financial Aid Satisfactory Academic Progress Policy. This policy addresses a minimum semester and cumulative grade point average (GPA) requirement, maximum time frame allowed to receive aid, percent of academic progress which must be made each semester relative to units attempted, consequences of not meeting the minimum requirements, reinstatement of financial aid eligibility, and appeal procedures.

The full policy is mailed to each student along with his or her financial aid award letter. It is each recipient's responsibility to read this policy and be responsible to understand it and ask for further clarification if needed.

### Complete Withdrawal From Classes After Receiving Aid

Federal law requires students to repay a portion of the funds received if they completely withdraw before the 60% point of the term, as measured in calendar days, not school days. NOTE: IF A STUDENT WITHDRAWS AFTER S/HE HAS EARNED 60% OF HIS/HER GRANT, THE STUDENT DOES NOT OWE ANY REPAYMENT. The Financial Aid Office will be able to indicate when exactly that 60% day of the term is. Students who complete '0' units in a term with a '0' GPA are subject to the same repayment regulations.

Students who are considering withdrawing from the College are highly encouraged to visit the Financial Aid Office, Building 1500, first to discuss the situation and to receive advice about their potential repayment.

Once the College notifies the withdrawn student of the Return to Title IV amount due, the student will have 45 calendar days to repay the Federal amount due to the College, which then will be returned to the federal government. If not repaid within 45 days, a national 'HOLD' will be placed on the student's federal financial aid record. The student will lose eligibility for all federal aid nation-wide, until satisfactory repayment arrangements are made with the federal government or until the debt is repaid in full. At the end of the school year, the account is referred to the Federal Government for collection.

Additionally, the College must pay the government directly some of the unearned portion of financial aid funds received by the student based on the registration fees which would have been assessed (even if the student received a waiver). The amount of institutional funds the College pays the federal government on the student's

behalf will be posted immediately on the student's account and a College hold will be placed. The hold will be lifted only upon full repayment arrangements. The hold will be reinstated if the repayment terms of the agreement are not upheld.

Any portion of the institutional portion of repayment due directly to the College which is unpaid at the end of the school year may be referred to the state COTOP collection program, which repays the debt (in addition to a 25% collection fee) by retaining funds from the student's state income tax refund.

### Financial Aid Handbook

A Financial Aid Handbook is posted on the Financial Aid webpage at [www.laspositascollege.edu/financialaid](http://www.laspositascollege.edu/financialaid). The handbook is a reference that clearly states general and specific financial aid program information, and Financial Aid Office policies and procedures. It also includes Las Positas College's Satisfactory Academic Progress Requirements for students receiving financial aid. All financial aid recipients are highly encouraged to read the handbook carefully and become familiar with its contents.

### Other Sources of Funds

Scholarships are funds generally made available by sources other than the government (such as private businesses, organizations, clubs, colleges, etc.) for students to help with the costs of their education. Generally, students must compete for scholarships. Awards have many different criteria.

### The Las Positas Scholarship Program

The Las Positas College Scholarship Program is advertised during the first week in February each year. Students may begin to apply for a variety of awards available only to College students. Applications are available via the College website or in Building 1500. The Scholarship Program Deadline is mid-March. Scholarship recipients are invited to attend the College's Annual Student Recognition Ceremony held in May.

### Outside Scholarship List

A list of current "outside scholarships" is posted in the Financial Aid area and on the Financial Aid Website, [www.laspositascollege.edu/financialaid](http://www.laspositascollege.edu/financialaid), and is updated frequently. These are scholarships often from local, statewide and national organizations or foundations, which are not specifically for Las Positas students, but which may be of particular interest to LPC students. Deadlines vary greatly, so students should check the list frequently for updated information.

### Other Scholarship Opportunities

Thousands of scholarship opportunities are available. The best source of scholarship information is through the World Wide Web. Students can search huge databases to seek scholarships for which they meet the qualifications, or take advantage of several FREE on-line scholarship searches, which do the searching for the student based on an application the student completes.

### Las Positas College Financial Aid

Building 1500  
Phone 925.424.1580  
Email: [lpcfinaid@laspositascollege.edu](mailto:lpcfinaid@laspositascollege.edu)

### *To Many Voices of Las Positas College*

"Taking classes here at LPC is great. I've made plenty of new friends, and also got back in touch with some old friends. The staff is very understanding and it is so easy to go to them with questions. The atmosphere of the campus is rather cozy and it is easy to feel accepted here. It is not big enough to get lost, but big enough to have space. The term 'I'm LPC,' to me, means that the school is built around the students and faculty—almost like the school conforms to the people instead of the people conforming to the campus. It's the people that make LPC."  
—Jean, Dublin

## Financial Aid

Website: [www.laspositascollege.edu/financialaid](http://www.laspositascollege.edu/financialaid)

### Directory of Resources for Financial Aid

#### FEDERAL STUDENT INFORMATION CENTER

For questions about Federal student financial aid:  
8 A.M. - 8 P.M. Eastern Time  
800.4.FEDAID (800.433.3243)

#### U.S. DEPARTMENT OF EDUCATION HOME PAGE

Federal financial aid information:  
[www.ed.gov/finaid.html](http://www.ed.gov/finaid.html)  
<http://studentaid.ed.gov>

#### FAFSA ON THE WEB

To file a financial aid application online, or to review your FAFSA information or make changes:  
[www.fafsa.ed.gov](http://www.fafsa.ed.gov)

#### CALIFORNIA STUDENT AID COMMISSION (CSAC)

For questions and information about California financial aid opportunities, including Cal Grant A, B, and C  
P.O. Box 419026, Rancho Cordova, CA 95741-9045  
916.445.0880  
[www.csac.ca.gov](http://www.csac.ca.gov)

#### MAPPING YOUR FUTURE:

Career planning, college selection and financial aid  
E-mail: [mapping-your-future@tgslc.org](mailto:mapping-your-future@tgslc.org) or  
visit CSAC Website (Listed above)

### *The Many Voices of Las Positas College*

"After I graduated with my BA, LPC was a place for me to continue my education and personal growth. I was able to go back and take some fun classes I wasn't able to take [at LPC] before because I was focusing on transfer credit. I enjoy being able to come back and take a class here and there as I desire."

—Samantha, Livermore

#### ED FUND—a service of the California Student Aid Commission

For loan questions/ problem resolution:  
Ed Fund  
P.O. Box 419045  
Rancho Cordova, CA 95741-9045  
[www.edfund.org](http://www.edfund.org)

#### DEFAULT PREVENTION HOTLINE: 800.298.9490

Post Default/Borrower Disputes/Closed School/False Certification Line: 800.367.1590  
Paid-in-Full Letters for Defaulted Borrowers: 800.367.1589

#### FINANCIAL AID INFORMATION PAGE

A free, comprehensive, objective, and independent guide to student financial aid resources, including scholarships, is sponsored by NASFAA (National Association of Student Financial Aid Administrators). It includes access to FASTWEB, an online searchable database of more than 180,000 private sector scholarships, fellowships, grants and loans.  
[www.finaid.org](http://www.finaid.org)

#### FASTWEB

A free online scholarship research service  
[www.fastweb.com](http://www.fastweb.com)

#### SCHOLARSHIP SCAMS

Identify common financial aid and scholarship rip-offs and scams  
[www.finaid.org/scholarships/scams](http://www.finaid.org/scholarships/scams)

#### SELECTIVE SERVICE REGISTRATION INFORMATION

Check your registration status or register directly online  
[www.sss.gov/regist](http://www.sss.gov/regist)

#### BUREAU OF CITIZENSHIP AND IMMIGRATION SERVICES (BCIS)

Appraiser's Building., Room 300  
630 Sansome Street  
San Francisco, CA 94111  
415.705.4411

#### INTERNAL REVENUE SERVICE

For copies of tax forms or for free copy of 'Tax Summary'  
800.829.1040  
Blank tax forms can be downloaded from the following site  
[www.irs.ustreas.gov/prod/forms\\_pubs/forms](http://www.irs.ustreas.gov/prod/forms_pubs/forms)

#### VETERANS EDUCATIONAL BENEFITS

Toll free: 888.442.4551



## Educational Benefits

Las Positas College is approved to offer instruction to service persons, reservists, and other eligible persons under Title 38, U.S. Code and Department of Veterans Affairs (V. A.) regulations. Eligibility for benefits under any of these programs is determined by the appropriate federal or state agency, and not by the College.

## Dependents of Veterans

A student who is a dependent of a veteran with a service-connected disability or who died of a service-connected cause may be eligible to receive a waiver of tuition and registration fees through the California Dependents of Veterans College Fee Waiver Program. Application forms and additional information may be obtained by contacting the local county veterans service officer, listed in the telephone directory under county government, or by calling 916.653.2573. Approved authorization forms may be submitted directly to the Financial Aid Office for a fee waiver.

## Certification Process

New students should first enroll in the College and register into courses, following the regular matriculation process for all students. Once enrolled, students may apply for V.A. benefits by completing a V.A. Application for Educational Benefits, which is available from the Veterans Office, Building 1500, and an Enrollment Certification Request form and must submit a DD214 if the veteran served on active duty. Students must request enrollment certification each semester. Students must notify the V.A. Office if their enrollment, major, or address changes. The V.A. Office will make necessary certifications of enrollment, changes in enrollment, and progress.

## Advance Pay Option

Certification/processing is through the V.A. Regional Center in Muskogee, Oklahoma, and generally takes up to two months. New students or students who did not attend the previous term (including summer) may request certification with "Advance Pay", but must do so at least 35 days prior to the first day of the term. V.A. will subsequently forward a benefit check available when the term begins, which advances pay for the first two calendar months of the term.

## Evaluation of Prior Education and Training

During the first semester, all students receiving veterans educational benefits are required to 1) have submitted to the Veterans Office or the Office of Admissions and Records, official academic transcripts from each school previously attended, 2) have submitted a DD214 if they were on active duty, and 3) complete a "Veterans Evaluation" with a College counselor, which establishes a personalized education plan based on prior education and training and the student's current academic objective. The institution will conduct an evaluation of all previous education and training and will grant appropriate credit, shorten the veteran's or eligible person's duration of the intended course proportionately, and will notify the V.A. Regional Center and the student accordingly, in compliance with Title 38 regulations.

## Course Restrictions for Certification

Courses will NOT be certified for benefits after the first semester until the Veterans Evaluation is complete. Only courses that meet requirements or their prerequisites for the major and degree objective as indicated on the evaluation will be certified for payment. If the academic objective is changed, the student must complete a new evaluation accordingly. The College can only certify for Certificate, AA, or AS majors listed in the Las Positas College Catalog, or for transfer majors for which official articulation has been completed between Las Positas College and the intended transfer college and program.

Veterans will be permitted to enroll into work experience courses but must do so under the Parallel Plan as practical training for their major.

There are individual academic programs and courses listed in the Catalog that may not meet V.A. approval for educational benefits. Contact the College Veterans Office, Building 1500, to determine if your intended program is approved for benefits. Note: Programs previously approved are subject to change as determined by the Department of Veterans Affairs.

For more information, contact the LPC Veterans Office 925.424-1582 or the Veterans Administration Regional Office at 1.888.442.4551 or [www.gibill.va.gov/](http://www.gibill.va.gov/)

## Library (Learning Resources Center, LRC)

The Library at Las Positas College is located in Building 2000. The mission of the Library is to provide the information services and resources required to meet the needs of the educational programs of the College. It exists to facilitate and improve learning by supporting and expanding the instructional capabilities of the College and providing students with the opportunity to develop information competency skills for lifelong learning. The Library offers reference and instructional services to meet the needs of students, faculty, and staff. The Library encompasses all types of print, non-print, and online resources including a wide variety of books, audiovisual materials, magazines and newspapers, and full-text periodical databases. The Library maintains an extensive website that provides access to the Chabot-Las Positas College Libraries online catalog, online databases, and research and instructional guides. The Library facilities include computer labs, study carrels, group and soundproof study rooms, and listening and viewing stations. Currently registered students, faculty, and staff may check out books and materials from both the Las Positas College and Chabot College Libraries. A current College ID is required.

## Integrated Learning Center (ILC)

The Integrated Learning Center in Building 1200 houses the Open Math Lab, English as a Second Language, English 1A Lab, and the Open Writing Center.

### Open Math Lab

The Lab offers a variety of free services to math students, including:

- drop-in math help
- study groups
- workshops

Students enrolled in a math course with a TBA lab hour satisfy their lab requirement in the Open Math Lab.

The Open Math Lab is staffed by full- and part-time mathematics instructors at LPC.

### Open Writing Center

Students can visit the open writing center to work one-on-one with a writing instructor on any writing assignment for any class.

### English as a Second Language

ESL students can take advantage of the following services:

- Computer-assisted learning opportunities, including grammar and vocabulary activities
- Complete their 1 hour lab assignment for each course
- Work with study groups and instructors

## Computer Laboratories

Las Positas College has computer laboratories on campus for student use. PC and Macintosh computers are loaded with a variety of software programs to assist students in completing course assignments and projects. In addition to the computers available in the LRC, the Computer Center, Building 800, and the English Laboratory, Building 400, have computers open to students on a first-come, first-served basis at various times during the day. Consult the lab staff for available hours.

Use of a College computer lab requires the purchase of a Print Fee Card obtained from the Bookstore or vending machines. Discounted print cards are available, and can be purchased in the Bookstore.

## Distance Education

Distance Education classes are designed to accommodate the busy lifestyles and various learning styles of students. Las Positas College typically offers Distance Education classes in two formats: online, which are conducted over the Internet, and video-conference, which are two-way interactive courses between a classroom at Las Positas College and at least one other off-campus site. To take classes online, you must have experience using a web browser (Internet Explorer preferred), access to a computer with an Internet connection, and an e-mail address.

Las Positas College continues to expand its offerings of Distance Education. Current offerings can be found in the Class Schedule, on the CLASS-Web website, and on the Las Positas College Online Learning website. Links for the above websites can be found on the College's home page at [www.laspositascollege.edu](http://www.laspositascollege.edu). For further information, call 925.424.1142.

## Special Academic Programs

### Honors Transfer Program

The Honors Transfer Program began in Spring Semester 2000, and has transfer agreements with several colleges and universities throughout California. Members of the Honors Transfer Program (HTP) have the option to participate in honors academic activities (honors courses, honors contracts, and honors colloquia) designed specifically to encourage independent and creative learning. Honors academic activities are designated with an "H" (for Honors) on the student's transcript. At graduation, honors students receive special recognition and an honors seal affixed to their diploma.

Eligibility requirements for applying for membership in the Honors Transfer Program are:

- Cumulative GPA of 3.5;
- 12 units at Las Positas College;
- Eligibility for English 1A.

*For additional information, contact the Honors Program Coordinator at 925.424.1266 or [www.laspositascollege.edu/honors](http://www.laspositascollege.edu/honors)*

### Independent Study

Independent study courses are open to all students and may be offered under any subject area contained within the Catalog using the number 29. Independent study must be contracted through an instructor for research, field experience or skill development. Check with the Counseling Center, Building 700, concerning transferability of these courses to four-year institutions.

### LaPTechS-Business, Electronics/CIS

Las Positas Technical Support (LaPTechS) is an innovative entrepreneurial venture offering technical support services to the campus community. Within a work-based learning model, students get hands-on training in a workplace environment. Students practice hardware and software installations, computer repair, assessment, maintenance and troubleshooting techniques. Business applications include data and information collections, storage and retrieval, document preparation, customer service, verbal and nonverbal communications, and job skills preparation. LaPTechS creates opportunities to learn all aspects of business operations, technical support, and the development of interpersonal skills. For additional information call 925.424.1236.

### Speech and Debate Program

The Speech and Debate Programs, otherwise known as "Forensics" or "The Talk Hawks" provides students with an intensive focus on enhancing research, writing and performance skills. Forensics students compete on an inter-collegiate basis at tournaments in the areas of Public Speaking, Oral Interpretation, and Debate. Besides traveling to competitions, students in the nationally-rekknowned program also host two on-campus tournaments a year and a Speech Performance night. With this opportunity, students experience accelerated growth in their communication skills and self-esteem. For more information refer to Catalog page 198.

### Internships

Internship opportunities are available at the College. Interested students who meet qualifications are placed in carefully structured work environments with local employers. Internships provide opportunities to apply knowledge gained in the classroom in a real world setting and can be an important part of career development for students. Students must concurrently enroll in the

Internship Seminar course. Placements are contingent upon the availability of an appropriate internship site, employer criterion and student qualifications, and are at the discretion of the employer. Students and employers should contact the Work-Based Learning Coordinator at 925.424.1255.

### Occupational Work Experience Education

The Occupational Work Experience Program incorporates participants from business, industry, and all levels of governmental agencies. The program enables students to apply their classroom instruction to related career employment for training and experience. The program increases the practicality of students' class-work by giving them the opportunity to examine and utilize the latest techniques, procedures, and equipment in a business setting. Close coordination and supervision by the College ensures that the Work Experience Program becomes a real learning opportunity related to the student's area of study.

Las Positas College offers two Occupational Work Experience Programs. The Parallel Plan allows students to concurrently enroll in College courses while working. The Alternate Plan permits students to study full-time one semester and work full-time the following semester. Refer to Catalog page 211 for course descriptions.

Work Experience education is a requirement for graduation in many of the occupational programs at the College. Students majoring in programs requiring Work Experience should enroll in that program's Work Experience course. Other students seeking elective or transferable credit also may enroll in the Occupational Work Experience Program.

Regulations governing the operation of Work Experience education programs may be found on Catalog page 211.



## Student Programs and Services

### Community Education

Community Education classes are designed to provide personal development, cultural enrichment, and job training to people of all ages. These classes are fee-based and not for credit. At present, Community Education offers classes in fitness and health, human development, home and garden, computers, business, arts and letters, financing, and college preparatory skills. For information regarding Community Education classes at Las Positas College or to suggest a Community Education class, telephone 925.424.1467.

### Continuing Education

Continuing education classes are designed to provide in-service education for persons who must maintain a professional license by periodic training and upgrading of their skills. Typically, such classes are required in the nursing, dental hygiene, real estate, and accounting professions. Organizations or individuals who desire information regarding continuing education opportunities, or who wish to suggest a needed continuing education class, should telephone 925.485.5212.

### *Be Many Voices of Las Positas College*

"Las Positas College is an integral part of my family's history. I attended many classes in art, math, science, and computer technology over the years.... All three of my daughters, attended their first college classes in the '80s. Their years at LPC helped them get into the university of their choice for their bachelor degrees in their junior years. They could not have gotten in so easily as freshman. I gratefully remember and thank the wonderful LPC teachers for all they contributed to my family, my career, and our life."

—Joanne, anonymous city

### Contract Education

Las Positas College contract education classes are offered through the District Office through contracts for educational services with public or private agencies, corporations, associations, or individuals. An active outreach program in contract education is conducted by the District to help business, industrial and public organizations develop training programs tailored to meet their needs. Examples include Business Communications, Supervision, CPR and First Aid, English as a Second Language, Commercial Law, Word Processing and Computer Skills, Pre-Retirement Planning, Radiation Technology, Technical Writing, and certificate or degree programs in technical and general education. Courses can be offered "on-site" (at the employer facility) or on campus. Organizations or persons desiring information on how the District can provide educational training programs to meet specific training needs should telephone 925.485.5212.

### QUEST (Expanding Education for Mature Adults)

College age lasts a lifetime, especially for those who are eager to learn. The QUEST program is designed to meet the educational needs of adults, 55 years and older. Classes are offered in a variety of disciplines such as art, English (writing), and physical fitness. Classes are held in senior and community centers throughout the valley.

QUEST students earn College credit and pay regular College fees. For further information, contact the QUEST Office 925.424.1115.

### Tech Prep (Technical Preparation Programs)

Tech Prep establishes a balance between academic instruction, technical/vocational training, and career development for students. The Tri-Valley Educational Collaborative (TEC) is comprised of representatives from the Tri-Valley Regional Occupational Program (ROP), Las Positas College, local school districts, CSU-East Bay, local business and community partners. Faculty, administrators, and business representatives work together to build seamless career pathways designed to prepare students for careers from high school through college. For further information, contact the Dean of Academic Services, 925.424.1324.

### High School Articulation

Las Positas College recognizes the value of coursework previously completed at the secondary level through local high schools or ROP's (Regional Occupational Programs). On an ongoing basis, articulation agreements between Las Positas College and these secondary schools are established when deemed appropriate by the College faculty in the discipline. These agreements provide high school (or ROP) students the ability to apply prior work towards Las Positas College requirements. There are two levels of articulation agreements: Noncredit Articulated Courses, and Credit-by-Examination Articulated Courses. In both instances, in order for the student to receive recognition of their work once they reach the College, the articulation agreement between the high school and the College must have been in place at the time the student completed the work at the high school.

The College home page, [www.laspositascollege.edu](http://www.laspositascollege.edu), provides a detailed discussion of High School Articulation, along with directions and application forms for students, high schools/ROP's and College staff. This website also lists current Articulation Agreements between the College and high schools and ROP's. Forms, directions and a listing of current articulation agreements are available online: [www.laspositascollege.edu](http://www.laspositascollege.edu)>select: Classes and Programs>select: High School ROP Articulation.

### Noncredit Articulated High School Courses

High schools and ROP's may request noncredit articulation\* status for a course offered at the secondary level. The course will be accepted for articulation status if the College faculty determine that the course offered at the secondary level is comparable to a specific community college course. (Course agreements which had previously been identified as "2+2", fall into this definition.)

Noncredit articulated high school courses can be applied to Las Positas College requirements, but cannot be granted College credit, unless the student or course has also qualified under the Credit-by-Examination process (see discussion below). There are several advantages to pursuing articulated courses at the high school level. Students moving from high school to LPC will be much better prepared if the expectations of the College faculty are met through the preparation provided by high school teachers. Articulated courses can also meet certificate and major requirements for some degrees (primarily occupational) at LPC. This enables students to go directly into the more advanced courses when they reach the College. (Students still need to meet full unit requirements for these certificates and degrees.)

*\*Noncredit Articulation of High School (Secondary) coursework is offered under the provisions of the California Administrative Code, Title 5 and the process is included in the CLPCCD Administrative*

*Rules and Procedures. (High School (Secondary) Articulation).*

### Credit-by-Examination Articulated High School Courses

This second level of high school course articulation\*\* at Las Positas College can also provide students with college credit for certain courses completed at the High School or ROP. In addition to agreeing that the course content is comparable, the College faculty also must design or approve the final exam given for the course by the high school or ROP, or in some instances may require that the final be taken at the College. The College faculty members who normally teach the College course must determine the nature and content of the exam. Such credit may be granted only to a student who is registered at the College and in good standing, and only for a course listed in the Catalog. Student's transcript will be noted to show that credit was earned by examination. The amount of credit to be granted cannot be greater than that listed for the course in the Catalog. Units will not count toward the 12-credit residency requirement of the College.

*\*\*Credit-by-Examination is offered under the provisions of the California Administrative Code, Title 5 and the process is included in the Administrative Rules and Procedures. (Course-wide Credit-by-Examination)*

In order for students to receive credit for a course with a Credit-by-Examination Articulation agreement, they need only to provide proof of completion at the high school level, after they begin a course of study at the College. Refer to the Las Positas College website for forms and directions. Individual students may also petition College instructors for Credit-by-Examination for College courses for which there are no Articulation Agreements. See Credit-by-Examination (Individual Student Application), Catalog page 45.





### Counseling Services

Counseling services, located in Building 700, are central to student success at Las Positas College. Counselors provide academic, career, and personal counseling services. They orient new students and teach psychology-counseling courses in career selection, orientation to the College experience, study skills, peer support training, re-entry support and interpersonal relationships. Each student meets with a counselor to select courses based upon the student's skills and interests and develops a Student Education Plan (SEP) to meet career, and/or college or university transfer requirements. Assessment scores are interpreted for the student by the counselor and articulation agreements with four-year colleges and universities are used to construct accurate student plans for transfer. Counselors remain available to students throughout their college career to discuss concerns that may be affecting their academic progress. The Counseling program is organized under the major services explained below.

#### Academic Counseling

Counselors assist students with selection of courses in which they can succeed and that lead them toward their goals. Courses considered are based upon the student's assessed skills, their selected career and/or the institution to which they plan to transfer.

#### Career Counseling

Counselors are available to assist students in self-assessment and career selection processes. Students will be encouraged to examine their skills, interests and aspirations and to research career possibilities that offer opportunities for utilizing their unique skills and personal qualities.

#### Personal Counseling

Counselors hold graduate degrees in counseling psychology and are fully qualified to provide individual and group personal counseling. Short-term confidential personal counseling is available to help students discuss ways to remove personal barriers to their academic progress. Referral to community resources is available for those requiring long-term personal counseling.

### Career/Transfer/Employment Center

It is the mission of the Center to meet the academic needs of our students by providing accurate educational and career information that matches their future goals through coordinated resources, activities and services.

#### Transfer Services

Transfer services include: individual appointments with LPC Counselors and meetings with four-year university representatives, referrals to appropriate faculty and services, assistance with technology in the articulation of coursework (ASSIST) and college applications, workshops, a college fair, and a resource library. Las Positas has guaranteed admits with UC, CSU, and private universities and concurrent/cross registration with UC Berkeley and CSU East Bay.

#### Career and Employment Services

Career planning is an integral part of the educational process. The Center staff assists students in researching majors and occupations through books, technology (EUREKA – computer software program), workshops and referrals to experiential opportunities such as internships and job shadowing. Psychology-Counseling 10, Career and Educational Planning, provides career assessments, in-depth career exploration, and guidance in educational planning for transfer. The College also partners with the Tri-Valley One Stop Career Center that provides career and employment services to our community members.

#### Employment Services

Employment services are available for students who qualify for Federal Work Study on campus employment opportunities. Resume and interview assistance is available for students looking for both full time and part time off campus employment. An annual Employment Fair is held in spring.

#### Assessment

The assessment process is a vital part of the College's counseling service. New students, unless exempt, are assessed in English, mathematics, and chemistry skills. Counselors utilize this information, along with other measures, in helping students to select courses in which they will succeed. The Assessment and Tutorial Center, Building 1000, also provides both career interest and aptitude assessments that will help students to make informed career selection decisions. Counselors assign these assessments and interpret results to students in the career counseling process.

### Multiple Measures Philosophy Statement

The mission of the Chabot-Las Positas Community College District is to provide quality educational opportunities to all students who seek to increase their knowledge and to improve their skills by enrolling in general education, career and transfer education, continuing education and basic skills courses. While it is recognized that the final responsibility for the selection of proper courses rests with the student, the College offers a variety of programs and services prior to enrollment to help advise students about how to match their individual educational needs with specific college resources. Past practice and legal mandates both indicate that any single assessment instrument will be inadequate for successfully advising students as to appropriate course enrollment. Multiple measures assessment must, therefore, be the process for all recommended course enrollments, including advice given by counselors, instructors, administrators and classified staff.

Multiple measures assessment is broad in scope. No list of factors that may be included in a multiple measures assessment is exhaustive; however, some general categories and examples can be outlined. Student factors may include cognitive skills, which may be inferred from test scores, GPA and transcripts; emotional well-being, motivational level and educational goals which may be elicited in an interview or self-reported; social factors, such as life experience, family responsibilities and social support for educational effort; economic factors, such as job demands and financial resources; and physical factors. Factors associated with the instructor, the institution and the community can often interact with student factors to further indicate the potential for success in a given course.

### New Student Orientation

#### Program Planning Session

Students new to Las Positas College and who are without previous college experience are required to attend a scheduled orientation session prior to registering for classes. The session, which includes counselor interpretation of the results of the student's English, mathematics, and chemistry assessments, is scheduled AFTER the English and mathematics assessment session. In this orientation session, counselors give new students vital information for making informed decisions about their college career, and help them select their first semester courses.

#### EXPO—Orientation Program

In addition, new students are encouraged to attend an EXPO LPC course scheduled for the week prior to the beginning of the Fall term. This student orientation program provides important College information as well as opportunities to meet other new students, student leaders, faculty, counselors and administrators.

### Counseling Electronic Mail (e-mail)

Students and potential students can contact the Counseling area to receive answers electronically from Counseling representatives at [counseling@laspositascollege.edu](mailto:counseling@laspositascollege.edu).

### Tutoring Program

The Tutoring Program, located in Building 1000, is dedicated to providing the support and assistance students need to be successful in their course work. Free individual and small group tutoring is provided in specific content areas as well as study skills assistance. Student tutors are recommended by faculty members for their positions and can receive course credit for tutoring as well as classes in tutor training. Positions as paid tutors are also available. Students are invited to visit the Assessment and Tutorial Center to request tutoring or to seek positions as tutors.



## Student Programs and Services

### **Disabled Students Programs and Services (DSPS)**

Disabled Students Programs and Services, is committed to excellence and accessibility for all students. DSPS offers support services for students with physical, communication, learning and psychological disabilities. Support services include priority registration, academic, career and disability-related counseling, new student orientation, interpreters, tutors, note takers, test-taking facilitation and community referrals. Students with verifiable disabilities are eligible for accommodations related to those disabilities. Credentialed, certified or licensed professionals must verify the disability. DSPS is located in Building 1500. Students may make appointments by calling 925.424.1510; the DSPS Coordinator can be reached at 925.424.1528.

### **High Tech Center**

DSPS has a dedicated technology center in Building 1500 for students with disabilities. PC computers are available along with other adaptive hardware and software to assist students in the areas of reading, writing, spelling and computation skills.

### **Learning Skills Program**

The Learning Skills Program is designed specifically to assist the learning disabled student who has the potential to succeed in a community college environment. The program includes an initial diagnostic assessment and evaluation to determine eligibility for learning skills lab classes, individualized instruction, academic advising, and open access to the High Tech Center instructional lab. The Learning Skills Program is located in Building 1500; the Learning Skills Specialist can be reached at 925.424.1524.

### **Web Accessibility**

Las Positas College is committed to providing web pages that meet Section 508 guidelines for web accessibility. Toward that end, each of the top-level pages on the website and all other pages managed by the College's Webmaster have been or are being modified to meet accessibility guidelines. In addition, DSPS and the Web team are educating faculty and staff on accessibility concerns including information about Section 508 compliance for web page content. Students who experience difficulties accessing a web page should contact DSPS at 925.424.1524.

### **Extended Opportunity Programs and Services**

Extended Opportunity Programs and Services (EOPS) provides financial assistance and support services for low-income students with unique and special needs created by language, social, and economic situations. A variety of programs, services, and activities have been directed to the identification, recruitment, retention, and transition of

EOPS students to the four-year college/university and/or career placement. Included services are: financial grants and book certificates; academic, career, and personal counseling; new student orientation and readiness programs; special assistance in tutoring and peer advising; transfer counseling; field trips and cultural enrichment activities; and information and referral services.

Program eligibility is based on a history of low income and demonstrated financial need. All candidates must be full-time students and complete required application forms. Information and assistance may be obtained at the EOPS Office, Building 1500, or call 925.424.1590.

### **Cooperative Agencies Resources for Education (CARE)**

The CARE Program provides a variety of services and activities to assist single parent students in achieving educational goals. They receive special counseling, support groups, child care, stipends, book certificates, transportation expense reimbursements, automotive repair and maintenance service, job search assistance, tutoring and peer advising. To be eligible for CARE, students must be attending college full-time, receiving Temporary Assistance to Needy Families (TANF), have a child who is under fourteen years of age, and be determined eligible for Extended Opportunity Programs and Services (EOPS). The CARE office is located in Building 1500. For additional information call 925.424.1593.

### **CalWORKS Program**

The Tri-Valley CalWORKs (California Work Opportunities and Responsibility to Kids) Program serves parents who are attending school as part of their Welfare-to-Work plan with the county. The program offers career counseling, academic advising, coordination with county welfare offices, transitional child-care funding, and on-campus and off-campus job placement. In addition, eligible students may apply for the Tri-Valley Housing Scholarship through the CalWORKs Program. For more information contact the CalWORKs Coordinator, Building 900, or call 925.424.1432.

### **Student Employment Services**

Employment services are available for students who qualify for Federal Work Study on campus employment opportunities. A listing of current part- and full-time job opportunities is posted in the Student Center Building, 1700. An annual Employment Fair is held in spring. Resume and interview assistance is available in the Career/Transfer/Employment Center, Building 900.

**Housing**

Las Positas College does not provide dormitories or other types of College-sponsored housing. Listings of rentals in the area are posted on the bulletin board in the Student Center, Building 1700.

**Public Transportation**

Transportation to and from the College is an individual responsibility. WHEELS is a service of the Livermore-Amador Valley Transit Authority (LAVTA) and provides public transportation to and from the College. Route schedules are available in Building 1700. For more information contact WHEELS at 925.455.7500 or at [www.wheelsbus.com](http://www.wheelsbus.com).

**Bookstore, Textbooks and Supplies**

All students are required to furnish their own textbooks and supplies that are available at the Bookstore or online via [www.efollett.com](http://www.efollett.com). Typical costs for books and supplies average \$400.00 to \$600.00 per semester for students pursuing a full-time program. Students financially unable to buy their own books and supplies should consult the Office of Financial Aid. Bookstore hours are posted outside the Bookstore, Building 1300, and more information about the Bookstore is available at the College web site, [www.laspositascollege.edu](http://www.laspositascollege.edu).

**Student Health Center**

The Student Health Center is staffed by a registered nurse practitioner and is located in the Student Center, Building 1700. Services include evaluation, treatment for minor illnesses and injuries, prescriptions, health education information and materials, birth control information, and health care referrals. Also available are mental health services and referrals. For more information, contact the Health Center at 925.424.1830. For information on the mandatory health service fee, refer to Catalog page 19, "Fees and Refunds."

Students who have a health condition that may require sudden emergency care are asked to advise and alert each of their instructors as well as the Nurse Practitioner in the Student Health Center to this condition at the beginning of each term.

**Student Health and Accident Insurance**

Students are responsible for providing their own health and accident insurance. For those students who do not have such coverage, health, accident, and dental policies may be obtained from the Student Health Center, Building 1700.

**First Aid**

First aid stations are located in the Security Office, Building 1600, and the Student Health Center located in the Student Center, Building 1700.

**Medical Emergencies on Campus**

For emergency assistance, dial \*16 from campus pay phones or 4999 from campus office phones. All cases of personal injury or medical emergency should be reported to the Security Office, Building 1600. The Student Health Center, located in the Student Center, Building 1700, can accommodate students with minor injuries and illnesses.

**Security Services**

Safety and Security Services are located in Building 1600. Security officers are responsible for providing the following services: information, assistance, escort service, security of personnel, security of facilities, emergency assistance, supervision of the College parking lots, investigation of crime on campus, and lost and found. Requests for service and reports of hazards and other problems should be directed to the Security Office, Building 1600, or call 925.424.1690.

**Lost and Found**

Lost and Found is located in the Security Office, Building 1600. Articles deposited with Lost and Found are held for six months. After this period, unclaimed items are disposed.

**Escort Service**

The College provides an escort service for students each evening from 6:00 p.m. to 11:00 p.m. Escort service can be obtained by contacting the Security Office, Building 1600 or call 925.424.1690.

**Parking**

Parking on campus is a privilege extended by the Board of Trustees to College faculty, staff, students and guests. To ensure safety and the efficient use of available parking space, rules and regulations for vehicle registration and parking are established. Drivers of vehicles using College parking lots shall comply with the Board approved rules and regulations. Drivers who do not comply may be cited and their vehicles may be towed away and impounded at the owner's expense. Repeated violations of the College rules and regulations may also cause a student to be subject to disciplinary action and may lead to the removal of the parking privilege.

## Student Programs and Services

### Parking Permits

Parking at Las Positas College is by permit only. Student Parking Permits for each instructional term can be purchased in the Bookstore, Building 1300. Daily Parking Permits can be purchased from dispensers located in the parking lots. Parking Permits do not guarantee a parking space. They do authorize parking in available spaces. Refer to the 2004-2006 Las Positas College Catalog, page 18, for parking fee information. Students who have a DMV disabled placard may park in the handicapped designated areas of student lots. Disabled students must have, in addition to their disabled placard, a Las Positas College Parking Permit. NOTE: There is no grace period for permits. You must display a Parking Permit each day you are parked on campus.

### Visitor Parking

A 30-minute visitor parking zone is provided at the entrance to the College. Long-term visitor parking is available in each student lot when a daily Parking Permit is purchased from a ticket dispenser and displayed on the dashboard on the driver's side. Visitors with a DMV disabled placard may park in the Visitor parking lot without purchasing a daily Parking Permit from the ticket dispensers in the lot, pursuant to the Vehicle Code



*of Las Positas College*

"This is my first year at LPC.... Not only do I have a beautiful campus to come to everyday, but the instructors have been so helpful in everything that I have done. I've attended a couple of other colleges and nothing compares to the vineyard setting, our beautiful open fields, and the friendly students. I would recommend LPC to everyone!"

—Yen, Tracy



## Philosophy

Las Positas College is committed to providing programs and services that foster student participation in government, activities, organizations and cultural events. The College recognizes the important role of students as active and meaningful participants in the shared governance decision-making process of the institution. Comprehensive leadership development and orientation programs for students to strengthen their knowledge, expand their understanding of governance issues, increase their preparedness, and enhance their credibility in the community are important and essential responsibilities of the College.

## Associated Students of Las Positas College (ASLPC)

The Associated Students of Las Positas College is the campus student government, providing opportunities for students to participate in the governance of the College on both local and statewide levels. Elections of ASLPC officers and senators are held each spring. ASLPC representatives have the opportunity to serve on numerous College committees.

The ASLPC is organized in two bodies: the Executive Council (composed of the elected officers) and the Student Senate (composed of members who have obtained a specific number of student signatures). All ASLPC officers and senators must be registered in at least 6.0 units at the College and are required to maintain a minimum 2.0 GPA.

Through ASLPC, special services are provided for students. These include social and cultural events, information on clubs and community services, and many other services that vary as opportunities develop.

The ASLPC office is located in Building 1700 and may be contacted at 925.424.1490.

## Student Clubs and Inter-Club Council (ICC)

Students also have the opportunity to form clubs relating to common social, recreational, or other interests. Each club must have a College faculty advisor recruited and nominated by the club members.

The Inter-Club Council is the representative body that coordinates interclub activities and funds, promotes communication and cooperation among clubs on campus. The ICC is composed of a voting representative from each club, representing cultural, educational, honorary, philanthropic, and social interests.

## Alpha Gamma Sigma

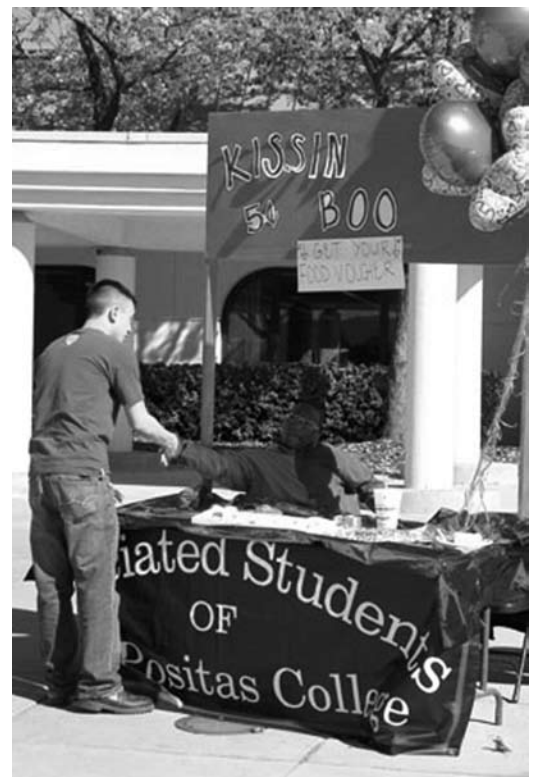
Alpha Gamma Sigma (AGS) is the official Las Positas College Honor Society. AGS membership will be noted on students' transcripts when they graduate or transfer from Las Positas College. Membership eligibility and other information are available from the club officers, the Office of Associated Students, Building 1700, or the Office of the Vice President of Student Services, Building 700.

## Social Activities

Numerous social activities are offered at Las Positas College each semester through ASLPC. Students interested in working on social activities and entertainment should contact the Office of the Associated Students, Building 1700.

## The Express Newspaper

The Express College newspaper is produced by students and published twice monthly. Students learn various aspects of newspaper production, including research, interviewing, reporting, writing, editing, proofreading, meeting deadlines, electronic typesetting, graphic design, advertising design, and page production using Adobe InDesign and Photoshop. To join the team, come to Room 305, Building 300, call 925.424.1240, or e-mail [LPCEXpress@laspositascollege.edu](mailto:LPCEXpress@laspositascollege.edu).



## Student Organizations and Activities

### Performing Arts

A wide range of opportunities is available to Las Positas College students in performing arts. The theater program presents a fall semester play, spring semester musical, and summer outdoor Shakespeare production, plus touring children's theater show and student directed one acts. The Music Department's program includes choirs, vocal jazz ensembles, and an instrumental jazz ensemble, plus opportunities to perform at recitals held each semester. The Dance Production class presents two dance programs a year, featuring dances choreographed by students and faculty. Forensics Team events include reader's theater, oral interpretation and debate.



### Intercollegiate Athletics

Opportunities to participate in intercollegiate athletics are available to all students of Las Positas College who meet eligibility requirements.

Las Positas College is a member of the Coast Conference. Men and women's athletic teams engage in intercollegiate competition with other Northern California teams in cross-country, soccer, and basketball.

Students who participate in intercollegiate athletics must meet the requirements of the Athletic Code of the California Community Colleges Commission on Athletics and the Coast Conference that relates to legal residence, academic standing and previous seasons of college competition. The nature of these requirements is very exacting, and athletes are advised to become thoroughly familiar with them in order to avoid loss of eligibility. Information on these requirements should be obtained by interested students from the appropriate coach of the athletic team at the beginning of the school year.

### Sports Activities

At Las Positas College a variety of intramural activities are offered. Students are also encouraged to become involved in intercollegiate club sports programs which include bowling, fencing, handball, taekwondo, and ultimate frisbee. Contact the Physical Education/Athletic Office at Las Positas College for more information, 925.424.1290.



## Student Grievance Policy

The Chabot-Las Positas Community College District encourages all students to pursue academic studies and other College-sponsored activities. In pursuit of these goals, the student should be free of unfair or improper action from any member of the academic community. The Chabot-Las Positas Community College District accords every student the right of protection. Students, however, must also be aware that they are responsible for complying with all College regulations and for meeting the appropriate College requirements.

Student Grievance procedures have been developed by Las Positas College to provide students with a prompt and equitable means of seeking an appropriate remedy for any alleged violation of rights and to insure that each student is fully accorded due process. Both the Student Grievance Procedures and the Student Conduct and Due Process Procedures outline the process for seeking resolution, and develop the procedure for filing and processing complaints, including time lines and decision-making authority.

The general provisions and specific procedures related to this policy are available from the Office of the Vice President of Student Services, or the Dean of Student Service Offices Building 700, and the Office of the Associated Students, Building 1700. You may also find this information online at [www.laspositascollege.edu](http://www.laspositascollege.edu).

## Student Conduct and Due Process

In joining the academic community, the student enjoys the right of freedom to learn and shares the responsibility in exercising that freedom with other members of the academic community. It is the policy of the District not to impose student discipline for acts occurring away from the College and not connected with College activities unless the student's conduct affects the functions of the College. Procedures within this section are based upon Title 5, California Administrative Code (sec. 41301 through 41304), and the California Education Code (sec. 76030-37).

When a student is charged with misconduct, such as: cheating, plagiarism, forgery, disruption, physical abuse or theft, the charge shall be processed in accordance with the policy and procedures in order to protect the student's rights and the College's interest. A student may be expelled, suspended, placed on probation or given a lesser sanction, as deemed appropriate, for one or more of the causes occurring on College/District premises.

The general provisions and specific procedures related to this policy are available from the Office of the Vice President of Student Services, or the Dean of Student

Services Offices, and the Office of the Associated Students.

## Academic Honesty

Academic honesty is a fundamental and guiding principle for Las Positas College. The College will not tolerate academic cheating, plagiarism, and duplicate use of written work. Any violation will be processed in accordance with the College policy on student misconduct. Actions can be taken to suspend, expel or impose other sanctions as appropriate. The actions will also be noted in the student's file in the case of repeated, flagrant or serious incidents. Information regarding this Policy is available in the Vice President of Student Services Office, Building 700.

## Academic Honesty Definitions

### Cheating

Cheating is defined as the act of obtaining or attempting to obtain credit for academic work through the use of any dishonest, deceptive, or fraudulent means including forgery. It also includes giving or attempting to give aid that is not authorized by the instructor.

### Plagiarism

Plagiarism is defined as taking the words or substance of another and either copying or paraphrasing the work without giving credit to the source (through footnotes, quotation marks, or reference citations) and submitting it to fulfill academic requirements.

### Duplicate Use of Written Work

This form of academic dishonesty includes: multiple students submitting identical or substantially similar work for academic credit or a student submitting identical or substantially similar work to multiple courses without the permission of the instructors.

Faculty members will report suspected instances of academic dishonesty to the Dean of Student Services.

## Harassment/Sexual Harassment

In accordance with Title VII and Title IX of the Education Amendments of 1972, the Chabot-Las Positas Community College District provides a school and working environment free from all forms of harassment, including sexual harassment. The District also maintains an environment in which all students and employees model this behavior and are treated with dignity and respect.

No person shall be subjected to sexual overtures or conduct either verbal, visual or physical, which are intimidating, hostile, offensive, or unwelcome. Such conduct by employees or students is deemed unacceptable behavior and will not be tolerated by the District.

## Student Rights and Responsibilities

The Board of Trustees considers harassment a serious offense. Violation of this Policy will constitute cause for disciplinary action. Specific disciplinary action shall be related to the severity of the incident, and/or the degree to which repeated incidents have occurred. Such disciplinary actions for employees may include, but are not limited to, verbal warnings, letters of reprimand, suspension with or without pay and dismissal. Such disciplinary actions for students may range from counseling to suspension and/or expulsion.

Las Positas College has designated a responsible officer, outlined procedures for seeking resolution, and developed procedures for filing and processing complaints, including timelines and decision-making authority. Las Positas College has established procedures that provide a person accused of harassment the opportunity to respond to allegations. These procedures ensure adequate communication of the Policy to all students and employees.

Sexual harassment may include, but is not limited to:

- I. Sending suggestive or obscene letters, notes, invitations; making derogatory comments, slurs, jokes, epithets, assaults; touching, impeding or blocking movement; leering, gesturing, displaying sexually suggestive objects, pictures or cartoons;
- II. Continuing to express sexual interest after being informed that the interest is unwelcome;
- III. Implying or withholding support for an appointment, promotion, or change of assignment; suggesting a poor performance report will be prepared; or suggesting probation will be failed; within the educational environment, implying or actually withholding grades earned or deserved; suggesting a poor performance evaluation will be prepared; or suggesting a recommendation or college application will be denied;
- IV. Engaging in coercive sexual behavior to control, influence, or affect the career, salary, and/or work environment of another employee; within the educational environment, engaging in coercive sexual behavior to control, influence, or affect the educational opportunities, grades and/or learning environment of a student;
- V. Engaging in offering favors of educational or employment benefits, such as grades or promotions, favorable performance evaluations, favorable assignments, favorable duties or shifts, recommendations, reclassification etc., in exchange for sexual favors.

For general provisions, specific procedures, and inquiries regarding the application of Sexual Harassment Policies contact:

Dr. Amber Machamer  
Director of Research and Planning  
925.424-1027

### **Americans with Disabilities Act**

In accordance with the 1990 Americans with Disabilities Act (ADA), the Chabot-Las Positas Community College District prohibits discrimination against students and employees with physical or mental disabilities that substantially limit activities such as working, walking, talking, seeing, hearing, or caring for themselves. People who have a record of such an impairment, and those regarded as having an impairment, are also protected.

The District ensures that students and employees with disabilities will not be unlawfully subjected to discrimination or excluded from participating in or benefitting from programs, services or activities. Students and employees are accorded due process as outlined in the specific complaint procedures developed by the Colleges. Las Positas College has designated the responsible officer, outlined the process for seeking resolution, and developed the procedures for filing and processing complaints, including timelines for decision-making authority.

Las Positas College has on file, as required by ADA, a Self-Evaluation to ascertain information pertaining to access and accommodations of the instructional programs, services and activities, including plans or alternatives to correct any noted deficiencies.

Las Positas College also has on file a Transition Plan which evaluates accessibility of facilities and delineates timelines for the removal of physical and structural barriers that exist in facilities, programs, and services.

The general provisions and specific procedures related to this policy are available from the Office of the Vice President of Student Services, the Office of Disabled Students Programs and Services a

### **Section 508 of the Rehabilitation Act**

Las Positas College is committed to providing access to its programs and services to all qualified individuals as mandated by Section 508 of the Rehabilitation Act. Students who have disabilities will have access to and use of technology information and services that is comparable to the access and use available to non-disabled students according to Section 508.

*For more information, contact the Disability Resource Center at 925-424-1524 or 925-4241510*



**Alcohol, Narcotics and Dangerous Drugs**

Persons possessing or being under the influence of alcohol, narcotics or dangerous drugs on campus are in violation of state law and College regulations.

**Smoking Policy**

In an effort to prevent the serious health risks associated with exposure to smoking and environmental tobacco smoke, faculty, staff, students and visitors at Las Positas College, who choose to use tobacco products, may do so in parking lots and designated areas only. Smoking is not permitted in any College-owned vehicle.

**Drug-Free Workplace**

Chabot-Las Positas Community College District is committed to maintaining a drug-free work/learning place in accordance with the requirements of the U.S. Drug-Free Workplace Act of 1988. The District certifies that it will provide a drug-free work/learning place by taking the actions required by the Drug-Free Workplace Act.

It is the intent of the District to make a good faith effort to continue to maintain a drug-free work/learning place through implementation of this policy. For further information, see the Vice President of Student Services.

**Visitors**

Visitors to Las Positas College must register with the receptionist in the Administration Building, Building 100. Visits to the classrooms are by permit only. Non-students, including children, must have a permit issued from the Office of the Vice President of Student Services, Building 700. Prior permission from the instructor is required. Permission to enter upon the property of the District, either stated or implied in other policies or practices, is subject to the District policy of time, place and manner.

**Pets**

No animals and/or pets of any kind or description are allowed within the boundaries of the College. This restriction also applies to animals and/or pets confined in any vehicle parked within the College boundaries.

This policy does not apply to the use of a guide dog, signal dog, or service dog specially trained for assisting a totally or partially blind person, deaf person, hearing-impaired person, or person with physical disabilities.

**Non-Discrimination Policy****Age**

Las Positas College complies with the Age Discrimination in Employment Act of 1974 which prohibits discrimination in employment on the basis of age.

**Disability**

Las Positas College does not discriminate on the basis of disability in admission or access to, or treatment or employment in, its programs and activities. Sections 503 and 504 of the Rehabilitation Act of 1973, as amended, and the regulation adopted thereunder prohibit such discrimination.

**Race, Color or National Origin**

Las Positas College complies with the requirements of Title VI of the Civil Rights Act of 1964 and the regulations adopted thereunder. No person shall on the grounds of race, color, or national origin be excluded from participation in, be denied the benefits of, or otherwise be subjected to discrimination under any program of the College. Las Positas College complies with Title VII of the Act, which includes nondiscrimination on the basis of religion and sex. Limited language skills are not a barrier to occupational programs and services of the College.

**Gender**

Las Positas College does not discriminate on the basis of gender in the educational programs or activities it conducts. Title IX of the Educational Amendments of 1972, as amended, and the administrative regulations adopted thereunder prohibit discrimination on the basis of gender in education programs and activities operated by the College. Such programs and activities include admission of students and employment.

**Declaración De No Discriminación**

Las Positas College, de acuerdo con las leyes civiles, declara que no discrimina hacia ninguna persona a base de su raza, color, nacionalidad, ascendencia, religión, creencia, sexo, edad o incapacidad, en sus programas y políticas de empleo y educación. El conocimiento limitado del idioma no limita acceso a programas y servicios ocupacionales. Cualquier pregunta sobre la aplicación de esta declaración puede dirigirse a Sylvia Rodriguez, Assistant Dean of Admissions and Records, teléfono 925.424-1524; / 925-424-1510 o al Regional Director of the Office of Civil Rights, Old Federal Building, 50 United Nations Plaza, Room 239, San Francisco, CA 94102, teléfono 415.437.7700.



# Student Rights and Responsibilities

## Privacy Rights of Students

Each student and alumnus of Las Positas College has a right to (1) review the official educational records, files, documents, and other materials that contain information directly related to him or her; and (2) challenge such records that are inaccurate, misleading, or otherwise inappropriate.

It is also the policy of the College that, unless excluded by state or federal law, no record, files, documents, materials, or personally identifiable information contained therein shall be released to any individual, agency, or organization without the express written consent of the student.

Any student desiring to review his or her official educational records should contact the Office of the Assistant Dean of Admissions and Records, Building 700, to determine procedures for such review.

Any student desiring to challenge the content of his or her official educational records should contact the Office of the Vice President of Student Services, Building 700.

While the College does not provide general directory services, it may (by law under special circumstances) release the following information about a student: name, address, telephone number, date and place of birth, major field of study, class schedule, participation in officially recognized activities and sports, weight and height of members of athletic teams, dates of attendance, degree and awards received, and the most recent previous public or private school of attendance. Any student who does not wish such information to be released about his/her participation or status should notify the Admissions and Records Office in writing at the beginning of each semester or session of attendance.

For further details, refer to the brochure titled "Student's Rights, Duties and Responsibilities," that is available in Building 700.

## Posting of Materials

The Vice President of Student Services or Division Deans must approve posting of fliers and posters.

Only posters related to activities, events or classes sponsored by Las Positas College or Chabot College will be approved for general display. Other announcements will be considered for approval for posting in the Student Center, Building 1700, only.

## Hazing

Section 32050 of the Education Code makes participation in any kind of hazing a misdemeanor. Hazing is defined as

"any method of initiation into a student organization or any pastime or amusement engaged in with respect to such an organization which degrades or disgraces or which causes bodily harm . . . to any student . . . attending any college or school . . . in California."

## Secret Organizations

Membership in secret fraternities, sororities, and organizations, as described by the California Education Code (Section 76035), is prohibited. Las Positas College students who participate in such groups shall be subject to the penalties outlined in the Education Code.

## Free Speech

Procedures regarding time, place and manner shall govern the exercise of free speech and related activities on the campus. The responsibility for maintaining conduct within the bounds of the law and compliance with the policies of the Board of Trustees shall be assumed by individuals, organizations, and the sponsoring organization's officers and student organizations, advisors and all organizational members. Restrictions on speech content shall extend no further than to restrain speech that is obscene, libelous, or presents a clear and present danger.

## Student Rights

Inquiries regarding application of Nondiscrimination Policies, Sexual Harassment, Disability Issues, and, Student Concerns and Grievances may be referred to the following individuals:

For inquiries regarding the application of non-discrimination policies contact:  
Sylvia Rodriguez  
Assistant Dean of Admissions and Records  
925.424.1492

For inquiries regarding the application of Sexual Harassment policies contact:  
Dr. Amber Machamer  
Director of Research and Planning  
925.424.1027

For inquiries regarding the application of Disability Issues and Student Concerns and Grievances contact:  
Pamela Luster  
Vice President of Student Services  
925.424.1405

Inquiries may also be addressed to the United States Department of Education, Office of Civil Rights, Old Federal Building, 50 United Nations Plaza, Room 239, San Francisco, CA 94102. 415.437.7700

## Academic Standards

It is the policy of the Las Positas College Academic Senate that all academic courses be taught at a post-secondary level, particularly courses for which Las Positas College has articulation agreements with four-year institutions. When a course is articulated, it assures that students completing the course have attained certain levels of academic skill and knowledge comparable with the equivalent course at a four-year institution.

It is understood that students enter Las Positas College with varying levels of scholarship and achievement. Because of this, some students will need to take extra measures (tutoring, basic skills work, etc.) to master their college coursework. It is the student's responsibility to take appropriate action to ensure his/her success; faculty are not expected to alter course content below the college-level so that students enrolled in the class will pass. Course content and objectives are reflected in the course outline on file with the Office of Academic Services, Building 100, and are based on the academic foundation students are expected to have upon entering the course.

## Faculty Office Hours

All members of the full-time faculty schedule office hours each week. This schedule is posted outside each instructor's office. Students are encouraged to take advantage of this opportunity, the benefits of which include:

- Assistance in understanding and achieving specific course expectations;
- Development of concepts and understanding beyond the course expectations;
- Insight into career opportunities within the instructor's area of expertise;
- Encouragement, assistance, and direction in meeting both educational and personal needs; and
- Continuing association with a member of the academic community.

## Attendance Requirements

It is assumed that each student will consider class attendance an absolute requirement. It is the student's responsibility to attend every class the scheduled length of time. Excessive absences, tardiness, and leaving class early may be taken into consideration by instructors in assigning grades.

## Excessive Absence

A student absent for a total of four consecutive, or six cumulative, instructional hours and/or two consecutive weeks of instruction may be dropped from that class by

the instructor. This action constitutes an official termination of class enrollment and will be recorded as specified on Catalog, page 18.

## Reporting Absence

Absences should be cleared personally with instructors. Messages may be left directly on the instructor's voice-mail.

## Examinations and Evaluations

Students will be expected to take examinations and to complete and submit reports and/or projects. The instructor will determine the scheduling of exams and due dates of reports and projects. Unless the student and instructor have made prior arrangements, the instructor is under no obligation to reschedule missed exams or to extend deadlines for reports and/or projects.

## Removal of Disruptive Students

Instructors may remove disruptive students from the classroom for the duration of a class period (Governing Board Policy No. 5512), but may not terminate their enrollment for disciplinary reasons. The Vice President of Student Services or designee may recommend suspension of a student for due cause. Only the Board of Trustees can expel a student from the College.

## Use of Tape Recorders

Students are not permitted to make tape recordings in class or in any campus meetings without the approval of the instructors involved. Exceptions shall be made for students with disabilities who have permission from Disabled Student Programs and Services.



# Academic Regulations

## Grades

Grades are a means of communicating student achievement within courses of instruction. College grades are defined as follows:

Grade	Meaning	Grade Value
A	Excellent	4 grade points per unit
B	Above Average	3 grade points per unit
C	Average	2 grade points per unit
D	Barely Passing	1 grade point per unit
F	Failure	0 grade points—units attempted with no units earned. May negatively affect progress, <i>see page 37.</i>
CR	Credit	0 grade points—units earned with no units attempted.
NC	No Credit	0 grade points—no units earned and no units attempted. May negatively affect progress, <i>see page 37.</i>
I	Incomplete	0 grade points—no units earned and no units attempted. May negatively affect progress, <i>see page 37.</i>

## Credit/No Credit Grades

(Unit limitations may exist at transfer institutions)

In accordance with the California Education Code and the Chabot-Las Positas Community College District Board Policy, Las Positas College has established a grading policy that adds the "CR" (credit) and "NC" (no credit) grades to the standard letter grades (A,B,C,D,F) used in colleges and universities. Courses in which a "CR" (credit) grade is earned will apply toward the 60 units required for graduation, but will not affect the student's grade point average. A maximum of 12 units of "CR" (credit) may be attempted and applied toward the Associate in Arts Degree or Associate in Science Degree. Additional units may be applied provided the student secures prior approval through petition to the Office of Admissions and Records. A course in which a "NC" (no credit) grade is earned will not apply toward graduation and will not affect

the student's grade point average. An excess number of "NC" grades will affect the student's progress.

Las Positas College offers:

- Some courses solely for a credit/no credit (CR or NC) grade;
- Some courses solely for a standard letter grade;
- Some courses the student may choose to complete for either a credit/no credit grade or for a standard letter grade.

Courses offered on a credit/no credit (CR or NC) basis are annotated in the Catalog and in the Class Schedule. On or before the last day of the fifth week of the semester, the student shall inform the Office of Admissions and Records, Building 700, by petition, of his or her intention to complete a course for a credit/no credit grade and the instructor shall report to the Assistant Dean of Admissions and Records a final grade of "CR" or "NC" for students who so petition. The student's decision to opt for credit/no credit grade may not be reversed by either the student or the instructor at a later date.

The "CR" grade will be given to indicate completion of a course with "C" or better work.

A student may repeat a course in which a grade of "D", "F" or "NC" is earned.

## Administrative Symbols "IP", "RD" and "I"

### Administrative Symbol "IP" In Progress

The administrative symbol "IP" is established to indicate coursework "in progress." The symbol "IP" is not a grade; therefore, it has no value in calculating unit credit or grade point average. The required coursework to remove the "IP" must be completed by the end of the term following the date the "IP" was granted. If a student is assigned an "IP" at the end of a term and does not complete that course during the subsequent term, the appropriate faculty member will assign an evaluative symbol (grade) to be recorded on the student's permanent record.

### Administrative Symbol "RD", Report Delayed

Only the Assistant Dean of Admissions and Records can assign the administrative symbol "RD". It is to be used when there is a delay in reporting a grade due to extenuating circumstances. It is a temporary notation to be replaced by a permanent grade/symbol, as soon as possible. "RD" shall not be used in calculating grade point averages.

### Administrative Symbol "I", Incomplete

Incomplete academic work for unforeseeable emergency and justifiable reasons at the end of the term may result

in an "I" symbol being entered by the instructor on the student's permanent record. The student may complete the course work by the end of the following term or semester and receive an appropriate letter grade. If the student does not complete the course work before this deadline, the right of the student to make up the work is forfeited. The student may petition to extend the deadline date because of extenuating circumstances, but this will require the approval of the Assistant Dean of Admissions and Records of Las Positas College, or designee, and the instructor of record. The "I" will be replaced with the alternate letter grade assigned by the instructor at the time the incomplete was assigned.

A "grade change card" will contain the following documentation and shall be maintained by the Assistant Dean of Admissions and Records.

- The condition(s) stated by the instructor for removal of the "I";
- The letter grade to be assigned if the work has not been completed within the designated time limit;
- The letter grade assigned when the stipulated work has been completed; and
- The signature of the student.

The "I" symbol shall not be used in calculating units attempted or for grade points.

**Academic Grade Point Average**

The Academic Grade Point Average (GPA) is an index of the quality of a student's work.

To enable the calculation of the GPA, eligibility for honors and recognition, and other scholastic status, letter grades are converted to numerical form using the grade value as previously defined.

Grades earned in non-degree applicable courses (numbered 100-299) will not be used when calculating a student's degree applicable grade point average. Courses below the English 1A requirement are not degree applicable.

The GPA is calculated by dividing total grade points by total units attempted. Points are determined as follows:

**Grade Points**

- A =4 points per unit
- B =3 points per unit
- C =2 points per unit
- D =1 points per unit
- F =0 points per unit

**Example**

History 1	3 units x 3 grade points (B) = 9 grade points
Math 1	5 units x 2 grade points (C) = 10 grade points
P.E. 1	.5 unit x 4 grade points (A) = 2 grade points
TOTAL	8.5 units = 21 grade points
21 divided by 8.5 = 2.47 or C	

**Scholastic Honors**

Students who complete at least 6 units of work each semester with grades yielding a semester GPA of 3.25 or better are recognized for academic distinction by placement on the Academic Honors List and by a notation on the semester grade report and transcript.

Students who graduate with "Highest Honors" (GPA of 3.50 or better) and those who graduate with "Honors" (GPA of 3.25 or better) are recognized at graduation.

The Sigma Theta Chapter of Alpha Gamma Sigma (AGS) is a California Community College Honor Scholarship Society that recognizes academic achievement. Membership eligibility and other information are available in Building 700 or through the AGS advisor.

**Grade Change Deadline Period**

Awarding grades to students is the responsibility of the instructor of the course in which the student is registered. The determination of the student's grade by the instructor shall be final in the absence of mistake, fraud, bad faith, or incompetence.

When a student believes that an error has been made in the assignment of a grade, he or she should discuss the problem with the instructor. To correct an erroneous grade, a special "Request for Grade Change" form must be completed and presented to the Office of Admissions and Records by the instructor. The Office of Admissions and Records will forward the form to the Vice President of Academic Services.

Requests for a grade change must be made during the semester immediately following the semester/session for which the grade was assigned. Responsibility for monitoring personal academic records rests with the student.

# Academic Regulations

Grade changes will not be made after the established deadline except in cases with extenuating circumstances. These are acute medical, family or other personal problems that cause the student to be unable to meet the deadline. Requests for a grade change under this exception shall be made to the Vice President of Student Services (or designee) who may, upon verification of the circumstance(s), authorize the initiation of a grade change to "NGR" or "W". The student must present evidence of the extenuating circumstance(s).

Original copies of the instructor grade reports will be retired to microfilm after a five-year retention period. Grade changes shall not be made after that time.

## Academic Renewal

Academic Renewal, in accordance with the California Education Code Sections 55764 and 55765, is a process that permits the alleviation of substandard (D's, F's) academic coursework not reflective of the student's current scholastic ability. Grades alleviated by this process will be disregarded in computing the student's grade point average. Only courses taken at the Chabot-Las Positas Community College District will apply. Work completed at other institutions may be considered for graduation eligibility only.

For students to be eligible for academic renewal they must be currently enrolled at Chabot and/or Las Positas College, and a period of at least two (2) years must have elapsed since completion of the coursework to be disregarded. The student may petition the Assistant Dean of Admissions and Records at Las Positas College, Building 700, or the Director of Admissions and Records at Chabot College for academic renewal upon completion of the following:

- a minimum of 12 units taken consecutively at Las Positas and/or Chabot with a grade point average of 2.5 or better; or
- a minimum of 20 units with at least a 2.0 grade point average.

Upon approval, the student's permanent record shall be annotated in such a manner that all courses disregarded shall remain legible on the transcript, indicating a true and accurate history of the student's record.

Students may petition for academic renewal only once. Once the academic renewal process has been completed, it cannot be reversed. A maximum of 24 units of work may be renewed.

Academic renewal at Chabot and Las Positas College does not guarantee that other colleges will accept this action. Acceptance of academic renewal is at the discretion of the receiving institution.

## Catalog Requirements and Continuous Attendance

A student in continuous attendance in regular semesters may, for the purpose of meeting degree or certificate requirements, elect to meet the requirements in effect at any time during their period of continuous attendance at the Chabot-Las Positas Community College District.

Graduation requirements are listed in the Catalog. If a break in attendance occurs before graduation requirements have been met, the graduation requirements that apply to the student are those listed in the Catalog in force at the time continuous studies are resumed.

Continuous attendance is defined as enrollment in at least one semester during the academic year excluding summer session. Any academic record symbol (A-F, C/NC, I, IP, RD, W) shall constitute enrollment. A student who drops out for one academic year or more is considered to be a returning student.

The Las Positas College Catalog Requirements and Continuous Attendance Policy do not necessarily apply to requirements in effect at transfer institutions. Courses applicable toward major and general education requirements may change. Students who are planning to transfer are advised to consult the catalog of the university to which they will transfer.

## Notice of Unsatisfactory Work (Early Alert)

Instructors may notify students of unsatisfactory work at any time during the semester. Such notices are given to the student in person or mailed to the student at his/her home address. Excessive absences, academic deficiency, and failure to submit assignments constitute reasons for notices of unsatisfactory work. A student who receives such notices, or any student who experiences difficulty with academic achievement, is encouraged to consult with his/her instructor and counselor for assistance.

## Scholastic Standards

The Academic Standards Policy of Las Positas College is established to assist students in making appropriate educational plans. There are two indices to academic standards: Academic Status and Academic Progress.

## Academic Probation and Dismissal

A student who has attempted at least 12 semester units of college courses and has a cumulative grade point average of less than 2.0 will be placed on Academic Probation I.

A student on Academic Probation I who does not raise his/her cumulative grade point average to 2.0 or higher in the following semester will be placed on Academic Probation II.



Veterans lose certification for Veterans Benefits after two semesters of academic probation; refer to the Office of Veterans Affairs, Building 1500.

A student on Academic Probation II who does not raise his/her cumulative grade point average to a 2.0 or higher in the following semester of attendance will be dismissed. The first time a student is dismissed, he or she may apply for readmission after one semester, summer session not included, of non-attendance. In the case of a second dismissal, the student may apply for readmission after 5 years of non-attendance or upon appeal to the Vice President of Student Services. Summer session does not count as a semester in determining academic status.

### Removal of Poor Academic Status

Once a student on academic probation raises his or her overall (cumulative) grade point average to a 2.0 ("C") or higher, s/he will be taken off Academic Probation status and will become a "student in good standing."

### Progress Probation and Dismissal

Progress Probation is determined by the percentage of cumulative units with grades of W, NC, or I (Poor Progress Grades). A student who has attempted 12 cumulative semester units of College course work will be placed on Progress Probation I if 50% or more of the cumulative units attempted resulted in Poor Progress grades.

A student on Progress Probation I who does not reduce his/her percentage of cumulative poor progress units to below 50% will be placed on Progress Probation II.

If a student on Progress Probation II continues to have 50% or more of his/her cumulative units made up of Poor Progress grades in the following semester, s/he will be dismissed. The first time a student is dismissed he or she may apply for readmission after one semester (summer session not included) of non-attendance. In the case of a second dismissal, the student may apply for readmission after 5 years of non-attendance or upon appeal to the Vice President of Student Services, Building 700. Summer session does not count as a semester in determining progress status.

### Removal of Poor Progress Status

In order to reverse poor progress status and become a student in good standing, a student must reduce the cumulative units of W, NC or I grades to less than 50% of his/her total units attempted. Summer session does not count as a semester in determining progress status.

### Appeal Process

Under extenuating circumstances beyond the student's control or ability to foresee, exceptions to these policies are granted by the Vice President of Student Services or designee. Students should see a counselor to discuss their progress or academic status and for details associated with the academic standards policy.

### Credit-by-Examination (Individual Student Application)

Chabot-Las Positas Community College District supports the general proposition that the full value of classroom learning experience cannot be measured by any examination. Students who have achieved elsewhere an equivalent knowledge, understanding and experience to that required by regular college courses may receive units of credit based on successful completion of a comprehensive and searching course examination approved by the College discipline faculty. Students may apply individually for Credit-by-Examination for any course offered in the Catalog. In addition, the Credit-by-Examination process may also be used to provide credit for completion of certain coursework at the high school level, where deemed appropriate by the majority of faculty in the discipline. (See High School Articulation, Catalog page 29.)

#### I. Eligibility

Any student applying for Credit-by-Examination will be expected to have had extensive experiences which have prepared the person in the subject matter and for which the individual can provide acceptable evidence of those experiences at the time of application. The student must be registered at the College and in good academic standing.

#### II. Application and Administration

A student may apply for Credit-by-Examination through the petition process for courses listed in the Catalog. The petition must be approved by the appropriate discipline faculty and by the Division Dean. Applicable fees/and or tuition must be paid at the Office of Admissions and Records, Building 700. Arrangements for completing the examination and the actual administration will be made between the student and the instructor after the petition is approved. The examination itself may take a variety of forms, including written, oral, demonstration or a combination of methods.

#### III. Awarding of Credit

Upon completion of the examination, the administering instructor will verify the course and number of units to be received and will assign an appropriate grade. Students shall be offered a credit/no-credit option if that option

## Academic Regulations

is normally available for the course. The student must achieve a grade of "C" or better to be awarded credit under CBE policy.

#### IV. Limitations

Credit-by-Examination coursework may not be counted as part of the 12-unit residency requirement necessary for graduation from the College. The amount of credit which may be earned and counted toward graduation at the College is normally limited to 10 semester units. Under certain circumstances, advanced placement credit may be awarded to a diploma graduate in nursing which may include up to 30 semester units (one year) of academic credit.

### *Be Many Voices of Las Positas College*

"LPC has changed my life. When I started classes as a re-entry student six years ago, I had no idea what I was in for. I have had wonderful instructors who have given of themselves in so many ways. The knowledge that I have received has been invaluable.

Thanks to all." —Cindy, Livermore

### Advanced Placement for College Students (C.E.E.B.)

Las Positas College grants credit for successful completion of examinations of the Advanced Placement (AP) Program of the College Entrance Examination Board (CEEB). Students who want to receive credit for AP examinations must petition the Assistant Dean of Admissions and Records and provide official verification of scores. Students who submit a petition for Advanced Placement credit will be required to meet with a counselor for advisement. See counseling, Building 700, for appropriate form. Exams and courses for which credit is granted will be posted on the student's transcript after completion of 12 units of course work at Las Positas College with a grade point average of 2.0 or better.

Credit granted on the basis of Advanced Placement scores does not necessarily transfer for either elective or specific course credit to other colleges or universities. Students planning to use Advanced Placement credit toward transfer requirements are advised to consult with appropriate representatives of the transfer institution for information regarding its policies and procedures.

Credit will be allowed at Las Positas College as follows:

- I. Course credit granted for Advanced Placement Examinations can be used to meet the requirements for a Las Positas College AA/AS degree.
- II. Advanced Placement test scores may be applied for Intersegmental General Education Transfer Curriculum (IGETC) course credit for acceptable scores on AP exams that are equivalent to Las Positas College IGETC approved courses. Current IGETC policy is to accept a score of 3 or higher to clear one course. Students may use only one course earned through Advanced Placement in each Area (1, 2, 3, 4, or 5).
- III. Advanced Placement test scores may be applied for CSU General Education Breadth requirement course credit. CSU policy is to grant credit according to the chart on the next. (See page 39, CSU GE CREDIT.)

Currently, AP credit is granted according to the following chart. All other tests must be submitted to the Division Dean by petition for consideration of credit. Students should see their counselor to initiate the petition process.

## Credit for Advanced Placement (AP) Examinations

EXAMINATION TITLE	AP SCORE	LPC EQUIVALENT	AA/AS CREDIT	CSU GE CREDIT	IGETC CREDIT
Art: Studio/General	See Note*	Art 2A,10 or 11	3-6 units	None	None
Art: History of Art	3, 4, or 5	Art 4 and 5	6 units	3 units, Area C1	3 units, Area 3, Arts
Biology	3, 4, or 5	Biology 31	4 units	3 units, Area B2	3 units, Area 5, Bio Sci
Chemistry	3, 4, or 5	Chemistry 1A	5 units	6 units, Area B1 and B3 (lab)	5 units, Area 5, Phys Sci
Economics: Macroeconomics	3, 4, or 5	None	None	3 units, Area D2	None
Economics: Microeconomics	3, 4, or 5	None	None	3 units, Area D2	None
English: Language & Composition	3, 4, or 5	English 1A	3 units	3 units, Area A2	3 units, Area 1A
English: Literature & Composition	3, 4, or 5	English 1A and 3	6 units	6 units, Area A2 and C2	3 units, Area 1A or C, Humn
French: Language	3, 4, or 5	French 1A and 1B	10 units	6 units, Area C2	Satisfies language proficiency**
French: Literature	3, 4, or 5	None	None	6 units, Area C2	None
German: Language	3, 4, or 5	None	None	6 units, Area C2	Satisfies language proficiency**
Govt. & Politics: U.S.	3, 4, or 5	Political Science 7	4 units	3 units, Area D8	3 units, Area 4
Govt. & Politics: Comparative	3, 4, or 5	None	None	3 units, Area D8	None
History: European	3, 4, or 5	History 2	3 units	3 units, Area D6	3 units, Area 4
History: U.S.	3, 4, or 5	History 7 and 8	6 units	3 units, Area D6	3 units Area 4
Latin: Vergil	3, 4, or 5	None	None	3 units, Area C2	None
Latin: Latin Literature	3, 4, or 5	None	None	3 units, Area C2	None
Math: Calc AB	3, 4, or 5	Math 1	5 units	3 units, Area B4	5 units, Area 2
Math: Calc BC	3, 4, or 5	Math 1 and 2	10 units	3 units, Area B4	5 units, Area 2
Music: Listening & Literature	3, 4, or 5	Music 1	3 units	None	3 units, Area 3, Arts
Music: Theory	3, 4, or 5	None	None	3 units Area C1	None
Physics B	3, 4, or 5	Physics 2A	4 units	6 units, Area B1 and B3 (lab)	3 units, Area 5, Phys Sci
Physics C: Mechanics	3, 4, or 5	Physics 8A	5 units	3 units, Area B1 and B3 (lab)	3 units, Area 5, Phys Sci
Physics C: Elect/Magnetism	3, 4, or 5	Physics 8B	5 units	3 units, Area B1 and B3 (lab)	3 units, Area 5, Phys Sci
Psychology	3, 4, or 5	None	None	3 units, Area D9	None
Spanish: Language	3, 4, or 5	Spanish 1A and 1B	10 units	6 units, Area C2	Satisfies language proficiency**
Spanish: Literature	3, 4, or 5	None	None	6 units, Area C2	None
Statistics	3, 4, or 5	Math 42A	3 units	3 units, Area B4	3 units, Area 2

\*Department consent and portfolio review

\*\*Does not earn units

# Degrees and Certificates

Las Positas College is authorized by the Board of Governors of the California Community Colleges to confer the Associate in Arts Degree, Associate in Science Degree, Certificate of Achievement and Certificate of Completion upon students who complete the necessary requirements.

## Associate in Arts Degree

## Associate in Science Degree

The Associate in Arts (AA) and Associate in Science (AS) Degrees offered by Las Positas College include Transfer Programs and Occupational Programs. Within each AA and AS Degree, there is a required general education component (see General Education Requirements, pages 48 and 49). General Education courses are grouped into several broad areas and are designed to cultivate intellect and imagination and to broaden awareness of the relationship and interdependence of ideas and disciplines.

### Associate in Arts Degree

The Associate in Arts Degree is conferred upon those students who complete the minimum of 60 semester units with a grade-point average of 2.0 or better and meet the graduation requirements as set forth on page 48.

### Associate in Science Degree

The Associate in Science Degree is conferred upon those students who complete the minimum of 60 semester units with a grade-point average of 2.0 or better and meet the graduation requirements as set forth on page 49.

### AA/AS Transfer Programs

Las Positas College provides the freshman and sophomore years of a four-year college or university program. Students intending to transfer to four-year colleges and universities may complete lower division general education requirements and major field preparatory courses at Las Positas College; pages 64-65 include majors designed for timely transfer to a four-year institution. In addition, students may develop Individual Transfer Majors for an Associate Degree. An Individual Transfer Major is earned by completion of 18 semester units of lower-division requirements in the selected major at the transfer institution. Students must complete the minimum of 60 semester units with a grade-point average of 2.0 or better and meet the graduation requirements as set forth on page 47. Students work in collaboration with a counselor to develop an Individual Transfer Major and should consult the catalog of the transfer institution for specific transfer information.

### AA/AS Occupational Programs

The courses of study within these programs prepare for direct job entry, and can normally be completed in a two-year period by a full-time student (carrying at least 15 units per semester). For a list of AA/AS Occupational Programs see pages 62 and 63. Students may also develop an Individual Occupational Major with a counselor, for approval by the Dean of Student Services.

## Certificate of Achievement Certificate of Completion

The courses of study within these programs prepare for direct job entry. Many certificate programs can be completed in one year in daytime classes, while others are designed to be completed over a longer period in evening classes. Students are advised to consult a counselor for more information about time frames for completion of certificate programs. For a list of Certificate Programs see pages 64 and 65. Students may also develop an Individual Occupational Major with a counselor, for approval by the Dean of Student Services.

### Certificate of Achievement

The Certificate of Achievement is awarded upon successful completion of a minimum of 20 semester units for the major with a grade-point average of 2.0 or higher.

### Certificate of Completion

The Certificate of Completion is awarded upon successful completion of minimum of 10 semester units for the major with a grade-point average of 2.0 or higher. For information on graduation see page 47.



## Graduation Requirements

### Associate in Arts and Associate in Science

A student is eligible for graduation with the Associate in Arts Degree and the Associate in Science Degree after satisfactorily completing:

- The minimum of 60 degree applicable, semester units (12 of which must be completed in residence at Las Positas College) with a grade-point average of 2.0 or higher;
- All requirements for the major plus electives to total 60 semester units (of these at least 18 must be in the major per Title V CCR.T5 55806);
- The General Education Requirements for the Associate in Arts Degree, see page 48, or the General Education Requirements for the Associate in Science Degree, see Catalog, page 49.

Official transcripts from other colleges must be submitted to the Office of Admissions and Records, Building 700, For coursework to be considered in meeting graduation requirements at Las Positas College. For graduation purposes only, total attempted and completed units transferred from other colleges will be included in determining a student's overall cumulative grade-point average (GPA).

### Certificate of Achievement

A student is eligible for graduation with Certificate of Achievement after satisfactorily completing:

- The minimum of 20 degree applicable, semester units for the major with a grade point average of 2.0 or higher.\*

### Certificate of Completion

A student is eligible for graduation with Certificate of Completion after satisfactorily completing:

- The minimum of 10 degree applicable, semester units for the major with a grade point average of 2.0 or higher.\*

*\*A student must complete at least eighty percent (80%) of the required program at Las Positas College or Chabot College, including the last three units. Grades earned in non-degree applicable courses (numbered 100-299) will not be used in calculating a student's degree applicable grade point average. No courses below the English 1A requirement are degree applicable.*



## Application for Graduation

- At least one semester before the planned graduation, students should schedule an appointment with a counselor to check their progress in fulfilling the graduation requirements and arrange to complete the appropriate application for graduation.
- All transcripts from other colleges must be submitted to the Office of Admissions and Records before a graduation evaluation can be made.
- Students may receive degrees or certificates at the end of any semester or the end of summer session. Students should petition no later than the tenth instructional week of the semester in which they plan to complete the requirements. Deadline dates are listed in the College Calendar (printed in the Class Schedule). "Petition to Graduate" forms are available at the Office of Admissions and Records, Building 700.

Commencement Exercises are held in late May or early June. All students receiving degrees and/or certificates are cordially invited to participate.





# Las Positas College General Education Pattern for Associate in Arts Degree

2006 – 2007 (Effective Fall 2006)

Use the boxes on the right to record your progress: N= NEED IP=IN PROGRESS C=COMPLETED			N	IP	C
<b>LANGUAGE AND RATIONALITY</b>					
<b>ENGLISH COMPOSITION</b> Complete 1 course from below			<b>3 UNITS</b>		
English 1A, 3, 52A, 70					
<b>WRITING AND CRITICAL THINKING</b> Complete 1 course from below			<b>3 UNITS</b>		
English 4, 7					
American Sign Language 1A, 1B Business 52, 55 CIS 50, 80 Computer Science 1			Electronics Technology 50 Foreign Language 1A, 1B Industrial Technology 74 Mass Communications 1		
Mathematics 1, 2, 20, 33, 34, 36, 38, 41, 42A, 44, 45, 55, 55A, 55B, 57, 65, 65B, 71 Speech 1, 2B, 10, 46 Theater Arts 3, 25					
<b>MATHEMATICS</b> Proficiency in Mathematics may be met in one of the ways specified below					
1. Demonstrate eligibility for intermediate algebra using multiple measures such as the LPC Placement Examination and previous course work; or 2. Submit documentation that a course equivalent to one of the mathematics courses listed below has been completed (with a grade of "C" or higher or "CR") at another college/university; or 3. Complete one of the following courses (with a grade of "C" or higher or "CR"): Mathematics 1, 2, 20, 33, 34, 36, 38, 41, 42A, 44, 45, 55, 55A, 55B, 57, 65, 65B, 71, Business 55, Electronics Technology 50 or Industrial Technology 74					
<b>NATURAL SCIENCES</b> Complete 1 course from below			<b>3 UNITS</b>		
<i>* Meets either the Natural Sciences or Social and Behavioral Sciences requirement</i>					
Anatomy 1 Astronomy 1, 10, 20, 30 Biology 1, 5, 10, 20, 31, 50 Biotechnology 1 Botany 1		Chemistry 1A, 30A, 31 Ecology 10 Geography 1*, 1L, 8, 15* Geology 1, 1L, 3, 3L, 12, 12L		Microbiology 1 Physics 2A, 8A, 10, 10L Physiology 1 Zoology 1	
<b>HUMANITIES</b> Complete 1 course from below <i>* Meets Humanities and/or American Cultures requirement</i>			<b>3 UNITS</b>		
American Sign Language 2A Art 1, 2A, 3A, 4, 5, 10 Creative Arts 10 English 11, 12, 13, 20, 23, 27, 32, 44*, 45 French 2A		History 1, 2 Humanities 1, 3, 7, 10, 28, 35, 40, 44 Music 1, 2, 4*, 5*, 12, 14, 43, 44, 45, 46A, 46B		Philosophy 1, 2, 4, 7, 25 Photography 67 Religious Studies 1, 2, 11 Spanish 2A Speech 2A, 5, 11* Theater Arts 1A, 1B, 4, 10, 12, 47, 48	
<b>SOCIAL AND BEHAVIORAL SCIENCES</b> Complete 1 course from below			<b>3 UNITS</b>		
<i>* Meets Social &amp; Behavioral Sciences and/or American Cultures requirement</i>					
<i>** Meets either Natural Sciences or Social &amp; Behavioral Sciences requirement</i>					
Anthropology 1, 2, 3, 5*, 12 Business 30 Early Childhood Development 15		Economics 1, 2, 5, 10 Geography 1**, 2, 5, 12, 15** History 28*, 32* Mass Communications 5		Political Science 20, 25, 30 Psychology 1, 2, 3, 4, 15 Psychology-Counseling 13 Sociology 1, 3*, 4, 11	
<b>WELLNESS</b> Complete 1 course from AREAS OF HEALTH and 1 unit from PHYSICAL EDUCATION			<b>4 UNITS</b>		
<i>*Exemption is allowed for illness or physical disability by filing a physician's statement at the Admissions &amp; Records Office. Students who hold an AA/AS Degree or higher are exempt.</i>					
<b>Areas of Health:</b> Health 1		<b>Physical Education*:</b> PE 1, 2, 3, 12, 30-48 or Dance 1			
<b>AMERICAN INSTITUTIONS (AI)</b> Complete 1 course from below; <i>partially satisfies CSU AI requirement</i>			<b>3 UNITS</b>		
History 7, 8, 25, 32		Political Science 7			
<b>AMERICAN CULTURES</b> Complete 1 course from below with a grade of 'C' or higher or 'CR'					
<i>Where appropriate, the course can simultaneously satisfy 1 other graduation or subject requirement</i>					
Anthropology 5 English 44		History 14, 28, 32 Music 4, 5 Psychology-Counseling 13		Sociology 3 Speech 11 Theater Arts 4	
<b>LAS POSITAS COLLEGE ASSOCIATE IN ARTS DEGREE GRADUATION REQUIREMENTS</b>					
1. Minimum of 60 units with a grade point average of 2.0 or better (12 units must be completed at Las Positas College);					
2. All requirements for the Major (minimum of 18 units) plus electives to total 60 units.					
3. General Education Requirements for the Associate in Arts Degree listed above.					

# Las Positas College General Education Pattern for Associate in Science Degree

2006 – 2007 (Effective Fall 2006)

Use the boxes on the right to record your progress: N= NEED IP=IN PROGRESS C=COMPLETED			N	IP	C
<b>LANGUAGE AND RATIONALITY</b>					
<b>ENGLISH COMPOSITION</b> Complete 1 course from below			<b>3 UNITS</b>		
English 1A, 52A, 70 or English as a Second Language 25					
<b>COMMUNICATION AND ANALYTICAL THINKING</b> Complete 1 course from below			<b>3 UNITS</b>		
American Sign Language 1A, 1B Business 52, 55 CIS 50, 80 Computer Science 1	Electronics Technology 50 Foreign Language 1A, 1B Industrial Technology 74 Mass Communications 1	Mathematics 1, 2, 20, 33, 34, 36, 38, 41, 42A, 44, 45, 55, 55A, 55B, 57, 65, 65B, 71 Speech 1, 2B, 10, 46 Theater Arts 3, 25			
<b>MATHEMATICS Proficiency</b> in Mathematics may be met in one of the ways specified below					
1. Demonstrate eligibility for intermediate algebra using multiple measures such as the LPC Placement Examination and previous course work; or 2. Submit documentation that a course equivalent to one of the mathematics courses listed below has been completed (with a grade of "C" or higher or "CR") at another college/university; or 3. Complete one of the following courses (with a grade of "C" or higher or "CR"): Mathematics 1, 2, 20, 33, 34, 36, 38, 41, 42A, 44, 45, 55, 55A, 55B, 57, 65, 65B, 71, Business 55, Electronics Technology 50 or Industrial Technology 74					
<b>NATURAL SCIENCES</b> Complete 1 course from below			<b>3 UNITS</b>		
<i>* Meets either the Natural Sciences or Social and Behavioral Sciences requirement</i>					
Anatomy 1 Astronomy 1, 10, 20, 30 Biology 1, 5, 10, 20, 31, 50 Biotechnology 1 Botany 1	Chemistry 1A, 30A, 31 Ecology 10 Geography 1*, 1L, 8, 15* Geology 1, 1L, 3, 3L, 12, 12L	Microbiology 1 Physics 2A, 8A, 10, 10L Physiology 1 Zoology 1			
<b>HUMANITIES</b> Complete 1 course from below			<b>3 UNITS</b>		
<i>* Meets Humanities and/or American Cultures requirement</i>					
American Sign Language 2A Art 1, 2A, 3A, 4, 5, 10 Creative Arts 10 English 11, 12, 13, 20, 23, 27, 32, 44*, 45 French 2A	History 1, 2 Humanities 1, 3, 7, 10, 28, 35, 40, 44 Music 1, 2, 4*, 5*, 12, 14, 43, 44, 45, 46A, 46B Philosophy 1, 2, 4, 7, 25	Photography 67 Religious Studies 1, 2, 11 Speech 2A, 5, 11* Spanish 2A Theater Arts 1A, 1B, 4, 10, 12, 47, 48			
<b>SOCIAL AND BEHAVIORAL SCIENCES</b> Complete 1 course from below			<b>3 UNITS</b>		
<i>* Meets Social &amp; Behavioral Sciences and/or American Cultures requirement</i>					
<i>** Meets either Natural Sciences or Social &amp; Behavioral Sciences requirement</i>					
Anthropology 1, 2, 3, 5*, 12 Business 30 Early Childhood Development 15	Economics 1, 2, 5, 10 Geography 1**, 2, 5, 12, 15** History 25, 28*, 32* Mass Communications 5	Political Science 7, 20, 25, 30 Psychology 1, 2, 3, 4, 15 Psychology-Counseling 13 Sociology 1, 3*, 4, 11			
<b>PHYSICAL EDUCATION</b> Complete 1 unit from below*			<b>1 UNIT</b>		
PE 1, 2, 3, 12, 30-48 or Dance 1					
<i>*Exemption is allowed for illness or physical disability by filing a physician's statement at the Admissions &amp; Records Office. Students who hold an AA/AS Degree or higher are exempt.</i>					
<b>AMERICAN INSTITUTIONS OR HEALTH</b> Complete 1 course from below			<b>3 UNITS</b>		
Health 1 or History 7, 8, 14, 25, 28, 32 or Political Science 7					
<b>AMERICAN CULTURES</b> Complete 1 course from below with a grade of 'C' or higher or 'CR'					
<i>Where appropriate, the course can simultaneously satisfy 1 other graduation or subject requirement</i>					
Anthropology 5 English 44	History 14, 28, 32 Music 4, 5 Psychology-Counseling 13	Sociology 3 Speech 11 Theater Arts 4			
<b>LAS POSITAS COLLEGE ASSOCIATE IN SCIENCE DEGREE GRADUATION REQUIREMENTS</b>					
1. Minimum of 60 units with a grade point average of 2.0 or better (12 units must be completed at Las Positas College);					
2. All requirements for the Major (minimum of 18 units) plus electives to total 60 units.					
3. General Education Requirements for the Associate in Science Degree listed above.					

# Transfer to a 4-Year College or University

## Transfer to a Four Year College or University

Las Positas College provides the freshman and sophomore years of a four-year college or university program. Students intending to transfer to four-year colleges and universities may complete their lower division general education requirements AND major field preparatory courses at Las Positas College. The Counseling Office, Building 700, and the Career/Transfer/Employment Center, Building 900, provide the most current transfer information in addition to individual counseling appointments.

Students are advised to meet early and regularly with a counselor to assure a smooth transition to the transfer institution. Counselors work with students to develop Student Educational Plans (SEPs) that map out the courses needed for successful transfer.

## Transfer Preparation

The three components of four-year institution lower-division requirements are listed below. This three-part combination of requirements may be complex and necessitates transfer students see a counselor to be assured they meet all transfer requirements.

### I. General Education Requirements

To earn a bachelor's degree from the University of California (UC) or the California State University (CSU), each student must complete a program of general education. The pattern for the CSU system is called CSU General Education Breadth Requirements (see page 58). The Intersegmental General Education Transfer Curriculum (IGETC) is a pattern valid for both the UC and CSU systems (see page 57).

### II. Lower-Division Major Requirements

Students should take the specific lower-division courses required for their chosen major (also called major preparatory courses). Impacted majors (those that are competitive and have fewer available seats) may require all or most major preparatory courses to be complete before transfer. ASSIST\* ([www.assist.org](http://www.assist.org)) lists the articulation agreements of these major preparatory courses for the UC and CSU systems. The lower-division major requirements may differ at different universities for the same major; therefore, it is important for students to review the agreements for each university they are considering.

\*See ASSIST information that follows.

### III. Electives

Electives are courses taken in addition to the major and general education requirements in order to meet the total number of units required to transfer.

## Transferability of Courses

Students can transfer a maximum of 70 community college transferable semester units to most California public four-year colleges or universities (courses may be taken over 70 units to meet subject and major preparatory requirements). Many baccalaureate level courses offered at Las Positas have been articulated with the University of California (UC), California State University (CSU), and many private institutions. Current UC and CSU transfer flyers are available in the Career/Transfer and Counseling Centers. ASSIST.org also provides the most up-to-date transfer course lists. Students need to review these transfer flyers at the beginning of each academic year to obtain updated information.

## ASSIST

ASSIST ([www.assist.org](http://www.assist.org)) is a computerized student transfer information system that can be accessed over the Internet. It displays reports of how course credits earned at a California community college can be applied when transferring to a public university. ASSIST is the official repository of articulation information for California public postsecondary educational institutions, and therefore, provides the most accurate and up-to-date information about student transfer. Students are advised to meet with a counselor to learn how to use the Information posted on ASSIST.



## California State University (CSU)

### Admission Requirements for Transfer to CSU

Students are eligible for admission to CSU as **Upper Division Transfer Students** if they meet the following requirements:

- Complete 60 CSU transferable units;
- Have a college grade point average of 2.0 or better in all transferable college units completed;
- Are in good standing at the last college or university attended, i.e., you are eligible to re-enroll;
- Have completed or will complete prior to transfer at least 30 units (45 quarter units) of courses equivalent to general education requirements (see page 50) with a grade of "C" or better. The 30 units must include all of the general education requirements in communication in the English language (English composition, oral communication, and critical thinking) and at least one course of at least 3 units (4 quarter units) required in college level mathematics.

Some CSUs may consider **Lower Division Transfer Students** (students who have completed less than 60 units before transfer) if they meet the following requirements:

- Have a college grade point average of 2.0 or better in all transferable college units completed;
- Are in good standing at the last college or university attended, i.e., you are eligible to re-enroll;
- Meet the admission requirements for a first-time freshman or have successfully completed necessary courses to make up high school deficiencies;
- Meet the eligibility index required of a freshman.

### CSU General Education Requirements

Las Positas College offers two general education patterns which enable students to meet all of the lower-division general education requirements.

Students can complete either of the following patterns:

- I. IGETC, refer to Catalog, page 57; or
- II. CSU General Education Breadth Requirements, refer to Catalog, page 58.

Completion and certification of either of these patterns will permit a student to transfer from a community college to a CSU without the need after transfer to take additional lower-division general education courses.

### Priority Application Filing Dates for CSU

Summer Term	Feb. 1 - 28 of that year
Fall Semester or Quarter	Oct. 1 - Nov. 30 of previous year
Winter Quarter	June 1 - 30 of previous year
Spring Semester or Quarter	Aug. 1 - 31 of previous year

*\*Not all campuses admit students every semester/quarter*

## CSU Resources

CSU Mentor—[www.csumentor.edu](http://www.csumentor.edu)—provides the most up-to-date information regarding admission requirements, application, deadlines, and specific CSU campuses.

### Certification of General Education for Transfer to UC and CSU

Upon a student's request, Las Positas College will certify the completion of the IGETC or the CSU General Education Breadth Requirements. Students who transfer without certification will have to meet the general education requirements of the specific UC or CSU campus to which they are transferring. Certification is not automatic and must be requested once accepted to the university of choice. This request should be made in the Counseling Office, Building 700. The certification will be sent when final grades are posted.

*The Many Voices  
of Las Positas College*

"Right after high school, LPC was a place for me to further my education until I figured out what I wanted to major in at a four-year university. I was able to earn an AA, meet a lot of wonderful people, and get educational experience. I was able to save money by going to a community college and still get credit for all my undergraduate work. After I graduated with my BA, LPC was a place for me to continue my education and personal growth. I was able to go back and take some fun classes I wasn't able to take before because I was focusing on transfer credit. I enjoy being able to come back and take a class here and there as I desire." —Samantha, Livermore

## Transfer to a 4-Year College or University

### University of California (UC)

#### Admission Requirements for Transfer to UC

To be eligible for admission as an **Upper Division Transfer Student** a student must have completed 60 UC transferable units with a minimum GPA of 2.4 (some campuses and majors require higher GPAs) and meet specific course requirements that can be met by following the Intersegmental General Education Transfer Curriculum (IGETC), see page 56 ). IGETC is not recommended for all majors such as those requiring extensive lower-division major preparation. Students should consult a counselor and use ASSIST.org to determine their best option to prepare for transfer to the UC.

#### Minimum UC Admission Requirements for Transfer (if not following IGETC):

1. Complete 60 units of UC transferable units with a GPA of at least 2.4; no more than 14 units may be taken Credit/No Credit.
2. Complete the following course pattern requirements, earning a grade of C or better in each class:
  - a two transferable college courses (3 units each) in English composition;
  - b one transferable college course (3 units) in mathematical concepts and quantitative reasoning;
  - c four transferable college courses (3 units each) chosen from at least two of the following subject areas: the arts and humanities, the social and behavioral sciences, and/or the physical and biological sciences.

#### UC General Education Requirements

To meet the general education requirements of the UC, students can complete either the IGETC, see Catalog page 57, or the general education requirements of the transfer campus. Students should come to the counseling office for IGETC certification after acceptance into the university

#### Priority Application Filing Dates for UC

Summer Term	Feb. 1 - 28 of that year
Fall Semester or Quarter	Nov. 1 - 30 of previous year
Winter Quarter	June 1 - 30 of previous year
Spring Semester or Quarter	Aug. 1 - 31 of previous year

*\*Not all campuses admit students every semester/quarter*

#### UC Resources

The web site [www.universityofcalifornia.edu/admissions](http://www.universityofcalifornia.edu/admissions) provides up-to-date UC transfer admissions and application information.

## IGETC

### Q What is the Intersegmental General Education Transfer Curriculum (IGETC)?

**A** The Intersegmental General Education Transfer Curriculum (IGETC) is a general education program which community college transfer students can use to fulfill lower-division general education requirements in either the CSU or UC system without the need, after transfer, to take additional lower-division general education courses. See course list on page

### Q Will all UC and CSU campuses accept the IGETC?

**A** NO. UC San Diego's Eleanor Roosevelt and Revelle Colleges and UC Berkeley's Haas School of Business will NOT accept IGETC.

### Q Is it advisable for all transfer students to follow the IGETC?

**A** NO. Some students may be better served by taking courses that fulfill the CSU General Education Breadth requirements or those of the UC campus or college to which they plan to transfer. Students pursuing majors that require extensive lower-division major preparation may not find the IGETC option to be advantageous. The IGETC will probably be most useful for students who want to keep their options open before making a final decision about transferring to a particular CSU or UC campus.



# FAQS

## Q Is IGETC an admission requirement?

**A** NO. There is no connection between completion of the IGETC and eligibility for admission to the CSU or UC system, or admission to a specific campus or program.

## Q What alternatives to IGETC exist?

**A** Community college students who are CSU-bound still have the option of completing the CSU General Education Breadth requirements (see page 58). Students who are UC-bound still have the option of completing the general education requirements of the receiving UC campus or the minimum requirements listed on ASSIST.org>select Las Positas College>click UC Transfer Admission Eligibility.

## Q What is IGETC certification?

**A** IGETC certification is the process by which community college counselors verify that a student has completed all the required coursework for the IGETC pattern. The certification is sent to the transfer institution by the community college. If IGETC is not completed and certified, students may be subject to the lower-division general education requirements of the campus to which they transfer. Students must request certification of IGETC in the Counseling Office at the end of the last semester before transferring (forms may also be obtained in the Admissions & Records Office).

## Independent Colleges and Universities

Transfer requirements for independent colleges and universities vary from college to college. Students should consult the transfer institution's catalog and/or website. Las Positas College counselors can also advise students on independent college and university requirements and preparation.

## Transfer with an Associate in Arts Degree

Transfer students may complete an AA in Liberal Arts and Sciences while completing the IGETC or CSU GE Breadth requirements. Students need to complete the IGETC or CSU GE Breadth requirements and additional LPC graduation requirements plus elective units to total a minimum of 60 semester units, as outlined below. See a counselor for more details.

1. Complete the IGETC or CSU GE Breadth requirements (see Catalog, page 57)
2. Language Other than English requirement for UC transfer students
3. LPC Graduation Requirements:
  - a. American Institutions
  - b. American Cultures (this course can be double-counted where appropriate)
  - c. Wellness – Areas of Health and P.E. (4 units)
  - d. Electives

## Career/Transfer/Employment Center

It is the mission of the Center to meet the academic needs of our students by providing accurate educational and career information that matches their future goals through coordinated resources, activities and services.

### Transfer Services

Transfer services include: individual appointments with LPC Counselors and meetings with four-year university representatives, referrals to appropriate faculty and services, assistance with technology in the articulation of coursework (ASSIST) and college applications, workshops, a college fair, and a resource library. Las Positas has guaranteed admits with UC, CSU, and private universities and concurrent/cross registration with UC Berkeley and CSU East Bay.

### Career and Employment Services

Career planning is an integral part of the educational process. The Center staff assists students in researching majors and occupations through books, technology (EUREKA – computer software program), workshops and referrals to experiential opportunities such as internships and job shadowing. Psychology-Counseling 10, Career and Educational Planning, provides career assessments,

## Transfer to a 4-Year College or University

in-depth career exploration, and guidance in educational planning for transfer. The College also partners with the Tri-Valley One Stop Career Center that provides career and employment services to our community members.

### Employment Services

Employment services are available for students who qualify for Federal Work Study on campus employment opportunities. Resume and interview assistance is available for students looking for both full time and part time off campus employment. An annual Employment Fair is held in spring.

### Transfer Admission Agreements

A Transfer Admission Agreement is a formal, written agreement that outlines courses a student must complete before transferring, states the grade point average a student must earn, and lists specific requirements for impacted majors. Students who comply with the agreement and apply for admission on time during the appropriate filing period are guaranteed admission. The following four-year institutions have transfer agreements with Las Positas College: CSU East Bay, CSU Monterey Bay, San Jose State University, UC Davis, UC Merced, UC Santa Cruz, UC Riverside, UC Irvine (PAIF), UC Santa Barbara, and Saint Mary's College. Consult a counselor for additional and updated information about Transfer Admission Agreements.

### Concurrent Enrollment with University of California, Berkeley

Students who have completed 20 transferable units at Las Positas College or Chabot College with a 2.4 cumulative Grade Point Average may be eligible to cross-register with University of California, Berkeley while completing coursework at Las Positas College. Students must be enrolled in 12 units between the two campuses and may enroll in one lower-division course (numbered 1-99 at UC, Berkeley). For further information contact the Career/Transfer/ Employment Center, Building 900 or the Counseling Office, Building 700.

### Cross Registration with California State University, East Bay

Students who have completed 20 transferable units at Las Positas College or Chabot College with a 2.0 cumulative Grade Point Average may be eligible to cross-register with California State University, East Bay while completing coursework at the College. Students who elect to "cross-register" may enroll in courses at Cal State East Bay which are either: (1) upper division or (2) not offered at any time by Las Positas College. Students must be enrolled

in a minimum of 6 units at Las Positas College and 12 units between the two campuses. For further information, contact the Career/Transfer/ Employment Center, Building 900 or the Counseling Office, Building 700.

### R.O.T.C. (Reserve Officers Training Corp) Program Cross-Town Agreement with University of California, Berkeley

Students may enroll in Army or Air Force R.O.T.C. Programs at the University of California, Berkeley, while attending Las Positas College full-time. Students should refer to this year's University of California catalog for R.O.T.C. course titles and descriptions. Interested students should contact the Assistant Dean of Admissions and Records at Las Positas College for further information.

### California Articulation Number (CAN) System and Lower Division Transfer Patterns (LDTP)

The CAN system identifies some of the transferable, lower division, introductory, preparatory courses commonly taught within each academic discipline on college campuses. The system assures students that CAN courses on one participating campus will be accepted "in lieu of" the comparable CAN course on another campus.

In this Catalog, many courses are identified with a CAN designation. The CAN is listed parenthetically in the course description for each CAN identified course. For example, Art 4 is identified as (CAN ART 2). This means that all campuses in California participating in the CAN system will accept our Art 4 in lieu of the specific Art course on their campuses identified as (CAN ART 2). Each campus retains and uses its own course number and title.

The CAN system is being phased out during the next few years; however, colleges and universities will honor the CAN system during this time.

The California State University (CSU) system will be transitioning to a program called "Lower Division Transfer Patterns (LDTP)." LDTP is a program sponsored by the CSU and supported by the California Community Colleges that presents potential transfer students with the most direct path to a bachelor's degree in the CSU system. The LDTP will identify a set of "road maps" for students to follow that will increase their academic preparation and decrease their time to graduate once they enter the CSU. Check with the Career/Employment/Transfer Center or a counselor for more details.

### Las Positas College Transfer Resources

Counseling Office, Building 700; 925.424.1400  
Career/Transfer/Employment Center, Building 900;  
925.424.1423 and online at the address directly below.

# Intersegmental General Education Transfer Curriculum (IGETC)

2006 – 2007 (Effective Fall 2006)

May be used for General Education Certification for the University of California and/or the California State University

Use the boxes on the right to record your progress: N= NEED   IP=IN PROGRESS   C=COMPLETED	N	IP	C		
<b>AREA 1: ENGLISH COMMUNICATION</b>					
<b>CSU:</b> Select <b>3 courses</b> , total <b>9 units</b> required, <i>select 1 from EACH group below</i> <b>UC:</b> Select <b>2 courses</b> , total <b>6 units</b> required, <i>select 1 from Group 1A and 1 from Group 1B</i>					
<b>GROUP 1A: English Composition</b> (3 units)	English 1A				
<b>GROUP 1B: Critical Thinking/English Composition</b> (3 units)	English 4 or 7				
<b>GROUP 1C: Oral Communication - CSU only</b> (3 units)	Speech 1 or 46				
<b>AREA 2: MATHEMATICAL CONCEPTS AND QUANTITATIVE REASONING</b>					
Select <b>1 course</b> from below; minimum <b>3 units</b> required					
Mathematics 1, 2, 3, 5, 10, 20*, 33, 34, 42A, 42B, 44, 45 <i>*UC: Maximum credit for MATH 20 is 4 units</i>					
<b>AREA 3: ARTS AND HUMANITIES</b>					
Select <b>3 courses</b> from below, minimum <b>9 units</b> ; at least <b>1 course from ARTS, 1 course from HUMANITIES</b>					
<table style="width: 100%; border: none;"> <tr> <td style="width: 50%; vertical-align: top; padding: 5px;"> <b>ARTS:</b> Select at least <b>1 course</b> from below            Art 1, 4, 5            Creative Arts 10            Music 1, 4, 5, 8A, 8B            Photography 67            Theater Arts 10, 11, 12, 14*  <i>*Minimum of 3 units required to clear requirement</i> </td> <td style="width: 50%; vertical-align: top; padding: 5px;"> <b>HUMANITIES:</b> Select at least <b>1 course</b> from below            American Sign Language 2A, 2B            English 3, 20, 23, 27, 32, 44, 45            French 2A, 2B            Humanities 1, 3, 10, 28, 35, 44            Music 2            Philosophy 1, 2, 4, 25            Religious Studies 1, 2, 11            Spanish 2A, 2B         </td> </tr> </table>				<b>ARTS:</b> Select at least <b>1 course</b> from below Art 1, 4, 5 Creative Arts 10 Music 1, 4, 5, 8A, 8B Photography 67 Theater Arts 10, 11, 12, 14* <i>*Minimum of 3 units required to clear requirement</i>	<b>HUMANITIES:</b> Select at least <b>1 course</b> from below American Sign Language 2A, 2B English 3, 20, 23, 27, 32, 44, 45 French 2A, 2B Humanities 1, 3, 10, 28, 35, 44 Music 2 Philosophy 1, 2, 4, 25 Religious Studies 1, 2, 11 Spanish 2A, 2B
<b>ARTS:</b> Select at least <b>1 course</b> from below Art 1, 4, 5 Creative Arts 10 Music 1, 4, 5, 8A, 8B Photography 67 Theater Arts 10, 11, 12, 14* <i>*Minimum of 3 units required to clear requirement</i>	<b>HUMANITIES:</b> Select at least <b>1 course</b> from below American Sign Language 2A, 2B English 3, 20, 23, 27, 32, 44, 45 French 2A, 2B Humanities 1, 3, 10, 28, 35, 44 Music 2 Philosophy 1, 2, 4, 25 Religious Studies 1, 2, 11 Spanish 2A, 2B				
<b>AREA 4: SOCIAL AND BEHAVIORAL SCIENCES</b>					
Select <b>3 courses</b> , minimum <b>9 units</b> from at least <b>2 subjects</b> below <i>*Courses may be listed in more than one area but will NOT be certified more than once</i>					
<table style="width: 100%; border: none;"> <tr> <td style="width: 50%; vertical-align: top; padding: 5px;">           Anthropology 1*, 2, 3, 5, 12            Economics 1, 2, 5, 10            Geography 2, 5, 12            History 1, 2, 8, 14, 25, 28, 32         </td> <td style="width: 50%; vertical-align: top; padding: 5px;">           Political Science 7, 20, 25, 30            Psychology 1, 2, 3, 4*, 6, 12            Psychology-Counseling 13            Sociology 1, 3, 4, 6, 11         </td> </tr> </table>				Anthropology 1*, 2, 3, 5, 12 Economics 1, 2, 5, 10 Geography 2, 5, 12 History 1, 2, 8, 14, 25, 28, 32	Political Science 7, 20, 25, 30 Psychology 1, 2, 3, 4*, 6, 12 Psychology-Counseling 13 Sociology 1, 3, 4, 6, 11
Anthropology 1*, 2, 3, 5, 12 Economics 1, 2, 5, 10 Geography 2, 5, 12 History 1, 2, 8, 14, 25, 28, 32	Political Science 7, 20, 25, 30 Psychology 1, 2, 3, 4*, 6, 12 Psychology-Counseling 13 Sociology 1, 3, 4, 6, 11				
<b>AREA 5: PHYSICAL AND BIOLOGICAL SCIENCES</b>					
Select <b>1 Physical Science course and 1 Biological Science course</b> from below; minimum <b>7 units</b> <b>1 course must include a laboratory</b> indicated with an underline <i>*Courses may be listed in more than one area but will NOT be certified more than once</i>					
<table style="width: 100%; border: none;"> <tr> <td style="width: 50%; vertical-align: top; padding: 5px;"> <b>PHYSICAL SCIENCE</b>            Astronomy 1, 10, 20, <u>30</u>            Chemistry <u>1A</u>, <u>1B</u>, <u>12A</u>, <u>12B</u>, <u>30A</u>, <u>30B</u>, <u>31</u>            Geography 1, <u>1L</u>, 8            Geology 1, <u>1L</u>, 3, <u>3L</u> 12, <u>12L</u>            Physics <u>2A</u>, <u>2B</u>, <u>8A</u>, <u>8B</u>, <u>8C</u>, <u>8D</u>, 10, <u>10L</u> </td> <td style="width: 50%; vertical-align: top; padding: 5px;"> <b>BIOLOGICAL SCIENCE</b>            Anatomy <u>1</u>            Anthropology 1*            Biology <u>1</u>, <u>5</u>, <u>10</u>, 20, <u>31</u>, <u>50</u>            Botany <u>1</u>            Ecology 10            Microbiology <u>1</u>            Physiology <u>1</u>            Psychology 4*            Zoology <u>1</u> </td> </tr> </table>				<b>PHYSICAL SCIENCE</b> Astronomy 1, 10, 20, <u>30</u> Chemistry <u>1A</u> , <u>1B</u> , <u>12A</u> , <u>12B</u> , <u>30A</u> , <u>30B</u> , <u>31</u> Geography 1, <u>1L</u> , 8 Geology 1, <u>1L</u> , 3, <u>3L</u> 12, <u>12L</u> Physics <u>2A</u> , <u>2B</u> , <u>8A</u> , <u>8B</u> , <u>8C</u> , <u>8D</u> , 10, <u>10L</u>	<b>BIOLOGICAL SCIENCE</b> Anatomy <u>1</u> Anthropology 1* Biology <u>1</u> , <u>5</u> , <u>10</u> , 20, <u>31</u> , <u>50</u> Botany <u>1</u> Ecology 10 Microbiology <u>1</u> Physiology <u>1</u> Psychology 4* Zoology <u>1</u>
<b>PHYSICAL SCIENCE</b> Astronomy 1, 10, 20, <u>30</u> Chemistry <u>1A</u> , <u>1B</u> , <u>12A</u> , <u>12B</u> , <u>30A</u> , <u>30B</u> , <u>31</u> Geography 1, <u>1L</u> , 8 Geology 1, <u>1L</u> , 3, <u>3L</u> 12, <u>12L</u> Physics <u>2A</u> , <u>2B</u> , <u>8A</u> , <u>8B</u> , <u>8C</u> , <u>8D</u> , 10, <u>10L</u>	<b>BIOLOGICAL SCIENCE</b> Anatomy <u>1</u> Anthropology 1* Biology <u>1</u> , <u>5</u> , <u>10</u> , 20, <u>31</u> , <u>50</u> Botany <u>1</u> Ecology 10 Microbiology <u>1</u> Physiology <u>1</u> Psychology 4* Zoology <u>1</u>				
<b>AREA 6: LANGUAGE OTHER THAN ENGLISH - UC REQUIREMENT ONLY</b>					
<i>Proficiency in a language other than English may be met in one of the ways specified below</i>					
1. Complete <b>1</b> of the following courses or a higher level: ASL 1A, French 1A, Italian 1A, Spanish 1A. 2. Two ( <b>2</b> ) years of high school study in the same language, completed with a grade of 'C' or higher. 3. Demonstrating equivalent proficiency prior to transfer may also satisfy this requirement. See counselor for details.					
<b>AMERICAN INSTITUTIONS REQUIREMENT - CSU GRADUATION REQUIREMENT ONLY</b>					
Complete <b>1 of the combinations</b> below <i>Courses used to fulfill this requirement may not be used to satisfy any other area.</i>					
<b>Group 1:</b> History 7 and History 8 <b>Group 2:</b> Political Science 7 and one of the following: History 7, 8, 25, 32					
<b>PLEASE NOTE THIS IMPORTANT INFORMATION</b>					
1. For a course to meet an IGETC requirement the course must be on the IGETC list during the academic year it is taken. 2. All courses must be completed with a grade of 'C' or better. 3. Not all majors should follow IGETC; see a counselor. 4. The UC System may limit transfer credit on specific courses or course sequences; see a counselor. 5. <b>Certification is not automatic.</b> Students must request certification from the Las Positas College Counseling Office at the end of the last semester of attendance. The final transcript should be ordered at this time. Failure to complete full					

# California State University General Education (GE) Breadth Requirements 2006 – 2007 (Effective Fall 2006)

Use the boxes on the right to record your progress: N= NEED IP=IN PROGRESS C=COMPLETED	N	IP	C
<b>AREA A: COMMUNICATION in the ENGLISH LANGUAGE and CRITICAL THINKING</b> Select at least <b>1 course</b> from each Group below, total <b>9 units</b> required; <i>must be completed with a grade of C or better.</i>			
<b>A1: Oral Communication</b> Speech 1, 46			
<b>A2: Written Communication</b> English 1A			
<b>A3: Critical Thinking</b> English 4, 7 or Speech 46			
<b>AREA B: PHYSICAL AND LIFE SCIENCES AND MATHEMATICS</b> Select at least <b>1 course</b> from each Group listed below, minimum <b>9 units</b> required			
<div style="display: flex; justify-content: space-between;"> <div style="width: 30%;"> <p><b>B1: Physical Science</b> Astronomy 1, 10, 20, <u>30</u> Chemistry <u>1A</u>, <u>1B</u>, <u>30A</u>, <u>30B</u>, <u>31</u> Geography 1, <u>1L</u>, 8 Geology 1, <u>1L</u>, 3, <u>3L</u>, 12, <u>12L</u> Physics <u>2A</u>, <u>2B</u>, <u>8A</u>, <u>8B</u>, <u>8C</u>, <u>8D</u>, 10 <u>10L</u></p> <p><b>B3: Physical or Life Science Laboratory</b> One of the courses selected from Group B1 or B2 must include a laboratory. Underlined courses are lab courses. Lab must be associated with the lecture course.</p> </div> <div style="width: 30%;"> <p><b>B2: Life Science</b> Anatomy <u>1</u> Anthropology 1* Biology 1, 5, <u>10</u>, 20, <u>31</u>, <u>40</u>, <u>50</u> Biotechnology <u>1</u> Botany <u>1</u></p> <p><b>B4: Mathematics</b> Select <b>1 course</b>; <i>must be completed with a grade of C or better.</i> Mathematics 1, 20, 33, 34, 36, 38, 41, 42A, 42B, 44, 45</p> </div> <div style="width: 30%;"> <p>Ecology 10 Microbiology <u>1</u> Physiology <u>1</u> Psychology 4* Zoology <u>1</u> <i>*Also listed in Area D but can only be used in one area.</i></p> </div> </div>			
<b>AREA C: ARTS, LITERATURE, PHILOSOPHY AND FOREIGN LANGUAGE</b> Select <b>3 courses</b> from below, minimum <b>9 units</b> ; at least <b>1 course from ARTS</b> , <b>1 course from HUMANITIES</b>			
<div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> <p><b>C1: Arts</b> Select at least <b>1 course</b> from below Art 1, 2A, 3A, 4, 5, 10, 11 Creative Arts 10 Music 1, 2, 4, 5, 6, 8A, 8B, 12, 44, 45 Photography 67 Theater Arts 1A, 4, 5, 10, 11, 12, 14, 25, 40 Welding Technology 71</p> </div> <div style="width: 45%;"> <p><b>C2: Humanities</b> Select at least <b>1 course</b> from below American Sign Language 2A, 2B English 3, 11, 12, 13, 20, 23, 27, 32, 44*, 45 French 2A, 2B History 1*, 2* Humanities 1, 3, 10, 28, 35, 40, 44 Philosophy 1, 2, 4, 7, 25 Religious Studies 1, 2, 11 Spanish 2A, 2B Speech 2A, 5 <i>*Also listed in Area D but can only be used in one area.</i></p> </div> </div>			
<b>AREA D: SOCIAL, POLITICAL AND ECONOMIC INSTITUTIONS AND BEHAVIOR</b> Select <b>3 courses</b> from below, minimum <b>9 units</b> from at least <b>2 different subjects</b> from groups <b>D1</b> through <b>D0</b>			
<div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> <p><b>D1: Anthropology and Archeology</b> Anthropology 1*, 2, 3, 5, 12 <i>*Also listed in Area B but can only be used in one area.</i></p> <p><b>D2: Economics</b> Economics 1, 2, 5, 10</p> <p><b>D3: Ethnic Studies</b> Anthropology 5 English 23, 44* History 14, 15, 16, 22, 25, 28 Psychology-Counseling 13 Sociology 3 <i>*Also listed in Area C but can only be used in one area.</i></p> <p><b>D4: Gender Studies</b> History 32 Sociology 11</p> <p><b>D5: Geography</b> Geography 2, 5, 12, 15</p> </div> <div style="width: 45%;"> <p><b>D6 – History</b> History 1*, 2*, 7, 8, 14, 25, 28, 32 <i>*Also listed in Area C but can only be used in one area</i></p> <p><b>D7: Interdisciplinary Social or Behavioral Science</b> Business 30 Marketing 50 Mass Communications 5 Psychology-Counseling 13</p> <p><b>D8: Political Science, Government and Legal Institutions</b> Political Science 7, 12, 20, 25, 30</p> <p><b>D9: Psychology</b> Early Childhood Development 15*** Psychology 1, 2, 3, 4*, 6, 12**, 15*** <i>* Also listed in Area B but can only but used in 1 area</i> <i>** Also listed in Area E but can only but used in 1 area</i> <i>*** ECD 15 + Psych 15, maximum credit 3 units</i></p> <p><b>D0: Sociology and Criminology</b> Sociology 1, 3, 4, 6, 11</p> </div> </div>			

# California State University General Education (GE) Breadth Requirements *(continued)*

## 2006 – 2007 (Effective Fall 2006)

Use the boxes on the right to record your progress: N= NEED   IP=IN PROGRESS   C=COMPLETED	N	IP	C
<b>AREA E: LIFELONG UNDERSTANDING AND SELF DEVELOPMENT</b> Select <b>3 units</b> from below			
<div style="display: flex; justify-content: space-between;"> <div style="width: 45%;">                     Health 1, 2                      Nutrition 1                      Physical Education 1****, 2****, 24**                      Psychology 10, 12*, 24**                      Psychology-Counseling 7***, 10, 11, 14                 </div> <div style="width: 45%;">                     Sociology 7                      Speech 10  <i>* Also listed in Area D but can only be used in one area.</i>  <i>** Psych 24 + PE 24, 3 units maximum credit.</i>  <i>*** For Area E credit, course must be taken once for 3 units.</i>  <i>**** Limit 2 units</i> </div> </div>			
<b>AMERICAN INSTITUTIONS REQUIREMENT:</b> Complete <b>1 of the groups</b> below Completion of the United States History, Constitution, and American Ideals Requirement is required for graduation from any CSU Campus. All CSUs will allow up to 6 of the units taken to meet this requirement to be credited toward satisfying the General Education Breadth Requirements in Area D.			
<b>GROUP 1</b> – History 7 + History 8 <b>GROUP 2</b> – Political Science 7 + History 7, 8, 25, or 32			
<b>PLEASE NOTE THIS IMPORTANT INFORMATION</b> 1. For a course to meet a CSU GE requirement the course must be on the CSU GE list during the academic year it is taken. 2. To earn a bachelor's degree from the California State University, students must complete a <b>48 unit program of general education</b> . Las Positas College students can complete <b>39</b> of these units by completing the requirements listed in this chart. Completion of these requirements will permit a student to transfer from Las Positas College to the CSU without the need after transfer to take additional lower-division general education courses. Las Positas College will certify completion of <b>39</b> units of general education courses. The remaining <b>9</b> units of the required <b>48</b> must be completed after reaching upper-division status (completion of 60 semester units) and after transfer to the CSU. 3. <b>Certification is not automatic.</b> Students must request certification from the Las Positas College Counseling Office at the end of the last semester of attendance. The final transcript should be ordered at this time. Failure to complete full certification will cause courses to be reviewed differently at the receiving campus. 4. Students are strongly encouraged to meet with a counselor for help with selection of appropriate courses.			



# Programs and Courses



Administration of Justice . . . . .	67	Humanities . . . . .	158
American Sign Language . . . . .	71	Human Services . . . . .	192
Anatomy . . . . .	82	Independent Study . . . . .	159
Anthropology . . . . .	72	Industrial Technology . . . . .	159
Apprenticeship . . . . .	73	Interior Design . . . . .	160
Art (see also Photography, Visual Communications) . . . . .	74	International Studies . . . . .	162
Astronomy . . . . .	77	Internship . . . . .	163
Automotive Technology . . . . .	78	Italian . . . . .	143
Biological Sciences . . . . .	81	Journalism (see Mass Communications) . . . . .	168
Biology . . . . .	81	Laser Technology . . . . .	163
Biotechnology . . . . .	82	Learning Skills . . . . .	164
Botany . . . . .	82	Liberal Arts and Sciences (General) . . . . .	165
Business Studies . . . . .	84	Library Studies . . . . .	167
Business (General) . . . . .	86	Marketing . . . . .	93
Marketing . . . . .	93	Mass Communications . . . . .	168
Supervision . . . . .	95	Mathematics . . . . .	170
Chemistry . . . . .	97	Microbiology . . . . .	83
Colloquia . . . . .	99	Music . . . . .	174
Community Interest Studies . . . . .	99	Nutrition . . . . .	178
Computing Studies . . . . .	100	Occupational Safety and Health . . . . .	179
Computer Information Systems . . . . .	101	Philosophy . . . . .	181
Computer Networking Technology . . . . .	106	Photography (see also Art, Visual Communications) . . . . .	182
Computer Science . . . . .	111	Physical Education . . . . .	184
Contemporary Studies . . . . .	116	Physics . . . . .	187
Continuing Education . . . . .	116	Physiology . . . . .	83
Creative Arts . . . . .	116	Political Science . . . . .	189
Dance . . . . .	117	Psychology . . . . .	190
Design Technology . . . . .	118	Psychology-Counseling . . . . .	192
Drama (see Theater Arts) . . . . .	200	Radiation Safety . . . . .	194
Early Childhood Development . . . . .	120	Recreation and Leisure Services . . . . .	194
Ecology . . . . .	83	Religious Studies . . . . .	194
Economics . . . . .	126	Science Technology . . . . .	195
Electronics Technology . . . . .	127	Social Science . . . . .	196
Engineering . . . . .	130	Sociology . . . . .	197
English . . . . .	132	Spanish . . . . .	143
English as a Second Language . . . . .	135	Special Studies . . . . .	197
Fire Service Technology . . . . .	138	Speech . . . . .	198
Foreign Languages . . . . .	142	Supervision . . . . .	95
French . . . . .	142	Theater Arts . . . . .	200
General Studies . . . . .	144	Tutoring . . . . .	203
Geography . . . . .	145	Vacuum Technology . . . . .	204
Geology . . . . .	147	Visual Communications (see also Art, Photography) . . . . .	206
Graphics (see Visual Communications) . . . . .	206	Viticulture and Winery Technology (see also Horticulture) . . . . .	210
Health and Wellness . . . . .	149	Welding Technology . . . . .	215
Health - Public Safety and EMT . . . . .	150	Work Experience . . . . .	218
History . . . . .	152	Zoology . . . . .	83
Horticulture (see also Viticulture and Winery Technology) . . . . .	154		
Human Growth and Development (see Early Childhood Development) . . . . .	120		

## Key to Course Information

### Course Scheduling

Information regarding the days, hours, instructors, and rooms in which classes will be held in each semester and summer session is contained in the Class Schedule, available in the Bookstore prior to the start of each semester and summer session.

### Registration

To receive credit, students must register in a course within the officially designated time. Auditing of specific classes is allowed (see page 15).

### Semester Units

All courses in this Catalog are described in semester units.

### Prerequisites

Many courses offered by the College require the completion of prerequisite courses. Students are advised to consult the course descriptions found in this Catalog for the identification of the prerequisites for a course. Courses with prerequisites are also designated in the current Class Schedule. See page 15 for prerequisite definitions and additional information.

### Numbering System

Courses numbered 1-99 are generally transferable. Courses numbered 100-149 are basic skills courses and are not for AA Degree, AS Degree or transfer credit. Courses numbered 150-199 (Continuing Education) may be applied for graduation credit (limit 6 units).

9 ..... Colloquia

29 ..... Independent Study (Transfer)

49 ..... Contemporary Studies

99 ..... Special Studies

100-149 ..... Basic Skills\*

150-199 ..... Continuing Education Studies

200-299 ..... Community Interest Studies (Non-Credit)

\*Students may not receive more than 30 semester units for pre-collegiate basic skills courses. English as a Second Language and learning disabled students are exempt.

### Course Notation

The courses in this Catalog have been annotated with the abbreviations used on the College transcript, e.g., Administration of Justice (AJ).

### Course Description Annotations

The courses in this Catalog have been annotated with codes to identify:

- Grading Option
- Transfer status to baccalaureate-degree institutions;
- California Articulation Number (CAN) qualified courses.

The following information explains how to interpret these codes.

The grading option for a course is indicated as follows:

OP	May be taken for a letter grade or credit/no credit
GR	Must be taken for a letter grade only
C/N	Must be taken for credit/no credit only

Transfer credit is indicated as follows:

UC	University of California
UC*	Special Credit Limitations (see page 63)
CSU	California State University
CSU*	Special Credit Limitations

California Articulation Number (CAN)

CAN The California Articulation Number is listed parenthetically in the course description for each CAN identified course.

### California Articulation Number (CAN)

The California Articulation Number system identifies some of the transferable, lower-division, introductory, preparatory courses commonly taught within each academic discipline on college campuses. The system assures students that CAN courses on one participating campus will be accepted "in lieu of" the comparable CAN course on another participating campus.

For example, CAN ECON 2 on one campus will be acceptable for CAN ECON 2 on another campus. Each campus retains its own numbering system.

# University of California Unit Limitations on Transferable Courses

COURSE	COURSE NAME	UNITS	LIMITATIONS
ANAT 1	General Human Anatomy	4	ANAT 1 combined with BIOL 50 & PHSI 1: max credit, 2 courses
ASTR 10	Introduction to Astronomy: The Solar System	3	No credit for ASTR 10 or 20 if taken after ASTR 1
ASTR 20	Intro to Astronomy: Stars and the Universe	3	No credit for ASTR 10 or 20 if taken after ASTR 1
BIOL 10	Introduction to the Science of Biology	4	BIOL 10 and 31 combined, max credit, one course; no credit for BIOL 10 or 31 if taken after BIOL 1
BIOL 31	Introduction to College Biology	4	BIOL 10 and 31 combined, max credit, one course; no credit for BIOL 10 or 31 if taken after BIOL 1
BIOL 50	Anatomy and Physiology	4	BIOL 50 combined with ANAT 1 & PHSI 1: max credit, 2 courses
CHEM 1A	General College Chemistry	5	CHEM 1A and 30A combined, max credit, one course
CHEM 1B	General College Chemistry	5	CHEM 1B and 30B combined, max credit, one course
CHEM 30A	Introductory and Applied Chemistry	4	CHEM 1A and 30A combined, max credit, one course
CHEM 30B	Introductory and Applied Chemistry	4	CHEM 1B and 30B combined, max credit, one course
CHEM 31	Introduction to College Chemistry	4	No credit for CHEM 31 if taken after CHEM 1A or 30A
ECOL 10	Humans and the Environment	3	ECOL 10 and 11 combined, max credit, 4 units
ECON 10	General Economics	3	No credit for ECON 10 if taken after ECON 1 or 2
ENGR 10	Introduction to Engineering	2	ENGR 10 and 15 combined: max credit, one course
ENGR 15	Intro to Optical Science and Engineering	4	ENGR 10 and 15 combined: max credit, one course
ENG 23	Native American Writers	3	ENG 23 and 27 combined: max credit, one course
ENG 27	From Folklore to Literature	3	ENG 23 and 27 combined: max credit, one course
ESL 24	Advanced Reading and Composition	5	ESL 24, 25: Any or all of these courses combined, max credit, 8 units
ESL 25	Advanced Reading and Composition	5	ESL 24, 25: Any or all of these courses combined, max credit, 8 units
HLTH 1	Introduction to Health	3	HLTH 1 and 2 combined, max credit, one course
HLTH 2	Health Issues	2	HLTH 1 and 2 combined, max credit, one course
MATH 1	Analytic Geometry and Calculus I	5	MATH 1 & 2 and MATH 33 & 34 combined, max credit, one series
MATH 2	Analytic Geometry and Calculus II	5	MATH 1 & 2 and MATH 33 & 34 combined, max credit, one series
MATH 20	Precalculus Mathematics	5	MATH 20 and 45 combined, max credit, one course/max credit for 20 is 4 units.
MATH 33	Finite Mathematics	4	MATH 1 & 2 and MATH 33 & 34 combined, max credit, one series
MATH 34	Calculus for Business and Social Sciences	5	MATH 1 & 2 and MATH 33 & 34 combined, max credit, one series
MATH 41	Statistics for Business Majors	5	MATH 41, 42A, 42B and 44 combined: max credit, one course
MATH 42A	Introduction to Probability and Statistics	3	MATH 41, 42A, 42B and 44 combined: max credit, one course
MATH 42B	Statistical Analysis	3	No credit is given for MATH 42B if MATH 42A, 44, or 41 is taken.
MATH 44	Statistical Analysis	5	MATH 41, 42A, 42B and 44 combined: max credit, one course
MATH 45	College Algebra	3	MATH 20 and 45 combined, max credit, one course
PE 21	Theory of Soccer	2	PE 21, 23, 27: Any or all of these courses combined, max credit, 8 units.
PE 23	Sports Officiating	2	PE 21, 23, 27: Any or all of these courses combined, max credit, 8 units.
PE 27	Principles of Coaching Interscholastic Sports	2	PE 21, 23, 27: Any or all of these courses combined, max credit, 8 units.
PE 1, PE 2, PE 3 and PE 31, PE 36, PE 38, PE 41, PE 46, PE 48 — Any or all of these courses combined, maximum credit, 4 units.			
PHYS 2A	Introduction to Physics I	4	PHYS 2AB combined with PHYS 8ABCD, max credit, one series. <i>Deduct credit for duplication of topics.</i>
PHYS 2B	Introduction to Physics II	4	PHYS 2AB combined with PHYS 8ABCD, max credit, one series. <i>Deduct credit for duplication of topics.</i>
PHYS 8A	General Physics I	5	PHYS 2AB combined with PHYS 8ABCD, max credit, one series. <i>Deduct credit for duplication of topics.</i>
PHYS 8B	General Physics II	5	PHYS 2AB combined with PHYS 8ABCD, max credit, one series. <i>Deduct credit for duplication of topics.</i>
PHYS 8C	General Physics III	5	PHYS 2AB combined with PHYS 8ABCD, max credit, one series. <i>Deduct credit for duplication of topics.</i>
PHYS 8D	General Physics IV	5	2AB combined with 8ABCD, max credit, one series. <i>Deduct credit for duplication of topics.</i>
PHYS 10	Descriptive Physics	3	No credit for PHYS 10/10L if taken after PHYS 2A or 8A.
PHYS 10L	Descriptive Physics Lab	1	No credit for PHYS 10/10L if taken after PHYS 2A or 8A.
PHSI 1	Human Physiology	5	PHSI 1 combined with BIOL 50 & ANAT 1: max credit, 2 courses
POLI 45	Selected Topics in Political Science	2-3	Credit given only after review of course by the enrolling UC, usually after transfer
Colloquium*, Contemporary Studies** and Independent Study***—Credit given only after review of course by the enrolling UC, usually after transfer.			

\* \*\* \*\*\* These courses may be offered under any subject area contained in the Catalog. \* uses the number 9 \*\* uses the number 49 \*\*\* uses the number 29.  
NOTE: This information is subject to change. Refer to WWW.ASSIST.ORG for the most current limitations on UC transfer credit.

## Courses and Programs

### Transfer and Occupational: Degree and Certificate Programs

PROGRAM NAME	AA/AS	AA	AS	CERTIFICATE	PAGE
	TRANSFER PROGRAMS*	OCCUPATIONAL PROGRAMS**			
Administration of Justice**	√	√			67
Art (Emphasis in Painting)	√				74
Automotive Electronics Technology**			√		78
Automotive Service Technician**				√	78
Automotive Technician**				√	79
Biology	√				81
Business Studies					
Business (General)					
Accounting Technician**				√	88
Administrative Assistant**		√		√	86
Business**			√		86
Business Administration	√				87
Business Entrepreneurship**		√		√	87
Business Workforce Proficiency**				√	90
Retail Management**				√	90
Marketing					
Marketing**		√			93
Retailing**				√	94
Supervision					
Supervisory Management**				√	95
Chemistry	√				97
Computing Studies					
Computer Information Systems					
Computer Information Systems**		√			101
Computer Applications Software (MICROCOMPUTERS)**				√	102
Computer Networking Technology					
Cisco Network Associate**				√	107
Cisco Network Professional**				√	107
Computer Network Technician**				√	107
Computer Network Administr'n (Microsoft)**				√	107
Network Security and Administration**			√		106
Computer Science					
Computer Science	√				112
Computer Programming			√	√	112
Computer Programming for the Web			√	√	113

\* Transfer Preparation Programs designed for transfer, and do not confer a degree.

\*\* Occupational Programs designed for direct job entry; however, many courses in these programs are transferable to many 4-year institutions. Students should consult a counselor for information.



Transfer and Occupational: Degree and Certificate Programs (continued)

PROGRAM NAME	AA/AS	AA	AS	CERTIFICATE	PAGE
	TRANSFER PROGRAMS*	OCCUPATIONAL PROGRAMS**			
ECD-Early Childhood Development**		√			121
ECD-Associate Teacher Certificate**				√	121
ECD-Basic Teacher Certificate**				√	121
ECD-Family Childcare**				√	122
Electronics Technology**		√			127
Electronics Telecommunications Systems**			√	√	127
Engineering	*see note				130
Fire Service Technology**			√	√	138
Horticulture**			√	√	154
Humanities (General)	√				158
Interior Design**			√	√	160
International Studies	√				162
Liberal Arts and Sciences (General)	√	√			165
Mass Communications: Journalism**				√	168
Music	√				174
Music - Beginning Piano Pedagogy**				√	174
Music - Intermediate Piano Pedagogy**				√	175
Occupational Safety and Health**			√	√	179
Photography**				√	182
Physical Education	√				184
Physical Education, Coaching**				√	185
Physical Education, Sports Medicine**				√	185
Physics	√				187
Psychology	√				190
Psychology/Counseling - Human Services (pending approval)				√	192
Science Technology**			√		195
Social Science (General)	√				196
Speech	√				197
Theater Arts	√				200
Vacuum Technology**			√	√	204
Visual Communications**		√		√	206
Viticulture and Winery Technology					
Viticulture**			√	√	210
Enology**			√	√	210
Viticulture and Enology**	*see note				210
Welding Technology**			√	√	215

# Key to Abbreviations

The grading option for each course is listed below the course description in the following pages.

<b>OP</b>	May be taken for a letter grade or credit/no credit
<b>GR</b>	Must be taken for a letter grade only
<b>C/N</b>	Must be taken for credit/no credit only

Transfer credit is indicated as follows:

<b>UC</b>	University of California
<b>UC*</b>	Special Credit Limitations (see page 63)
<b>CSU</b>	California State University
<b>CSU*</b>	Special Credit Limitations

## Degree

### AA – Administration of Justice

#### About the Program

Las Positas College offers courses that lead to an Associate in Arts degree in Administration of Justice, including a Basic Peace Officer Academy for students seeking full-time employment in law enforcement. A Reserve Peace Officer course and several advanced officer courses are also offered in the program. The degree program prepares students for transfer to a four-year college or university while the Basic Peace Officer Academy and Reserve Peace Officer programs prepare students for direct job entry with a California law enforcement agency. While units in this program are transferable to many institutions, students should consult a counselor for transfer information.



## AA – Administration of Justice

### Freshman Year

Administration of Justice 50 (Introduction to Administration of Justice) .....	3
Administration of Justice 54 (Investigative Reporting) .....	3
Administration of Justice 60 (Criminal Law) .....	3
Administration of Justice 61 (Evidence) .....	3
Electives* .....	0-6
General Education Courses	

### Sophomore Year

Administration of Justice 62 (The Justice System) .....	3
Administration of Justice 63 (Criminal Investigations) .....	3
Administration of Justice 70 (Community Relations) .....	3
Health 61 (First Responder) .....	2.5
Electives* .....	0-6
General Education Courses	
<b>Total units required</b> .....	<b>60</b>

### \*Electives

Select from the following for a minimum of 6 units:

- Administration of Justice 51 (Introduction to Security)
- Administration of Justice 52 (Retail Security)
- Administration of Justice 53 (Industrial Security)
- Administration of Justice 55 (Introduction to Correctional Science)
- Administration of Justice 56 (Fundamentals of Crime and Delinquency)
- Administration of Justice 57 (Community Agencies and Treatment)
- Administration of Justice 58 (Delinquency Prevention – A Family Approach)
- Administration of Justice 59 (Child Abuse in the Community)
- Administration of Justice 64 (Patrol Procedures)
- Administration of Justice 66 (Juvenile Procedures)
- Administration of Justice 67 (Defensive Tactics)
- Administration of Justice 69 (Sex Crime Investigation)
- Administration of Justice 71 (Narcotics and Drug Enforcement)
- Administration of Justice 72 (Crisis Intervention)
- Administration of Justice 74 (Gangs and Drugs)
- Administration of Justice 79 (Homicide Investigation)
- Administration of Justice 81 (Interpersonal Behavior)
- Administration of Justice 82 (Current Legal Decisions)
- Administration of Justice 84 (Interviewing—Interrogation)
- Administration of Justice 86 (Police Computer Networks)
- Administration of Justice 89 (Family Violence)

# Administration of Justice

## Administration of Justice (AJ)

### AJ 50 INTRODUCTION TO ADMINISTRATION OF JUSTICE 3 UNITS

(Included in CORE curriculum of baccalaureate degree-granting institutions.)

History and philosophy of administration of justice in America; recapitulation of the system; identifying the various subsystems, role expectations, and their interrelationships; theories of crime, punishment, and rehabilitation; ethics, education and training for professionalism in the system. 3 hours. (CAN AJ 2)

Grading Option: OP

Transfer: CSU, UC

### AJ 51 INTRODUCTION TO SECURITY 2 UNITS

Security systems and their uses within our society. Constitutional aspects, as well as federal, state and related laws as they apply to the different agencies responsible for carrying out the systems of security. Various types of devices and locks used in security and/or protection. 2 hours.

Grading Option: OP

Transfer: CSU

### AJ 52 RETAIL SECURITY 2 UNITS

Retail security in relation to inventory shortages and their investigation. Organization and responsibilities of those involved in retail security. 2 hours.

Grading Option: GR

### AJ 53 INDUSTRIAL SECURITY 2 UNITS

All phases of industrial security, including history, legal aspects, agencies, controls, problems, responsibilities and security devices. 2 hours.

Grading Option: GR

### AJ 54 INVESTIGATIVE REPORTING 3 UNITS

Investigative reports with emphasis upon accuracy and details necessary. Includes arrest reports, incident reports, and miscellaneous field reports. Techniques and methods used to cover information; how to analyze and present information in a clear and concise report. 3 hours.

Grading Option: OP

Transfer: CSU

### AJ 55 INTRODUCTION TO CORRECTIONAL SCIENCE 3 UNITS

Aspects of modern correctional process as utilized in rehabilitation of adult and juvenile offenders. Emphasis on custody, rehabilitation and treatment programs as recognized by modern penology. Exploration of career opportunities. 3 hours.

Grading Option: OP

Transfer: CSU

### AJ 56 FUNDAMENTALS OF CRIME AND DELINQUENCY 2 UNITS

Survey of the sociological and psychological theories pertaining to the causation of crime and delinquency. Includes ethnic considerations and their relationships. 2 hours.

Grading Option: OP

Transfer: CSU, UC

### AJ 57 COMMUNITY AGENCIES AND TREATMENT 2 UNITS

Correctional agencies and programs at local, state and federal levels, includes aspects of organization and administration. Control and treatment of juveniles and adults in modern society in the correctional setting. 2 hours.

Grading Option: OP

Transfer: CSU

### AJ 58 DELINQUENCY PREVENTION--A FAMILY APPROACH 2 UNITS

Family's role in creating and perpetuating delinquency (*criminality*). Responsibility and reasons for supporting anti-social behavior. Development of a practical model for preventing continuing delinquency. 2 hours.

Grading Option: OP

Transfer: CSU

### AJ 59 CHILD ABUSE IN THE COMMUNITY 2 UNITS

Dynamics of the battered child syndrome. Focus on the abusive caretaker, patterns of abuse, and means necessary for effective intervention and treatment including effective legal and social action to control child abuse in the community. 2 hours.

Grading Option: OP

Transfer: CSU

### AJ 60 CRIMINAL LAW 3 UNITS

(Included in CORE curriculum of baccalaureate degree-granting institutions)

Historical development, philosophy of law and constitutional provisions; definitions, classification of crime, and their application to the system of administration of justice; frequently used Penal Code and other code sections; case law, methodology, and concepts of law as a social force. 3 hours. (CAN AJ 4)

Grading Option: GR

Transfer: CSU, UC

### AJ 61 EVIDENCE 3 UNITS

(Included in CORE curriculum of baccalaureate degree-granting institutions)

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. 3 hours. (CAN AJ 6)

Grading Option: GR

Transfer: CSU

### AJ 62 THE JUSTICE SYSTEM 3 UNITS

(Included in CORE curriculum of baccalaureate degree-granting institutions)

Roles and responsibilities of each segment within the Administration of Justice System: law enforcement, judicial, corrections. Past, present and future exposure to each sub-system; procedures from initial entry to final disposition and the relationship each segment maintains with its system members. 3 hours

Grading Option: GR

Transfer: CSU

**AJ 63 CRIMINAL INVESTIGATION 3 UNITS**

Fundamentals of investigation; crime scene search and recording; collection and preservation of physical evidence; scientific aids; modus operandi; sources of information; interviews and interrogation; follow-up and case preparation of specific crimes. 3 hours.

CAN AJ 8)

Grading Option: GR

Transfer: CSU

**AJ 64 PATROL PROCEDURES 3 UNITS**

Responsibilities, techniques of observation, community relations and methods of police patrol. Emphasis on legal and practical aspects. 3 hours.

Grading Option: GR

Transfer: CSU

**AJ 65 TRAFFIC RULES AND INVESTIGATION 3 UNITS**

Traffic law enforcement, regulation and control; fundamentals of traffic accident investigation; California Vehicle Code. Prerequisite: Administration of Justice 61 (completed with a grade of "C" or higher). 3 hours.

Grading Option: GR

Transfer: CSU

**AJ 66 JUVENILE PROCEDURES 2 UNITS**

Organization, functions and jurisdiction of juvenile agencies; processing and detention of juveniles; juvenile case disposition; juvenile statutes and court procedures. 2 hours.

Grading Option: OP

Transfer: CSU

**AJ 67 DEFENSIVE TACTICS 2 UNITS**

Protection against persons armed with dangerous and deadly weapons; demonstration and drill in a limited number of holds and come-alongs; restraint of prisoners and the mentally ill; fundamental use of the baton safety procedures. 1 hour lecture, 3 hours laboratory.

Grading Option: OP

Transfer: CSU

**AJ 69 SEX CRIME INVESTIGATION 3 UNITS**

Sexual assault investigations; human behavior in relation to sexual attitudes and behavior; sexual assault laws and investigations; interview and interrogation techniques; court preparation and trial phase; sex crime prevention. 3 hours.

Grading Option: OP

Transfer: CSU

**AJ 70 COMMUNITY RELATIONS 3 UNITS**

Roles of the Administration of Justice practitioners and their agencies. Interrelationships and role expectations among various agencies and the public. Emphasis on the professional image of the system of Justice Administration and development of positive relationships between members of the system and the public. 3 hours.

Grading Option: GR

Transfer: CSU, UC

**AJ 71 NARCOTICS AND DRUG ENFORCEMENT 2 UNITS**

Local, state and federal narcotics problems and laws; application of investigative procedures and the work and methods of special narcotics units; methods of locating and apprehending violators; the use of informants and undercover persons. 2 hours.

Grading Option: OP

Transfer: CSU

**AJ 72 CRISIS INTERVENTION 2 UNITS**

Domestic relations problems as seen by agency personnel in the justice field; causes of marital disputes and tools for diagnosis of their severity and potential danger; effective intervention techniques, both legal and social. 2 hours.

Grading Option: C/N

Transfer: CSU

**AJ 73 OFFICER SURVIVAL 1 UNIT**

Techniques for defensive officer survival; assaults against police and related incidents; training in techniques of survival. 1 hour.

Grading Option: C/N

Transfer: CSU

**AJ 74 GANGS AND DRUGS 2 UNITS**

Definition of a gang and gang activity. Historical and cultural aspects. Interrelationships among local, national and international gangs, including prison gangs. Gang activity in relation to drug trafficking. 2 hours.

Grading Option: OP

Transfer: CSU

**AJ 75 SECURITY FIREARMS QUALIFICATION 0.5 UNIT**

Moral, legal aspects, civil and criminal liability of firearm use on the job. Emphasis on effective use of the firearm includes minimal qualification of actual firing on the range. 14 total hours.

Grading Option: C/N

Transfer: CSU

**AJ 76 BATON TRAINING FOR SECURITY GUARDS 0.5 UNIT**

Legal uses of the baton, emphasis on appropriate and legal use of the baton. Exercising self-discipline in the use of the baton. Includes training and demonstration of techniques. 12 total hours.

Grading Option: C/N

Transfer: CSU

**AJ 77 POWERS TO ARREST 0.5 UNIT**

Legal authority in powers to arrest; differences between detention and arrest. Designed for Security Guards to meet the California State law requirements. 9 total hours.

Grading Option: C/N

Transfer: CSU

**AJ 79 HOMICIDE INVESTIGATION 3 UNITS**

Process of analysis of all aspects of the death case in order to arrive at the true cause and manner of the death, whether it is murder, suicide, accidental or natural. Emphasis on importance of the death scene related to investigation of cause. 3 hours.

Grading Option: OP

Transfer: CSU



# Administration of Justice

## AJ 81 INTERPERSONAL BEHAVIOR 2 UNITS

Interpersonal processes combined with self awareness; concepts of individual and group behavior; defense mechanism; role interaction; self analysis; and experiences in situational group interactions. 2 hours.

Grading Option: C/N

Transfer: CSU

## AJ 82 CURRENT LEGAL DECISIONS 1 UNIT

Legal decisions which are being rendered concerning appellate courts of both the state and federal judiciary system, and relation to current problems. 1 hour.

Grading Option: C/N (*May be repeated 3 times*)

Transfer: CSU

## AJ 84 INTERVIEWING--INTERROGATION 1 UNIT

Techniques involved in interviewing victims and witnesses of crimes and the interrogation of persons suspected of crimes. Methods involved and various approaches utilized in these techniques. 1 hour.

Grading Option: GR

Transfer: CSU

## AJ 86 POLICE COMPUTER NETWORKS 2 UNITS

Processing methods, systems, and equipment used in data processing with emphasis on the Police Computer Networks consisting of input, retrieval, updating and deletion of items. 2 hours.

Grading Option: GR

Transfer: CSU

## AJ 89 FAMILY VIOLENCE 2 UNITS

Origins of violence in the family from the administration of justice perspective. Specific types of violent interactions and abuse among family members. Emphasis on techniques for use by peace officers to intervene effectively. 2 hours.

Grading Option: GR

Transfer: CSU

## AJ 90 RESERVE MODULE A: ARREST AND CONTROL 4 UNITS

Ethical considerations concerning arrest; laws of arrest; search and seizure; methods of arrest; investigation and communications; law enforcement ethics. Designed to satisfy the 1993 revised requirements of Penal Code 832. 4 hours.

Grading Option: C/N

## AJ 91 RESERVE MODULE A: FIREARMS 2 UNITS

Ethical considerations concerning the use of firearms. Firearms safety. Techniques of shooting and range qualification. Prerequisite: Administration of Justice 90 (completed with a grade of "C" or higher). 2 hours.

Grading Option: C/N

## AJ 92 RESERVE MODULE B, PART I: ROLE OF THE BACKUP OFFICER 3 UNITS

Elements involved in backing up another officer; professional orientation; communications; criminal law; traffic stops; custody issues; patrol. Designed to meet part of Module B for the Level II Reserve Peace Officer. Certified by the California Commission on Peace Officer Standards and Training. 2 hours lecture, 3 hours laboratory.

Grading Option: GR

## AJ 93 RESERVE MODULE B, PART II: ROLE OF THE BACKUP OFFICER 4 UNITS

Elements involved in backing up another officer; vehicle operations; First Aid/CPR; force and weaponry and remediation of skills. Designed to meet part of Module B for the Level II Reserve Peace Officer. Certified by the California Commission on Peace Officer Standards and Training. 2 hours lecture, 6 hours laboratory.

Grading Option: GR

## AJ 94 RESERVE MODULE C 5 UNITS

Professional orientation; police community relations; patrol procedures; domestic violence; laws of evidence; traffic issues; criminal investigation. Designed to meet the legal requirements for Module C for Level I Reserve Peace Officer. Certified by the California Commission on Peace Office Standards and Training. Prerequisite: Administration of Justice 93 completed with a grade of "C" or higher). 5 hours.

Grading Option: GR

## AJ 99.97 LAW ENFORCEMENT ACADEMY 19 - 25 UNITS

Basic concepts of law enforcement, covering investigation, procedures, records, laws, tactics, firearms, and public human relations. The Law Enforcement Academy is certified by the Commission of Peace Officer Standards and Training (POST). Prerequisites: Administration of Justice 50, 60, 61, 62 and 70 (all completed with a grade of "C" or higher) or employment as a peace officer. 1056 total hours. \*Limited to 4 transfer units.

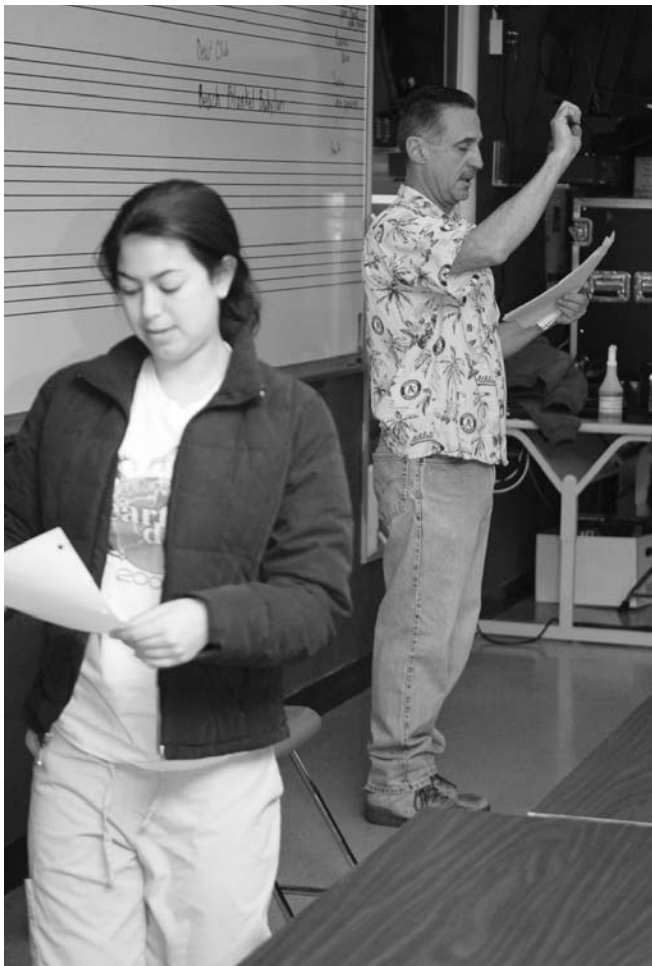
Grading Option: GR

Transfer: CSU\*

## American Sign Language

### About the Program

The American Sign Language (ASL) program provides an introduction to the language of the Deaf, the Deaf Community, and Deaf Culture. The program consists of four classes: ASL-1A and ASL-1B are offered on a semester basis; ASL-2A and ASL-2B are offered on a yearly basis. The ASL classes emphasize conversational skills in functional situations and provide students an opportunity to explore, in a relaxed atmosphere, the language and culture of deafness.



### American Sign Language (ASL)

**ASL 1A AMERICAN SIGN LANGUAGE I 3 UNITS**  
 Introduction to American Sign Language (ASL), including expressive and receptive skills, the manual alphabet, facial expression, and body gestures. Emphasis on conversational skills in functional situations, knowledge of Deaf culture and the Deaf community. 3 hours.  
 Grading Option: GR Transfer: CSU, UC

**ASL 1B AMERICAN SIGN LANGUAGE II 3 UNITS**  
 Continued development of American Sign Language (ASL) receptive/ expressive skills and knowledge learned in American Sign Language 1A. Emphasis on conversational skills in functional situations, continued vocabulary and sentence structure expansion, and knowledge of Deaf culture and the Deaf community. Prerequisite: American Sign Language 1A (completed with a grade of "C" or higher). 3 hours.  
 Grading Option: GR Transfer: CSU, UC

**ASL 2A AMERICAN SIGN LANGUAGE III 3 UNITS**  
 Further development of American Sign Language (ASL) receptive/ expressive skills and knowledge learned in American Sign Language 1B. Emphasis on conversational skills in functional situations, continued vocabulary expansion and knowledge of Deaf culture and the Deaf community. Prerequisite: American Sign Language 1B (completed with a grade of "C" or higher). 3 hours.  
 Grading Option: GR Transfer: CSU, UC

**ASL 2B AMERICAN SIGN LANGUAGE IV 3 UNITS**  
 Further development of American Sign Language (ASL) receptive/ expressive skills and knowledge learned in American Sign Language 2A. Emphasis on conversational skills in functional situations, continued expansion of vocabulary and knowledge of Deaf culture and the Deaf community. Prerequisite: American Sign Language 2A (completed with a grade of "C" or higher). 3 hours.  
 Grading Option: GR Transfer: CSU, UC

**Anatomy (ANAT)**  
 SEE: **Biological Sciences**

# Anthropology

## Anthropology

### About the Program

Anthropologists study human beings from a holistic and cross-cultural point of view. Encompassing every aspect of human existence, the subject matter of anthropology is traditionally divided into four fields: physical or biological anthropology, social or cultural anthropology, linguistics, and archaeology. A comparative science, its concerns include human genetic, cultural, and linguistic variation.

As modern technology and business practices dissolve borders across the globe, anthropologists grow ever more important. Companies that do business in multiple countries are well advised to seek out anthropological understandings of their target markets, while anthropologists at home are instrumental advocates of multiculturalism. Applied anthropology, meanwhile, asserts itself as a force for positive change around the world.

Las Positas College offers anthropology classes in three of the four sub-fields to prepare students for transfer to a four-year institution. All courses transfer as lower-division requirements. Some variation in requirements may exist at a particular four-year college or university; therefore, it is essential that the student also refer to the catalog of the prospective transfer institution and consult a counselor.

## Anthropology (ANTH)

### ANTH 1 PHYSICAL ANTHROPOLOGY 3 UNITS

Humans as a biological species through an examination of the fossil evidence for human evolution, behavior of nonhuman primates, and human evolutionary biology and genetics. Emphasis on uniquely human biological and behavioral characteristics, as well as those shared with other animals. Current anthropological issues such as the biological meaning of race, genetic diseases, and the influence of evolution on human behavior. 3 hours. (CAN ANTH 2)

Grading Option: OP

Transfer: CSU, UC

### ANTH 2 INTRODUCTION TO ARCHAEOLOGY: PREHISTORY AND CULTURE GROWTH 3 UNITS

Prehistoric development of human culture through studies of stone tools and other remains of the earliest human lifeways up to the growth of technologically advanced civilizations. Emphasis on modern archaeological theories and techniques for understanding cultural adaptation to different ecological conditions in the past. Review of important archaeological case studies. 3 hours. (CAN ANTH 6)

Grading Option: OP

Transfer: CSU, UC

### ANTH 3 SOCIAL AND CULTURAL ANTHROPOLOGY 3 UNITS

How human beings in different cultures meet basic biological, social and cultural needs, including kinship and marriage practices, political and social organization, economic institutions, religious and childrearing practices, social change, as well as other aspects of cultural behavior. Emphasis on understanding other cultures on their own terms. Includes the many subcultures making up North American populations. 3 hours. (CAN ANTH 4)

Grading Option: OP

Transfer: CSU, UC

### ANTH 5 CULTURES OF THE U.S.: ANTHROPOLOGICAL PERSPECTIVES ON RACE, CLASS, GENDER AND ETHNICITY 3 UNITS

Issues relevant to understanding race, class, gender and ethnicity within the American setting. Historical, as well as contemporary situation of the following groups: 1) African Americans; 2) Native Americans; 3) Hispanic Americans; 4) European Americans; and, 5) Asian Americans, among other groups. Emphasis on analyzing the way that public understandings of culture and biology are translated into social policy. Contemporary social issues such as race relations, multiculturalism, affirmative action, bilingual education, and the use and abuse of I.Q. testing. 3 hours.

Grading Option: OP

Transfer: CSU, UC

**ANTH 12 MAGIC, RELIGION, WITCHCRAFT, AND HEALING 3 UNITS**

Cross-cultural perspectives on spirituality, religious practice, myth, ancestor beliefs, witchcraft and the variety of religious rituals and practitioners found in the cultures of the world. Examination of the cosmologies of different cultures through the anthropological perspective. Emphasis is placed on how knowledge of the religious practices and beliefs of others can help us to understand the multicultural world in which we live. Comparison of the ways in which diverse cultures confront the large and fundamental questions of existence: those dealing with the meaning of life, birth and death, and with the relationship of humans to each other and to their universe. 3 hours.

Grading Option: OP

Transfer: CSU, UC

**Apprenticeship (APAU)****About the Program**

To provide apprenticeship training for their employees, many employers (or employee organizations) partner with the California Community Colleges so that apprentices can receive college credit while they learn a trade. Apprentices receive on-the-job training via their employer, and then in the evening or weekend receive employer-selected “related and supplemental instruction” (RSI). Through some of the RSI apprenticeship programs, apprentices can earn a certificate or degree (Associate in Arts or Associate in Science). The apprenticeships are typically three to five years in length. Las Positas College partners with a variety of employers to provide apprenticeship training and education. For a current listing of LPC Apprenticeship programs, contact Birgitte Ryslinge, Dean of Vocational Education, at 925.424.1324

**✓ DEGREE**

**Degree  
AA – Art – Emphasis in Painting**

**About the Program**

Students who elect to major in the field of art have a variety of opportunities open to them. Choices include careers in teaching, art criticism, or work as practicing artists in graphic design, painting, drawing, and photography.

The Art (Painting) major offered by Las Positas College provides a secure foundation for the student. Courses in the Art department are designed to fulfill the needs of Art majors, as well as those whose interest is avocational or recreational. This program fulfills typical lower-division requirements at four-year transfer institutions. Some variation in requirements may exist at a particular four-year college or university; therefore, it is essential that the student also refer to the catalog of the prospective transfer institution and consult a counselor.

SEE ALSO: **Photography, Visual Communications**

**AA – Art – Emphasis in Painting**

**Freshman Year**

Art 2A (Introduction to Drawing) .....	3
Art 2B (Drawing, Color and Composition).....	3
Art 12A (Oil/Acrylic Painting- Beginning I) .....	3
Art 12B (Oil/Acrylic Painting- Beginning II) .....	3
Art 3A (Figure and Composition I) .....	3
Art 1 (Introduction to Art) .....	3
General Education Courses	

**Sophomore Year**

Art 4 (Art History: Ancient) .....	3
Art 5 (Art History: Renaissance to Modern).....	3
Art 12C (Oil/Acrylic Painting- Advanced I) .....	3
Art 12D (Oil/Acrylic Painting- Advanced II) .....	3
Art 3B (Figure and Composition II).....	3
Art 10 (Design and Materials) .....	3
Art 7A (Introduction to Watercolor Painting).....	3
General Education Courses	
<b>Total units required</b> .....	<b>60</b>





**Art (ART)****ART 1 INTRODUCTION TO ART 3 UNITS**

Architecture, sculpture, painting, photography and design in relation to human inventiveness in providing for material and aesthetic needs; orientation to contemporary and historic art forms and principles. 3 hours.

Grading Option: OP

Transfer: CSU, UC

**ART 2A INTRODUCTION TO DRAWING 3 UNITS**

Skills development in light and shade composition, perspective, and other basics. The use of pencil, charcoal, and/or ink. 2 hours lecture, 4 hours studio. (CAN ART 8)

Grading Option: OP

Transfer: CSU, UC

**ART 2B DRAWING AND COMPOSITION 3 UNITS**

Development of knowledge and skills introduced in Art 2A, emphasizing media and composition and introducing the use of color. Prerequisite: Art 2A (completed with a grade of "C" or higher). 2 hours lecture, 4 hours studio.

Grading Option: OP

Transfer: CSU, UC

**ART 3A FIGURE AND COMPOSITION I 3 UNITS**

Skill development drawing the figure with charcoal, conte or pastel, pencil, and ink with emphasis on composition. Strongly recommended: Art 2A. 2 hours lecture, 4 hours studio.

Grading Option: OP

Transfer: CSU, UC

**ART 3B FIGURE AND COMPOSITION II 3 UNITS**

Development of knowledge and skills introduced in Art 3A, emphasis on composition and color. Prerequisite: Art 3A (completed with a grade of "C" or higher). 2 hours lecture, 4 hours studio.

Grading Option: OP

Transfer: CSU, UC

**ART 3C FIGURE AND COMPOSITION III 3 UNITS**

Development of knowledge and skills introduced in Art 3B, emphasis on composition and color. Prerequisite: Art 3B (completed with a grade of "C" or higher). 2 hours lecture, 4 hours studio.

Grading Option: OP

Transfer: CSU, UC

**ART 3D FIGURE AND COMPOSITION IV 3 UNITS**

Development of knowledge and skills introduced in Art 3C. Drawing the figure with charcoal, conte, graphite, ink, watercolor, pastels, tempera and oils with emphasis on composition and color. Prerequisite: Art 3C (completed with a grade of "C" or higher). 2 hours lecture, 4 hours studio.

Grading Option: OP

Transfer: CSU, UC

**ART 4 ART HISTORY: ANCIENT 3 UNITS**

History of Western art from prehistoric times through Egyptian, Mesopotamian, Aegean, Greek, Etruscan, Roman, Early Christian, Byzantine, Medieval, Romanesque, and Gothic civilizations. 3 hours. (CAN ART 2; Art 4 + 5 = CAN ART SEQ A)

Grading Option: OP

Transfer: CSU, UC

**ART 5 ART HISTORY: RENAISSANCE TO MODERN 3 UNITS**

History of Western art from Early Renaissance, High Renaissance, Mannerism, Baroque, Neoclassicism, Romanticism, Realism, Impressionism, Post-Impressionism, 20th Century developments of American art. 3 hours. (CAN ART 4; Art 4 + 5 = CAN ART SEQ A)

Grading Option: OP

Transfer: CSU, UC

**ART 7A INTRODUCTION TO WATERCOLOR PAINTING 3 UNITS**

Materials, methods, and techniques of transparent watercolor painting, including its effects and possibilities. Strongly Recommended: Art 2A and Art 2B. 2 hours lecture, 4 hours studio.

Grading Option: OP

Transfer: CSU, UC

**ART 7B WATERCOLOR PAINTING 3 UNITS**

Development of knowledge and skills introduced in Art 7A. Emphasis on experimenting with the watercolor medium leading to development of individual methods of expression. Prerequisite: Art 7A (completed with a grade of "C" or higher). 2 hours lecture, 4 hours studio.

Grading Option: OP

Transfer: CSU, UC

**ART 7C ADVANCED WATERCOLOR: PAINTING I 3 UNITS**

Development of knowledge and skills introduced in Art 7B directed toward individualized needs. Prerequisite: Art 7B (completed with a grade of "C" or higher). 2 hours lecture, 4 hours studio.

Grading Option: OP

Transfer: CSU, UC

**ART 7D ADVANCED WATERCOLOR PAINTING II 3 UNITS**

Development of knowledge and skills introduced in Art 7C directed toward individualized needs. Prerequisite: Art 7C (completed with a grade of "C" or higher). 2 hours lecture, 4 hours studio.

Grading Option: OP

Transfer: CSU, UC

**ART 10 DESIGN AND MATERIALS 3 UNITS**

Introduction to the basic elements of design: line, texture, value, shape, color, light, and spatial concepts. Experimentation with paper, cardboard, cloth, etc. Emphasis on two-dimensional design. 2 hours lecture, 4 hours studio. (CAN ART 14)

Grading Option: OP

Transfer: CSU, UC

**ART 11 DESIGN, MATERIALS, AND COLOR 3 UNITS**

Color theory as it applies to two and three dimensional design. 2 hours lecture, 4 hours studio.

Grading Option: OP

Transfer: CSU, UC

**ART 12A OIL/ACRYLIC PAINTING: BEGINNING I 3 UNITS**

Beginning projects in oil painting with an emphasis on fundamental painting techniques and approaches. Strongly Recommended: Art 2A or equivalent. 2 hours lecture, 4 hours studio.

Grading Option: OP

Transfer: CSU, UC

## Art

### ART 12B OIL/ACRYLIC PAINTING: BEGINNING II 3 UNITS

Projects in oil or acrylic painting with an emphasis on fundamental painting techniques and approaches. Prerequisite: Art 12A (completed with a grade of "C" or higher) or equivalent. 2 hours lecture, 4 hours studio.

Grading Option: OP

Transfer: CSU, UC

### ART 12C OIL/ACRYLIC PAINTING: ADVANCED I 3 UNITS

Advanced projects in oil or acrylic painting with emphasis on individual creative work and development of personal ideas and style. Prerequisite: Art 12B (completed with a grade of "C" or higher) or equivalent. 2 hours lecture, 4 hours studio.

Grading Option: OP

Transfer: CSU, UC

### ART 12D OIL/ACRYLIC PAINTING: ADVANCED II 3 UNITS

Advanced projects in oil or acrylic painting with emphasis on individual creative work and development of personal ideas and style. Prerequisite: Art 12C (completed with a grade of "C" or higher) or equivalent. 2 hours lecture, 4 hours studio.

Grading Option: OP

Transfer: CSU, UC

### ART 13A ACRYLIC PAINTING: BEGINNING I 3 UNITS

Projects in acrylic painting with an emphasis on fundamental painting techniques. Strongly Recommended: Art 2A or equivalent. 2 hours lecture, 4 hours studio.

Grading Option: OP

Transfer: CSU, UC

### ART 13B ACRYLIC PAINTING: BEGINNING II 3 UNITS

Projects in acrylic painting with an emphasis on fundamental painting techniques. Prerequisite: Art 13A or equivalent (completed with a grade of "C" or higher). 2 hours lecture, 4 hours studio.

Grading Option: OP

Transfer: CSU, UC

### ART 13C ACRYLIC PAINTING: ADVANCED I 3 UNITS

Advanced projects in acrylic painting with emphasis on individual creative work and development of personal ideas and style. Prerequisite: Art 13B or equivalent (completed with a grade of "C" or higher). 2 hours lecture, 4 hours studio.

Grading Option: OP

Transfer: CSU, UC

### ART 13D ACRYLIC PAINTING: ADVANCED II 3 UNITS

Advanced projects in acrylic painting with emphasis on individual creative work and development of personal ideas and style. Prerequisite: Art 13C or equivalent (completed with a grade of "C" or higher). 2 hours lecture, 4 hours studio.

Grading Option: OP

Transfer: CSU, UC



## Astronomy

### About the Program

The Astronomy program offers introductory courses for students who wish to satisfy the Natural Sciences requirement for an Associate degree. These courses cover subjects as diverse as celestial astronomy and constellations, history of Astronomy, evolution of the Solar System, comparative planetology, extrasolar systems, the Sun, Stars and normal Galaxies, Active Galaxies, Quasars, and Cosmology.

For students intending to transfer to a four-year university that has a laboratory science requirement, 1-unit laboratory courses are offered that may be taken concurrently with or after completion of a lecture course. General Education courses should be selected carefully to meet the requirements of the intended transfer institution. Some variation in requirements may exist at a particular four-year college or university; therefore, it is essential that the students also refer to the catalog of the prospective transfer institution and consult a counselor.



### Astronomy (ASTR)

#### ASTR 1 PRINCIPLES OF ASTRONOMY AND ASTROPHYSICS 3 UNITS

Includes planets, their motions, the sun and stars, stellar structure and evolution, black holes, galaxies, and cosmology. A companion science laboratory, Astronomy 30 is available. Strongly Recommended: Mathematics 36 or Mathematics 38 and Physics 2A, 8A or 10. 3 hours.

Grading Option: OP

Transfer: CSU, UC

#### ASTR 10 INTRODUCTION TO ASTRONOMY: THE SOLAR SYSTEM 3 UNITS

Introduction to history and physical principles of astronomy, focusing on our Solar System. Includes view of heavens, historical development of scientific models of the sky, telescopes, formation and evolution of the solar system, and the possibilities for life in space. Designed for non-majors in mathematics or physical science. A companion science laboratory, Astronomy 30, is also available. 3 hours. \*Transfer unit limitations, see page 63

Grading Option: OP

Transfer: CSU, UC\*

#### ASTR 20 INTRODUCTION TO ASTRONOMY: STARS AND THE UNIVERSE 3 UNITS

Introduction to the study of stars, galaxies, and cosmology. Includes the nature of light, telescopes, spectroscopy, stellar formation and evolution, galaxies, quasars, and cosmology. Designed for non-majors in mathematics or a physical science. A companion science laboratory, Astronomy 30, is also available. 3 hours. \*Transfer unit limitations, see page 63

Grading Option: OP

Transfer: CSU, UC\*

#### ASTR 30 INTRODUCTION TO ASTRONOMY LABORATORY 1 UNIT

Introduction to laboratory principles and techniques in astronomy. Includes telescope operation and measuring stellar magnitudes, spectral lines, motions of the sun, moon and planets. Prerequisite: Astronomy 1, 10, or 20 (may be taken concurrently). 2-3 hours laboratory.

Grading Option: OP

Transfer: CSU, UC

#### ASTR 40 OBSERVATIONAL ASTRONOMY 1 UNIT

Fundamentals of observing the sky with and without telescopes; constellations, major and minor planets, meteors and comets, moon and sun. 1 hour lecture, 1 hour laboratory.

Grading Option: C/N

Transfer: CSU

# Automotive Technology

- ✓ DEGREE
- ✓ CERTIFICATE

## Degree

### AS - Automotive Electronics Technology

## Certificate

### Automotive Service Technician

### Automotive Technician

## About the Program

Automotive technicians are in high demand in California and throughout the U.S. but there is a lack of trained professionals to meet this demand. This shortage of well-trained technicians has been caused by advances in computerized engine controls, evolving emissions regulations, and development of alternative technologies driven by the ever-escalating cost of fuel. The Las Positas College Automotive Technology program can provide the skills necessary to qualify as trained entry-level technicians, as well as for career advancement. Students work side by side and hands-on with industry professionals in a fully equipped and up-to-date facility.

Las Positas College offers both the Associate degree and Certificate programs designed for direct job entry, which will give the student a thorough and complete knowledge of the basics of the modern automobile. These programs are for technical career majors. While units in this program are transferable to many institutions, students should consult a counselor for information. Students desiring to complete the Associate in Science degree in Automotive Technology within a two-year timeframe should plan ahead because not all classes are offered every semester.

The Las Positas College Automotive program also provides training and services in a variety of programs in addition to regular classes:

- industry-standard training for General Motors and other manufacturers;
- Automotive Apprenticeship; Smog Certification;
- State of California Bureau of Automotive Repair Smog Inspection.

These additional programs provide our students with numerous opportunities for industry exposure.



## AS - Automotive Electronics Technology

### Freshman Year

Automotive Technology 55 (Automotive Service) .....	3
Automotive Technology 61A (Fuel Induction, Emission and Computer Control Systems I).....	4
Automotive Technology 61B (Fuel Induction, Emission and Computer Control Systems II).....	4
Automotive Technology 60A (Automotive Electrics/Electronics I) ...	4
Automotive Technology 60B (Automotive Electrics/Electronics II)..	4
Automotive Technology 62 (Automotive Air Conditioning, Cooling and Heating Systems) .....	2.5
Automotive Technology 65 (Automotive Brake and Safety Inspection) .....	3
Automotive Technology 73 (Reading Automotive Service Manuals)	3
Welding Technology 70 (Introduction to Welding) .....	2
General Education Courses	

### Sophomore Year

Automotive Technology 67A (Advanced Diagnosis and Troubleshooting of Automotive Systems).....	4
Automotive Technology 67B (Advanced Diagnosis and Troubleshooting of Automotive Systems).....	3
Automotive Technology 69 (Automotive Testing and Diagnosis) ....	3
Automotive Technology 66 (Automotive Steering and Suspension Systems).....	3
Automotive Technology 68 (California B.A.R. Clean Air Course).....	5
General Education Courses	
<b>Total units required .....</b>	<b>66.5</b>

## Certificate of Achievement Automotive Service Technician

Automotive Technology 55 (Automotive Service) .....	3
Automotive Technology 61A (Fuel Induction, Emission and Computer Control Systems I).....	4
Automotive Technology 61B (Fuel Induction, Emission and Computer Control Systems II).....	4
Automotive Technology 60A (Automotive Electrics/Electronics I) ...	4
Automotive Technology 60B (Automotive Electrics/Electronics II)..	4
Automotive Technology 73 (Reading Automotive Service Manuals)	3
<b>Total units required .....</b>	<b>22</b>

## Certificate of Achievement Automotive Technician

Automotive Technology 55 (Automotive Service) .....	3
Automotive Technology 61A (Fuel Induction, Emission and Computer Control Systems I).....	4
Automotive Technology 61B (Fuel Induction, Emission and Computer Control Systems II).....	4
Automotive Technology 60A** (Automotive Electrics/Electronics I)	4
Automotive Technology 60B** (Automotive Electrics/Electronics II)	4
Automotive Technology 62**** (Automotive Air Conditioning, Cooling and Heating Systems) .....	2.5
Automotive Technology 65*** (Automotive Brake and Safety Inspection) .....	3
Automotive Technology 68* (California B.A.R. Clean Air Course) ...	5
Automotive Technology 69 (Automotive Testing and Diagnosis) ....	3
Automotive Technology 73 (Reading Automotive Service Manuals)	3
<b>Total units required .....</b>	<b>35.5</b>

This program is recommended for students preparing to take the State of California tests for Smog Check License, Lamp Adjuster's License, Brake Adjuster's License, and Air Conditioning Refrigerant Recovery and Recycling Certification.

*These courses are recommended as preparation for the following California State and EPA tests for:*

\*Smog Check Mechanic's License

\*\*Lamp Adjuster's License

\*\*\*Brake Adjuster's License

\*\*\*\*Air Conditioning Refrigerant Recovery and Recycling Certification



## Automotive Technology (AUTO)

**AUTO 55 AUTOMOTIVE SERVICE 3 UNITS**

Role of the automotive service technician in the automotive industry with an emphasis on preventive maintenance, lubrication, and maintenance. Introduction to hazardous waste handling. Development and theory of computer access to service manuals. 1.5 hours lecture, 5 hours laboratory.

Grading Option: OP (May be repeated 3 times) Transfer CSU

**AUTO 60A AUTOMOTIVE ELECTRICS/ELECTRONICS I 4 UNITS**

Automotive electrical/electronic systems, including electrical circuits, battery, starting, charging, ignition and wiring systems. Emphasis on diagnosis of electrical troubles, assembly, and repair of components and diagnostic equipment usage. Prerequisite: Automotive Technology 55 (May be taken concurrently). 2 hours lecture, 6 hours laboratory.

Grading Option: OP (May be repeated 3 times)

**AUTO 60B AUTOMOTIVE ELECTRICS/ELECTRONICS II 4 UNITS**

Continuation of Automotive Technology 60A with emphasis on diagnosis and repair of electrical/electronic components including computer controlled circuits/systems using schematics, diagnostic procedures and equipment; headlamp adjusting and repair. Prerequisite: Automotive Technology 60A (completed with a grade of "C" or higher or equivalent). 2 hours lecture, 6 hours laboratory.

Grading Option: OP (May be repeated 3 times)

**AUTO 61A FUEL INDUCTION, EMISSION AND COMPUTER CONTROL SYSTEMS 1 4 UNITS**

Principles of automotive fuel induction and emission control systems, including inspection, diagnosis and repair of fuel and emission control systems/components governed by federal and state laws and standards. Prerequisite: Automotive Technology 55 (May be taken concurrently). 2 hours lecture, 6 hours laboratory.

Grading Option: OP (May be repeated 3 times) Transfer: CSU

**AUTO 61B FUEL INDUCTION, EMISSION AND COMPUTER CONTROL SYSTEMS II 4 UNITS**

Continuation of Automotive Technology 61A with emphasis on emission control, fuel injection and computer control systems. Includes software/hardware concepts and applications, sensor and control circuits, diagnosis and repair of systems/components. Prerequisite: Automotive Technology 61A (completed with a grade of "C" or higher or equivalent). 2 hours lecture, 6 hours laboratory.

Grading Option: OP (May be repeated 3 times) Transfer: CSU



# Automotive Technology

## **AUTO 62 AUTOMOTIVE AIR CONDITIONING, COOLING AND HEAT SYSTEMS 2.5 UNITS**

Diagnosis, testing, adjustment, and repair of air conditioning, cooling and heating systems. Includes heat and energy, psychometrics, air flow, refrigerant recycling, equipment and controls. Strongly Recommended: Automotive Technology 60A (May be taken concurrently) or equivalent. 1.5 hours lecture, 3.5 hours laboratory. Grading Option: OP (May be repeated 3 times)

## **AUTO 65 AUTOMOTIVE BRAKE AND SAFETY INSPECTION 3 UNITS**

Diagnosis, inspection, adjustment, and repair of safety equipment, braking and antilock braking systems and devices. Includes the material on the California Brake Adjuster's Licensing Examination. Strongly Recommended: Automotive Technology 55 or 60A (or equivalent). 1.5 hours lecture, 5 hours laboratory. Grading Option: OP (May be repeated 3 times)

## **AUTO 66 AUTOMOTIVE STEERING AND SUSPENSION SYSTEMS 3 UNITS**

Diagnosis, testing, adjustment, and repair of steering and suspension systems. Includes common automotive steering and suspension system problems. Strongly Recommended: Automotive Technology 65 (or equivalent). 1.5 hours lecture, 5 hours laboratory. Grading Option: OP (May be repeated 3 times)

## **AUTO 67A ADVANCED DIAGNOSIS AND TROUBLESHOOTING OF AUTOMOTIVE SYSTEMS 4 UNITS**

Continuation of Automotive Technology 60B and 61B with emphasis on diagnosis of electronic problems including computer controlled circuits/systems using schematics, diagnostic procedures and equipment. Prerequisites: Automotive Technology 60B and 61B (both completed with a grade of "C" or higher) or industry training. 2 hours lecture, 6 hours laboratory. Grading Option: GR (May be repeated 3 times)

## **AUTO 67B SPECIAL ADVANCED DIAGNOSIS AND TROUBLESHOOTING OF AUTOMOTIVE SYSTEMS 3 UNITS**

Continuation of Automotive Technology 67A with emphasis on diagnosis of complex electronic problems in computer controlled systems. Prerequisite: Automotive Technology 67A (completed with a grade of "C" or higher). 1.5 hours lecture, 5 hours laboratory. Grading Option: GR (May be repeated 3 times)

## **AUTO 68 CALIFORNIA BAR CLEAN AIR CAR COURSE 5 UNITS**

Motor vehicle emission inspection and maintenance. Provides the legal background necessary to analyze malfunctions, repair, assemble, and adjust those systems and devices of the automobile covered by legal standards and limitations. Techniques and applications of sound shop and/or agency practices. Overview of all modules of the complete "Clean Air Car" course. Prerequisite: (In order to be eligible to take the State Licensing exam at completion of the course): One year trade experience in emissions/tune up, or nine units in Automotive Technology, or 180 hours at an accredited automotive school. 4 hours lecture, 4 hours laboratory. Grading Option: OP (May be repeated 3 times)

## **AUTO 69 AUTOMOTIVE TESTING AND DIAGNOSIS 3 UNITS**

Inspection, diagnosis and repair of connected and related components, and malfunctioning parts; replacing and adjusting components for maximum efficiency and emission standards. Review Clear Air Car Course. Prerequisite: Automotive Technology 60B and 61B (both completed with a grade of "C" or higher) or equivalent. 1.5 hours lecture, 5 hours laboratory. Grading Option: GR (May be repeated 3 times)

## **AUTO 73 READING AUTOMOTIVE SERVICE MANUALS 3 UNITS**

Automotive service manuals and other related publications. Includes basic reading skills with emphasis on test preparation as it relates to automotive service manuals, Bureau of Automotive Repair (BAR) regulations, and certification tests preparation. 3 hours. Grading Option: GR (May be repeated 3 times)

## **AUTO 99 SELECTED TOPICS IN AUTOMOTIVE TECHNOLOGY 0.3-3 UNITS**

Designed to explore special interest subjects drawn from the field of Automotive Technology. Emphasis will be on topics of practical use to automotive technicians as well as for persons employed in the automotive industry. Prerequisite may vary for specific topics. 3-9 hours. \*Limited to 4 transfer units  
Grading Option: C/N Transfer: CSU\*



## Degree AA – Biology

### About the Program

Biologists study the origin and evolution, development, anatomy, physiology, ecology, behavior, and other basic principles of plants, animals, and other living organisms. Various areas of specialization are available to biologists in research, manufacturing, teaching, health care, natural resource management, public policy, consulting, administration, and organizations such as zoos, aquaria, museums, and parks. Biologists are usually classified according to specialty, e.g., microbiologists, ecologists, physiologists, molecular biologists, zoologists, botanists, naturalists, and geneticists. Preparation for some entry-level jobs in these and other areas generally requires a bachelor's degree in biology.

This program is designed to prepare students for transfer; however, completion of this AA degree also provides entry-level opportunities for laboratory technicians in industry and the academic environment. This program fulfills typical lower-division requirements at four-year transfer institutions. Some variation in requirements may exist at a particular four-year college or university; therefore, it is essential that the student also refer to the catalog of the prospective transfer institution and consult a counselor.

## AA - BIOLOGY

### Freshman Year

Botany 1 (General Botany).....	5
Zoology 1 (General Zoology).....	5
Chemistry 1A (General College Chemistry).....	5
Chemistry 1B (General College Chemistry).....	5
General Education Courses:	

### Sophomore Year

Biology 1 (Introduction to Cell Biology) .....	5
Physics 2A (Introduction to Physics I) .....	4
Physics 2B (Introduction to Physics II).....	4
General Education Courses	
<b>Total units required .....</b>	<b>60</b>



# Biological Sciences

## Biological Sciences

### Anatomy (ANAT)

#### ANAT 1 GENERAL HUMAN ANATOMY 4 UNITS

Structure and function of the human body with emphasis on microscopic, gross, and developmental anatomy. Microscopic examination of normal and pathological tissues, and dissection, supplemented by use of charts, models and computer assisted instruction. Prerequisite: Biology 31 (completed with a grade of "C" or higher). Strongly Recommended: Eligibility for English 1A or 52A. 2 hours lecture, 6 hours laboratory. (AN BIOL 10) \*Transfer unit limitations, see page 63

Grading Option: GR

Transfer: CSU, UC\*

### Biology (BIOL)

#### BIOL 1 INTRODUCTION TO CELL BIOLOGY 5 UNITS

Basic principles of biology with emphasis on the experimental approach to solving modern problems in biology. Includes cell physiology, biochemistry, molecular genetics, DNA, and evolution. Prerequisite: Zoology 1 or Botany 1 (completed with a grade of "C" or higher). Strongly recommended: Chemistry 1B or concurrent enrollment; Physics 2A or concurrent enrollment, and eligibility for English 1A or 52A. 3 hours lecture, 6 hours laboratory. (CAN BIOL 2; CAN BIOL SEQ A = BIOL 1 + ZOOL 1 + BOTN 1)

Grading Option: GR

Transfer: CSU, UC

#### BIOL 5 MARINE BIOLOGY 4 UNITS

Ocean as a habitat, the organisms that inhabit marine waters, their ecology, adaptations and evolution, and the role of the ocean in the ecology of the biosphere. 3 hours lecture, 3 hours laboratory.

Grading Option: OP

Transfer: CSU, UC

#### BIOL 10 INTRODUCTION TO THE SCIENCE OF BIOLOGY 4 UNITS

Basic principles of biology dealing with the nature of living things, and the nature of scientific investigation and its bioethical impact in our modern world. Designed for non-majors in biology or the biomedical sciences. 3 hours lecture, 3 hours laboratory.

\*Transfer unit limitations, see page 63

Grading Option: OP

Transfer: CSU, UC\*

#### BIOL 20 CONTEMPORARY HUMAN BIOLOGY 3 UNITS

Human organism, with emphasis placed on human origin and evolutionary legacy, the relationship with the environment, and the ethical implications of biological discoveries in science. 3 hours.

Grading Option: OP

Transfer: CSU, UC

#### BIOL 31 INTRODUCTION TO COLLEGE BIOLOGY 4 UNITS

Basic principles of biology. Includes origin of life, cell structure and function, cell division, reproduction, genetics, taxonomy, evolution, and cell metabolism. Laboratory emphasis on developing various laboratory skills, using the metric system, collecting data, graphing, interpreting data, preparing for and taking laboratory practicals. Designed to prepare the necessary concepts and laboratory skills that are needed to succeed in more advanced courses in biology. Strongly recommended: Mathematics 65 or 65B or 65Y and eligibility for English 1A or 52A. 3 hours lecture, 3 hours laboratory. \*

Transfer unit limitations, see page 63

Grading Option: GR

Transfer: CSU, UC\*

#### BIOL 40 FIELD BIOLOGY 3 UNITS

California ecosystems and living vertebrates, their behavior, evolution and ecology, and their interactions with humans. 2 hours lecture, 3 hours laboratory.

Grading Option: OP

Transfer: CSU

#### BIOL 50 ANATOMY AND PHYSIOLOGY 4 UNITS

Structure and function of the human body is studied. Emphasis on human anatomy and physiological principles at the cellular and systemic level. Designed primarily for majors in paramedic and medical assisting programs and pre-medical students who wish to explore the realm of anatomy and physiology. 3 hours lecture, 3 hours laboratory. \*Transfer unit limitations, see page 63

Grading Option: GR

Transfer: CSU, UC\*

### Biotechnology (BIOT)

#### BIOT 1 INTRODUCTORY BIOTECHNOLOGY METHODS 5 UNITS

Introductory Biotechnology Methods includes current basic theory and laboratory skills used in modern biology laboratories. Lectures cover concepts such as DNA structure, function and manipulations, basic protein biochemistry, sterile technique, solution production, record keeping, report writing, and bioethics. The laboratory illustrates lecture topics through media production, cell culture, transformations, and gel preparation, use and documentation. Prerequisites: Biology 31 and Chemistry 30B (completed with a grade of "C" or higher). 3 hours lecture, 6 hours laboratory.

Grading Option: OP

Transfer: CSU

### Botany (BOTN)

#### BOTN 1 GENERAL BOTANY 5 UNITS

Plant structure and function, with emphasis on anatomy, morphology, and physiology of higher (*flowering*) plants. Includes evolutionary sequence of plant forms and basic principles of ecology. Prerequisite: Math 55 or 55B or 55Y or an appropriate skill level demonstrated through the mathematics assessment process. Strongly recommended: Biology 31. 3 hours lecture, 6 hours laboratory. (CAN BIOL 6)

Grading Option: GR

Transfer: CSU, UC

## Ecology (ECOL)

ECOL 10 HUMANS AND THE ENVIRONMENT 3 UNITS

Identification of problems created by humans' modification of their environment by focusing on ecological interactions involving the human species; investigating the life processes of organisms as they relate to specific environments. 3 hours lecture.

\*Transfer unit limitations, see page 63

Grading Option: OP

Transfer: CSU, UC\*



## Microbiology (MICR)

MICR 1 MICROBIOLOGY 5 UNITS

Bacteria, fungi, protozoans, parasites, and viruses with an emphasis on their relationship to humans. Cultivation, control, metabolism, body's defense against disease, microbial genetics, laboratory tests, and contemporary diseases are discussed. Methods used in the laboratory include staining, investigation, cultivation, identification of unknowns, and sensitivity testing. Prerequisite: Biology 31 and Chemistry 30A or Chemistry 1A (both completed with a grade of "C" or higher). Strongly Recommended: Anatomy 1, and eligibility for English 1A or 52A. 3 hours lecture, 6 hours laboratory. (CAN BIOL 14)

Grading Option: GR

Transfer: CSU, UC



## Physiology (PHSI)

PHSI 1 HUMAN PHYSIOLOGY 5 UNITS

Cellular and systemic body functions. Emphasis placed on physico- and electro-chemical and clinical methods, collection and analysis of data, extrapolations and conclusions. Working models, including human responses, computer simulations are studied. Prerequisite: Chemistry 30A and Anatomy 1 (both completed with a grade of "C" or higher). Strongly Recommended: Chemistry 30B, and eligibility for English 1A or 52A. 3 hours lecture, 6 hours laboratory. (CAN BIOL 12)

\*Transfer unit limitations, see page 63

Grading Option: GR

Transfer: CSU, UC\*



## Zoology (ZOOL)

ZOOL 1 GENERAL ZOOLOGY 5 UNITS

Major groups of organisms from Protista and Animalia kingdoms with emphasis on the evolution of form and function and their relationship to behavior and ecology. Laboratory dissection and observation of anatomy with correlative studies in animal behavior in the laboratory and field. Designed for majors in biology, zoology, wildlife management and related fields. Prerequisite: Math 55 or 55B or 55Y or an appropriate skill level demonstrated through the mathematics assessment process. Strongly recommended: Biology 31. 3 hours lecture, 6 hours laboratory. (CAN BIOL 4; BIOL 1 + ZOOL 1 + BOTN 1 = CAN BIOL SEQ A.)

Grading Option: OP

Transfer: CSU, UC



Las Positas College offers three areas of study under the broad heading, Business Studies.

These areas are:

## **Business (General)**

### **Marketing**

### **Supervision**

In the pages that follow you will find program, certificate and course information about:

## **Business (General)**

### **Degree**

AA – Administrative Assistant

AS – Business

AA – Business Administration (Transfer Preparation)

AA – Business Entrepreneurship

### **Certificate**

Accounting Technician

Administrative Assistant

Business Entrepreneurship

Business Workforce Proficiency

Retail Management

## **Marketing**

### **Degree**

AA- Marketing

### **Certificate**

Retailing

## **Supervision**

### **Certificate**

Supervisory Management

## **Special Instructional Programs**



### **LaPTechS - Business/Electronics**

Las Positas Technical Support (LaPTechS) is an innovative entrepreneurial venture offering technical support services to the campus community. Within a work-based learning model, students get hands-on training in a workplace environment. Students practice hardware and software installations, computer repair, assessment, maintenance and troubleshooting techniques. LaPTechS creates opportunities to learn all aspects of business operations, technical support, and the development of interpersonal skills.

### **Internships**

Internship opportunities are available through Las Positas College. Interested students who meet qualifications are placed in carefully structured work environments with local employers. Internships provide opportunities to apply knowledge gained in the classroom in a real-world setting and can be an important part of career development for students. Students must be concurrently enrolled in the Internship Seminar course. Placements are contingent upon the availability of an appropriate internship site, employer criteria and student qualifications, and are at the discretion of the employer. Students and employers should contact the Work-Based Learning



DEGREE   
CERTIFICATE 

## Degree

AA – Administrative Assistant

AS – Business

AA – Business Administration (Transfer Preparation)

AA – Business Entrepreneurship

## Certificate

Accounting Technician

Administrative Assistant

Business Entrepreneurship

Business Workforce Proficiency

Retail Management

## About the Business Program

The Business area of study is designed to prepare students for a wide range of careers in the world of business. The areas of specialization available at Las Positas College reflect the current and projected needs of the business environment. Within this area students may pursue programs that prepare them for work or transfer. It is critical that students work closely with business faculty and counselors to determine what degrees or certificates are most consistent with career and/or transfer goals.

## AS - Business

This degree is designed as a non-transfer curriculum to provide individuals with the basic business knowledge, economic awareness, and skills needed to succeed in private and public organizations as supervisory managers, support employees, and/or owners. The degree is intended to prepare people to plan, organize, and manage human, financial, and material resources to achieve the objectives of a business. Graduates may find employment in entry-level positions where specific or advanced skills in business are not needed, such as trainee jobs in insurance, banking, the hospitality industry, marketing, purchasing or other related business fields. Students interested primarily in transferring as business majors to four-year colleges or universities should consider the AA Degree in Business Administration, page 87.

## AA - Business Administration

This degree prepares students working toward transfer to four-year institutions for continued study in business administration. This program fulfills typical lower-division requirements at four-year transfer institutions. Some variation in requirements may exist at a particular four-year college or university; therefore, it is essential that the student also refer to the catalog of the prospective transfer institution and consult a counselor.

## AA and Certificate - Business Entrepreneurship

These programs are designed to provide the necessary business foundation to enable potential or present entrepreneurs to learn and apply management principles to the selection, establishment and operation of a small business. The curriculum focuses on the problems encountered by small businesses. While units in this program are transferable to many institutions, students should consult a counselor for transfer information.

## Certificate - Accounting Technician

This certificate program offers students opportunity to enter the employment field as accounting technicians. The curriculum is supported by related business and computer courses. While units in this program are transferable to many institutions, students should consult a counselor for specific transfer information.

## Certificate - Business Workforce Proficiency

This program is designed to provide the basic and necessary foundation of skills for entry-level office workers. The curriculum focuses on basic computer skills (keyboarding, records and data management). Courses in basic office procedural skills, and orientation and preparation for the workplace are also available. While some units in this program are transferable to other institutions, students should consult a counselor for transfer information.

## Certificate - Retail Management

This program\* prepares students for management in the Retail Sector. It is designed to provide students with a retail management foundation that will enable them, as current or prospective employees, to deal with the challenges of the retail environment. The curriculum includes courses in foundational skills (math and communication, oral and written) as well as courses focusing on marketing, accounting, supervision, human relations and retail management. While many units in this program are transferable to other institutions, students should consult a counselor for transfer information.

\*Meets requirements of the Western Association of Food Chains (W AFC) Retail Management Certificate program.

## Business (General)

### AA - Administrative Assistant

#### Freshman Year

Computer Information Systems 50 (Introduction to Computing and Information Technology) .....	3
Computer Information Systems 73A (Ten-Key Skill Development) ..	1
Computer Information Systems 75 (Office Technology/ Communications) .....	1
Computer Information Systems 88A (Introduction to Microsoft Word for Windows).....	1.5
Computer Information Systems 88B (Advanced Microsoft Word for Windows) .....	1.5
Business 74 (Office Procedures) .....	3
Computer Information Systems 43 (Professional Communications) or Business 43 (Professional Communications).....	4
Business 40 (Introduction to Business) .....	3
Business 51A (General Accounting I) or Business 1A (Principles of Accounting I) .....	3-4
Electives* .....	0-3
General Education Courses	

#### Sophomore Year

Computer Information Systems 72A (Data Management) .....	1
Computer Information Systems 55 (Integrating Office Applications)4	
Business 48 (Human Relations in the Workplace) or Supervision 81 (Human Relations in the Workplace) .....	3
Computer Information Systems 54 (Excel Introduction to Spreadsheets) .....	4
Computer Information Systems 89A (Desktop Presentation).....	1
Business 95 (Business Work Experience) or Business 92 (Workforce Laboratory).....	1-3
Business 96 (Business Work Experience Seminar) or Business 91 (Workforce Seminar).....	1-2
Electives* .....	0-3
General Education Courses	
<b>Total units required</b> .....	<b>60</b>

#### \*Electives

Select from the following for a minimum of 6 units:

Business 60 (Consumer Finance)
Business 91 (Workforce Development Seminar) and Business 92 (Workforce Development Laboratory)
Computer Information Systems 57 (ACCESS: Introduction to Databases)
Computer Information Systems 59A (Web Development: HTML/XHTML)
Computer Information Systems 66 (Networking Fundamentals)
Computer Information Systems 69 (Web Development: Web Development: Web Design Technologies and Tools)
Computer Information Systems 89B (Desktop Publishing)
Computer Information Systems 72B (Spreadsheet Integration with Word Processing)
Marketing 50 (Introduction to Marketing)
Supervision 80 (Elements of Supervision) or Business 56 (Concepts of Management)

### AS – Business

#### Freshman Year

Business 48 (Human Relations in the Workplace) or Supervision 81 (Human Relations in the Workplace) or Business 52 (Business Communications).....	3
Business 40 (Introduction to Business) .....	3
Business 55** (Business Mathematics).....	3
Business 51A (General Accounting I) or Business 1A (Principles of Accounting I) .....	3-4
Computer Information Systems 50 (Introduction to Computing and Information Technology) .....	3
Economics 10*** (General Economics) or Economics 1*** (Microeconomics).....	3
Electives* .....	1-4
General Education Courses	

#### Sophomore Year

Marketing 50 (Introduction to Marketing) .....	3
Business 30*** (Business, Society and Ethics or Business 20 (International Business) .....	3
Computer Information Systems 88A (Introduction to Microsoft Word for Windows) and Computer Information Systems 88B (Advanced Microsoft Word for Windows).....	3
Computer Information Systems 55 (Integrating Office Applications) 4	
Business 18 (Business Law) .....	4
Business 53 (Business Correspondence) or Business 43 (Professional Communications) .....	3-4
Business 95 (Business Work Experience).....	1-3
Business 96 (Business Work Experience Seminar) .....	1
Electives* .....	1-4
General Education Courses	
<b>Total units required</b> .....	<b>60</b>

#### \*Electives

Select from the following for a minimum of 1 unit:

Business 60 (Consumer Finance and Ownership)
Computer Information Systems 54 (Excel: Introduction to Spreadsheets)
Computer Information Systems 71 (Computer Typing)
Computer Information Systems 72A (Data Management)
Computer Information Systems 72B (Spreadsheet Integration with Word Processing)
Computer Information Systems 75 (Office Technology/ Communications)
Supervision 80 (Elements of Supervision) or Business 56 (Concepts of Management)
Any Marketing Course (except Marketing 50)

\*\* Meets Math; Communications/Analytical Thinking Requirements

\*\*\*Meets Social and Behavioral Sciences requirement

#### Keyboarding Competency for AA - Administrative Assistant

Students must demonstrate keyboarding speed of 60 net words per minutes. Competency can be met by completing Computer Information Systems 71C, Computer Information Systems 71D, or Computer Information Systems 71E with a "C" or better or by presenting a Las Positas College Verification of Proficiency certifying 60 net words per minutes in a five (5) minute timing.

**AA – Business Administration**  
(Transfer Preparation)

This degree prepares students interested in transferring to four-year institutions for continued study in business administration. The program outlined below fulfills typical lower-division requirements at four-year transfer institutions. Some variation in requirements may exist at a particular four-year college or university; therefore, it is essential that the student also refers to the catalog of the prospective transfer institution and consults a counselor.

**Freshman Year**

Business 40 (Introduction to Business) .....	3
Business 18 (Business Law) .....	4
Computer Information Systems 50 (Introduction to Computing and Information Technology) .....	3
Economics 2 (Macroeconomics) .....	3
Mathematics 33 (Finite Mathematics) or Mathematics 34 (Calculus for Business and Social Sciences).....	3-5
Computer Information Systems 71 (Computer Typing) or Library Studies 1 (Library Skills).....	1
General Education Courses	

**Sophomore Year**

Business 1A (Principles of Accounting I).....	4
Economics 1 (Microeconomics) .....	3
Mathematics 44 (Probability and Statistics) or Mathematics 41 (Statistics for Business Majors) or Mathematics 42A (Introduction to Probability and Statistics) ....	3-5
Business 1B (Principles of Accounting II) .....	
General Education Courses	
<b>Total units required .....</b>	<b>60</b>



**AA – Business Entrepreneurship**

**Freshman Year**

Business 48 (Human Relations in the Workplace) or Supervision 81 (Human Relations in the Workplace) .....	3
Business 40 (Introduction to Business) .....	3
Business 55** (Business Mathematics).....	3
Business 43 (Professional Communications) or Business 53 (Business Correspondence).....	3-4
Business 51A (General Accounting I) or Business 1A (Principles of Accounting I) .....	3-4
Marketing 50 (Introduction to Marketing) .....	3
Economics 10*** (General Economics) or Economics 1*** (Microeconomics).....	3
Recommended Electives*	
General Education Courses	

**Sophomore Year**

Business 18 (Business Law) .....	4
Computer Information Systems 50 (Introduction to Computing and Information Technology) ` .....	3
Business 58 (Small Business Management) or Marketing 60 (Retail Store Management) .....	3
Supervision 80 (Elements of Supervision) or Business 56 (Concepts of Management) .....	3
Business 95 (Business Work Experience).....	1-3
Business 96 (Business Work Experience Seminar) .....	1
Recommended Electives*	
General Education Courses	
<b>Total units required .....</b>	<b>60</b>

**\*Recommended Electives**

Business 20 (International Business)
Business 30 (Business, Society, and Ethics)
Business 52 (Business Communications)
Business 60 (Consumer Finance and Ownership)
Business 81 (Introduction to Investments)
Computer Information Systems 54 (Excel: Introduction to Spreadsheets)
Computer Information Systems 71 (Computer Typing)

\*\* Meets Math; Communications/Analytical Thinking Requirements

\*\*\*Meets Social and Behavioral Sciences requirement

## Business (General)

### Certificate of Achievement Accounting Technician

Business 40 (Introduction to Business) .....	3
Business 51A (General Accounting I) or Business 1A (Principles of Accounting I) .....	3-4
Business 51B (General Accounting II).....	3
Business 53 (Business Correspondence) .....	3
Business 55 (Business Mathematics).....	3
Computer Information Systems 50 (Introduction to Computing and Information Technology) .....	3
Computer Information Systems 54 (Excel: Introduction to Spreadsheets) .....	4
Computer Information Systems 73A (Ten-Key Skill Development) .. 1 Option* .....	3
<b>Total units required</b> .....	<b>26-27</b>

#### \*Option

Select 1 set from the following:

- Computer Information Systems 88A (Introduction to Microsoft Word for Windows) and  
Computer Information Systems 88B (Advanced Microsoft Word for Windows) or
- Computer Information Systems 89A (Desktop Presentation) and  
Computer Information Systems 89B (Desktop Publishing)

### Certificate of Achievement Administrative Assistant

Computer Information Systems 73A (Ten-Key Skill Development) .. 1 Computer Information Systems 72A (Records and Data Management).....	1
Computer Information Systems 72B (Spreadsheet Integration with Word Processing) .....	1
Computer Information Systems 75 (Office Technology/ Communications) .....	1
Business 74 (Office Procedures) .....	3
Computer Information Systems 43 (Professional Communications) or Business 43 (Professional Communications) .....	4
Computer Information Systems 50 (Introduction to Computing and Information Technology) .....	3
Computer Information Systems 88A (Introduction to Microsoft Word for Windows) and Computer Information Systems 88B (Advanced Microsoft Word for Windows).....	3
Computer Information Systems 89A (Desktop Presentation).....	1
Business 51A (General Accounting) .....	3
Computer Information Systems 55 (Integrating Office Applications for Personal Computers) or Computer Information Systems 54 (Excel: Intro to Spreadsheets)..	4
Business 40 (Introduction to Business) .....	3
Business 48 (Human Relations in the Workplace) or Supervision 81 (Human Relations in the Workplace) .....	3
<b>Total units required</b> .....	<b>30-32</b>

Keyboarding Competency for Certificate of Achievement - Administrative Assistant and Certificate of Completion - for Business Workforce Proficiency: Students must demonstrate keyboarding speed of 40 net words per minutes. Competency can be met by completing Computer Information Systems 71C, Computer Information Systems 71D, or Computer Information Systems 71E with a "C" or better or by presenting a Las Positas College Verification of Proficiency certifying 40 net words per minutes in a five (5) minute timing.

**Certificate of Achievement  
Business Entrepreneurship**

Computer Information Systems 50 (Introduction to Computing and Information Technology) .....	3
Business 53 (Business Correspondence) .....	3
Business 55 (Business Mathematics) .....	3
Marketing 50 (Introduction to Marketing) .....	3
Business 18 (Business Law) .....	4
Business 40 (Introduction to Business) .....	3
Business 51A (General Accounting I) or Business 1A (Principles of Accounting I) .....	3-4
Business 58 (Small Business Management) or Marketing 60 (Retail Store Management) .....	3
Supervision 80 (Elements of Supervision) or Business 56 (Concepts of Management) or Business 48 (Human Relations in the Workplace) or Supervision 81 (Human Relations in the Workplace) .....	3
<b>Total units required .....</b>	<b>28-29</b>

**Certificate of Completion  
Business Workforce Proficiency**

Business 82.2 (Success Strategies) or Psychology/Counseling 15 (College Study Skills) .....	2
Business 48 (Human Relations in the Workplace) or Supervision 81 (Human Relations in the Workplace) .....	3
Computer Information Systems 43 (Professional Communications) or Business 43 (Professional Communications) .....	4
Business 74 (Office Procedures) .....	3
Business 40 (Introduction to Business) .....	3
Business 91 (Workforce Development Seminar) .....	1
Business 92 (Workforce Development Laboratory) .....	1
One Elective Unit* .....	1
<b>Total units required: .....</b>	<b>18</b>

**\*Electives**

Select from the following for a total of 1 unit:

- Computer Information Systems 72A (Data Management)
- Computer Information Systems 72B (Spreadsheet Integration with Word Processing)
- Computer Information Systems 73A (Ten-Key Skill Development)
- Computer Information Systems 75 (Office Technology/Communications)
- Computer Information Systems 84 (Windows)
- Computer Information Systems 89A (Desktop Presentation)

**Certificate of Achievement  
Retail Management**

Business 55 (Business Mathematics) .....	3
Business 52 (Business Communications) or Speech 10 (Interpersonal Communication) .....	3
Computer Information Systems 50 (Introduction to Computing and Information Technology) or Three (3) units of Computer Application courses such as Word, Excel, etc .....	3
Business 53 (Business Correspondence) or (English 52A (Essentials of Communication) or English 1A (Critical Reading and Composition) .....	3
Business 56 (Concepts of Management) or Supervision 80 (Elements of Supervision) .....	3
Business 51A (General Accounting I) or Business 1A (Principles of Accounting I) .....	3-4
Marketing 50 (Introduction to Marketing) .....	3
Marketing 60 (Retail Store Management) .....	3
Business 48 (Human Relations in the Workplace) or Supervision 81 (Human Relations in the Workplace) .....	3
Supervision 88 (Human Relations Management) .....	3
<b>Total .....</b>	<b>30-31 units</b>





## Business (General)

### Business (BUSN)

#### Keyboarding Competency for AA Administrative Assistant

Students must demonstrate keyboarding speed of 60 net words per minutes. Competency can be met by completing Computer Information Systems 71C, Computer Information Systems 71D, or Computer Information Systems 71E with a "C" or better or by presenting a Las Positas College Verification of Proficiency certifying 60 net words per minutes in a five (5) minute timing.

#### **BUSN 1A PRINCIPLES OF ACCOUNTING I 4 UNITS**

Basic theory and structure of accounting; accounting cycles and preparation of accounting statements for service and merchandising operations; receivables, inventory, Plant assets, current liabilities, payroll, accounting principles, concepts, and partnerships. 4 hours lecture, 0-1 hour laboratory. (CAN BUS 2; BUS 1A + BUS 1B = CAN BUS SEQ A)

Grading Option: OP

Transfer: CSU, UC

#### **BUSN 1B PRINCIPLES OF ACCOUNTING II 4 UNITS**

Corporations, long-term liabilities, investments, income tax, manufacturing accounting, cost accounting, cost-volume-profit, break-even analysis, capital expenditures, funds and cash flow, analysis of financial statements, segment evaluation, budgeting and standard costs. Emphasis on analysis and use of accounting within the organization. Prerequisite: Business 1A (completed with a grade of "C" or higher). 4 hours lecture, 0-1 hour laboratory. (CAN BUS 4; BUS 1A + BUS 1B = CAN BUS SEQ A)

Grading Option: OP

Transfer: CSU, UC

#### **BUSN 18 BUSINESS LAW 4 UNITS**

Legal setting in which business operates, with emphasis on legal reasoning and resolution, contracts, agency, partnerships and corporations. 4 hours. (CAN BUS 8)

Grading Option: OP

Transfer: CSU, UC

#### **BUSN 20 INTERNATIONAL BUSINESS 3 UNITS**

Exploration of major factors involved in developing international trade. A managerial overview of international law, monetary environment, foreign market analysis, physical distribution, documentation and international ethics. Emphasis on current events in international business. 3 hours.

Grading Option: OP

Transfer: CSU

#### **BUSN 30 BUSINESS, SOCIETY, AND ETHICS 3 UNITS**

Past and current political, social and ethical behavior of big business in American society. Emphasis on the responsibility of business toward customers, employees, stockholders, competitors, suppliers, government and the community at large. Strongly Recommended: Eligibility for English 1A or 52A. 3 hours.

Grading Option: OP

Transfer: CSU

#### **BUSN 40 INTRODUCTION TO BUSINESS 3 UNITS**

Concepts of economic systems, competition, and business enterprises in the international marketplace. Business ethics and laws, accounting and computer data and systems by which businesses are controlled, banking and securities. Types of business ownership for small and

large enterprises, organizational structures and management function. Fundamentals of insurance, production, marketing, human resources, and employee motivation. 3 hours.

Grading Option: OP

Transfer: CSU, UC

**BUSN 43 (Professional Communications) may be used instead of BUSN 52 (Business Communications) or BUSN 53 (Business Correspondence) where they are required.**

#### **BUSN 43 PROFESSIONAL COMMUNICATIONS 4 UNITS**

This course is designed to help students develop and refine the written and oral communication skills necessary to communicate effectively in a business environment. This will be accomplished through the planning, composing, and evaluating of written communication; report writing; and oral presentations. Additional focus will be placed on developing interpersonal skills, team participation skills, and professionalism. Students who have completed or are enrolled in Computer Information Systems 43, Computer Networking Technology 43, Computer Science 43, English 43, or Speech 43 may not receive credit. Strongly recommended: Eligibility for English 1A. 4 hours.

Grading Option: OP

Transfer: CSU

#### **BUSN 48 HUMAN RELATIONS IN THE WORKPLACE 3 UNITS**

Basic concepts of individual, group, and organizational human behavior as they affect human relations, performance, and productivity within the workplace. Strategies and techniques that influence interpersonal, administrative, and organizational communications and interactions among people. Fundamentals of the multi-disciplined science/nature of human relations in developing employee leadership, in working toward win/win situations, and in enhancing performance evaluations and respective reward systems. Students who have completed or are enrolled in Supervision 81 may not receive credit. 3 hours.

Grading Option: OP

Transfer: CSU

#### **BUSN 51A GENERAL ACCOUNTING 3 UNITS**

Bookkeeping practice; debit and credit practice; books of original entry; ledgers, working papers, adjusting and closing entries; income statement, balance sheet, and statement of owners equity, cash, payroll, special journals, merchandising firms. 3 hours lecture, 1 hour laboratory.

Grading Option: OP

Transfer: CSU

#### **BUSN 51B GENERAL ACCOUNTING II 3 UNITS**

Inventories, plant and equipment, corporations, cash flows, manufacturing firms. Integration of accounting procedures into the operation of a microcomputer-based accounting system. Emphasis on general ledger, accounts receivable, accounts payable, payroll, inventory, and financial statement analysis. Prerequisite: Business 1A or Business 51A (completed with a grade of "C" or higher). Strongly Recommended: Computer Information Systems 71A. 2 hours lecture, 3 hours laboratory.

Grading Option: OP

Transfer: CSU

**BUSN 52 BUSINESS COMMUNICATIONS 3 UNITS**

Process of transferring oral and non-verbal meanings and the techniques that help remove barriers. Delegating work assignments, planning, problem solving, conferences, employee counseling and making oral presentations. Strongly Recommended: Eligibility for English 1A or 52A. 3 hours.

Grading Option: OP Transfer: CSU

**BUSN 53 BUSINESS CORRESPONDENCE 3 UNITS**

Development of skills in organizing and writing business letters, memoranda, reports, résumés, and letters of application with emphasis on rules for punctuation, spelling, and grammar which meet the needs of modern business. Strongly Recommended: Eligibility for English 1A or 52A. 3 hours lecture, 1 hour laboratory.

Grading Option: OP Transfer: CSU

**BUSN 55 BUSINESS MATHEMATICS 3 UNITS**

Mathematics to solve typical business problems including simple interest, compound interest, installment sales, trade and cash discounts, mark on percents, pricing, discounting notes and drafts, depreciation, taxes, insurance, statistics, stocks and bonds, and distribution of ownership and profits. Strongly Recommended: Business 105B (with a grade of "C" or higher). 3 hours.

Grading Option: OP Transfer: CSU

**BUSN 56 CONCEPTS OF MANAGEMENT 3 UNITS**

Principles and concepts of management; planning, organizing, coordinating and controlling in the firm; social responsibility and ethics in business, decision making, communications, and budgetary control. 3 hours.

Grading Option: OP Transfer: CSU

**BUSN 58 SMALL BUSINESS MANAGEMENT 3 UNITS**

Application of management principles to the selection, establishment, and operation of a small business. Emphasis on the problems encountered by the small manufacturer or merchant. Strongly Recommended: Business 1A or 51A. 3 hours.

Grading Option: OP Transfer: CSU

**BUSN 59 LEADERSHIP ACTIVITY 1 UNIT**

Performance in marketing and management competitive events plus field trips, workshops, market research studies and projects designed to develop vocational competence and leadership abilities. 1 hour.

Grading Option: OP (May be repeated 3 times)

**BUSN 60 CONSUMER FINANCE AND OWNERSHIP 3 UNITS**

Principles and practices of renting or owning real estate, vehicles, and other investments. Financial management of banking, options, credit, insurance, taxes, estate planning in relationship to business cycles and government relations. Strongly Recommended: Eligibility for English 1A and Math 65. 3 hours.

Grading Option: OP Transfer: CSU

**BUSN 74 OFFICE PROCEDURES 3 UNITS**

Office principles and procedures to include telephone skills, office equipment, reconciling bank statements, principles of pricing and discounts, payroll, taxes, expense reports, petty cash, record-keeping, postal services, utilizing the Internet for on-line financial services and resources, the usage of various business reference books, handbooks, manuals, periodicals, newspapers, and government publications. The importance of ethics in the application of professional business behavior. Strongly recommended: CIS 86 and CIS 71C. 2 hours lecture, 3 hours laboratory.

Grading Option: OP Transfer: CSU

**BUSN 81 INTRODUCTION TO INVESTMENTS 3 UNITS**

Application of investment principles, including the various types of securities, the problems of securing capital for business ownership and the decisions involved in an individual or a corporate investment program. 3 hours.

Grading Option: OP Transfer: CSU

**BUSN 82.1 WORKFORCE ORIENTATION 0.3 - 0.6 UNITS**

Orientation to Workforce Development opportunities, support, and responsibilities. Computer usage and connections to Internet; East Bay Works and other information resources. 13.5 - 27 hours laboratory.

Grading Option: OP

**BUSN 82.2 SUCCESS STRATEGIES 2 UNITS**

Study of professional and personal growth, college success skills, and career development. Emphasis is on enhancing one's self-image and self-knowledge and improving study skills. Students work on developing time management, writing, reading, test taking, note taking, memory, study, and relationship skills. Includes modeling, practice, and evaluation of study techniques. 2 hours.

Grading Option: OP

**BUSN 91 WORK FORCE DEVELOPMENT SEMINAR 1 UNIT**

LaPTechs (Las Positas Technical Support) is an on-campus business that provides on-the-job training in technical and business applications. Assessment of job-related skills, goal setting, time planning and prioritizing, improvement of listening and nonverbal communication strategies, development of critical thinking abilities in working with data, materials and people. Assessment, analysis and improvement of characteristics, values, attitudes and guide transition into the workplace. Corequisite: Business 92. 1 hour.

Grading Option: OP (May be repeated 2 times)

## Business (General)

### **BUSN 92 WORK FORCE DEVELOPMENT LABORATORY 1-2 UNITS**

LaPTechS (Las Positas Technical Support), an on-campus, on-the-job training laboratory simulating a workplace environment wherein students perform typical workplace functions in either business or technical applications. Technical applications include: hardware and operating system support, job shadowing LPC tech support team, job skills preparation. Business applications include: data and information collections, storage and retrieval, document preparation, customer service, verbal and nonverbal communication, job skills preparation. Corequisite: Business 91. 4 or 8 hours laboratory/week/unit.

Grading Option: OP (May be repeated 2 times)

### **BUSN 95 BUSINESS WORK EXPERIENCE 1-3 UNITS**

College supervised on-the-job training for work in a business related occupation. Through the cooperation of the work supervisor, contract to accomplish new learning objectives or broaden experiences in work field. Corequisite: Concurrent enrollment in Business 96. 5-15 hours of employment per week.

See page 218 for Work Experience requirements. \*BUSN 95 and BUSN 96 combined, maximum transfer credit 6 units.

Grading Option: GR (May be repeated 3 times) Transfer: CSU\*

### **BUSN 96 BUSINESS WORK EXPERIENCE SEMINAR 1 UNIT**

Focal point for the coordination of curriculum with college supervised part-time or full-time employment in major field. Case studies, job-related problems, student cases and presentations, and material related to employment, organizations and management discussed; emphasis on building strong working relationships with supervisors, subordinates, and co-workers. Corequisite: Concurrent enrollment in Business Work Experience 95. 1 hour. See page 218 for Work Experience requirements. \*BUSN 95 and BUSN 96 combined, maximum transfer credit 6 units.

Grading Option: GR Transfer: CSU\*

### **BUSN 105A BUSINESS ARITHMETIC 2 UNITS**

Self-paced, individualized, mastery learning course covering decimals and fractions. Application of these arithmetic skills to common business problems such as: bank statement reconciliation, payrolls, insurance, measurement. 3 hours laboratory/lecture combination.

Grading Option: GR (May be repeated 1 time)

### **BUSN 105B BUSINESS ARITHMETIC 2 UNITS**

Self-paced, individualized, mastery learning course covering percents, proportions, equations. Application of these arithmetic skills to common business problems such as: discounts, interest, prorating, solving for unknowns, linear equations. Prerequisite: Business 105A (completed with a grade of "C" or higher) or equivalent. 3 hours laboratory/lecture combination.

Grading Option: GR (May be repeated 1 time)

### **BUSN 107 BUSINESS ARITHMETIC APPLICATIONS 3 UNITS**

Application of decimals, fractions, percents, ratios, proportions and equations to common business problems including, but not limited to, bank statement reconciliation, payrolls, purchase orders, invoices,



## Degrees AA - Marketing

## Certificates Retailing

### About the Program

Academic preparation in Marketing can lead to work in product development, sales, advertising, retailing, research and more. The course offerings provide a solid foundation and preparation for entry-level marketing positions.

### AA - Marketing

In addition to advertising and promotion, the field of marketing involves everything from researching whether a new product is needed, to labeling, packaging, transportation, warehousing, merchandising and sales. The ability of every organization to survive is directly affected by marketing. Entry-level jobs exist in manufacturing, service firms, wholesalers, retailers, advertising agencies, consulting firms and private and public non-profit organizations. While units in the program are transferable to many institutions, this program is designed to prepare students to enter the work force. Students should consult a counselor for information.

### Certificate - Retailing

This program provides a detailed focus on marketing and retailing, and then allows the student to choose from a variety of business related options, depending on the student area of interest. While many units in this program are transferable to other institutions, students should consult a counselor for transfer information.

## AA – Marketing

### Freshman Year

Business 48 (Human Relations in the Workplace) or  
 Business 52 (Business Communications) or  
 Business 53 (Business Correspondence) or  
 Supervision 81 ((Human Relations in the Workplace) ..... 3  
 Business 55\*\* (Business Mathematics)..... 3  
 Business 40 (Business Concepts)..... 3  
 Business 51A (General Accounting I) or  
 Business 1A (Principles of Accounting I) ..... 3-4  
 Marketing 50 (Introduction to Marketing) ..... 3  
 Economics 10\*\*\* (General Economics) or  
 Economics 2\*\*\* (Macroeconomics)..... 3  
 Recommended Electives\*  
 General Education Courses

### Sophomore Year

Marketing 61 (Professional Selling) ..... 3  
 Business 18 (Business Law) ..... 4  
 Computer Information Systems 50 (Introduction to Computing and  
 Information Technology) ..... 3  
 Marketing 64 (Introduction to Advertising) or  
 Marketing 56 (Retail Strategies)..... 3  
 Business 95 (Work Experience) ..... 1-2  
 Business 96 (Work Experience Seminar) or  
 Supervision 80 (Elements of Supervision) or  
 Business 56 (Concepts of Management) ..... 1-3  
 Recommended Electives\*  
 General Education Courses  
**Total units required ..... 60**

### \*Recommended Electives

- Business 30 (Business, Society, and Ethics)
- Supervision 80 (Introduction to Supervision) or  
 Business 56 (Concepts of Management)
- Marketing 60 (Retail Store Management)

\*\* Meets Math; Communications/Analytical Thinking Requirements

\*\*\*Meets Social and Behavioral Sciences requirement

# Marketing

## Certificate of Achievement Retailing

Business 55 (Business Mathematics).....	3
Marketing 50 (Introduction to Marketing) .....	3
Marketing 56 (Retail Strategies) .....	3
Marketing 60 (Retail Store Management).....	3
Marketing 61 (Professional Selling) .....	3
Work Experience 95 (Work Experience) .....	1-3
Work Experience 96 (Work Experience Seminar) .....	1
Electives* .....	15
<b>Total units required .....</b>	<b>35-37</b>

### \*Electives

Select from the following for a minimum of 15 units:

- Business 18 (Business Law)
- Business 40 (Business Concepts)
- Business 51A (General Accounting I) or  
Business 1A (Principles of Accounting)
- Business 52 (Business Communications) or  
Business 43 (Professional Communications)
- Business 53 (Business Correspondence)
- Business 58 (Small Business Management)
- Computer Information Systems 50 (Introduction to  
Computing and Information Technology)
- Marketing 64 (Introduction to Advertising)
- Business 48 (Human Relations in the Workplace) or  
Supervision 81 (Human Relations in the Workplace)
- Supervision 80 (Elements of Supervision) or  
Business 56 (Concepts of Management)

**BUSN 43 (Professional Communications) may be used instead of BUSN 52 (Business Communications) or BUSN 53 (Business Correspondence) where they are required.**

## Marketing (MKTG)

**MKTG 50 INTRODUCTION TO MARKETING 3 UNITS**  
Marketing as an exchange process involving all members of society; research on the demographic and behavioral dimensions of markets; analyses of marketing strategies and the social, cultural, economic, competitive and legal factors affecting marketing mix decisions. 3 hours.  
Grading Option: OP Transfer: CSU

**MKTG 52 MARKETING STRATEGY 2 UNITS**  
Use of marketing principles to decide on the proper strategies for beating the competition and achieving company goals. Emphasis on decision making in a simulated dynamic marketing environment. Strongly recommended: Marketing 50. 1 hour lecture, 3 hours laboratory.  
Grading Option: OP

**MKTG 56 RETAIL STRATEGIES 3 UNITS**  
An overview of marketing in the retail industry. Developing business strategies appropriate to consumer behavior. Applying the principles of persuasion in image development, Internet retailing and visual merchandising. Developing a successful media plan, including advertising, promotions and public relations. Strongly recommended: Marketing 50 or Business 53. 3 hours.  
Grading Option: OP

**MKTG 60 RETAIL STORE MANAGEMENT 3 UNITS**  
Profitably starting and managing a retail business. Practical information such as finding a site and managing personnel, merchandising, buying, pricing, financial management, store security and information systems. Strongly recommended: Marketing 56 or Business 53. 3 hours.  
Grading Option: OP Transfer: CSU

**MKTG 61 PROFESSIONAL SELLING 3 UNITS**  
Principles and techniques involved in selling products or services to consumers in stores and on a direct basis to manufacturers, distributors and institutions. Includes buying motives, sales call planning, ethics, customer service and territory management. 3 hours.  
Grading Option: OP Transfer: CSU

**MKTG 63 SALES FORCE MANAGEMENT 3 UNITS**  
Principles and techniques involved in recruiting, selecting, training, directing and controlling an outside sales force. Includes tasks of sales forecasting, budgeting, designing territories and analyzing sales results. Strongly recommended: Marketing 61. 3 hours.  
Grading Option: OP Transfer: CSU

**MKTG 64 INTRODUCTION TO ADVERTISING 3 UNITS**  
Contributions of advertising to marketing and communication, including coordination and development of sales promotion programs, media selection, copy writing, layout, research and budgeting. 3 hours.  
Grading Option: OP Transfer: CSU



DEGREE   
 CERTIFICATE

## Certificate Supervisory Management

### About the Program

Supervisors are responsible for providing direction and oversight for other employees. The Supervisory Management Certificate program provides knowledge of human relations and management techniques that is critical for success as a supervisor.

### Certificate – Supervisory Management

All organizations have first-line supervisors. This certificate is designed to address challenges faced by all employees, including, for example, to provide organizational promotions of such employees as technicians, retail associates, food servers, warehouse personnel, teachers, and administrative assistants in first-level management.

## Certificate of Completion Supervisory Management

Supervision 81 (Human Relations in the Workplace) or Business 48 (Human Relations in the Workplace) .....	3
Supervision 80 (Elements of Supervision) or Business 56 (Concepts of Management) .....	3
Supervision 88 (Human Resource Management).....	3
Supervision 82 (Organizational Behavior) or Business 30 (Business, Society, and Ethics).....	3
Business Work Experience 95 and.....	1
Business Work Experience 96 (Seminar).....	1
Electives:* .....	3
<b>Total units required .....</b>	<b>17</b>

#### \*Electives (Emphasis in Law or Accounting)

Select from the following for a minimum of 3 units:

- Business 1A (Introduction to Accounting) or  
Business 51A (General Accounting)
- Business 18 (Business Law)
- Business 40 (Business Concepts)
- Business 43 (Professional Communications)
- Business 58 (Small Business Management)
- Business 60 (Consumer Finance and Ownership)



# Supervision

## Supervision (SUPV)

### SUPV 80 ELEMENTS OF SUPERVISION 3 UNITS

Introduction to the functions and responsibilities of an effective supervisor. Functions of management-planning, organizing, leading and controlling. Current trends and developments in supervisory management including: team building, quality circles, and total quality management. Responsibilities of various organizational departments and current issues of supervisory management. Social responsibility, ethics, change, the environment, and the global economy. Students who have completed or are enrolled in Business 56 may not receive credit. 3 hours.

Grading Option: OP

Transfer: CSU

### SUPV 81 HUMAN RELATIONS IN THE WORKPLACE 3 UNITS

Basic concepts of individual, group, and organizational human behavior as they affect human relations, performance, and productivity within the work place. Strategies and techniques that influence interpersonal, administrative, and organizational communications and interactions among people. Fundamentals of the multi-disciplined science/nature of human relations in developing employee leadership, in working toward win/win situations, and in enhancing performance evaluations and respective reward system. Students who have completed or are enrolled in Business 48 may not receive credit. 3 hours.

Grading Option: OP

Transfer: CSU

### SUPV 82 BEHAVIOR IN ORGANIZATIONS 3 UNITS

Understanding the roles of individuals and groups within the organizational structure; basic concepts of individual behavior such as perception, attitudes, motivations, and learning; techniques managers may apply to improve the organizational environment; background of organizational development; conflict and conflict resolution; role of the manager in influencing members of an organization; and use of groups/teams to assure organizational success. Strongly Recommended: Supervision 80 or equivalent. 3 hours.

Grading Option: OP

### SUPV 83 HUMAN RESOURCE TRAINING AND DEVELOPMENT 3 UNITS

Introduction to the training and development process; determination of training needs and selection of participants; learning theory, developing content and delivery methods; concepts of discussion leading; implementation and instruction of training programs. Strongly Recommended: Supervision 80. 3 hours.

Grading Option: OP

### SUPV 84 EMPLOYEE SAFETY 3 UNITS

Human element in accident causation and prevention. Includes supervisor role; OSHA, California SB 198 and the American Disabilities Act in relation to a safe work environment; different types of safety hazards; safety analysis of accident investigation; health and safety training, aids, stress, ergonomics and future challenges in safety issues. Strongly Recommended: Supervision 80. 3 hours.

Grading Option: OP

### SUPV 85 INTRODUCTION TO LABOR MANAGEMENT RELATIONS 3 UNITS

History, organization, concepts, and legislation of labor/management relations; collective bargaining contract content, legal base, economics, and contract negotiation; contract administration; dispute resolution grievances arbitration, and mediation; public sector labor/management relations; global implications and emerging trends, issues and future challenges. Strongly Recommended: Supervision 80 or equivalent. 3 hours.

Grading Option: OP

### SUPV 88 HUMAN RESOURCES MANAGEMENT 3 UNITS

Introduction to the management of human resources and an understanding of the impact and accountability to the organization in terms of human resource activities. Global human resource strategies, social and organizational realities, legal implications affecting people at work, union/non-union practices, comparable work, employee compensation and benefits, and employee rights. Strongly Recommended: Supervision 80 or equivalent. 3 hours.

Grading Option: OP

## Degree

### AS – Chemistry (TRANSFER PREPARATION)

#### About the Program

The Chemistry degree prepares students for transfer to four-year institutions for continued study in the field of chemistry or for pre-professional studies for medical and dental programs. This program fulfills the lower-division requirements recommended by the American Chemical Society for Chemistry and is typical of requirements at four-year transfer institutions. The program also satisfies lower-division requirements in chemistry for engineering and biology transfer majors. General Education courses should be selected carefully to meet the requirements of the intended transfer institution.

Some transfer institutions require more general education units than are required by the AS degree. Students should consult the catalog of the transfer institution for requirements and should consult a counselor for more information.

### AS – Chemistry (TRANSFER PREPARATION)

#### Freshman Year

Chemistry 1A** (General College Chemistry) .....	5
Chemistry 1B (General College Chemistry).....	5
Math 1 (Analytical Geometry and Calculus I) .....	5
Math 2 (Analytical Geometry and Calculus II) .....	5
Physics 8A (General Physics I).....	5
Physics 8B (General Physics II).....	5
Recommended Electives*	
General Education Courses	

#### Sophomore Year

Chemistry 12A (Organic Chemistry) .....	5
Chemistry 12B (Organic Chemistry) .....	5
Math 3 (Multivariable Calculus) .....	5
Physics 8C (General Physics III).....	5
Physics 8D (General Physics IV) .....	3
Recommended Electives*	
General Education Courses	
<b>Total units required .....</b>	<b>60</b>

#### \*Recommended Electives:

- Mathematics 5 (Differential Equations with Computer Applications)
- Mathematics 7 (Elementary Linear Algebra with Computer Applications)
- Computer Science 1 (Computing Fundamentals I)

\*\* Fulfills the Natural Science requirement for the AS degree.

To remain in a chemistry class a student must demonstrate competency in chemistry lab safety procedures by receiving a satisfactory score on the safety quiz administered during the NGR period.



# Chemistry

## Chemistry (CHEM)

### CHEM 1A GENERAL COLLEGE CHEMISTRY 5 UNITS

Introduction to atomic structure, bonding, stoichiometry, thermochemistry, gases, matter and energy, oxidation-reduction, chemical equations, liquids and solids, solutions, chemical energetics and equilibrium concepts. Laboratory includes both quantitative and qualitative experiments. Prerequisites: Mathematics 55 or 55B or 55Y and Chemistry 31 (both completed with a grade of "C" or higher). 3 hours lecture, 6 hours laboratory. (CAN CHEM 2 and CHEM 1A + CHEM 1B = CAN CHEM SEQ A) \*Transfer unit limitations, see page 63  
Grading Option: GR Transfer: CSU, UC\*

### CHEM 1B GENERAL COLLEGE CHEMISTRY 5 UNITS

Continuation of Chemistry 1A. Includes chemical energetics and equilibria, solutions and ionic equilibria, acid-base chemistry, electrochemistry, coordination chemistry, kinetics, nuclear chemistry, organic chemistry, and the chemistry of family groups of the periodic table. Laboratory emphasizes quantitative techniques, including instrumentation, and qualitative analysis. Prerequisite: Chemistry 1A (completed with grade of "C" or higher). 3 hours lecture, 6 hours laboratory. (CAN CHEM 4; CHEM 1A + CHEM 1B = CAN CHEM SEQ A)  
\*Transfer unit limitations, see page 63  
Grading Option: GR Transfer: CSU, UC\*

### CHEM 12A ORGANIC CHEMISTRY 5 UNITS

Hydrocarbons, alkyl halides, alcohols, ethers, and an introduction to aromatic hydrocarbons. Structure, bonding, stereochemistry, conformational analysis, nomenclature, and physical properties in relation to these particular groups of compounds. Emphasis on reactivity and reaction mechanisms. Laboratory work includes microscale, macroscale, spectroscopic, and chromatographic techniques. Chemistry 12A is the first semester in a year-long course in organic chemistry designed for students majoring in chemistry and related disciplines. Prerequisite: Chemistry 1B (completed with a grade of "C" or higher). 3 hours lecture, 6 hours laboratory.  
Grading Option: GR Transfer: CSU, UC



### CHEM 12B ORGANIC CHEMISTRY 5 UNITS

Continuation of Chemistry 12A with an introduction to the chemistry of aromatics, amines, enols and enolate ions, carboxylic acids, aldehydes, ketones and biochemical topics focusing on structure, synthesis and mechanisms of reaction. Laboratory work in basic techniques, synthetic methods, qualitative, spectroscopic, and chromatographic analysis techniques. Designed for students whose interests require a full year in-depth study of organic chemistry. Prerequisite: Chemistry 12A (completed with a grade of "C" or higher). 3 hours lecture, 6 hours laboratory.  
Grading Option: GR Transfer: CSU, UC

### CHEM 30A INTRODUCTORY AND APPLIED CHEMISTRY 4 UNITS

Chemistry of inorganic compounds, atomic theory, bonding, equations, gas laws, solutions, acid-base theory and oxidation-reduction. Designed to meet the requirements of certain programs in allied health and technological fields and for general education. Prerequisite: Mathematics 65 or 65B or 65Y (completed with a grade of "C" or higher). 3 hours lecture, 3 hours laboratory. (CAN CHEM 6)  
\*Transfer unit limitations, see page 63  
Grading Option: GR Transfer: CSU, UC\*

### CHEM 30B INTRODUCTORY AND APPLIED CHEMISTRY 4 UNITS

Continuation of Chemistry 30A with emphasis on organic and biochemical concepts related to human physiological systems. Prerequisite: Chemistry 30A (completed with a grade of "C" or better). 3 hours lecture, 3 hours laboratory. (CAN CHEM 8)  
\*Transfer unit limitations, see page 63  
Grading Option: GR Transfer: CSU, UC\*

### CHEM 31 INTRODUCTION TO COLLEGE CHEMISTRY 4 UNITS

Elementary concepts of chemistry with emphasis on mathematical calculations; includes nomenclature, stoichiometry, atomic structure, gas laws, and acids and bases. Designed for majors in science and engineering. Prerequisites: Mathematics 55 or 55B or 55Y (completed with a grade of "C" or higher). 3 hours lecture, 3 hours laboratory.  
\*Transfer unit limitations, see page 63  
Grading Option: OP Transfer: CSU, UC\*

## Colloquium

### COLLOQUIUM

1 UNIT

A colloquium is a group of students who meet with an instructor over a period of one semester to consider ideas or documents of continuing importance, or a special topic. The purpose is to stimulate serious thought through discussion and analysis. A student is limited to one colloquium each semester. A colloquium may be offered under any subject area contained in the Catalog, using the number 9. Open to all students in good standing. 2 hours. *\*Limited to 4 transfer units. \*\*Transfer unit limitations, see page 63.*

Grading Option: Varies by department (May be repeated 3 times)

Transfer: CSU\* UC\*\*

## Community Interest Studies

### About the Program

Community interest courses are non-credit and include both full-term and short-term courses in a wide variety of course patterns, field studies, seminars, workshops, and other educational activities that will meet the educational needs of the College community. May be offered under any course title contained in the Catalog, using the numbers 200 through 299.



# Computing Studies

Las Positas College offers three areas of study under the broad heading, Computing Studies.

These areas are:

**Computer Information Systems**  
**Computer Networking Technology**  
**Computer Science**

## *The Many Voices of Las Positas College*

"When I started attending LPC I was just 15. As a 'homeschooler' I had a need for some extra classes, like classical guitar and a few other electives. I obtained my AA from Las Positas and continue to take a class here and there as needed. I work as a Linux SysAdmin and my employer will pay for me to get a Computer Science degree from CSU. I have so many fond memories of LPC. Lots of good times and good friends have made attending the College a pleasurable experience!"

—Shane, Livermore

In the pages that follow you will find program, certificate and course information about:

### **Computer Information Systems** Degree

AA – Computer Information Systems

Certificate

Computer Applications Software (Microcomputers)

### **Computer Networking Technology** Degree

AS – Network Security and Administration

Certificate

Computer Network Technician

Computer Network Administration (Microsoft)

Cisco Network Associate

Cisco Network Professional

### **Computer Science** Degree

AS – Computer Science (Transfer Preparation)

AS – Computer Programming

AS – Computer Programming for the Web

Certificate

Computer Programming

Computer Programming for the Web

## Computer Information Systems

### About the Program

Computer Information Systems (CIS) degree and certificate programs are for the business professional with an emphasis on a variety of computer subjects applicable to the “real business world.” The types of jobs held by computer professionals fall into several general categories, including computer design and manufacturing, computer sales and service, system development and programming, and computer operations.

The Computer Information Systems (CIS) program is designed to:

- Introduce all students to basic computer literacy skills;
- Build a solid foundation of knowledge to transfer to a four-year institution;
- Enhance, improve, and upgrade current computer skills; and
- Provide classes necessary to acquire computer industry certifications.

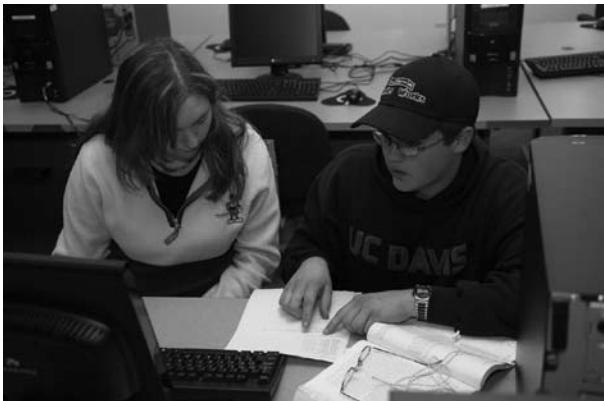
### AA - Computer Information Systems

This degree deals with applications of computer and information theory in business. Because computers have become an integral part of most organizations, CIS majors are needed in every area of a business—finance, manufacturing, marketing, personnel, accounting, distribution and MIS or IT departments.

### Certificate of Achievement

#### Computer Applications Software (Microcomputers)

This program introduces microcomputer applications, focusing on the most widely used applications of word processing, spreadsheets and databases. This certificate prepares students for employment in many entry-level positions using business software.



## Degree

### AA – Computer Information Systems

#### Freshman Year

Computer Information Systems 50 (Introduction to Computing and Information Technology) .....	3
Computer Information Systems 65 (Introduction to Desktop Operating Systems) .....	2
Computer Information Systems 55 (Integrating Office Applications).....	4
Computer Information Systems 88A (Introduction to Microsoft Word for Windows) .....	1.5
Computer Information Systems 88B (Advanced Microsoft Word for Windows) .....	1.5
Computer Information Systems 54 (Excel: Introduction to Spreadsheets) .....	4
General Education Courses	

#### Sophomore Year

Computer Information Systems 43 (Professional Communications). 4	
Computer Information Systems 66 (Networking Fundamentals) .....	3
Computer Information Systems 57 (Access: Introduction to Databases) .....	4
Computer Information Systems 60 (Systems Analysis and Design)..	3
Programming Options* .....	6
General Education Courses	
<b>Total Units Required.....</b>	<b>60</b>

#### \*Programming Options

Select from the following for 6 units:

Computer Information Systems 80 (Introduction to Programming Using Basic/Visual Basic)	
Computer Information Systems 68 (Visual Basic for Microsoft Applications)	
Computer Information Systems 59A (Web Development: HTML/XHTML)	
Computer Information Systems 59B (Web Development: DHTML, CSS, JavaScript)	
Computer Information Systems 69 (Web Development: Web Design Technologies and Tools)	

*Note: Other classes may be substituted to meet the Programming requirement. Please consult Discipline Coordinator, 925.424.1194*

# Computer Information Systems

## Certificate of Achievement

### Computer Applications Software (Microcomputers)

Computer Information Systems 50 (Introduction to Computing and Information Technology) .....	3
Computer Information Systems 65 (Introduction to Desktop Operating Systems) or Computer Information Systems 84 (Windows) .....	1-2
Computer Information Systems 55 (Integrating Office Applications).....	4
Computer Information Systems 75 (Office Technology/Communications) .....	1
Computer Information Systems 43 (Professional Communications). 4	
Computer Information Systems 88A (Introduction to Microsoft Word for Windows).....	1.5
Computer Information Systems 88B (Advanced Microsoft Word for Windows) .....	1.5
Computer Information Systems 89A (Desktop Presentation) .....	1
Computer Information Systems 89B (Desktop Presentation) .....	2
Computer Information Systems 54 (Excel: Introduction to Spreadsheets) .....	4
Computer Information Systems 57 (Access: Introduction to Databases) .....	4
Programming Options* .....	4
Electives** .....	3
<b>Total Units Required.....</b>	<b>34-35</b>

#### Programming Options\*

Select from the following courses for a minimum of 4 units:

- Computer Information Systems 80 (Introduction to Programming using BASIC/Visual BASIC)
- Computer Information Systems 68 (Using Visual Basic for Microsoft Applications)
- Computer Information Systems 59A (Web Development: HTML/XHTML)
- Computer Information Systems 59B (Web Development: DHTML, CSS, JavaScript)
- Computer Information Systems 69 (Web Development: Web Design Technologies and Tools)

#### Electives\*\*

Select from the following courses for a minimum of 3 units:

- Computer Information Systems 66 (Networking Fundamentals)
- Computer Networking Technology 51 (A+ Computer Fundamentals)
- Computer Information Systems 99 (Special Studies)

## Computer Information Systems (CIS)

### CIS 43 PROFESSIONAL COMMUNICATIONS 4 UNITS

This course is designed to help students develop and refine the written and oral communication skills necessary to communicate effectively in a business environment. This will be accomplished through the planning, composing, and evaluating of written communication; report writing; and oral presentations. Additional focus will be placed on developing interpersonal skills, team participation skills, and professionalism. Students who have completed or are enrolled in Business 43, Computer Networking Technology 43, Computer Science 43, English 43, or Speech 43 may not receive credit. Strongly recommended: Eligibility for English 1A. 4 hours.

Grading Option: OP

Transfer: CSU

### CIS 50 INTRODUCTION TO COMPUTING AND INFORMATION TECHNOLOGY 3 UNITS

A comprehensive introductory overview of computers and information technology. Topics include: basic computer concepts and terminology, hardware, software, data and procedures, data communications, Internet, computer programming concepts, the system development process and new emerging technologies. Students will interactively solve applied problems utilizing software productivity tools such as: word processors, spreadsheets, databases, Email, WWW, and programming languages such as Visual Basic or HTML. Introduce the analytical, written and oral communication skills necessary to communicate effectively in a computing environment. 3 hours lecture, 1 hour laboratory.

Grading Option: OP

Transfer: CSU, UC

### CIS 54 EXCEL: INTRODUCTION TO SPREADSHEETS 4 UNITS

Introductory spreadsheet class using Excel on the PC to create a variety of spreadsheets with emphasis on business application programs. Identification of an Excel worksheet, adding numbers and text to a worksheet, calculations using functions and formulas, modify, change and format cell entries, save, retrieve and print a worksheet. Includes functions, templates, data query, charts, and macros. Strongly Recommended: Computer Information Systems 50 and 65. 3 hours lecture, 3 hours laboratory.

Grading Option: OP

Transfer: CSU

### CIS 55 INTEGRATING OFFICE APPLICATIONS 4 UNITS

Develop a beginning/intermediate level of skills using the Microsoft Office features of Word, Excel, Access, PowerPoint, and Internet Explorer to design, produce and integrate: documents, worksheets, databases and professional presentations. The use of Object Linking and Embedding (OLE) to create integrated office documents that promote information sharing and collaboration are covered along with how to create simple integrated office documents on the Web. This course emphasizes workplace communications and information processing skills and standards. Students will complete integrated projects that apply technology to business tasks and represent what is required in an actual business environment using the components of Microsoft Office (Word, Excel, PowerPoint, Access, email, and the Internet). Strongly recommended: Computer Information Systems

50. 3 hours lecture, 3 hours laboratory.

Grading Option: OP

Transfer: CSU

**CIS 57 ACCESS: INTRODUCTION TO DATABASES 4 UNITS**

Introduction to Database Management Systems, a computer program that is used to organize, store, and retrieve information. Understanding of data, file and database concepts using Microsoft Access for Windows with emphasis on business applications. Identify and evaluate client needs/requirements and translate those needs into a working database application model. Integrate Access data with other Microsoft applications, such as Word and Excel. Strongly recommended: Computer Information Systems 50 and Computer Information Systems 55. 3 hours lecture, 3 hours laboratory.

Grading Option: OP

Transfer: CSU

**CIS 59A WEB DEVELOPMENT: HTML/XHTML 2 UNITS**

Introduction to publishing on the World Wide Web (WWW). Topics include: creating Web pages with markup languages, including HTML/XHTML, file management for the Web, and uploading files via File Transfer Protocol (FTP) to a web server. This course includes coding with markup languages, cascading style sheets, and introduction to scripting (JavaScript), the use of images and other media (audio, video) on the Web, and interactive tools like forms and image maps. This course prepares apprentice Web designers and developers to identify the information needs of a client, design appropriate WWW solutions, and implement them. Strongly recommended: Computer Information Systems 50. 2 hours lecture, 1 hour laboratory.

Grading Option: OP (May be repeated 1 time)

Transfer: CSU

**CIS 59B WEB DEVELOPMENT: DHTML/XHTML, CSS, JAVASCRIPT 2 UNITS**

An expansion of HTML web authoring capabilities that includes Dynamic HTML/XHTML, cascading style sheets, and JavaScript. This course is designed to offer students a case-oriented, problem-solving approach to learning beyond the basics of HTML/XHTML. Students will quickly review all the most important topics of HTML/XHTML, from the basics of creating Web pages with graphics and links, using tables, and controlling page layout with frames, to study more advanced topics, including cascading style sheets, programming with JavaScript and JavaScript objects and events, creating a multimedia Web page, creating a Web page with forms, working with dynamic content and layout, controlling mouse and keyboard events, and creating new frames and windows. Strongly recommended: Computer Information Systems 59A. 2 hours lecture, 1 hour laboratory.

Grading Option: OP (May be repeated 1 time)

Transfer: CSU

**CIS 60 SYSTEMS ANALYSIS AND DESIGN 3 UNITS**

Principles of systems analysis; techniques of analysis and design. This course will explore systems analysis and design from the early days of second generation systems development up to and including graphical user interface design and development (GUI). Exercises and case projects to develop knowledgeable use of the entire system development life cycle. Data gathering, problem solving,

data flow diagrams, decision tables, pseudocode, database design and implementation, program coding and the use of Computer-Aided Software Engineering (CASE) tools. Strongly recommended: Computer Information Systems 50. 3 hours lecture, 1 hour laboratory.

Grading Option: OP

Transfer: CSU

**CIS 65 INTRODUCTION TO DESKTOP OPERATING SYSTEMS (FORMERLY CIS 51) 2 UNITS**

Students in this class will gain an understanding of desktop operating systems including DOS, Windows, Unix, and Macintosh. The role of hardware, application software and the operating system, and how it interacts with each will be explored. Students will install, configure, and update the operating system on a microcomputer system. Students who have completed or are enrolled in Computer Networking Technology 50 may not receive credit. Strongly recommended: Computer Information Systems 50. 2 hours lecture, 1 hour laboratory.

Grading Option: OP

Transfer: CSU

**CIS 66 NETWORKING FUNDAMENTALS 3 UNITS**

This course is a foundation course that explains and describes how computer networks are designed, installed, and administrated. Introduction to communications concepts, data communications, networking, and internetworking. Review of major network components: hardware, software, protocols (TCP/IP, IPX/SPX, NETBEUI), topologies, and cabling. Overview of LAN administration, setup, and installation. Strongly recommended: Computer Information Systems 55. Students who have completed or are enrolled in Computer Networking Technology 52 may not receive credit. 3 hours lecture.

Grading Option: OP

Transfer: CSU

**CIS 68 USING VISUAL BASIC FOR MICROSOFT OFFICE APPLICATIONS 2 UNITS**

Visual Basic for Applications, a programming language provided with Microsoft Office Suite, provides a common programming language for customizing Microsoft Office applications. With VBA, students will develop customized applications built around the standard Office applications of Word, Excel, PowerPoint, and Access for specific business needs. In this class students will learn how the Microsoft Office suite is related to Visual Basic for Applications (VBA). They will also become acquainted with the Visual Basic for Applications Integrated Development Environment (VBA IDE). They will learn to open the VBA IDE in multiple different Office applications. They will also create some simple programs into the VBA IDE and learn how to run those programs. Finally, students will learn how to create and run a macro and view the code created by the macro. Strongly recommended: Computer Information Systems 55. 2 hours lecture, 1 hour laboratory.

Grading Option: OP (May be repeated 1 time)

Transfer: CSU

# Computer Information Systems

## CIS 69 WEB DEVELOPMENT: WEB DESIGN TECHNOLOGIES AND TOOLS 2 UNITS

A survey of the languages and tools used to author Web pages. Introduction to the basics of HTML/XHTML and Cascading Style Sheets (CSS) and explains how to develop basic Web pages using Dreamweaver authoring tool. Learn how to create and manipulate images and animation with Adobe Photoshop, ImageReady, Fireworks, and Flash. Add interactivity to your Web pages using JavaScript and DHTML. Students will create many different applications ranging from simple Web pages that link to other Web pages, animations that run within a Web page, and JavaScript programs that interact with visitors to a Web site. Strongly recommended: Computer Information Systems 59A. 2 hours lecture, 1 hour laboratory.

Grading Option: OP (May be repeated 1 time) Transfer : CSU

*The following CIS 71 sequence courses are self-paced, individualized computer typing courses:*

## CIS 71A KEYBOARDING (THE ALPHABET) 1 UNIT

Introduction to the alphabet letter keys on the computer keyboard for touch-typing. Learn basic keyboarding techniques for accuracy and speed. Develop skill in using the mouse for windows and software applications. This course is the first in a series of sequential courses in Keyboarding instruction. Students are advised to take these courses in sequence for best training results. 42 total hours.

Grading Option: OP (May be repeated 2 times)

## CIS 71B KEYBOARDING (NUMBERS AND SYMBOLS) 1 UNIT

Introduction to the numbers and symbol keys on the computer keyboard for touch typing. Learn basic keyboarding techniques for building accuracy and speed. Develop skill in using the mouse for windows desktop use. Strongly Recommended: CIS 71A (\*Note: If you have had no previous keyboard training, you should take CIS 71A before attempting this course.) 42 total hours.

Grading Option: OP (May be repeated 2 times)

## CIS 71C SKILLS DEVELOPMENT 1 UNIT

Development of keyboarding skill for those students who have learned the location of the keys on the keyboard by touch and are ready to increase speed. The keyboarding software analyzes participant's typing technique and suggests practice that will help to type faster. Skill progress is measured by keying text within specified time limits. (\*Note: This course is the third module in a sequential series of beginning keyboarding instruction. Students should know the location of the keys on the keyboard before attempting this course. A typing speed of at least 25 wpm is also important to completing this course successfully.) Strongly Recommended: Computer Information Systems 71B competency. 42 total hours.

Grading Option: OP (May be repeated 2 times)

## CIS 71D SPEED AND ACCURACY IMPROVEMENT 1 UNIT

This course continues the speed and accuracy progress achieved in CIS 71C. This is a course for all students working towards speed and accuracy development. Program software analyzes technique problems and assigns practices to improve speed and accuracy.

Skill progress is measured by keying text within specified time limits. \*Note: This course is the first of two advanced modules in speed building. Students should have successfully completed a beginning course. A typing speed of at least 35 wpm is required. Strongly Recommended: Computer Information Systems 71C competency. 42 total hours.

Grading Option: OP (May be repeated 2 times)

## CIS 71E KEYBOARDING CONTROL AND DEVELOPMENT 1 UNIT

The second advanced module in keyboarding speed and accuracy building. Practice keyboarding control of speed and accuracy on straight copy, rough draft copy, handwritten copy and copy with numbers, symbols, and tabulation. Progress measured through timed writings on various types of copy at specified time limits. Strongly Recommended: Computer Information Systems 71D competency. 42 total hours.

Grading Option: OP (May be repeated 2 times)

## CIS 72A DATA MANAGEMENT 1 UNIT

Self-paced theory and practice of alphabetic, numeric, geographic, and subject filing. Basic principles of filing and effective records management for both paper and electronic filing systems. Introduction to database functions, such as enter, edit, find, and delete records; create queries; and print reports. 42 total hours.

Grading Option: OP (May be repeated 1 time) Transfer: CSU

## CIS 72B SPREADSHEET INTEGRATION WITH WORD PROCESSING 1 UNIT

Self-paced, individualized, instruction in the basic usage of spreadsheet software in document reporting and presentation. Integration of spreadsheets with other software for business communication. Strongly Recommended: Computer Information Systems 50 and Computer Information Systems 88A or word processing equivalency. 42 total hours.

Grading Option: OP (May be repeated 1 time) Transfer: CSU

## CIS 73A TEN-KEY SKILL DEVELOPMENT 1 UNIT

Self-paced, individualized mastery learning program in ten-key skill development on the numeric keypad, using spreadsheets and electronic calculators. 30 total hours.

Grading Option: OP (May be repeated 1 time)

## CIS 75 OFFICE TECHNOLOGY/COMMUNICATIONS 1 UNIT

Overview of various technologies (such as bulletin boards, teleconferencing, shared resources, voice-messaging systems, and online services) used for communicating internally and externally with microcomputers. Hands-on practice with electronic mail, the Internet, MS Outlook, and integrating the MS Office Suite to perform administrative tasks and functions for managing the office. Strongly recommended: Eligibility for English 1A and Computer Typing at 30 wpm. 0.5 hour lecture, 1.5 hours laboratory.

Grading Option: OP



**CIS 77 VIRTUAL OFFICE/SOHO TECHNOLOGIES 2 UNITS**

Examine from a practical viewpoint the technologies, technical terminology, installation, and operation of a small office/home office (SOHO) or virtual office. Explores steps in creating a virtual office, setting up a home office using technology to support a business, and other topics related to communication and business operations. Hardware, software, tools and gadgets for the virtual, computer-based small office/home office business are evaluated. Strongly recommended: Computer Information Systems 50. 2 hours lecture, 1 hour laboratory.

Grading Option: OP

Transfer: CSU

**CIS 78 BECOMING A VIRTUAL PROFESSIONAL 3 UNITS**

A Virtual Professional is an independent entrepreneur that provides their services on a contractual basis using today's advanced technology from their own office or remote location. Services offered by each Virtual Professional differ according to their own skills. Students will explore the career opportunities available to administrative support personnel or "virtual assistants" or other professionals offering their services in a virtual environment. This course provides information and guidance in creating a virtual office. Topics include: marketing your abilities, setting up an in-home office, using technology to support your business, coping with working alone, electronic communication, and professional networking. Strongly recommended: Computer Information Systems 50. 3 hours lecture, 1 hour laboratory.

Grading Option: OP

Transfer: CSU

**CIS 80 INTRODUCTION TO PROGRAMMING USING BASIC/VISUAL BASIC 4 UNITS**

Computer programming in BASIC and Visual Basic with special emphasis on the analysis and solution to business application programs. Introduction to the fundamentals of interpretative BASIC language and object-oriented Visual Basic language programming. Students will code and execute programs with an emphasis on efficient structured programming techniques. Prerequisite: Computer Information Systems 50 or equivalent (completed with a grade of "C" or higher). 3 hours lecture, 3 hours laboratory.

Grading Option: OP

Transfer: CSU, UC

**CIS 84 WINDOWS 1 UNIT**

Self-paced, hands-on class introducing Microsoft Windows operations. Participants will become familiar with the windows environment. Learn techniques to manage files and folders, use Microsoft Windows' accessories programs, such as WordPad, Calculator, and Paint, and share data between programs. 0.5 hours lecture, 1.5 hours laboratory.

Grading Option: OP

**CIS 86 OVERCOMING COMPUTER ANXIETY 1 UNIT**

Introduction to computers for users with reservations and anxiety about getting started. Course will be combining keyboard training with operating systems commands, fundamental features of word processing, database, spreadsheet and graphics software programs. 0.5 hours lecture, 1.5 hours laboratory.

Grading Option: OP

**CIS 88A INTRODUCTION TO MICROSOFT WORD FOR WINDOWS 1.5 UNITS**

Word processing techniques and applications, including formatting, basic operating system commands for processing data and records management. Strongly Recommended: typing skills level of 30 wpm. 1 hour lecture, 1.5 hours laboratory.

Grading Option: OP (May be repeated 2 times)

Transfer: CSU

**CIS 88B ADVANCED MICROSOFT WORD FOR WINDOWS 1.5 UNITS**

Advanced word processing techniques such as multiple columns, mail merge, styles, macros, and templates, to produce complex business documents. Incorporate graphics features to create flyers, and newsletters. Strongly recommended: Computer Information Systems 88A. 1 hour lecture, 1.5 hours laboratory.

Grading Option: OP (May be repeated 1 time)

Transfer: CSU

**CIS 89A DESKTOP PRESENTATION 1 UNIT**

Desktop presentation design techniques and enhancements. Application using current desktop presentation software. Hands-on experience creating, saving, printing slide shows. 6 week class. .5 hour lecture. 1.5 hours laboratory.

Grading Option: OP (May be repeated 1 time)

Transfer: CSU

**CIS 89B DESKTOP PUBLISHING 2 UNITS**

Introduction to the concepts and techniques used in desktop publishing. Hands-on computer experience using desktop publishing software to combine text and graphics, worksheets and charts, and other program features to create publications. In the planning, designing, publishing process, problem solving/critical thinking techniques emphasized. 1 hour lecture, 1.5 hours laboratory.

Grading Option: OP

Transfer: CSU

**CIS 99 SPECIAL STUDIES 3-3 UNITS**

Special studies in a specialized technical-vocational major. Typically offered for a particular occupation or skill. Courses may be offered under any course title contained in the Catalog, using the number 99. 0.3 - 9 hours. Refer to the Schedule of Classes under Computer Information Systems 99, Special Studies, for a list of the current offerings. \*Limited to 4 transfer units.

Grading Option: OP

Transfer: CSU\*

**REQUEST FOR COURSE SUBSTITUTION-SPECIAL STUDIES (CIS 99)**

Students who wish to fulfill a degree or certificate program requirement with a Special Studies (CIS 99) course should complete a Request for Course Substitution or Waiver form. This form (available from the Division Offices and Counseling) should be completed by students in consultation with academic faculty in order for Special Studies to be accepted in fulfillment of the degree and certificate requirements.

# Computer Networking Technology

- ✓ DEGREE
- ✓ CERTIFICATE

## Degree

### AS – Network Security and Administration

## Certificate

### Computer Network Technician

### Computer Network Administration(Microsoft)

### Cisco Network Associate

### Cisco Network Professional

SEE ALSO: **Electronics**

## About the Program

The Computer Networking Technology program prepares students for a variety of career opportunities including the networking field. CNT classes prepare students for Cisco CCNA and CCNP certification tests, Microsoft MCSE and MCSA tests, and CompTIA Net+, Security+ and A+ tests. Constantly evolving and modernizing classes include targeted skills training in Emerging Technologies like Wireless, VoIP, VPN, Computer Forensics, Incident Response, Network Security and OS Hardening. Many of these subjects have become basic required knowledge even in other career fields. Students in Business, the Sciences, Arts and Administration of Justice will all need skills in network technologies to excel in their fields.

Four Certificates of Completion provide quick paths to validate training in today's important tech knowledge areas.

The program also includes an AS degree in Network Security Administration. This degree incorporates the latest in Emerging Technologies and skills employers are seeking.

## AS – Network Security and Administration

### Freshman Year

Computer Networking Technology 50 (Introduction to Desktop Operating Systems) or Computer Information Systems 65 (Introduction to Desktop Operating Systems) .....	2
Computer Networking Technology 51 (A+ Computer Fundamentals) .....	3
Computer Networking Technology 52 (Networking Fundamentals) .....	3
Computer Networking Technology 62A (Cisco Networking Academy CCNA 1&2) .....	4
Electives Tracks* .....	6-9
General Education Courses	

### Sophomore Year

Computer Networking Technology 62B (Cisco Networking Academy CCNA 3-4) .....	4
Computer Networking Technology 43 (Professional Communications) .....	4
Electives Tracks* .....	6-9
General Education Courses	
<b>Total Units Required</b> .....	<b>60</b>

### \*Electives Tracks

Select from the following for 12-18 units:

#### CCNP Track:

- CNT 63 (CISCO CCNP Semester 5 – Advanced Routing)
- CNT 64 (CISCO CCNP Semester 6 – Remote Access)
- CNT 65 (CISCO CCNP Semester 7 – Multilayer Switching)
- CNT 66 (CISCO CCNP Semester 9 – Internetworking Troubleshooting)

#### Network and Wireless Security Track:

- CNT 67 (Wireless Networks and Security CWNA)
- CNT 68 (Introduction to Computer Forensics)
- CNT 69 (Network Security Sec+)

#### Network Administration Track:

- CNT 55 (Windows Server)
- CNT 56 (Implementing Windows Network Infrastructure)
- CNT 57 (Implementing Windows Active Directory Services)
- CNT 99 (Special Studies)\*

Note: Request for Course Substitution-Special Studies (CNT 99)

*Students who wish to fulfill a degree or certificate program requirement with a Special Studies (CNT 99) course should complete a Request for Course Substitution or Waiver form. This form (available from the Division Offices and Counseling) should be completed by students in consultation with academic faculty in order for Special Studies to be accepted in fulfillment of the degree and certificate requirements.*

**Certificate of Completion  
Computer Network Technician**

Computer Networking Technology 50 (Introduction to Desktop Operating Systems) or  
Computer Information Systems 65 (Introduction to Desktop Operating Systems) ..... 2

Computer Networking Technology 51  
(A+ Computer Fundamentals) ..... 3

Computer Networking Technology 52 (Networking Fundamentals) 3

Computer Networking Technology 43 (Professional Communications) ..... 4

**Total Units** ..... 12

**Certificate of Completion  
Computer Network Administration (Microsoft)**

Computer Networking Technology 50 (Introduction to Desktop Operating Systems) or  
Computer Information Systems 65 (Introduction to Desktop Operating Systems) ..... 2

Computer Networking Technology 52 (Networking Fundamentals) 3

Computer Networking Technology 54 (Windows Professional) ..... 3

Computer Networking Technology 55 (Windows Server) ..... 3

Computer Networking Technology 56 (Implementing Windows Network Infrastructure) ..... 3

Computer Networking Technology 57 (Implementing Windows Directory Services) ..... 3

**Total Units** ..... 17

**Certificate of Achievement  
Cisco Network Associate**

Computer Networking Technology 50 (Introduction to Desktop Operating Systems) ..... 2

Computer Networking Technology 51  
(A+ Computer Fundamentals) ..... 3

Computer Networking Technology 52 (Networking Fundamentals) 3

Computer Networking Technology 62A (Cisco Networking Academy CCNA 1&2) ..... 4

Computer Networking Technology 62B (Cisco Networking Academy CCNA 3-4 ) ..... 4

Computer Networking Technology 43 (Professional Communications) ..... 4

**Total Units Required**..... 20

**Certificate of Achievement  
Cisco Network Professional**

Computer Networking Technology 50 (Introduction to Desktop Operating Systems) ..... 2

Computer Networking Technology 51  
(A+ Computer Fundamentals) ..... 3

Computer Networking Technology 62A (Cisco Networking Academy CCNA 1&2) ..... 4

Computer Networking Technology 62B (Cisco Networking Academy CCNA 3&4 ) ..... 4

Computer Networking Technology 43 (Professional Communications) ..... 4

Computer Networking Technology 52 (Networking Fundamentals) 3

Computer Networking Technology 63 (Cisco CCNP Semester 5 - Advanced Routing) ..... 4

Computer Networking Technology 64 (Cisco CCNP Semester 6 - Remote Access) ..... 4

Computer Networking Technology 65 (Cisco CCNP Semester 7 - Multilayer Switching)..... 4

Computer Networking Technology 66 (Cisco CCNP Semester 8 - Internetworking Troubleshooting)..... 4

**Total Units Required**..... 36



# Computer Networking Technology

## Computer Networking Technology (CNT)

### CNT 43 PROFESSIONAL COMMUNICATIONS 4 UNITS

This course is designed to help students develop and refine the written and oral communication skills necessary to communicate effectively in a business environment. This will be accomplished through the planning, composing, and evaluating of written communication; report writing; and oral presentations. Additional focus will be placed on developing interpersonal skills, team participation skills, and professionalism. Students who have completed or are enrolled in Business 43, Computer Information Systems 43, Computer Science 43, English 43, or Speech 43 may not receive credit. Strongly recommended: Eligibility for English 1A. 4 hours.

Grading Option: OP

Transfer: CSU

### CNT 50 INTRODUCTION TO DESKTOP OPERATING SYSTEMS 2 UNITS

Students in this class will gain an understanding of desktop operating systems including DOS, Windows, Unix, and Macintosh. The role of hardware, application software and the operating system and how it interacts with each will be explored. Students will install, configure, and update the operating system on a microcomputer system. Students who have completed or are enrolled in Computer Information Systems 65 may not receive credit. Strongly recommended: Computer Information Systems 50. 2 hours lecture, 1 hour laboratory.

Grading Option: OP

Transfer: CSU

### CNT 51 A+ COMPUTER FUNDAMENTALS 3 UNITS

Preparation for the A+ Computer Exam. Students will build and configure several computer systems, install and configure a variety of expansion cards, install operating systems such as DOS, Windows and learn how to do basic hardware and operating system troubleshooting and repair. Personal computer functions, maintenance, and upgrade issues. Students will learn about and work with various CPU types, motherboards and BIOS, memory, disk drives, video, adapter cards, and peripherals. Strongly recommended: Computer Networking Technology 50. 2.5 hours lecture, 1.5 hours laboratory.

Grading Option: OP (May be repeated 1 time)

Transfer: CSU

### CNT 52 NETWORKING FUNDAMENTALS 3 UNITS

This course is a foundation course that explains and describes how computer networks are designed, installed, and administrated. Introduction to communications concepts, data communications, networking, and internetworking. Review of major network components: hardware, software, protocols (TCP/IP, IPX/SPX, NETBEUI), topologies, and cabling. Overview of LAN administration, setup, and installation. Preparation for the Network+ certification exam. Students who have completed or are enrolled in Computer Information Systems 66 may not receive credit. Strongly recommended: Computer Information Systems 55. 3 hours lecture.

Grading Option: OP

Transfer: CSU

### CNT 54 WINDOWS PROFESSIONAL 3 UNITS

Installation and configuration of Windows Professional operating system. Preparation for the Microsoft Certified System Engineer (MCSE) exam. Students will learn to install and configure Microsoft Windows Professional on stand-alone computers and on client computers that are part of a workgroup or a domain. Creation of user and group accounts, group policies, administrating access to shared resources, configuration of hardware devices, monitoring of system resources, troubleshooting, and ensuring data integrity and security. Strongly recommended: Computer Network Technology 51 and Computer Network Technology 52. 2.5 hours lecture, 1.5 hours laboratory.

Grading Option: OP (May be repeated 1 time)

Transfer: CSU

### CNT 55 WINDOWS SERVER 2003 3 UNITS

Installation and configuration of Windows Server operating system. Preparation for the Microsoft Certified Engineer (MCSE) exam. Students will learn to install, configure, and administer Microsoft Windows Server 2003 in a domain environment. Networking fundamentals and protocols with emphasis on the TCP/IP suite. Mixed environment networking, data security server domain models, network directory concepts. Server system administration, troubleshooting, and optimization. Creation of user and group accounts, group policies, administrating access to shared resources, configuration of hardware devices, monitoring of system resources, troubleshooting, and ensuring data integrity and security in a domain environment. Strongly recommended: Computer Networking Technology 51 and Computer Networking Technology 52. 2.5 hours lecture, 1.5 hours laboratory.

Grading Option: OP (May be repeated 1 time)

Transfer: CSU

### CNT 56 IMPLEMENTING WINDOWS NETWORK INFRASTRUCTURE 3 UNITS

This course will enable students to install, configure, manage, and support a network infrastructure that uses the Microsoft Windows Server products. The course focuses heavily on TCP/IP and related services including DHCP server, DNS server, WINS, network security protocols, Public Key Infrastructure (PKI), Internet Protocol Security (IPSec), and remote access. This course also enables a student to configure Windows as a network router, configure Internet access for a network, configure a Web server, and manage a Windows deployment using Remote Installation Service (RIS). The student will also learn to enable network connectivity between NetWare, Macintosh, and UNIX networks. Strongly recommended: Computer Network Technology 54 and Computer Network Technology 55. 2.5 hours lecture, 1.5 hours laboratory.

Grading Option: OP (May be repeated 1 time)

Transfer: CSU

### CNT 57 IMPLEMENTING WINDOWS ACTIVE DIRECTORY SERVICES 3 UNITS

Students will learn to install, configure, and administer Microsoft Windows Active Directory services. This course focuses on implementing Group Policy and understanding the Group Policy tasks required to centrally manage users and computers. Students

will use Group Policy to configure and manage the user desktop environment, to configure and manage software and implement and manage security settings. Students will install and manage Windows domains and domain controllers through Active Directory. Strongly recommended: Computer Network Technology 54 and Computer Network Technology 55. 2.5 hours lecture, 1.5 hours laboratory.

Grading Option: OP (May be repeated 1 time) Transfer: CSU

#### CNT 62A CISCO NETWORKING ACADEMY CCNA 1&2 4 UNITS

This course covers the first 2 parts in the Cisco Certified Network Associate (CCNA) curriculum, and the objectives of the CCNA 640-821 INTRO certification exam. This course will cover the fundamentals of networking, including the OSI model and industry standards, concepts, network topologies, cabling, network hardware, basic network design, LANs, and network configuration terminology including RIP, EIGRP and IGRP routing protocols, distance vector and link state routing, routing loop issues, routing theory, TCP/IP basics, IP addressing, subnetting, router IOS and configuration, switching concepts, CDP and CSMA-CD. Students will get hands-on experience configuring Cisco routers and switches. Students should have basic computer skills and knowledge of Internet use. Strongly recommended: Computer Information Systems 50. 3 hours lecture; 3 hours laboratory.

Grading Option: OP (May be repeated 1 time) Transfer: CSU

#### CNT 62B CISCO NETWORKING ACADEMY CCNA 3&4 4 UNITS

This course covers the third and fourth parts of the Cisco Certified Network Associate (CCNA) curriculum, and the objectives of the CCNA 640-811 ICND exam. It covers internetwork topology and design, configuring LAN switches, STP, VLANs and trunking, TCP/IP suite, VLSM/CIDR IP addressing and subnetting, advanced routing concepts and configuration for RIP, EIGRP, IGRP, and static routes. Also includes WANs using Frame Relay, ISDN, dial-on-demand routing, PPP, PAP/CHAP authentication, and network address translation. Network security, best practices, router/switch security, passwords, and remote access concepts. This class includes hands-on experience using Cisco routers and switches. Prerequisite: Computer Networking Technology 62A (completed with grade of "C" or higher) or completion of Cisco Networking Academy 1 & 2 at a Cisco Academy. 3 hours lecture, 3 hours laboratory.

Grading Option: OP (May be repeated 1 time) Transfer: CSU

#### CNT 63 CISCO CCNP SEMESTER 5—ADVANCED ROUTING 4 UNITS

This course is the first course in the Cisco Certified Network Professional (CCNP) curriculum. This course will cover the configuration of Cisco routers for operating in large or growing multiprotocol internetworks. This course includes lectures and laboratory exercises that focus primarily on scalable technologies and the Cisco IOS software features that are most useful in building large or growing internetworks. These features include scalable routing protocols, such as OSPF, EIGRP, and BGP, queuing, VLSM, route distribution, route summarization, and NAT. Recommend students take classes in order and only one CCNP course at a time Prerequisite: Computer Network Technology 62 (completed with a grade of "C" or higher) or have a

CCNA certificate. 3 hours lecture, 3 hours laboratory.

Grading Option: OP (May be repeated 1 time) Transfer: CSU

#### CNT 64 CISCO CCNP SEMESTER 6—REMOTE ACCESS 4 UNITS

This is one of the four courses in the Certified Cisco Network Professional (CCNP) curriculum. This course is designed to provide students a combination of both lectures and laboratory experience in current and emerging networking technology. This will prepare them for the Cisco Certified Networking Professional (CCNP) exam: Building Cisco Remote Access Networks. Instruction includes ISDN, DDR, ODR, dialup networking, Cisco 700 series routers, Frame Relay, and AAA. Recommend students take classes in order and only one CCNP course at a time Prerequisite: Computer Network Technology 62 (completed with a grade of "C" or higher) or have a CCNA certificate. 3 hours lecture, 3 hours laboratory.

Grading Option: OP (May be repeated 1 time) Transfer: CSU

#### CNT 65 CISCO CCNP SEMESTER 7—MULTILAYER SWITCHING 4 UNITS

This is one of the four courses in the Certified Cisco Network Professional (CCNP) curriculum. This course is designed to provide students a combination of both lectures and laboratory experience in current and emergent networking technology. This will prepare them for the Cisco Certified Networking Professional (CCNP) exam: Building Cisco Multilayer Switching Networks. Instruction includes both routing and switching concepts, covering both Layer 2 and Layer 3 technologies. This course includes topics in LAN design, media types, VLANs, VLAN Trunking Protocol, ISL, 802.1Q, Spanning Tree, Inter-VLAN routing, Multilayer Switching, Flow Masks, HSRP, Multicasting, IGMP, and CGMP. Recommend students take classes in order and only one CCNP course at a time Prerequisite: Computer Network Technology 62 (completed with a grade of "C" or higher) or have a CCNA certificate. 3 hours lecture, 3 hours laboratory.

Grading Option: OP (May be repeated 1 time) Transfer: CSU

#### CNT 66 CISCO CCNP SEMESTER 8—INTERNETWORKING TROUBLESHOOTING 4 UNITS

This is one of the four courses in the Certified Cisco Network Professional (CCNP) curriculum. This course is designed to provide students a combination of both lectures and laboratory experience in current and emergent networking technology. This will prepare them for the Cisco Certified Networking Professional (CCNP) exam: Internetworking Troubleshooting and Support Exam. This advanced course provides networking professionals with the troubleshooting processes on Cisco Routers and Catalyst Switches. Students are taught how to baseline and troubleshoot an environment using Cisco routers and switches for multi-protocol client hosts and servers connected with: Ethernet, Fast Ethernet, Token Ring, Serial, Frame Relay, and ISDN BRI. Recommend students take courses in order and only one CCNP course at a time Prerequisite: Computer Network Technology 62 (completed with a grade of "C" or higher), or have a CCNA certificate and have completed Computer Network Technology 63, 64 and 65 or industry equivalent experience. 3 hours lecture, 3 hours laboratory.

Grading Option: OP (May be repeated 1 time) Transfer: CSU



# Computer Networking Technology

## CNT 67 WIRELESS NETWORKS AND SECURITY CWNA 2 UNITS

This survey course covers the objectives of the CWNA wireless networking exam with a combination of reading and practical exercises in current and emerging wireless and security technology. This will prepare students to plan, purchase, and install a small to medium sized wireless network and secure it, and meets the needs of small businesses, SOHO (Small Office, Home Office) workers, telecommuters, and home wireless networks. Subjects covered include: wireless network access, modems, routers, firewalls, wardriving, security, compatibility, site survey and network planning, basic network administration, basic network troubleshooting. Strongly recommended: Computer Information Systems 50. 1.5 hours lecture; 1.5 hours laboratory.

Grading Option: OP (May be repeated 1 time) Transfer: CSU

## CNT 68 INTRODUCTION TO COMPUTER FORENSICS 3 UNITS

A survey course in the detection, prevention and investigation of incidents involving computers and digital information, including cyber attacks and the use of computers to investigate crimes. The program will include introduction to computer forensics, incident response, methods of investigation, tracking persons and data, the secure analysis of hard drives and storage mediums, and IT security utilizing court-approved forensic software and tools. Strongly recommended: Computer Information Systems 50. 2.5 hours lecture; 1.5 hours laboratory.

Grading Option: OP (May be repeated 1 time) Transfer: CSU

## CNT 69 NETWORK SECURITY SEC+ 3 UNITS

Following the Sec+ certification objectives, an introduction to the concepts and practices of secure network design and management using desktop and network operating systems, router and switch operating systems, hardware and software Firewall and VPN technology for wired and wireless systems. The program will include authentication methods and devices, protocol analysis and IP network troubleshooting, strategies for identifying and countering vulnerabilities, network medias and topologies in a secure network, intrusion detection and forensic incident response. Strongly recommended: Computer Networking Technology 62B or CCNA certification. 2.5 hours lecture; 1.5 hours laboratory.

Grading Option: OP (May be repeated 1 time) Transfer: CSU

## CNT 99 SPECIAL STUDIES .3-3 UNITS

Special studies in a specialized technical-vocational major. Typically offered for a particular occupation or skill. Courses may be offered under any course title contained in the Catalog, using the number 99. 0.3 - 9 hours. Refer to the Schedule of Classes under Computer Networking Technology 99, Special Studies, for a list of the current offerings. \*Limited to 4 transfer units.

Grading Option: OP Transfer: CSU\*

## REQUEST FOR COURSE SUBSTITUTION-SPECIAL STUDIES (CNT 99)

Students who wish to fulfill a degree or certificate program requirement with a Special Studies (CNT 99) course should complete a Request for Course Substitution or Waiver form. This form (available from the Division Offices and Counseling) should be completed by students in consultation with academic faculty in order for Special Studies to be accepted in fulfillment of the degree and certificate requirements.

## *So Many Voices* of Las Positas College

"I have experienced LPC in many ways! As a member of the first graduating class of 1977, I was one of two students to complete the Computer Maintenance Technician program in two years. My great friend Charles (now deceased) and I challenged each other to finish the program on time. We both landed great technical jobs right after college. Charles went to work for Burroughs Corporation and I went to work at Lawrence Livermore National Laboratory. Later in life, I developed an interest in teaching computer technology and taught an evening computer technology class for several years. I also enrolled in other classes throughout the years (German, guitar, etc.). My wife began pursuing an AA degree, and after acquiring that, she went on to obtain her Masters at CSU. Going full circle, our daughter is enrolled and in her sophomore year at LPC."

—Alan, Livermore

**Degree****AS Computer Science (transfer preparation)****AS Computer Programming****AS Computer Programming for the Web****Certificate****Computer Programming****Computer Programming for the Web****About the Program**

Las Positas College offers Degrees and Certificate programs in Computer Science that prepare students for direct job entry and/or preparation for transfer to a four-year university.

These programs cover a wide range of computer related professions that include programming, systems analysis, data processing, and computer science. Students will learn to direct computer operations by writing detailed instructions in computer languages to solve a variety of problems in business, government, and science. These include information acquisition, processing storage, and transmission, using computers and computer peripherals.

Principal areas of study within computer science include artificial intelligence; computer systems and networks; database systems; human factors; numerical analysis; programming languages; software engineering and theory of computing.

**AS - Computer Science**

This degree prepares students for transfer to four-year institutions for continued study in computer science. The program outlined fulfills typical lower-division requirements at four-year transfer institutions. Some variation in requirements may exist at a particular four-year college or university; therefore, it is essential that the student also refer to the catalog of the prospective transfer institution and consult a counselor.

General Education courses should be selected carefully to meet the requirements of the intended transfer institution. Some transfer institutions require more general education units than are required by the AS degree.

DEGREE CERTIFICATE **AS and Certificate - Computer Programming**

The curriculum in this program is designed to prepare students for employment as computer programming professionals. Programming professionals in this field have a variety of titles, such as Programmer, Programmer/Analyst, Business Analyst, Systems Analyst, Computer Scientist, Information Technologist, Information Systems Professional, Information Technology Professional, Programming Professional, Software Developer, or Software Engineer. Although successful programming careers are possible without a degree, the professional with a degree will have a marked advantage.

**AS and Certificate - Computer Programming for the Web**

The curriculum in this program is designed to prepare students for employment as computer programming professionals for the web. Programming professionals in this field have a variety of titles, such as Programmer, Programmer/Analyst, Business Analyst, Systems Analyst, Computer Scientist, Information Technologist, Information Systems Professional, Information Technology Professional, Programming Professional, Software Developer, or Software Engineer. Although successful programming careers are possible without a degree, the professional with a degree will have a marked advantage.



# Computer Science

## AS - Computer Science (TRANSFER PREPARATION)

### Freshman Year

Computer Science 1 (Computing Fundamentals I) .....	5
Computer Science 2 (Computing Fundamentals II) .....	5
Computer Science 41 (Introduction to UNIX).....	2
Mathematics 1 (Analytical Geometry and Calculus I) .....	5
Mathematics 2 (Analytical Geometry and Calculus II) .....	5
General Education Courses	

### Sophomore Year

Computer Science 20 (Advanced Programming Methods with Data Structures Using C++) .....	4
Computer Science 21 (Computer Organization and Assembly Language Programming) .....	4
Mathematics 7 (Elementary Linear Algebra with Computer Applications) or Mathematics 41 (Statistics for Business Majors) or Mathematics 42A (Introduction to Probability and Statistics) or Mathematics 44 (Statistics and Probability) .....	3-5
Mathematics 10 (Discrete Mathematics).....	4
General Education Courses	
<b>Total units required .....</b>	<b>60</b>



## AS - Computer Programming

### Freshman Year

Computer Science 1 (Computing Fundamentals I) .....	5
English 1A (Critical Reading and Composition).....	3
Computer Information Systems 60 (Systems Analysis and Design). 3	
<i>Select 1 course from the following:</i>	
Computer Science 2 (Computing Fundamentals II)	
Computer Science 21 (Assembly Language)	
Computer Science 30 (C++ Programming)	
Computer Science 31 (Java Programming)	
Computer Science 32 (Visual Basic Programming) .....	4-5
Computer Science 43 (Professional Communications).....	4
General Education Courses:	

### Sophomore Year

Computer Science 45 (Database Programming).....	3
<i>Select 1 course from the following:</i>	
Computer Science 20 (Data Structures)	
Computer Science 33 (Advanced C++ Programming)	
Computer Science 34 (Advanced Java Programming)	
Computer Science 35 (Advanced Visual Basic Programming)	
Computer Science 36 (Windows and MFC Programming) .....	4
<i>Select 1 course from the following:</i>	
Computer Science 2 (Computing Fundamentals II)	
Computer Science 21 (Assembly Language)	
Computer Science 30 (C++ Programming)	
Computer Science 31 (Java Programming)	
Computer Science 32 (Visual Basic Programming) .....	4
Computer Science 47 (Capstone Project) .....	3
General Education Courses	
<b>Total units required .....</b>	<b>60</b>

## AS - Computer Programming for the Web

### Freshman Year

Computer Science 1 (Computing Fundamentals I) .....	5
Computer Science 43 (Professional Communications).....	4
English 1A (Critical Reading and Composition).....	3
Computer Science 31 (Java Programming).....	4
Computer Science 37 (Web Programming).....	4
Visual Communications 53 (Photoshop I for Design) .....	2
General Education Courses	

### Sophomore Year

Computer Information Systems 60 (Systems Analysis and Design). 3	
Select 1 course from the following:	
Computer Science 38 (Perl and CGI)	
Computer Science 39 (Java Servlets and JSP)	
Computer Science 40 (VBScript, ASP, ActiveX).....	2
Computer Science 44 (Advanced Web Programming).....	4
Computer Science 45 (Database Programming) .....	4
Computer Science 47 (Capstone Project) .....	3
General Education Courses	
<b>Total units required .....</b>	<b>60</b>

## Certificate of Achievement Computer Programming

### Programming Fundamentals:

Computer Science 1 (Computing Fundamentals I).....	5
<i>Intermediate Courses in two Programming Languages—Select 2:</i>	
Computer Science 21 (Assembly Language)	
Computer Science 30 (C++ Programming)	
Computer Science 31 (Java Programming)	
Computer Science 32 (Visual Basic Programming).....	8

### Advanced Course in any Programming Languages—Select 1:

Computer Science 20 (Data Structures)	
Computer Science 33 (Advanced C++ Programming)	
Computer Science 34 (Advanced Java Programming)	
Computer Science 35 (Advanced Visual Basic Programming)	
Computer Science 36 (Windows and MFC Programming) .....	4

### Professional Competence:

Computer Information Systems 60 (Systems Analysis and Design). 3	
Computer Science 43 (Professional Communications).....	4
Computer Science 45 (Database Programming) .....	4
Computer Science 47 (Capstone Project) .....	3
<b>Total Units .....</b>	<b>31</b>

## Certificate of Achievement Computer Programming for the Web

### Programming Fundamentals:

Computer Science 1 (Computing Fundamentals I) .....	5
Computer Science 31 (Java Programming).....	4
Scripting Languages/Imaging ( <i>Select 1</i> ):	
Computer Science 38 (Perl and CGI)	
Computer Science 39 (Java Servlets and JSP)	
Computer Science 40 (VBScript, ASP, Active X).....	2

### Professional Competence:

Visual Communications 53 (Photoshop I for Design) .....	2
Computer Science 37 (Web Programming).....	4
Computer Science 43 (Professional Communications).....	4
Computer Science 44 (Advanced Web Programming).....	4
Computer Information Systems 60 (Systems Analysis and Design).. 3	
Computer Science 45 (Database Programming) .....	4
Computer Science 47 (Capstone Project) .....	3
<b>Total Units .....</b>	<b>35</b>



# Computer Science

## Computer Science (CS)

### CS 1 COMPUTING FUNDAMENTALS I 5 UNITS

Computing systems; problem-solving concepts and algorithms; computer logic and architecture; number systems; program design, development, style, testing and documentation; algorithms; elementary data structures; functions and control statements; operating systems; arrays. Programming language: C++. Prerequisite: Mathematics 55 (completed with a grade of "C" or higher). 4 hours lecture, 3 hours laboratory. (CAN CSCI 22)

Grading Option: OP

Transfer: CSU, UC

### CS 2 COMPUTING FUNDAMENTALS II 5 UNITS

Data abstraction and structures; pointers; stacks; queues; recursive algorithms, searching and sorting; object-oriented programming, encapsulation, inheritance and polymorphism; file I/O. Programming language: C++. Prerequisite: Computer Science 1 (completed with a grade of "C" or higher). 4 hours lecture, 3 hours laboratory.

Grading Option: OP

Transfer: CSU, UC

### CS 7 INTRODUCTION TO COMPUTER PROGRAMMING CONCEPTS 3 UNITS

An introductory course in computer programming for nonscience majors and for students requiring additional preparation before taking Computer Science 1. Hardware, system software basics, the history of computing, computer ethics, basic computer operations, number systems, design of algorithms, pseudocoding, flowcharting, and programming constructs such as variables, expressions, input/output, decision-making, loops. 2.5 hours lecture, 1.5 hours laboratory.

Grading Option: OP

Transfer: CSU, UC

### CS 20 ADVANCED PROGRAMMING METHODS WITH DATA STRUCTURES USING C++ 4 UNITS

Design and implementation of larger programs in C++ using software engineering principles. Emphasis on definition and use of data structures. Includes specification of abstract data types, recursion, dynamic memory allocation, stacks, linked lists, queues, binary trees, random access files, and use of hash codes. Prerequisite: Computer Science 2 (completed with a grade of "C" or higher). 3 hours lecture, 3 hours laboratory.

Grading Option: OP

Transfer: CSU, UC

### CS 21 COMPUTER ORGANIZATION AND ASSEMBLY LANGUAGE PROGRAMMING 4 UNITS

Basics of machine architecture, machine language, assembly language, operating system and higher level language interface. Data representation, instruction representation and execution, addressing techniques and use of macros. Space and time efficiency issues. Input/output including video modes. Procedures including parameter passing and linkage to higher level languages. Prerequisite: Computer Science 1 (completed with a grade of "C" or higher). 3 hours lecture, 3 hours laboratory. (CAN CSCI 10)

Grading Option: OP

Transfer: CSU, UC

### CS 30 C++ PROGRAMMING 4 UNITS

Applications programming in C++ for the student already familiar

with the concepts of programming. The following concepts are introduced: Object-oriented programming, encapsulation, inheritance and polymorphism; introduction to data abstraction and structures; pointer; file I/O. Prerequisite: Computer Science 1 (completed with a grade of "C" or higher). 3 hours lecture, 3 hours laboratory. Note: This course will not be offered at this time. Students are advised to take CS 1 instead

Grading Option: OP

Transfer: CSU, UC

### CS 31 JAVA PROGRAMMING 4 UNITS

Applications programming in Java for students already familiar with the concepts of programming. Topics will include in Applets and Swing, multimedia, presenting data files over the web, elementary data structures (queues, linked list, stacks) and vectors, binary searching, sorting, JDBC (Java Data Base Connectivity), Remote Method Invocation (RMI), and Java Beans. Prerequisites: Computer Science 1 (completed with a grade of "C" or higher). 3 hours lecture, 3 hours laboratory.

Grading Option: OP

Transfer: CSU, UC

### CS 32 VISUAL BASIC PROGRAMMING 4 UNITS

Applications programming in Visual Basic to create Windows oriented applications for student already familiar with the concepts of programming. Emphasis on algorithms, I/O, multimedia capabilities, data file I/O, loops, decision-making, string processing, functions, control objects (such as sliders, combination boxes, radio buttons), ActiveX controls, Object Linking and Embedding (OLE), use of the grammar and syntax for a foundation for VBScript and Visual Basic for Applications. Prerequisite: Computer Science 1 (completed with a grade of "C" or higher). 3 hours lecture, 3 hours laboratory.

Grading Option: OP

Transfer: CSU,UC

### CS 33 ADVANCED C++ PROGRAMMING 4 UNITS

This is an advanced course in C++ programming. Advanced topics will be covered which will build on the skills acquired in earlier courses. Topics include advanced OOP, class libraries, STL, templates, Input and Output, graphics, files, multimedia, database, prototyping, interface design. Prerequisite: Computer Science 30 or Computer Science 2 (completed with a grade of "C" or higher). 3 hours lecture, 3 hours laboratory. Note: This course will not be offered at this time. Students are advised to take CS 2 instead.

Grading Option: OP

Transfer: CSU,UC

### CS 34 ADVANCED JAVA PROGRAMMING 4 UNITS

This is an advanced course in Java programming. Contents include advanced topics that will build on the skills acquired in earlier courses. It will cover advanced topics in Java: design and implementation of graphical user interfaces, exception handling, multithreading, database connectivity (JDBC), Servlets, networking, data structures, utility packages, collections, and JavaBeans. Prerequisite: Computer Science 31 (completed with a grade of "C" or higher). 3 hours lecture, 3 hours laboratory.

Grading Option: OP

Transfer: CSU,UC



**CS 35 ADVANCED VISUAL BASIC PROGRAMMING 4 UNITS**

This is an advanced course in Visual Basic programming. The contents will build on the skills acquired in earlier courses. Topics include advanced OOP, class libraries, Input and Output, graphics, files, multimedia, database, prototyping, interface design. Prerequisite: Computer Science 32 (completed with a grade of "C" or higher). 3 hours lecture, 3 hours laboratory.

Grading Option: OP

Transfer: CSU,UC

**CS 36 WINDOWS AND MFC PROGRAMMING 4 UNITS**

This is an advanced course in Windows programming using C++. Teaches Applied Windows Programming in C++. This course presents a comprehensive introduction to the Windows C++ programming and its role in the Internet and database programming. A variety of OOP topics covered will include building basic Windows applications including menus, dialog boxes, main window, buttons, MFC Wizards, ODBC, OLE-DB/ADO, DHTML, and ActiveX. Prerequisite: Computer Science 30 or Computer Science 2 (completed with a grade of "C" or higher). 3 hours lecture, 3 hours laboratory.

Grading Option: OP

Transfer: CSU

**CS 37 WEB PROGRAMMING 4 UNITS**

The objective of this course is to develop skills and understanding in designing Web Pages using "static" and "dynamic" HTML tags for page layouts, hypertext links, site navigation, multimedia presentations, and audiovisual special effects. To enhanced web site appearance and functionality, JavaScript will also be introduced. Participants will learn to use various web programming tools such as HTML editors, graphic image editors, graphic animators, and image map makers. Participants will also learn proper web design principles and develop web pages based upon current mainstream browser capabilities and limitations. Prerequisite: Computer Science 1 (completed with a grade of "C" or higher). 3 hours lecture, 3 hours laboratory.

Grading Option: OP

Transfer: CSU

**CS 38 PERL AND CGI PROGRAMMING 2 UNITS**

Introductory course in Programming Evaluation and Reporting Language (PERL) and its use in elementary Common Gateway Interface on a UNIX server. Topics include basic PERL grammar and syntax, creating CGI scripts and HTML calls. Prerequisite: Computer Science 1 (completed with a grade of "C" or higher). Strongly recommended: Computer Science 41, Computer Science 37. 1.5 hours lecture, 1.5 hours laboratory.

Grading Option: OP

Transfer: CSU, UC

**CS 39 JAVA SERVLETS AND JSP 2 UNITS**

Introduction to basic Java Servlet capabilities as an alternative to Common Gateway Interface (CGI) to create interactive web pages including secure access to the web site, database interactivity, generate dynamic web pages and maintain client session data (i.e., cookies). Prerequisites: Computer Science 31 and Computer Science 37 (both completed with a grade of "C" or higher). 1.5 hours lecture, 1.5 hours laboratory.

Grading Option: OP

Transfer: CSU

**CS 40 VBSCRIPT, ASP, ACTIVE X 2 UNITS**

Introductory coding of ActiveX Controls, VBScript and ASP capabilities in web applications designed to run primarily under Microsoft Internet Explorer. Demonstration and use of user interface ActiveX objects, the VBScript that allows these controls to operate and the use of ASP to access database data over the web. Designed as an introductory course for Microsoft Internet Explorer web page authors with a moderate background in programming to develop user controlled event driven applications with the potential capability to access data over the web. Prerequisite: Computer Science 32 (completed with a grade of "C" or higher). 1.5 hours lecture, 1.5 hours laboratory.

Grading Option: OP

Transfer: CSU

**CS 41 INTRODUCTION TO UNIX/LINUX 2 UNITS**

Introduction to the UNIX/Linux operating system. Includes components of a UNIX/Linux system, getting started on a UNIX/Linux system, working with directories and files, using redirection and pipes, user to user communication, shell commands, and text manipulation including the vi editor. 1.5 hours lecture and 1.5 hours laboratory.

Grading Option: OP

Transfer: CSU

**CS 42 UNIX/LINUX ENVIRONMENT AND SYSTEM ADMINISTRATION 2 UNITS**

Continuation of Computer Science 41. Introduction to UNIX/Linux shell programming, system administration, and security including how to install and configure Linux. Prerequisite: Computer Science 41 (completed with a grade of "C" or higher). Strongly recommended: Computer Science 1. 1.5 hours lecture, 1.5 hours laboratory.

Grading Option: OP

Transfer: CSU

**CS 43 PROFESSIONAL COMMUNICATIONS 4 UNITS**

This course is designed to help students develop and refine the written and oral communication skills necessary to communicate effectively in a business environment. This will be accomplished through the planning, composing, and evaluating of written communication; report writing; and oral presentations. Additional focus will be placed on developing interpersonal skills, team participation skills, and professionalism. Students who have completed or are enrolled in Business 43, Computer Information Systems 43, Computer Networking Technology 43, English 43, or Speech 43 may not receive credit. Strongly recommended: Eligibility for English 1A. 4 hours.

Grading Option: OP

Transfer: CSU

**CS 44 ADVANCED WEB PROGRAMMING 4 UNITS**

The objective of this course is to develop skills and understanding in designing eCommerce websites. This is a programming course that goes beyond mere "formatting" of web pages found with HyperText Markup Language (HTML). This course extends web page "functionality" with interactivity, multimedia, security, and database capability using prior knowledge of a scripting language (HTML, JavaScript, etc.). The participant will learn about database sorting and filtering capabilities of eXtensible Markup language (XML) that identifies data fields (e.g., <automfg> to refer to auto manufacturers).

# Computer Science

The participant will also learn eXtensible Stylesheet Language (XSL) – which specifies the presentation of a class of XML documents by describing how an instance of the class is transformed into an XML document that uses the formatting vocabulary. SXL is based on and extends the Document Style Semantics and Specification Language (DSSSL) and the Cascading Style Sheet, level 1 (CSS1) standards. Additional topics include good design principles, examples of scripts (JavaScript, ASP, ActiveX, VBScript, Servlets, JSP, Perl or CGI), discussion of security (SET, SSL, etc.), and examples of “good, bad, ugly” eCommerce websites. Prerequisite: Computer Science 37 (completed with a grade of “C” or higher). 3 hours lecture, 3 hours laboratory.

Grading Option: OP

Transfer: CSU

## CS 45 DATABASE PROGRAMMING 4 UNITS

This is a programming course that goes beyond mere “desktop” database management. Participants explore dynamic applications that interact with a database using client-side scripts, server-side scripts, and compiled server programs. Learn database concepts, relational database principles, and Structured Query Language (SQL). Prerequisite: Computer Science 2 or Computer Science 30 or Computer Science 31 or Computer Science 32 (completed with a grade of “C” or higher). 3 hours lecture, 3 hours laboratory.

Grading Option: OP

Transfer: CSU

## CS 47 CAPSTONE PROJECT 3 UNITS

This is the last course in the Computer Programming (CP) degree or certificate sequence. Students will work in teams and write a client-driven work-like project requiring planning, writing, execution and presentation. The project will require the development of a large application selected by each team. According to client specifications, each team will define their project and break it down into parts. Each member of the team will write one of the parts. The team will prepare a written and oral report to present their project. This course will require the use of all of the programming and systems analysis skills developed in previous courses and will serve as a means of demonstration of mastery of program competencies. Prerequisites: Computer Information Systems 60 and Computer Science 43 and either Computer Science 20 or Computer Science 33 or Computer Science 34 or Computer Science 35 or Computer Science 36 or Computer Science 44 (completed with a grade of “C” or higher). Strongly recommended: Computer Science 45. 1 hour lecture, 6 hours laboratory.

Grading Option: OP

Transfer: CSU

## Contemporary Studies

CONTEMPORARY STUDIES 49

.5-4 UNITS

Content developed around selected areas of contemporary issues and thought. May be offered through any non technical-vocational course title contained in the Catalog by using the number 49. The same course content may not be offered more than 2 semesters under this course number. 1-6 hours. \*Transfer unit limitations, see page 63 \*\*Limited to 2.5 transfer units

Grading Option: OP

Transfer: CSU\*\*, UC\*

## Continuing Education Studies

### About the Program

Continuing education courses include both full-term and short-term courses in a wide variety of course patterns, field studies, seminars, workshops, and other educational activities that will meet the educational needs of the College community. May be offered under any course title contained in the Catalog, using the numbers 150 through 199. Continuing Education studies may be repeated; however, graduation credit is limited to 6 units. 1-12 hours.

## Creative Arts (CRAR)

CRAR 10 PERFORMING AND VISUAL ARTS

3 UNITS

Interdisciplinary approach to art, music, and drama which may also include film and opera. Critical analysis and response through observing, analyzing, reporting, and discussing local performances and exhibits attended. 3 hours.

Grading Option: OP

Transfer: CSU, UC

SEE ALSO: **Humanities**

## Dance

### About the Program

Dance classes at Las Positas are offered in a state-of-the-art dance studio within the newly constructed Physical Education Complex. From Introduction to Dance, Ballet, and Jazz Dance to Salsa and Ballroom, the Physical Education offerings provide learning opportunities to the novice and experienced dancer alike (see page 184 this Catalog, and current Class Schedule). The Performing Arts area offers a highly popular class in Dance Production/Choreography that gives students a rare opportunity to experience being a performer, choreographer, costume and program designer. The class culminates in a series of three public dance concerts in the College Theater. Dance performances are enthusiastically supported by the College and local communities.

SEE ALSO **Physical Education Activities**



### Dance (DANC)

**DANC 1 DANCE TECHNIQUE .5 UNIT**

Movement skills, rhythmic structure of dance, qualities of movement, special design and appreciation of dance. Emphasis on creation of individual and group compositions. Includes Afro-American dance, ballet, disco/ballroom dance, folk dance, jazz dance, modern dance, square dance, and tap dance (see Physical Education 1). 2 hours.

Grading Option: OP (May be repeated 3 times) Transfer: CSU, UC

**DANC 5 DANCE WORKSHOP 1.5 UNITS**

Dance techniques, choreographic principles and stage presentation. Includes classical ballet, modern ballet, modern dance, polyrhythmic jazz, improvisation, Broadway musical, ethnic and folk dance. 1 hour lecture, 2 hours laboratory.

Grading Option: OP (May be repeated 3 times) Transfer: CSU, UC

**DANC 6 DANCE PRODUCTION: CHOREOGRAPHY 1-3 UNITS**

Choreographic principles of dance composition and stage presentation. Participation in dance production with the creation of new works directed toward large groups, trios, duets and solos, possibly leading to scheduled performances. Minimal participation in technical and business aspects of production. 3-9 hours laboratory.

Grading Option: OP (May be repeated 3 times) Transfer: CSU, UC



# Design Technology

## Design Technology (DSNT)

Beginning with the 2007-08 academic year, Las Positas College will no longer offer classes or award degrees or certificates in design technology. Students seeking information about classes offered in the 2006-07 academic year, should see the class schedule or contact the Dean, Dr. Neal Ely, 925.424.1182.

### DSNT 51A TECHNICAL ILLUSTRATION I 3 UNITS

Development of skills and knowledge involved in constructing three-dimensional drawings. Shading techniques and rendering in black and white and pastels. Application and consideration of materials and equipment pertinent to technical illustration. Inking and lettering devices. Prerequisite: Drafting Technology 50 (completed with a grade of "C" or higher) or equivalent. 1.5 hours lecture, 4.5 hours laboratory.

Grading Option: GR

Transfer: CSU

### DSNT 51B TECHNICAL ILLUSTRATION II 3 UNITS

Development of skills and knowledge involved in axonometric projection. Applications and consideration of materials and equipment pertinent to technical illustration. Rendering conceptual drawings, specification of type styles and human factors. Prerequisite: Drafting Technology 51A (completed with a grade of "C" or higher). 1.5 hours lecture, 4.5 hours laboratory.

Grading Option: GR

Transfer: CSU

### DSNT 52 TECHNICAL GRAPHICS 3 UNITS

A general approach to graphical communication and technical problem solving using sketches, traditional tools, and Computer-Aided Drafting (CAD). Introduction to the concepts and skills needed to graphically represent technical design data. Emphasis is on the development of visualization techniques and understanding design process as the foundation of the Design Technology sequence. 1.5 hours lecture, 4.5 hours laboratory.

Grading Option: OP

Transfer: CSU

### DSNT 54 MANUFACTURING PROCESSES 2 UNITS

Overview of machine shop procedure, welding, and general manufacturing processes, practice in the use of hand tools, basic machine tools, and welding equipment; understanding the relationship between manufacturing processes and design. 1 hour lecture, 3 hours laboratory.

Grading Option: GR

Transfer: CSU

### DSNT 55 BLUE PRINT READING AND SKETCHING 2 UNITS

Orthographic projection (or equivalent), principles of sectioning, functional drawing practices, dimensioning; sketching, using orthographic and isometric principles; familiarity with specifications; reading of blueprints; interpretation of various symbols commonly used; interpretation of materials lists and bills of materials; making of takeoffs. 1 hour lecture, 3 hours laboratory.

Grading Option: OP

Transfer: CSU

### DSNT 57 ELECTRICAL SYSTEMS 2 UNITS

Introduction to electrical systems, components for electrical systems and circuits, basic electrical theorem, magnetism, and electrostatics for application to design process. Strongly recommended: Mathematics 36 or Mathematics 38. 1 hour lecture, 3 hours laboratory.

Grading Option: GR

Transfer: CSU

### DSNT 61 ELECTRONIC DESIGN 3 UNITS

Preparation of electrical and electronic drawings using standard graphical symbols and annotation currently utilized in industry, including wiring, cable, interconnecting, logic, and schematic diagrams. Introduction to printed circuit board layout and design using CAD and surface mounting technology. Prerequisite: Design Technology 62A (May be taken concurrently). 1.5 hours lecture, 4.5 hours laboratory.

Grading Option: GR

Transfer: CSU

### DSNT 62A COMPUTER-AIDED DRAFTING (CAD) 3 UNITS

Introduction to the basic understanding of Computer-Aided Drafting, with emphasis on user terminology and exposure to various types of CAD systems, hardware, and associated software. How to set up drawings, create geometric shapes and constructions to form multiviews, and use special editing operations that increase productivity. Prerequisite: Design Technology 52 (May be taken concurrently). 1.5 hours lecture, 4.5 hours laboratory.

Grading Option: OP (May be repeated 1 time)

Transfer: CSU

### DSNT 62B COMPUTER-AIDED DESIGN (CAD) 3 UNITS

Continuation of the knowledge and skills learned in Design Technology 62A, focusing on the design processes to complete and present drawings and accompanying documentation effectively using CAD; dimensioning, tolerancing, and crosshatching to facilitate creation of multiview layouts, managing symbol libraries to streamline pictorial assemblies, and plotting/presentation techniques to captivate. Prerequisite: Design Technology 62A (completed with a grade of "C" or higher). 1.5 hours lecture, 4.5 hours laboratory.

Grading Option: GR (May be repeated 1 time)

Transfer: CSU

### DSNT 62C THREE-DIMENSIONAL MODELING 3 UNITS

This course develops skills in visualizing and drawing three-dimensional shapes for modeling, testing, analysis, manufacturing, assembly, and marketing, as well as form the basis of computer animations and virtual worlds. A variety of skills and techniques for drawing, designing, editing, and display of 3-D wireframes, surfaces, and solids will be studied. Prerequisite: Design Technology 62B (completed with a grade of "C" or higher). 1.5 hours lecture, 4.5 hours laboratory.

Grading Option: GR (May be repeated 1 time)

Transfer: CSU

**DSNT 65 ELECTRONIC DESIGN DRAFTING 3 UNITS**

Preparation of logic diagrams with the use of logic symbols. Introduction to printed circuit design. Analog and digital printed circuit layout and taping techniques. Printed circuit documentation and parts list. Strongly Recommended: Drafting Technology 61 (or equivalent) or Engineering 20 (or equivalent). 1.5 hours lecture, 4.5 hours laboratory.

Grading Option: GR

Transfer: CSU

**DSNT 66A MECHANICAL DESIGN CONCEPTS 3 UNITS**

Continued refinement of the principles of Mechanical Design Technology through original design and analysis, application of descriptive geometry, auxiliary views and revolutions to mechanical detail drawings, and geometric tolerancing applied to complete design assemblies. Prerequisite: Design Technology 52 (completed with a grade of "C" or higher). 1.5 hours lecture, 4.5 hours laboratory.

Grading Option: GR

Transfer: CSU

**DSNT 66B ELECTRO-MECHANICAL DESIGN 3 UNITS**

Continuation of mechanical design principles with the addition of electronic/electrical concepts. Part design with concentration on the flow and interaction between manufacturing and design, documentation, revision systems, Engineering change orders and requests, complex drawing and notation of entire systems. Also includes résumé, portfolio, and interview preparation, career opportunities, skills and attitudes necessary to succeed in industry. Prerequisites: Design Technology 61 and 66A (both completed with a grade of "C" or higher). 1.5 hours lecture, 4.5 hours laboratory.

Grading Option: GR

Transfer: CSU

**DSNT 69 STRUCTURAL DESIGN CONCEPTS 4 UNITS**

Introduction to technical statics, including resolution of forces and basic coplanar force systems. Emphasis on graphical analysis. Prerequisite: Mathematics 36 or Mathematics 38 (completed with a grade of "C" or higher). 3 hours lecture, 3 hours laboratory.

Grading Option: GR

Transfer: CSU

**DSNT 70 MANUFACTURING AND DESIGN USING PRO/ENGINEER 3 UNITS**

Fundamentals of computer-aided design and drafting using Pro/ENGINEER software, a 3-D solid modeler. Application of operating system, software, hardware, and peripherals in creating manufacturing models. Prerequisite: Engineering 20 or Design Technology 52 (completed with a grade of "C" or higher) or equivalent. Strongly recommended: Design Technology 66A. 2 hours lecture, 3 hours laboratory.

Grading Option: GR (May be repeated 2 times)

Transfer: CSU

**DSNT 71 ASSEMBLY AND DESIGN USING PRO/ENGINEER 3 UNITS**

Continuation class in a series for developing fundamentals of computer-aided design using Pro/ENGINEER software, a 3-D solid modeler. Application of the Pro/ENGINEER CAD System in assembling manufacturing models and creating drawings. Prerequisite: Design Technology 70 (completed with a grade of "C" or higher). Strongly recommended: Design Technology 66B. 2 hours lecture, 3 hours laboratory.

Grading Option: GR (May be repeated 2 times)

Transfer: CSU

**DSNT 75 DESIGN MATERIALS TECHNOLOGY 2 UNITS**

Introduction to physical and mechanical characteristics and behavior of materials used in design and engineering applications. Emphasis will be on material processing of metals, ceramics, and polymers; basics of metallurgy, tension testing, hardness testing, and heat treatment. Strongly recommended: Chemistry 31. 1 hour lecture, 3 hours laboratory.

Grading Option: GR

Transfer: CSU

**DSNT 76 GRAPHICAL KINEMATICS 2 UNITS**

A study of elementary mechanisms with emphasis on the fundamentals of displacement, velocity and acceleration, and on the application of these to the analysis and design of mechanisms such as linkages, slides, cams, cranks, gears, and gear-trains. Strongly recommended: Engineering 20 or Design Technology 52 and Mathematics 36 or Mathematics 38. 1 hour lecture, 3 hours laboratory.

Grading Option: GR

Transfer: CSU





# Early Childhood Development

- ✓ DEGREE
- ✓ CERTIFICATE

## Degree

### AA – Early Childhood Development

## Certificate

### Associate Teacher Certificate

### Basic Teacher Certificate

### Family Childcare

## About the Program

This program leads to an Associate in Arts Degree in Early Childhood Development and three Certificates: Early Childhood Development (Basic Teacher), Early Childhood Development (Associate Teacher) and Family Child Care. The degree provides a broad background in early childhood education. Students are trained to become teachers of young children in a variety of preschool and educational settings. The care and education of young children demands a high level of personal and professional integrity and enthusiasm.

In addition to preparing the student to work in early care and education programs, students are also prepared for and strongly encouraged to transfer to four-year programs to pursue a Bachelor's of Arts degree. Many early childhood development units are transferable to four-year institutions for elective credit, but a counselor should be consulted for specific transfer information.

The Early Childhood Development major builds a foundation of understanding and skills for those interested in providing services to children and families. The program is relevant for early childhood and elementary school teachers, school and educational program directors, recreation leaders, those entering the field of mental health preparing to work with families and children, and parents.

Completion of the certificate dovetails with both the California Child Development Permit as well as the requirements of Community Care Licensing for Title 22 programs.

## AA – Early Childhood Development

*This degree requires 29 units of work in ECD and includes theoretical courses, hands-on application classes, and a supervised work experience (practicum) opportunity.*

- Graduates are qualified as Teachers.
- Graduates may transfer to a four-year institution.
- With eight additional units in administration and supervision, graduates are qualified to be at the "Site Supervisor" level on the Child Development Permit.

## Basic Teacher Certificate

This program requires 25 units of work in ECD and will include those courses considered to be "core" as well as additional classes focusing on the principles of child development and hands-on application courses. The program also requires a supervised work experience class.

- Graduates with this certificate will be qualified as teachers in Title 22 centers and preschools under Community Care Licensing guidelines.
- Permit holders need 16 additional units of General Education classes in four specific disciplines to be at the Child Development Permit "Associate Teacher" level.

## Associate Teacher Certificate

- This program requires 13 units of course work. The ECD "core" courses are included.
- Graduates holding this certificate are qualified as teachers in schools and centers operating under the Title 22 regulations of Community Care Licensing.
- Graduates are also qualified at the Child Development Permit "Associate Teacher" level.

## Family Child Care Certificate

- This program requires 20-22 units of work in ECD.
- The "core" courses for the ECD program are required as this provides a good foundation in child development and appropriate curricula.
- Nine additional units are specifically tailored for the Family Child Care Provider. Graduates will have the information and techniques to enable them to operate a business from their home.



**AA – Early Childhood Development**

**Freshman Year**

Early Childhood Development 50 (Early Childhood Education and Care) ..... 3  
 Early Childhood Development 51 (Prenatal to Early Childhood) ..... 3  
 Early Childhood Development 62 (Child, Family and Community).. 3  
 Early Childhood Development 63 (Early Childhood Curriculum)..... 4  
 Electives\* ..... 0-4  
 General Education Courses

**Sophomore Year**

Early Childhood Development 55 (Professional Care-Giver)..... 2  
 Early Childhood Development 60 (Teaching Special Needs Infants and Preschoolers)..... 3  
 Early Childhood Development 90 (Supervised Experience)..... 4  
 Early Childhood Development 95\*\* (Work Experience)..... 2-3  
 Early Childhood Development 96+ (Work Experience Seminar) ..... 1  
 Electives\* ..... 0-4  
 General Education Courses  
**Total units required ..... 60**

**\*Electives**

Select from the following for a minimum of 4 units:

- ECD 15 (Problems of Childhood)
- ECD 52 (Childhood and Adolescence)
- ECD 53 (Emergency and Preventive Health for Infants and Children)\*\*
- ECD 61 (Literature for the Young Child)
- ECD 64 (Play: Materials and Environments)
- ECD 65 (Administration)
- ECD 67 (Infant and Toddler Development and Care Giving)
- ECD 68 (Program Supervision)
- ECD 78 (Language Development)
- ECD 79 (Anti-Bias Curriculum for Young Children)
- ECD 80 (Advanced Topics in Childhood Development)
- ECD 83 (Adult Supervision)

\*\*ECD 53 (Emergency and Preventive Health for Infants and Children) may be substituted for 1 unit of ECD 95 (Work Experience) requirement.

+ See page 211 for enrollment requirements

**Certificate of Achievement  
 Early Childhood Development—  
 Basic Teacher Certificate**

Early Childhood Development 50 (Early Childhood Education and Care) ..... 3  
 Early Childhood Development 51 (Prenatal to Early Childhood) ..... 3  
 Early Childhood Development 55 (Professional Care-Giver)..... 2  
 Early Childhood Development 60 (Teaching Special Needs Infants and Preschoolers)..... 3  
 Early Childhood Development 62 (Child, Family and Community).. 3  
 Early Childhood Development 63 (Early Childhood Curriculum)..... 4  
 Early Childhood Development 90 (Supervised Experience)..... 4  
 Early Childhood Development 95\*\* (Work Experience)..... 2  
 Early Childhood Development 96+ (Work Experience Seminar) ..... 1  
**Total units required ..... 25**

+See page 211 for enrollment requirements.

\*\*Early Childhood Development 53 (Emergency and Preventive Health for Infants and Children) may be substituted for 1 unit of Early Childhood Development 95 (Work Experience) requirement.



**Certificate of Completion  
 Early Childhood Development—  
 Associate Teacher Certificate**

Early Childhood Development 50 (Early Childhood Education and Care) ..... 3  
 Early Childhood Development 51 (Prenatal to Early Childhood) ..... 3  
 Early Childhood Development 62 (Child, Family and Community).. 3  
 Early Childhood Development 63 (Early Childhood Curriculum)..... 4  
**Total Units Required..... 13**

# Early Childhood Development

## Certificate of Achievement Early Childhood Development— Family Child Care

Early Childhood Development 50 (Early Childhood Education and Care) .....	3
Early Childhood Development 51 (Prenatal to Early Childhood) .....	3
Early Childhood Development 62 (Child, Family and Community)..	3
Early Childhood Development 70 (Family Child Care Profession) ...	2
Early Childhood Development 95 (Work Experience).....	1-3
Early Childhood Development 96 (Work Experience Seminar).....	1
Electives* .....	7
<b>Total units required .....</b>	<b>20-22</b>

### \*Electives

Select from the following for a minimum of 7 units:

- Early Childhood Development 15 (Problems of Childhood)
- Early Childhood Development 60 ( Teaching Special Needs Infants and Toddlers)
- Early Childhood Development 71 (Creative Programming for Family Child Care)
- Early Childhood Development 72 (CORE (Caring, Observing, Responding, Extending) Curriculum for Family Child Care)
- Early Childhood Development 73 (Family Child Care Provider Advanced Enrichment Course)
- Early Childhood Development 74 (Discipline Strategies)
- Early Childhood Development 75 (Orientation to School Age Child Care Programs)



## Early Childhood Development (ECD)

*These courses are designed to satisfy the recommendations of the Department of Social Services, Title 22, regarding child care personnel and the higher standards required by the Commission on Teacher Credentialing and Licensing for the Child Development Permit, Title 22.*

- ECD 15 PROBLEMS OF CHILDHOOD 3 UNITS**  
An exploration of the emotional, cognitive, developmental, and behavioral problems of childhood and adolescence. Topics include: common stresses and problems of adjustment; the effects of stress, abuse, and traumas on development; mental retardation, autism and other developmental disabilities; normal and abnormal problems of attention, conduct, mood anxiety, sleep, eating, sex, learning and speech. Examination of the theories of cause of mental health problems in children and adolescents and approaches to treatment. Examination of information and theory for practical application. Students who have completed or are enrolled in Psychology 15 may not receive credit. 3 hours.  
Grading Option: OP Transfer: CSU
- ECD 50 EARLY CHILDHOOD EDUCATION AND CARE 3 UNITS**  
Historical and contemporary systems of Early Childhood group care, career opportunities, licensing requirements, personal qualifications, differing orientations to early childhood education, developmental stages of young children as related to quality programs with developmentally appropriate curriculum. 3 hours.  
Grading Option: OP Transfer: CSU
- ECD 51 PRENATAL TO EARLY CHILDHOOD 3 UNITS**  
Development of the child from prenatal life to early childhood; developmental characteristics, influences affecting development in prenatal life and infancy; individual differences; physical, emotional, intellectual, and social development. Emphasis on scientific method, research strategies, historical overview, social and cultural context, methods of observing children, and theories. 3 hours.  
Grading Option: GR Transfer: CSU, UC
- ECD 52 CHILDHOOD AND ADOLESCENCE 3 UNITS**  
Development of the child from elementary school age through adolescence; physical, intellectual, social and personality factors. Emphasis on the continuity, observation, scientific methods, and stages of development. 3 hours.  
Grading Option: OP Transfer: CSU, UC
- ECD 53 EMERGENCY CARE AND PREVENTIVE HEALTH FOR INFANTS AND CHILDREN 1 UNIT**  
Cardiopulmonary resuscitation, first aid principles and prevention of disease transmission for adults, infants and children. Designed for early childhood development majors. 1 hour.  
Grading Option: OP (May be repeated 3 times)
- ECD 55 THE PROFESSIONAL CARE-GIVER 2 UNITS**  
Analysis of motives, goals, qualifications, competencies and attitudes of the successful professional and relationships with clients; includes individual assessments and strategies for career success. Strongly

Recommended: Early Childhood Development 50. 2 hours.  
Grading Option: GR Transfer: CSU

**ECD 60 TEACHING SPECIAL NEEDS INFANTS AND PRESCHOOLERS 3 UNITS**

Introduction to early childhood education for the special needs infant and preschooler. Developmental characteristics and abilities found in infants and preschoolers identified as "at risk" or handicapped. Instructional methods, assessments, interventions, learning and mainstreaming environments for the special needs infant and preschooler. Prerequisite: Early Childhood Development 51 (completed with a grade of "C" or higher). 3 hours.

Grading Option: OP Transfer: CSU

**ECD 61 LITERATURE FOR THE YOUNG CHILD 3 UNITS**

Selection, evaluation and use of fiction, non-fiction, prose and poetry from existing written and or recorded children's literature for appropriate class presentation. Includes puppets, flannel boards and props. Role of books in early literacy. 3 hours.

Grading Option: GR Transfer: CSU

**ECD 62 CHILD, FAMILY AND COMMUNITY 3 UNITS**

Patterns of family living in contemporary society including the varying roles and interactions of family members; demographic, socio-cultural, racial and economic factors affecting family life; relationship of the family to early care and education and to community resources. 3 hours.

Grading Option: GR Transfer: CSU

**ECD 63 EARLY CHILDHOOD CURRICULUM 4 UNITS**

Professional application of the principles of human growth and development in: the study of play based curriculum, the physical environment and learning experiences including program content, the use of materials, the facilitation and guidance of children's experiences based on developmentally appropriate principles, the methods used to meet children's physical, social, emotional, cognitive and creative needs within cultural context. Prerequisite: Early Childhood Development 50 and Early Childhood Development 51 (both completed with a grade of "C" or higher). 4 hours lecture or 3 hours lecture, 3 hours laboratory.

Grading Option: GR Transfer: CSU

**ECD 64 PLAY: MATERIALS AND ENVIRONMENTS 3 UNITS**

Application of principles of human growth and development in the consideration of play materials and environments for children from birth through early elementary. The selection and development of play materials and environments that are developmentally, culturally, and age-appropriate. Prerequisite: Early Childhood Development 51 (completed with a grade of "C" or higher). 3 hours.

Grading Option: GR Transfer: CSU

**ECD 65 ADMINISTRATION 3 UNITS**

An overview of administrative principles and practices of Early Care and Education facilities; program planning, organizational structures, financial management, personnel policies, records; nutrition program and food purchasing; relationships with families, community, and regulatory agencies; requirements of State and Federal programs; legal and ethical issues. Prerequisite: Early Childhood Development 62 and Early Childhood Development 63 (both completed with a grade of "C" or higher). 3 hours.

Grading Option: GR Transfer: CSU

**ECD 67 INFANT AND TODDLER DEVELOPMENT AND CARE GIVING 3 UNITS**

Analysis of child development with emphasis on infants and toddlers. Observation of current practices in infant/toddler care giving in group settings in both centers and family day care homes. Assessments and planning of care giving techniques and environments based on principles of human development, health and safety, and legal requirements. Prerequisite: Early Childhood Development 50 and Early Childhood Development 51 (completed with a grade of "C" or higher). 3 hours.

Grading Option: GR Transfer: CSU

**ECD 68 PROGRAM SUPERVISION 3 UNITS**

Management of Early Care and Education programs which includes: Strategic planning, group dynamics, supervision of staff and volunteers, development of motivation and morale, leadership skills, functions of personnel, interviewing techniques, interpersonal and group conflicts, staff evaluations, and working effectively with families and advisory boards. Designed to provide knowledge of methods and principles of working with adults in a supervisory capacity in Early Care and Education settings. Prerequisite: Early Childhood Development 62 and Early Childhood Development 63 (both completed with a grade of "C" or higher.) 3 hours.

Grading Option: GR Transfer: CSU

**ECD 70 FAMILY CHILD CARE PROFESSION 2 UNITS**

This course will focus on all aspects of setting up and operating a family child care home business. The course explores creation of an optimum child care environment, relationships with the child's parents, the impact of child care on the provider's family, and the relationship between family child care homes and centers. 2 hours.

Grading Option: OP Transfer: CSU

**ECD 71 CREATIVE PROGRAMMING FOR FAMILY CHILD CARE 1 UNIT**

The focus for this course is on increasing the practical skills necessary for working with young children in a family child care situation. Information will be given about inexpensive and easily obtainable materials and how these can improve the physical and emotional quality of the child care provided. Available community resources that provide support for families and children will be researched. 1 hour.

Grading Option: OP Transfer: CSU

# Early Childhood Development

## **ECD 72 CORE (CARING, OBSERVING, RESPONDING, EXTENDING) CURRICULUM FOR FAMILY CHILD CARE 2 UNITS**

Basic competencies of caring about children and their families; Observing children and their activities; Responding by interacting with children based on observation; Extending by building on observations of children and their activities (CORE). The CORE concept is also used as a focus for the family home provider to look at her/his business in relation to the families served. 2 hours.

Grading Option: OP

Transfer: CSU

## **ECD 73 THE FAMILY CHILD CARE PROVIDER ADVANCED ENRICHMENT COURSE 2 UNITS**

This course of instruction is designed to assist the family child care provider in developing new and advanced knowledge and skills that will enhance the provider's career and self-esteem. It examines the blending of the business and the nurturing sides of family child care and offers creative coping solutions aimed at promoting provider longevity, credibility, professionalism, ultimately resulting in his/her home/business providing quality child care. 2 hours.

Grading Option: OP

Transfer: CSU

## **ECD 74 DISCIPLINE STRATEGIES 2 UNITS**

Designed to suggest various methods of managing, controlling, disciplining and motivating children while teaching. Techniques for working with aggressive, disruptive, hyperactive, repressed and other children whose behavior may be a problem in the classroom. 2 hours.

Grading Option: OP

Transfer: CSU

## **ECD 75 ORIENTATION TO SCHOOL AGE CHILD CARE PROGRAMS 1 UNIT**

An introduction to the developmentally appropriate behavior of school age children and how to provide activities that will build their self-esteem, meet and challenge their diverse interest, expose them to creative art, music, literature and give their high energy a productive outlet. Promoting positive behavior and dealing effectively with discipline issues. Designed for child care centers and family day care home providers. 1 hour.

Grading Option: OP (May be repeated 2 times)

Transfer: CSU

## **ECD 78 LANGUAGE DEVELOPMENT 3 UNITS**

Principles of language development of young children. Skills involved in communication. Facilitating acquisition and use of communication skills. Prerequisite: ECD 51 (completed with a grade of "C" or higher). 3 hours.

Grading Option: OP

Transfer: CSU

## **ECD 79 ANTI-BIAS CURRICULUM FOR YOUNG CHILDREN 3 UNITS**

Developing approaches which help young children and the adults who care for them to enhance human diversity, recognize social bias, and take action for their own and others' behalf. 3 hours.

Grading Option: OP

Transfer: CSU

## **ECD 80 ADVANCED TOPICS IN CHILDHOOD DEVELOPMENT 1-3 UNITS**

Development and presentation of advanced topics in Early Childhood Development. Emphasis on creative arts, math and science, music and movement. Prerequisite: Early Childhood Development 63 (completed with a grade of "C" or higher). 1-3 hours.

Grading Option: OP (May be repeated 3 times)

Transfer: CSU

## **ECD 81 PLANNING CURRICULUM FOR THE SCHOOL-AGE CHILD 3 UNITS**

Fundamentals of planning, implementing and evaluating curriculum for before and after school care of school-age children (K-6). Emphasis on developmental levels, age-appropriate activities and developing an integrated curriculum. 3 hours.

Grading Option: GR

Transfer: CSU

## **ECD 82 COMMUNICATING EFFECTIVELY WITH THE SCHOOL-AGE CHILD 3 UNITS**

Communication skills that promote self-discipline, techniques for resolving conflicts with the school-age child and effective interactions with parents. Consideration of: environment, appropriateness of program, materials, games and equipment; developmental age of children as instrumental to behavior management; development of pro-social behavior, multicultural awareness, diversity issues, and anti-bias curriculum. 3 hours.

Grading Option: GR

Transfer: CSU

## **ECD 83 ADULT SUPERVISION 2 UNITS**

Methods and principles of mentoring and supervising adults in early care and education settings. Emphasis on the role of experienced classroom teachers who function as mentors to new teachers while simultaneously addressing the needs of children, families and other staff. Prerequisite: Early Childhood Development 62 and Early Childhood Development 63 (both completed with a grade of "C" or higher). 2 hours.

Grading Option: OP

Transfer: CSU

## **ECD 90 SUPERVISED EXPERIENCE 4 UNITS**

Direct experience working with young children. Observation and evaluation of individual children, group activities, roles of adults in the preschool and the entire school program. Planning instructional activities, developing educational plans, planning parent conferences, and discussion of on-site experiences. Prerequisite Early Childhood Development 55 (May be taken concurrently) and Early Childhood Development 63. 2 hours lecture, 6 hours laboratory.

Grading Option: GR

Transfer: CSU

## **ECD 95 WORK EXPERIENCE 1-3 UNITS**

Application of principles and skills through participation in on-the-job training. Corequisite: Early Childhood Development 96. 5-15 hours experience per week. (May be repeated to a total of 16 units, including the ECD 96 class.) See page 218 for Work Experience requirements. \*ECD 95 and ECD 96 combined, maximum transfer credit 6 units.

Grading Option: GR

Transfer: CSU\*



**ECD 96 WORK EXPERIENCE**

**1 UNIT**

Discussion and analysis of problems encountered on the job. Case studies of on-the-job problems often encountered by employees. Application of quality standards to the job site. Corequisite: Early Childhood Development 95. 1 hour. *(May be repeated to a total of 16 units, including the ECD 95 class. See page 218 for Work Experience requirements.)*

Grading Option: GR

Transfer: CSU\*

**ECD 99 SPECIAL TOPICS IN EARLY CHILDHOOD DEVELOPMENT**

**0.3-3 UNITS**

Designed to explore special interest subjects drawn from the field of Early Childhood Development. Emphasis will be on topics of practical use for persons employed in the field of Early Childhood Development, as well as for the person interested in learning about this field. Prerequisites may vary for specific topics. 0.3 - 9 hours.

*\*Limited to 4 transfer units.*

Grading Option: OP

Transfer: CSU\*



*Be Many Voices  
of Las Positas College*

"...20 years after completing my bachelor's degree at a UC, I began attending LPC to take ... classes in Early Childhood Development .... Even though I also went on to get a teaching credential through CSU ... my LPC classes have been my favorites! My instructors have been as good as or better than any I've had at UC or CSU and the courses as interesting. I like the small class sizes, the short commute, and the rural feel of the campus. And the price of learning can't be matched anywhere else! For me, LPC means I can be a lifelong learner.

—Jean, Dublin

**Ecology (ECOL)**

SEE: **Biological Sciences**

## Economics

### About the Program

Economics is central to many issues facing us today—job creation, wage determination, health-care reform, future of social security, economic prosperity, and environmental sustainability all require knowledge of economics. Economics, often called the “science of choice,” analyzes how individuals, households, firms, and governments interact. Understanding those interactions is a distinctive feature of economics as a discipline and explains why so many everyday issues have an important economic dimension.

Economics courses at Las Positas College provide students with the education necessary to embark on rewarding careers in business, law, and/or public sector. These courses combine economic theory with a wide range of real-world applications and help students develop and master problem-solving skills, analytical clarity, as well build writing and communication abilities.

Las Positas College Economics courses prepare students for future coursework in Economics and Business and, most importantly, provide a framework for analyzing economic issues within the

## Economics (ECON)

### ECON 1 PRINCIPLES OF MICROECONOMICS 3 UNITS

Economic analysis of market systems and price theory; supply and demand analysis, elasticity, cost and revenue concepts, perfect and imperfect competition, monopoly, pricing of the factors of production and poverty and income inequalities. Strongly recommended: Mathematics 65 and eligibility for English 1A. 3 hours. (CAN ECON 4)

Grading Option: OP

Transfer: CSU, UC

### ECON 2 PRINCIPLES OF MACROECONOMICS 3 UNITS

Economic analysis of the theory of income determination, including national income analysis, business cycles, the consumption function, the multiplier, fiscal policy, monetary policy, money and banking, the public debt, economic growth and development, comparative economic systems and international trade. Strongly recommended: Mathematics 65 and eligibility for English 1A. 3 hours. (CAN ECON 2)

Grading Option: OP

Transfer: CSU, UC

### ECON 5 ECONOMIC HISTORY OF THE UNITED STATES 3 UNITS

Origins and historical development of major economic forces, institutions, and philosophies that have shaped the U.S. market economy from colonial times to the present. Interactions among major ethnic and social groups in the historical development of the U.S. economy. The effects of geography, politics, and social movements on the development of the U.S. economy. 3 hours.

Grading Option: OP

Transfer: CSU, UC

### ECON 10 GENERAL ECONOMICS 3 UNITS

Survey of the economic system of the United States, covering such macroeconomic and microeconomic topics as supply and demand, firms' output and pricing decisions, international trade, comparative economic systems, economic growth, business cycles, fiscal and monetary policy, labor, money and banking. 3 hours. \*Transfer unit limitations, see page 63.

Grading Option: OP

Transfer: CSU, UC\*

**Degree**  
**AS – Electronics Telecommunications Systems**

**Certificate**  
**Electronics Telecommunications Systems**  
 SEE ALSO: **Computer Networking Technology**

**About the Program**

The Electronics programs are designed to prepare students for a variety of career opportunities in the fields of electronics, computers, and related technologies. Students may prepare for direct job entry as technicians in computer sales, installation and repair.

The Electronics Telecommunications Systems AS and Certificate programs prepare students for entry-level employment as technicians in the Electronics Communications (Telecommunications) fields.

While units in the program are transferable to many institutions, students should consult a counselor for information.

**Special Instructional Programs - Electronics/CIS**

Las Positas College Technical Support (LaPTechS) is an innovative entrepreneurial venture offering technical support services to the campus community. Within a work-based learning model, students get hands-on training in a workplace environment. Electronics and computer applications include troubleshooting, repair (hardware and software), configuration, help desk, customer service and job skills preparation. LaPTechS creates opportunities to learn all aspects of business operations, technical support, and the development of interpersonal skills.



**AS – Electronics**  
**Telecommunications Systems**

**Freshman Year**

Electronics Technology 50 (Fundamentals of Electronics) or  
 Electronics Technology 85.1, 85.2, 85.3, 85.4 ..... 6  
 Electronics Technology 53\*\* (Fabrication and Repair Techniques) .. 2  
 Computer Networking Technology 51 (A+ Computer Fundamentals)  
 or  
 Electronics Technology 85.5, 85.6 ..... 3-4  
 General Education Courses

**Sophomore Year**

Electronics Technology 56A\* (Radio Communications I)..... 4  
 Electronics Technology 56B\* (Radio Communications II) ..... 4  
 General Education Courses:

**Total units required ..... 60:**

*\*This program is offered in alternate years: ET 56A-56B offered every other year.*

*\*\*Electronics Technology 53 offered Summer Session only.*

**Certificate of Achievement**  
**Electronics Telecommunications Systems**

Electronics Technology 50 (Fundamentals of Electronics) or  
 Electronics Technology 85.1, 85.2, 85.3, 85.4 ..... 6  
 Electronics Technology 53\*\* (Fabrication and Repair Techniques) .. 2  
 Computer Networking Technology 51 (A+ Computer Fundamentals)  
 or  
 Electronics Technology 85.5, 85.6 ..... 3-4  
 Electronics Technology 56A\* (Radio Communications I)..... 4  
 Electronics Technology 56B\* (Radio Communications II) ..... 4  
**Total units required ..... 19-20**

*\*This program is offered in alternate years: ET 56A-56B offered every other year.*

*\*\*Electronics Technology 53 offered Summer Session only.*



# Electronics Technology

## Electronics Technology (ELEC)

### General

#### ELEC 50 FUNDAMENTALS OF ELECTRONICS 6 UNITS

Fundamentals of DC and AC electronic circuits using resistors, capacitors, inductors, diodes, transistors, and integrated circuits. Measurements using the digital multimeter and oscilloscope. Strongly Recommended: 1 year high school algebra or equivalent. 5 hours lecture, 3 hours laboratory.

Grading Option: OP (May be repeated 3 times) Transfer: CSU

#### ELEC 52 CIRCUITS AND SYSTEMS 4 UNITS

Analysis and troubleshooting of operational amplifier circuits with negative and positive feedback, such as linear amplifiers, comparators, active filters, non-linear waveshaping circuits, and oscillators. Interfacing to transducers; digital to analog and analog to digital conversion. Linear and switching power regulators. Prerequisite: Electronics Technology 50 (completed with a grade of "C" or higher) or equivalent. 3 hours lecture, 3 hours laboratory.

Grading Option: OP (May be repeated 3 times) Transfer: CSU

#### ELEC 53 FABRICATION AND REPAIR TECHNIQUES 2 UNITS

Soldering and removal of components on printed circuit boards, including surface mounted components. Prerequisite: Electronics Technology 50 (completed with a grade of "C" or higher). 1 hour lecture, 3 hours laboratory.

Grading Option: OP (May be repeated 3 times) Transfer: CSU

#### ELEC 59 OPTICAL ELECTRONICS 2 UNITS

Fundamental principles of light, geometric and wave optics, sources of light, displays, optical sensors, fiber optics, and opto-isolators. System applications of optical electronics. Prerequisite: Electronics Technology 50 or equivalent. 1 hour lecture, 3 hours laboratory.

Grading Option: OP Transfer: CSU

#### ELEC 70 INTRODUCTION TO ELECTRONICS 2 UNITS

A survey course in electronic technology. Ohm's Law and fundamental DC and AC circuit analysis; magnetism and capacitance; semiconductor technology with applications; digital building blocks with application to computer technology; survey of the electronic technology fields; use of basic electronic test equipment. Intended for non-majors. Strongly Recommended: Elementary course in algebra. 1 hour lecture, 3 hours laboratory.

Grading Option: OP (May be repeated 3 times) Transfer: CSU

## Telecommunications

#### ELEC 55 TELECOMMUNICATION EXAMINATION PREPARATIONS

3 UNITS

Designed to aid in passing the F.C.C. General Radiotelephone Operator License examination. Electronics theory, radiotelephone operations, and radiotelephone rules and regulations. A requirement for servicing of marine or aviation radio equipment. Prerequisite: Electronics Technology 50 (completed with a grade of "C" or higher) or equivalent. 3 hours.

Grading Option: GR Transfer: CSU

#### ELEC 56A RADIO COMMUNICATIONS I 4 UNITS

Basic modulation techniques, radio transmitters, radio receivers, and the associated circuits employed by each. Circuits include AM, FM, PM, and SSB modulators and detectors, RF amplifiers, oscillators, and PLL circuits, frequency multipliers, voice processing circuits, filters, and squelch circuits. Includes specialized test equipment and the performance of EIA standard tests and measurements. Prerequisite: Electronics Technology 50 (completed with a grade of "C" or higher) or equivalent. 2 hours lecture, 6 hours laboratory.

Grading Option: GR Transfer: CSU

#### ELEC 56B RADIO COMMUNICATIONS II 4 UNITS

A continuation of Electronics Technology 56A with emphasis on advanced circuits, total systems, and new technology. Includes transmission line theory, wave propagation, antenna theory, control systems, digital modulation techniques, transmitter and receiver combining, and electromagnetic interference control. Prerequisite: Electronics Technology 56A (completed with a grade of "C" or higher) or equivalent. 2 hours lecture, 6 hours laboratory.

Grading Option: GR Transfer: CSU

## F.A.C.E.T. Courses

The F.A.C.E.T. (Fault Assisted Circuits for Electronics Training) program is an independent, self-paced, interactive computer-based training program in the field of electronics. This course of study allows students to earn college credit in electronics. Enrollment in the F.A.C.E.T. program is open-ended throughout the semester. Courses numbered 85, 86, and 87 are F.A.C.E.T. courses.

#### ELEC 85.1 DC FUNDAMENTALS 1.5 UNITS

Self-paced individualized course using interactive computer instruction on DC circuits with resistors connected in series, parallel, and series-parallel. The use of Ohm's Law, DC power, and use of the digital multimeter. 4.5 hours laboratory.

Grading Option: OP (May be repeated 3 times) Transfer: CSU

#### ELEC 85.2 AC1 FUNDAMENTALS 1.5 UNITS

Self-paced individualized course using interactive computer instruction on AC circuit measurements, use of the oscilloscope, transformers, RC & RL circuits. Prerequisite: ET 85.1. (completed with a grade of "C" or higher). 4.5 hours laboratory.

Grading Option: OP (May be repeated 2 times) Transfer: CSU

**ELEC 85.3 AC2 FUNDAMENTALS 1.5 UNITS**

Self-paced individualized course using interactive computer instruction on electronic filters and resonant circuits. Prerequisite: ET 85.2. (completed with a grade of "C" or higher). 4.5 hours laboratory.

Grading Option: OP (May be repeated 2 times) Transfer: CSU

**ELEC 85.4 SEMICONDUCTOR DEVICES 1.5 UNITS**

Self-paced individualized course using interactive computer instruction on diodes, diode rectification, zener diode voltage regulation, and transistor fundamentals. Prerequisite: ET 85.3. (completed with a grade of "C" or higher). 4.5 hours laboratory.

Grading Option: OP (May be repeated 2 times) Transfer: CSU

**ELEC 85.5 DIGITAL LOGIC FUNDAMENTALS 1.5 UNITS**

Self-paced individualized course using interactive computer instruction on the fundamentals of digital logic gates and flip-flops. Prerequisite: Electronics Technology 85.4 (completed with a grade of "C" or higher or 70% minimum test score on pretest). 4.5 hours laboratory.

Grading Option: OP Transfer: CSU

**ELEC 85.6 DIGITAL CIRCUITS 1 1.5 UNITS**

Self-paced individualized course using interactive computer instruction on digital counters, shift registers, and arithmetic circuits. Prerequisite: Electronics Technology 85.5 (completed with a grade of "C" or higher or 70% minimum test score on pretest). 4.5 hours laboratory.

Grading Option: OP Transfer: CSU

**ELEC 85.7 DIGITAL CIRCUITS 2 2 UNITS**

Self-paced individualized course using interactive computer instruction on decoders, encoders, multiplexers, parity generator/checker, and troubleshooting MSI circuits. Prerequisite: ET 85.6 (completed with a grade of "C" or higher). 6 hours laboratory.

Grading Option: OP (May be repeated 2 times) Transfer: CSU

**ELEC 86.1 OPERATIONAL AMPLIFIER FUNDAMENTALS 1.5 UNITS**

Self-paced individualized course using interactive computer instruction on the fundamentals of operational amplifiers. Prerequisite: ET 85.4 (completed with a grade of "C" or higher). 4.5 hours laboratory.

Grading Option: OP (May be repeated 2 times) Transfer: CSU

**ELEC 86.2 OPERATIONAL AMPLIFIER APPLICATIONS 1.5 UNITS**

Self-paced individualized course using computer instruction on operational amplifier applications, such as filters and integrators. Prerequisite: ET 86.1 (completed with a grade of "C" or higher). 4.5 hours laboratory.

Grading Option: OP (May be repeated 2 times) Transfer: CSU

**ELEC 86.3 POWER SUPPLY REGULATION 1.5 UNITS**

Self-paced individualized course using interactive computer instruction on power supply regulators and IC regulators. Prerequisite: ET 86.2 (completed with a grade of "C" or higher). 4.5 hours laboratory.

Grading Option: OP (May be repeated 2 times) Transfer: CSU

**ELEC 87.1 DC NETWORK THEOREMS 1.5 UNITS**

Self-paced individualized course using interactive computer instruction on network theorems, including Kirchhoff's voltage and current laws and Thevenin's theorem. Prerequisite: ET 85.1 (completed with a grade of "C" or higher). 4.5 hours laboratory.

Grading Option: OP (May be repeated 2 times) Transfer: CSU

**ELEC 87.2 TRANSISTOR AMPLIFIER CIRCUITS 1.5 UNITS**

Self-paced individualized course using interactive computer instruction on common base, common emitter, common collector, RC coupled, transformer coupled, and direct coupled transistor amplifiers. Prerequisite: ET 85.4 (completed with a grade of "C" or higher). 4.5 hours laboratory.

Grading Option: OP (May be repeated 2 times) Transfer: CSU

**ELEC 87.3 TRANSISTOR POWER AMPLIFIERS 1.5 UNITS**

Self-paced individualized course using interactive computer instruction on transistor power amplifiers and Darlington pair operation. Prerequisite: ET 87.2 (completed with a grade of "C" or higher). 4.5 hours laboratory.

Grading Option: OP (May be repeated 2 times) Transfer: CSU

**ELEC 87.4 TRANSISTOR FEEDBACK AMPLIFIERS 1.5 UNITS**

Self-paced individualized course using interactive computer instruction on transistor feedback amplifiers. Prerequisite: ET 87.3 (completed with a grade of "C" or higher). 4.5 hours laboratory.

Grading Option: OP (May be repeated 2 times) Transfer: CSU

**ELEC 87.5 FIELD EFFECT TRANSISTORS 1.5 UNITS**

Self-paced individualized course using interactive computer instruction on JFET and MOSFET operation and applications. Prerequisite: ET 85.4 (completed with a grade of "C" or higher). 4.5 hours laboratory.

Grading Option: OP (May be repeated 2 times) Transfer: CSU

**ELEC 87.6 THYRISTOR AND PHASE CONTROL CIRCUITS 1.5 UNITS**

Self-paced individualized course using interactive computer instruction on thyristor operation and use to control electrical power. Prerequisite: ET 87.5 (completed with a grade of "C" or higher). 4.5 hours laboratory.

Grading Option: OP (May be repeated 2 times) Transfer: CSU

**ELEC 87.7 32-BIT MICROPROCESSOR 2 UNITS**

Self-paced individualized course using interactive computer instruction on microprocessor operation, data transfer, programming, and interfacing. Prerequisite: ET 85.7 (completed with a grade of "C" or higher). 6 hours laboratory.

Grading Option: OP (May be repeated 2 times) Transfer: CSU

**Emergency Medical Technician (EMT)**  
SEE: **Health—Public Safety and EMT**



# Engineering

## Engineering (TRANSFER PREPARATION)

### About the Program

Engineers seek to understand and solve a broad range of technological problems faced by society. Engineers are responsible for such projects as converting raw materials and power sources into useful products and systems, developing scientific equipment, taking an abstract idea and making it real, planning and designing the construction of buildings and process plants, and designing the processes and equipment for the microprocessor and optical industries.

Engineering as a profession continues to experience a period of rapid growth, impacting virtually every aspect of our lives. A career in engineering offers many options such as: Aeronautical, Mechanical, Electrical, Optical, Civil, Materials and Chemical Engineering. As society becomes more technologically complex, so do the ever-emerging branches of engineering.

Students interested in majoring in engineering should discuss their course planning with a counselor to ensure they are following the guidelines for transferring to a four-year college.

For program information, contact Dean, Dr. Neal Ely 925.424.1182

## Engineering Requirements (TRANSFER PREPARATION)

### Freshman Year

Chemistry 1A* (General College Chemistry) .....	5
Engineering 10 (Introduction to Engineering) .....	2
Engineering 22 (Engineering Design Graphics) .....	3
Mathematics 1 (Analytic Geometry and Calculus I) .....	5
Mathematics 2 (Analytic Geometry and Calculus II) .....	5
Physics 8A (General Physics I) .....	5
Physics 8B (General Physics II) .....	5
Computer Science 1 (Computing Fundamentals I) .....	4-5

### Sophomore Year

English 1A (Critical Reading and Composition) .....	3
Engineering 35 (Statics) .....	3
Engineering 44 (Introduction to Circuit Analysis) .....	4
Engineering 46 (Materials of Engineering) .....	3
Mathematics 3 (Multivariable Calculus) .....	5
Mathematics 5 (Differential Equations with Computer Applications) .....	3.5
Mathematics 7*** (Elementary Linear Algebra with Computer Applications) .....	3.5
Mathematics 10*** (Discrete Mathematics) .....	4
Physics 8C (General Physics III) .....	5
Physics 8D** (General Physics IV) .....	3
Speech 1 (Fundamentals of Speech Communication) .....	3

\*.. *Chemical Engineering and Materials Engineering majors should also take Chemistry 1B*

\*\* *Physics 8D may not be required by some universities for specific engineering majors*

\*\*\* *Mathematics 7 and 10 may not be required by some universities for specific engineering majors.*

*Students interested in pursuing a degree in Optical Science Engineering should take Engineering 15 in the Freshman year.*

**ENGR 10 INTRODUCTION TO ENGINEERING 2 UNITS**

Introduction to careers, activities, and topics related to the field of engineering, including computer applications to design and problem solving. Strongly Recommended: Eligibility for English 1A or 52A. 2 hours. \*Transfer unit limitations, see page 63

Grading Option: OP

Transfer: CSU, UC\*

**ENGR 15 INTRODUCTION TO OPTICAL SCIENCE AND ENGINEERING 4 UNITS**

An introduction to the field of optical science and engineering. Basic concepts of the manipulation of light. Discussion of the opportunities and professional practice in the field including: application of engineering principles, ethics, and responsibilities. 3 hours lecture, 3 hours laboratory. \*Transfer unit limitations, see page 63

Grading Option: GR

Transfer: CSU, UC\*

**ENGR 22 ENGINEERING DESIGN GRAPHICS 3 UNITS**

Introduction to the engineering-design process and to technical graphic communications tools used by engineers. Conceptual design of products. Development of spatial reasoning skills. Orthographic and axonometric projection-drawing techniques. Tolerance analysis for fabrication. Documentation of designs through engineering working drawings. Use AutoCAD Computer-Assisted Drawing software as a design tool. Basic CAD 3-Dimensional solid-modeling. Strongly recommended: Mathematics 38 or Mathematics 36Y and English 1A or English 52A. 2 hours lecture, 3 hours laboratory.

\*UC Transfer pending

Grading Option: GR

Transfer: CSU, UC\*

**ENGR 35 STATICS 3 UNITS**

Force systems under equilibrium conditions, rigid body structures; vector; graphical and algebraic solution of problems. Prerequisite: Physics 8A, Mathematics 2, Engineering 21 (all completed with a grade of "C" or higher). 2 hours lecture, 3 hours laboratory. (CAN ENGR 8)

Grading Option: GR

Transfer: CSU, UC

**ENGR 44 INTRODUCTION TO CIRCUIT ANALYSIS 4 UNITS**

Analysis of introductory engineering AC and DC circuits. Natural, forced, and complete circuit response. Prerequisite: Physics 8A (completed with a grade of "C" or higher). 3 hours lecture, 3 hours laboratory. (CAN ENGR 12)

Grading Option: GR

Transfer: CSU, UC

**ENGR 46 MATERIALS OF ENGINEERING 3 UNITS**

Application of principles of chemistry and physics to the properties of engineering materials; the relation of microstructure to mechanical, electrical, thermal and corrosion properties of metals; ceramics and polymers. Prerequisites: Physics 8A and Chemistry 1A (both completed with a grade of "C" or higher). 2 hours lecture, 3 hours laboratory.

Grading Option: GR

Transfer: CSU, UC



# English

## English

### About the Program

The English department is proud to serve the majority of students, whether entering or returning to Las Positas College. The mission of the program is to help students develop reading, writing, and critical thinking skills so they thrive as a student here and in transfer destinations, as well as professionals in the working world. Most of the students who plan to enroll in English classes at LPC will take an assessment test that will indicate whether they should begin with our Basic Skills Program or with English 1A, a transfer-level class.

### Basic Skills

These are non-transferable classes designed to help students achieve success in transfer-level English classes and classes across the curriculum. Usually, based on the recommendation of a counselor, students will take basic skills classes for either one year (English 100A & 100B) or for one semester (accelerated English 104).

### Transfer Classes

These classes are transferable to CSU and UC. Most students take English 1A first. Depending on students' plans for transfer, students choose to take one or more of the following: English 4, English 7, or English 3.



## English (ENG)

### Composition and Literature

#### ENG 1A CRITICAL READING AND COMPOSITION 3 UNITS

Integrated approach to reading, writing, and critical thinking intended to develop ability to read and write complex, college-level prose. Examination of ideas in relation to individuals' world view and contexts from which these ideas arise. Some research required. Prerequisite: English 100B or 104 or equivalent or an appropriate skill level demonstrated through the English assessment process. 3 hours lecture, 0–1 hour laboratory. (CAN ENGL 2; ENGL 1A + ENGL 3 = CAN ENGL SEQ A)

Grading Option: GR

Transfer: CSU, UC

#### ENG 3 COMPOSITION AND ANALYSIS OF LITERATURE 3 UNITS

Continues instruction in the composing and revision process. Develops critical and analytical reading and writing skills based on the study of fiction, drama and poetry; emphasizes characteristics of both the genre and the individual work; explores the variety of literary approaches to human experience. Prerequisite: English 1A completed with a grade of "C" or higher. 3 hours. (CAN ENGL 4; ENGL 1A + ENGL 3 = CAN ENGL SEQ A)

Grading Option: GR

Transfer: CSU, UC

#### ENG 4 CRITICAL THINKING AND WRITING ABOUT LITERATURE

3 UNITS

Develops critical thinking, reading, and writing skills as they apply to the analysis of fiction, poetry and drama; literary criticism; and related non-fiction from diverse cultural sources and perspectives. Emphasis on the techniques and principles of effective written argument as they apply to literature. Some research required. Prerequisite: English 1A (completed with a grade of "C" or higher). 3 hours.

Grading Option: GR

Transfer: CSU, UC

#### ENG 7 CRITICAL THINKING AND WRITING ACROSS DISCIPLINES

3 UNITS

Develops critical thinking, reading, and writing skills as they apply to the textual analysis of primary and secondary book-length works from a range of academic and cultural contexts. Emphasis on the techniques and principles of effective written argument in research-based writing across disciplines. Prerequisite: English 1A (completed with a grade of "C" or higher). 3 hours.

Grading Option: GR

Transfer: CSU, UC

#### ENG 11 INTRODUCTION TO CREATIVE WRITING

3 UNITS

Elements of creative writing, including narrative, verse and dialogue, using materials drawn from individual's own work and selected texts. Strongly recommended: Eligibility for English 1A. 3 hours.

Grading Option: OP

Transfer: CSU

**ENG 12 THE CRAFT OF WRITING FICTION 3 UNITS**

Practice in writing fiction. Developing internal and external sources for stories and novels; biographical sources, characterization, plotting, points of view, narrative techniques; analysis and criticism of published writing and individual's own work. Strongly recommended: Eligibility for English 1A or 52A. 3 hours.

Grading Option: OP (*May be repeated 2 times*) Transfer: CSU

**ENG 13 THE CRAFT OF WRITING - POETRY 3 UNITS**

Practice in writing poetry, using materials drawn from published poetry and individual's own work for analysis and criticism, with a focus on techniques of revision. Strongly recommended: Eligibility for English 1A or 52A. 3 hours. *Transfer: CSU; GE: AA/AS*

Grading Option: OP (*May be repeated 2 times*) Transfer: CSU

**ENG 19 LITERARY MAGAZINE WORKSHOP 1 UNIT**

Practical workshop training in the managing, editing, and printing of a literary supplement and/or magazine. Workshop enrollment constitutes the staff of the magazine. 1 hour.

Grading Option: OP (*May be repeated 2 times*)

**ENG 20 STUDIES IN SHAKESPEARE 3 UNITS**

Readings of the sonnets and representative comedies, histories, tragedies, and romances of William Shakespeare, with attention to the early, middle and late phases of his art and to the Age of Elizabeth. Strongly Recommended: English 3 or 4. 3 hours.

Grading Option: OP Transfer: CSU, UC

**ENG 23 NATIVE AMERICAN LITERATURE 3 UNITS**

Introduction to traditional forms of Native American narrative and to current literature by Native American writers. Readings include creation myths, hero legends, journey to the other world tales and Trickster tales as well as 20th century literary works which reflect Native American concerns in poem and novel. Strongly recommended: Eligibility for English 1A or 52A. 3 hours. *\*Transfer unit limitations, see page 63*

Grading Option: OP Transfer: CSU, UC\*

**ENG 27 FROM FOLKLORE TO LITERATURE 3 UNITS**

Heroes and legendary creatures in folklore and literature. Reading and critical analysis of modern works which grow out of myth, legend, and folk tale. Consideration of folklore's influence on contemporary culture. Strongly recommended: Eligibility for English 1A or 52A. 3 hours. *\*Transfer unit limitations, see page 63*

Grading Option: GR Transfer: CSU, UC\*

**ENG 32 U.S. WOMEN'S LITERATURE 3 UNITS**

Chronicles the expression of U.S. women authors through readings in a variety of genres such as fiction, poetry, drama, and the essay. Explores works by authors of varied racial and ethnic backgrounds in an effort to understand the diversity of women's voices, especially in the 20th century. Strongly recommended: Eligibility for English 1A. 3 hours.

Grading Option: GR Transfer: CSU, UC

**ENG 43 PROFESSIONAL COMMUNICATIONS 4 UNITS**

This course is designed to help students develop and refine the written and oral communication skills necessary to communicate effectively in a business environment. This will be accomplished through the planning, composing, and evaluating of written communication; report writing; and oral presentations. Additional focus will be placed on developing interpersonal skills, team participation skills, and professionalism. Students who have completed or are enrolled in Business 43, Computer Networking Technology 43, Computer Information Systems 43, Computer Science 43, or Speech 43 may not receive credit. Strongly recommended: Eligibility for English 1A. 4 hours.

Grading Option: OP Transfer: CSU

**ENG 44 LITERATURE OF THE AMERICAN WEST 3 UNITS**

Critical analysis of the cultural and historical experiences of diverse peoples of the American West as expressed in their literatures, including the novel, short story, poetry, autobiography, memoirs, as-told-to narratives, and secondary works. Exploration of interrelationships among peoples and cultures of the West, considering place and community, gender, and ethnicity as given voice in literature. Study of the works of at least three of the following groups: African Americans, Asian Americans, European Americans, Hispanic Americans, Native Americans. Emphasis upon techniques of critical review of and response to literary works, including gaining understanding of one's identity as a Westerner and an American. 3 hours.

Grading Option: OP Transfer: CSU, UC

**ENG 45 STUDIES IN FICTION 3 UNITS**

Form, development, and cultural insights of the novel and short story; exploration of particular themes or periods as reflected in works of fiction. Strongly Recommended: Eligibility for English 1A or 52A. 3 hours.

Grading Option: OP (*May be repeated 3 times*) Transfer: CSU, UC

**ENG 52A ESSENTIALS OF COMMUNICATION 3 UNITS**

Development of reading and writing skills with a focus on academic as well as career-oriented materials. Designed for certificate or associate degree majors. Strongly Recommended: English 100B or 104 or appropriate skill level demonstrated through the English assessment process. 3 hours.

Grading Option: OP Transfer: CSU

**ENG 70 REPORT WRITING 3 UNITS**

Preparation of reports in industrial and technical fields, including explanations, instructions and other kinds of writings, based on the demands of the occupations. Strongly Recommended: Eligibility for English 1A or 52A. 3 hours.

Grading Option: OP Transfer: CSU

# English

## Preparatory Reading and Writing

Students should work with a counselor to determine whether their English prerequisite will be English 100A/100B or English 104.

### ENG 100A READING: REASONING, AND WRITING I 4 UNITS

Preparation in English for success in college. Integrates reading, critical thinking, and writing assignments, using materials that present a variety of perspectives from across the curriculum. Strongly recommended: Appropriate skill level demonstrated through the English assessment process. 3 hours lecture, 3 hours laboratory.

Grading Option: C/N

### ENG 100B READING: REASONING, AND WRITING II 4 UNITS

Continues preparation in English for success in college. Integrates reading, critical thinking, and writing assignments, using materials that present a variety of perspectives from across the curriculum. Prerequisite: English 100A (completed with a grade of "C" or higher). 3 hours lecture, 3 hours laboratory.

Grading Option: C/N

### ENG 104 READING: REASONING, AND WRITING I AND II ACCELERATED 4 UNITS

An accelerated one-semester preparation in English for success in college. Integrates reading, critical thinking and writing assignments, using materials that present a variety of perspectives from across the curriculum. Strongly recommended: Appropriate skill level demonstrated through the English assessment process. 3 hours lecture, 3 hours laboratory.

Grading Option: C/N







## English as a Second Language (ESL)

### ESL 23 COLLEGE GRAMMAR 3 UNITS

This is a one-semester advanced grammar course for academic purposes designed to enable students to use linguistic forms accurately, meaningfully and appropriately in both oral and written expression. The course includes: 1) verb tense in discourse, 2) relative clauses, 3) modal perfect verbs, 4) hypothetical statements, 5) perfect infinitives, 6) subjunctive verbs in clauses, 7) grammar in discourse. Prerequisite: Eligibility for ESL 24 or appropriate skill level demonstrated through the ESL assessment process. Students are advised to enroll concurrently in ESL 23 and 24. 3 hours lecture.

Grading Option: OP

Transfer: CSU

### ESL 24 ADVANCED READING AND COMPOSITION 5 UNITS

This is the first semester of a one-year advanced reading and writing course for academic purposes. Emphasis is on critical reading techniques and writing expository essays as well as on grammar and vocabulary development. Prerequisite: ESL 120B, 121B or an appropriate skill level demonstrated through the ESL assessment process. 5 hours. \*Transfer unit limitations, see page 63

Grading Option: OP

Transfer: CSU, UC\*

### ESL 25 ADVANCED READING AND COMPOSITION 5 UNITS

This is the second semester of a one-year reading and writing course for academic purposes. Emphasis is on critical reading and techniques of exposition, analysis and argumentation. Prerequisite: ESL 24 or an appropriate skill level demonstrated through the ESL assessment process. 5 hours. \*Transfer unit limitations, see page 63

Grading Option: OP

Transfer: CSU, UC\*

### ESL 26 ADVANCED EDITING 3 UNITS

This course is designed to increase student awareness of their own use of written language, strengthen their linguistic monitors and give them practice in editing strategies which will enable them to use linguistic forms accurately, meaningfully and appropriately in written expression. Prerequisite: Eligibility for ESL 24. 3 hours.

Grading Option: OP (May be repeated 1 time)

Transfer: CSU

### ESL 120A INTERMEDIATE GRAMMAR FOR WRITING AND READING I 2 UNITS

This is the first semester of a one-year course in intermediate grammar for academic writing and reading designed to enable students to use linguistic forms accurately, meaningfully and appropriately in written expression. This course focuses on compound and complex sentences, verb tense and form, and modals. This course also emphasizes grammar analysis, detecting and correcting grammatical errors, and self-editing skills. Prerequisite: ESL 130B or appropriate skill level demonstrated through the ESL assessment process. Students are advised to enroll concurrently in ESL 120A and 121A. 2 hours lecture, 0–1 hour laboratory.

Grading Option: C/N (May be repeated 1 time)

# English as a Second Language

## ESL 120B INTERMEDIATE GRAMMAR FOR WRITING AND READING II 2 UNITS

This is the second semester of a one-year course in intermediate grammar for academic writing and reading designed to enable students to use linguistic forms accurately, meaningfully and appropriately in written expression. The course focuses on compound and complex sentences and short paragraphs, overview of the verb tense system in English, verb forms with gerunds and infinitives, verb forms in modifying phrases, and modals. This course also emphasizes analyzing grammar and meaning, detecting and correcting grammatical errors, and self-editing skills. Prerequisite: ESL 120A or appropriate skill level demonstrated through the ESL assessment process. Students are advised to enroll concurrently in ESL 120B and 121B. 2 hours lecture, 0–1 hour laboratory.

Grading Option: C/N (May be repeated 1 time)

## ESL 121A INTERMEDIATE WRITING AND READING I 6 UNITS

This is the first semester of a one-year course in intermediate academic writing and reading. The course is designed to enable students to use and interpret linguistic forms accurately, meaningfully, and appropriately in written expression. Classes will focus on writing sentences, paragraphs and compositions, developing strategies for reading comprehension and flexibility, on interactive reading, and on academic vocabulary development. Students will develop cultural understanding, vocabulary, and fluency through a variety of academic writing and reading tasks. Prerequisite: ESL 131B or appropriate skill level demonstrated through the ESL assessment process. Students are advised to enroll concurrently in ESL 120A and 121A. 6 hours lecture, 0–1 hour laboratory.

Grading Option: C/N (May be repeated 1 time)

## ESL 121B INTERMEDIATE WRITING AND READING II 6 UNITS

This is the second semester of a one-year course in intermediate academic writing and reading. The course is designed to enable students to use and interpret linguistic forms accurately, meaningfully, and appropriately in written expression. Classes will focus on writing sentences, paragraphs and compositions, developing strategies for reading comprehension and flexibility, on interactive reading, and academic vocabulary development. Students will develop cultural understanding and fluency through a variety of academic writing and reading tasks. Prerequisite: ESL 121A or appropriate skill level demonstrated through the ESL assessment process. Students are advised to enroll concurrently in ESL 120B and 121B. 6 hours lecture, 0–1 hour laboratory.

Grading Option: C/N (May be repeated 1 time)

## ESL 123 INTERMEDIATE ORAL COMMUNICATION 2 UNITS

This is an intermediate-level oral communication course. This course will enable students to use linguistic forms accurately, meaningfully and appropriately, emphasizing academic listening and speaking skills: listening and speaking in small groups, listening to short lectures on academic topics, learning academic vocabulary and expressions, making presentations on new topics. Prerequisite: Eligibility for ESL 120A and 121A or an appropriate skill level demonstrated through the ESL assessment process. 2 hours lecture, 1 hour laboratory.

Grading Option: C/N (May be repeated 1 time)

## ESL 126 PRONUNCIATION OF ENGLISH 2 UNITS

Intensive practice in recognizing and pronouncing the sounds of American English with emphasis on words and phrases: stress, intonation, phrasing, reduction. attention to individual, as well as, group priorities. Prerequisite: Eligibility for ESL 120A and 121A or an appropriate skill level demonstrated through the ESL assessment process. 2 hours lecture, 1 hour laboratory.

Grading Option: C/N (May be repeated 1 time)

## ESL 130A BEGINNING GRAMMAR FOR WRITING AND READING I 2 UNITS

This is the first semester of a one-year course in beginning grammar for academic purposes designed to enable students to identify and use linguistic forms accurately, meaningfully and appropriately in written expression. The course focuses on simple and compound sentences, questions, modifiers, phrases, and verb tenses, especially simple present, simple past, and present progressive. Strongly recommended: appropriate skill level demonstrated through the ESL assessment process. Students are advised to enroll concurrently in ESL 130A, 131A, and 133. 2 hours lecture, 0–1 hour laboratory.

Grading Option: C/N (May be repeated 1 time)

## ESL 130B BEGINNING GRAMMAR FOR WRITING AND READING II 2 UNITS

This is the second semester of a one-year course in beginning grammar for academic purposes designed to enable students to identify and use linguistic forms accurately, meaningfully and appropriately in written expression. The course focuses on simple and compound sentences, questions, modals, modifiers, phrases, and verb tenses, especially simple present, past, and future as well as present and past progressive. Prerequisite: ESL 130A or appropriate skill level demonstrated through the ESL assessment process. Students are advised to enroll concurrently in ESL 130B, 131B, and 133. 2 hours lecture, 0–1 hour laboratory.

Grading Option: C/N (May be repeated 1 time)

**ESL 131A BEGINNING WRITING AND READING I****6 UNITS**

This is the first semester of a one-year course in beginning academic writing and reading. The course is designed to enable students to use and interpret linguistic forms accurately, meaningfully, and appropriately in written expression. Classes will focus on writing simple and compound sentences in short paragraphs, on developing strategies for increasing reading comprehension and flexibility, on interactive reading, and on developing academic vocabulary. Students will develop cultural understanding and fluency through a variety of writing and reading tasks. Strongly recommended: Appropriate skill level demonstrated through the ESL assessment process. Students are advised to enroll concurrently in ESL 130A, 131A, and 133. 6 hours lecture, 0–1 hour laboratory.

Grading Option: C/N (May be repeated 1 time)

**ESL 131B BEGINNING WRITING AND READING II****6 UNITS**

This is the second semester of a one-year course in beginning academic writing and reading. The course is designed to enable students to use and interpret linguistic forms accurately, meaningfully, and appropriately in written expression. Classes will focus on writing simple, compound, and complex sentences in structured paragraphs, on developing strategies for increasing reading comprehension and flexibility, on interactive reading, and on developing academic vocabulary. Students will develop cultural understanding and fluency through a variety of writing and reading tasks. Prerequisite: ESL 131A or appropriate skill level demonstrated through the ESL assessment process. Students are advised to enroll concurrently in ESL 130B, 131B, and 133. 6 hours lecture, 0–1 hour laboratory.

Grading Option: C/N (May be repeated 1 time)

**ESL 133 BEGINNING ORAL COMMUNICATION****2 UNITS**

This is a beginning oral communication course. This course will enable students to use linguistic forms accurately, meaningfully and appropriately, emphasizing conversational skills: listening and speaking in small groups, using new grammar structures, learning new words and expressions, comprehending and using idiomatic expressions. Strongly Recommended: Appropriate skill level demonstrated through the ESL assessment process. 2 hours lecture, 1 hour laboratory.

Grading Option: C/N (May be repeated 1 time)



# Fire Service Technology

- ✓ DEGREE
- ✓ CERTIFICATE

## Degree AS – Fire Service Technology

## Certificate Fire Service Technology

### About the Program

Fire protection is a highly specialized professional field in public service or private industry requiring extensive knowledge and use of scientific principles. This program teaches 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. Designed for direct job entry, this program provides technical knowledge and the ability to work within an organized system at a fire or other emergency scene. While units in the program are transferable to many institutions, students should consult a counselor for information.



## AS – Fire Service Technology

### Freshman Year

Fire Service Technology 50* (Fire Protection Organization) .....	3
Fire Service Technology 51* (Fire Service Operations).....	3
Fire Service Technology 52* (Fire Safety and Public Education) .....	3
Fire Service Technology 53* (Fire Behavior and Combustion) .....	3
Fire Service Technology 54 (Fire Prevention Technology) .....	3
Fire Service Technology 65* (First Responder Hazardous Materials/ Incident Command ICS 200).....	3
Fire Service Technology 86* (Wildland Interface Fire Fighting) .....	2
Health 61* (Emergency Response) .....	2.5
General Education Courses	

### Sophomore Year

Fire Service Technology 55 (Fire Protection Equipment and Systems).....	3
Fire Service Technology 56 (Fundamentals of Building Construction for Fire Protection).....	3
Health 81 (EMT I (Basic)).....	6.5
Fire Service Technology 90A (Firefighter I Certification Preparation A) .....	2
Fire Service Technology 90B (Firefighter I Certification Preparation B) .....	2
Fire Service Technology 90C (Firefighter I Certification Preparation C) .....	2
General Education Courses	
<b>Total Units Required.....</b>	<b>60</b>

*\*Required for entry into the Fire Service Technology 90A, 90B, and 90C courses (Fire Fighter I Certification Preparation)*





**Certificate of Achievement  
Fire Service Technology**

Fire Service Technology 50** (Fire Protection Organization) .....	3
Fire Service Technology 51** (Fire Service Operations).....	3
Fire Service Technology 52** (Fire Safety and Public Education).....	3
Fire Service Technology 53** (Fire Behavior and Combustion).....	3
Fire Service Technology 54 (Fire Prevention Technology) .....	3
Fire Service Technology 55 (Fire Protection Equipment and Systems).....	3
Fire Service Technology 56 (Fundamentals of Building Construction for Fire Protection) .....	3
Health 61* (Emergency Response).....	2.5
Health 81 EMT 1 (Basic) .....	6.5
Electives* .....	2-3
<b>Total Units Required.....</b>	<b>32-33</b>

**\*Electives**

Select from the following for a minimum of 2 units:

- Fire Service Technology 65 (First Responder Hazardous  
Materials/Incident Command ICS 200)
- Fire Service Technology 74A (Fire Investigation 1A)
- Fire Service Technology 86 (Wildland Interface Fire Fighting)

*\*\*Fulfills the Fire Fighter I Certification requirements and required for entry into the Fire Service Technology 90A, 90B, and 90C courses (Fire Fighter I Certification Preparation)*

*Be Many Voices  
of Las Positas College*

**“The main reason I chose to come to Las Positas is the Fire Service Technology Program. It’s well-known in the Bay Area and it’s highly-regarded. I was sold on the program after I met and spoke with the director. I also like LPC because the campus is small and you really get to know the faculty.”**  
 —Jon, Pleasanton

**Fire Service Technology (FST)**

*Fire Service Technology courses may be scheduled alternating years. Students may be required to take day and evening classes to complete the Associate Degree.*

**FST 50 FIRE PROTECTION ORGANIZATION 3 UNITS**

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 the fire service; fire service nomenclature; specific fire protection functions; basic fire chemistry and physics; introduction to fire protection systems; introduction to fire strategy and tactics. Cultural Diversity, including discrimination and harassment laws and regulation. Course complies with State Board of Fire Services requirements (1999). 3 hours lecture plus a total of 12 hours laboratory for the semester.

Grading Option: GR Transfer: CSU

**FST 51 FIRE SERVICE OPERATIONS 3 UNITS**

Fundamentals of fire department organization, management and resources; fire company organization; resources to control various emergencies; multi-agency coordinating systems; support and regulatory agencies; strategy and tactics applied to structural fire fighting; wildland fire fighting and hazardous material emergencies; and safety conditions to be considered. Prerequisite: Fire Service Technology 50 (completed with a grade of “C” or higher). 3 hours lecture, plus a total of 12 hours laboratory for the semester.

Grading Option: GR Transfer: CSU

**FST 52 FIRE FIGHTER SAFETY AND PUBLIC EDUCATION 3 UNITS**

Assessing fire dangers and handling common fire situations in the home and in the work place; risk abatement and personal preparation for unforeseen fire emergencies; roles and responsibilities in educating the public on fire safety. 3 hours.

Grading Option: GR

**FST 53 FIRE BEHAVIOR AND COMBUSTION 3 UNITS**

Theory and fundamentals of 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. 3 hours.

Grading Option: GR Transfer: CSU

**FST 54 FIRE PREVENTION TECHNOLOGY 3 UNITS**

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 relationships of fire prevention with built-in fire protection systems, fire investigation and fire safety education. Provides skills necessary for California Fire Service Training and Education System, Certified Firefighter I and Fire Inspector I. Prerequisite: Fire Service Technology 50 (completed with a grade of “C” or higher). 3 hours.

Grading Option: GR Transfer: CSU



# Fire Service Technology

## **FST 55 FIRE PROTECTION EQUIPEMENT AND SYSTEMS 3 UNITS**

History and development of the Uniform Fire Code; features, design, and operations of fire alarm systems and smoke detection systems; means and adequacy of required exiting systems. Installation and maintenance of automatic, manual, and other private fire extinguishing equipment, heat and smoke control systems, water or sprinkler supply, water supply for fire protection and portable fire extinguishers. 3 hours.

Grading Option: GR

Transfer: CSU

## **FST 56 FUNDAMENTALS OF BUILDING CONSTRUCTION FOR FIRE PROTECTION 3 UNITS**

Study of the components of building construction that relate to fire/life safety. Elements of construction and design of structures are shown to be key factors when inspecting buildings, preplanning fire operations, and operating at fires/collapse emergencies. Development and evolution of building and fire codes will be studied in relationship to past fire/collapses in residential, commercial, and industrial occupancies. Prerequisite: Fire Service Technology 50. 3 hours.

Grading Option: OP

Transfer: CSU

## **FST 65 FIRST RESPONDER HAZARDOUS MATERIALS/INCIDENT COMMAND ICS200 3 UNITS**

Hazard recognition and identification; incident response safety procedures and decontamination. Response to hazardous materials emergencies. Emphasis on skills and knowledge necessary to protect lives, property, and the environment. Meets the California Specialized Training Institute's requirements for Hazardous Materials First Responder Operational Awareness and Hazmat First Responder "Decon" Certifications under California Government Code Section 1503. Principles of Incident Command System, basic ICS structure and common responsibilities. Meets the State Fire Marshall's Office ICS 200 Certification Requirement. Strongly recommended: Fire Service Technology 53. 3 hours lecture, 12 hours total laboratory.

Grading Option: GR

Transfer: CSU

## **FST 70A BASIC RESCUE PRACTICES 2 UNITS**

Fire incident search and evacuation principles. Implementation of auto incident safety, access, first aid, extrication and removal operations. Wildland incident search procedures, knot tying and slope evacuation skills. Simulated automobile incident rescue exercises. Strongly Recommended: Fire Service Technology 90A and 90B (Fire Fighter-1) or active member of paid or volunteer fire department. 2 hours.

Grading Option: GR

Transfer: CSU

## **FST 70B ADVANCED RESCUE PRACTICES 2 UNITS**

Continuation of skills and knowledge from Fire Service Technology 70A. Application of triage principles. Implementation of multi-casualty incident safety, access, first aid, extrication and removal operations. Advanced wildland incident vertical slope lowering and hoisting skills. Structure collapse shoring, debris tunneling and trench collapse patient recovery techniques. Includes simulated structure collapse rescue and incident command exercises. Prerequisite: Fire

Service Technology 70A (completed with a grade of "C" or higher). 1 hour lecture, 3 hours laboratory.

Grading Option: GR

Transfer: CSU

## **FST 71A FIRE COMMAND 1A 2 UNITS**

Provides fire company officers with information and experience in command and control techniques. Emphasis on decision making, the act of commanding, the authority of command. Satisfies part of the requirements for the State Fire Officer I Certification. 40 total hours.

Grading Option: GR

Transfer: CSU

## **FST 71B FIRE COMMAND 1B 2 UNITS**

Provides company officers with information and experience in command and control techniques. Emphasis on decision making and appropriate use of resources for the first arriving company officer at hazardous material incidents. Satisfies part of the requirements for the State Fire Officer I Certification. 40 total hours.

Grading Option: GR

Transfer: CSU

## **FST 72 FIRE SERVICE MANAGEMENT 2 UNITS**

Development of skills and knowledge necessary to make the transition from a specialist or supervisory role to a managerial role. Preparation for State Fire Officer I certification. 40 total hours.

Grading Option: GR

Transfer: CSU

## **FST 73A FIRE PREVENTION OFFICER IA 2 UNITS**

Principles of fire prevention. Preparation for Fire Prevention Officer I Certification. 40 total hours.

Grading Option: GR

Transfer: CSU

## **FST 73B FIRE PREVENTION OFFICER IB 2 UNITS**

Private fire protection systems; code requirements for access and egress; life safety factors. Preparation for the Fire Prevention Officer I Certification. Prerequisite: Fire Service Technology 73A (completed with a grade of "C" or higher). 40 total hours.

Grading Option: GR

Transfer: CSU

## **FST 74A FIRE INVESTIGATION 1A 2 UNITS**

An introduction into the principles of fire investigation including fire investigation techniques relating to different types of fires. Recognition of arson laws and penalties in California, laws related to scene preservation and evidence collection. Fire origin and cause determination within the fire ground environment. Fire scene documentation requirements. This is a State of California Fire Marshal, CFSTES (California Fire Service Training and Education System) course approved by the California State Fire Board. A certificate will be issued by the California State Fire Marshall, State Fire Training upon successful completion of the course. 2 hours.

Grading Option: GR

Transfer: CSU

## **FST 75A FIRE INSTRUCTOR IA 2 UNITS**

Methods and techniques to help fire service personnel select, develop, and organize materials for in-service programs. Designed for fire company officers who conduct in-service training programs.

Prerequisite: Fire Service Technology 50 (completed with a grade of "C" or higher) or employment in the Fire Service. 32 total hours lecture, 8 total hours demonstration laboratory. 40 total hours.

Grading Option: GR

Transfer: CSU

**FST 75B FIRE INSTRUCTOR IB 2 UNITS**

A continuation of Fire Service Technology 75A. Practice in the development, implementation, and evaluation of inservice training programs. Prerequisite: Fire Service Technology 75A (completed with a grade of "C" or higher). 32 total hours lecture, 8 total hours demonstration laboratory. 40 total hours.

Grading Option: GR

Transfer: CSU

**FST 86 WILDLAND INTERFACE FIRE FIGHTING 2 UNITS**

Factors affecting wild land fire, prevention, fire behavior, and control techniques. Emphasis on organization, weather patterns, and equipment usage, safety and wildland fire behavior. 2 hours lecture, 12 hours total laboratory.

Grading Option: GR

**FST 90A FIRE FIGHTER-1 CERTIFICATION PREPARATION 2 UNITS**

Development of individual skills and basic knowledge necessary to perform the functions of a fire fighter. Practice in donning breathing apparatus, knot tying, placing ladders, pulling hose, making water supply connections and using the incident command system. Prerequisite: Fire Service Technology 50, 51, 52, and 53, 65, 86, Health 61 or proof of current completion of an Emergency Medical Technician Program (all courses completed with a grade of "C" or higher). 24 total lecture hours, 40 total hours laboratory.

Grading Option: GR

**FST 90B FIRE FIGHTER-1 CERTIFICATION PREPARATION 2 UNITS**

Continuation of skills and basic knowledge necessary to perform the functions of a fire fighter, engineer and captain within a fire attack team. Practice in donning breathing apparatus, knot tying, placing ladders, pulling hose, making water supply connections and using the incident command system. Prerequisite: Fire Service Technology 90A (completed with a grade of "C" or higher). 24 total lecture hours, 40 total hours laboratory.

Grading Option: GR

**FST 90C FIRE FIGHTER-1 CERTIFICATION PREPARATION 2 UNITS**

Continuation of skills and basic knowledge necessary to perform the functions of a fire attack team, in multiple company exercises, which include: hose and ladder evolutions; salvage and overhaul techniques; fire attack, control and extinguishment techniques for various situations. Fire fighter-1 Graduation Certificate awarded upon successful completion. Students with six months paid experience or 12 months volunteer/work experience may apply for the State Certificate, with proof of current completion of a valid Emergency Medical Technician Program. Prerequisite: Fire Service Technology 90B (completed with a grade of "C" or higher). 24 total hours lecture, 40 total hours laboratory.

Grading Option: GR

**FST 92 FIRE FIGHTER-II CERTIFICATION PREPARATION 4 UNITS**

Manipulative and technical training in fire protection water supply, self-contained breathing apparatus, fire service equipment inspection and maintenance, advanced hose and ladder operations, fire attack and control procedures, and radiological monitoring. Designed to develop the abilities of the employed or volunteer fire fighter to perform the objectives stated in the Fire Fighter II Certification guidelines. Academy Certificate, EMT Certificate. Prerequisite: Fire Service Technology 54, 55, 70B (all completed with Grade of "C" or higher) and proof of eligibility for/or possession of a State of California Fire Fighter I Certificate. May substitute the State Heavy Rescue course and a Vehicle Extrication course for the 70A and 70B requirements. 3.5 hours lecture, 2 hours laboratory.

Grading Option: GR

**FST 95 WORK EXPERIENCE 1-3 UNITS**

College supervised on-the-job training while working in a fire service related occupation. Prerequisite: State Fire Fighter I Academy Certificate, EMT Certificate. Corequisite: Fire Service Technology 96. 5-15 hours each week. See page 218 for Work Experience requirements.

\*FST 95 and FST 96 combined, maximum transfer credit 6 units.

Grading Option: GR (May be repeated 3 times)

Transfer: CSU

**FST 96 WORK EXPERIENCE SEMINAR 1 UNIT**

Coordination of curriculum with college supervised part-time or full-time employment, or volunteer work in the fire service field. Includes case studies, job related problems, cases and presentations, and material related to employment, organization and management; emphasis on building working relationships with supervisors, subordinates, and co-workers. Prerequisite: State Fire Fighter I Academy Certificate, EMT Certificate. Corequisite: Fire Service Technology 95. 1 hour. See page 218 for Work Experience requirements.

\*FST 95 and FST 96 combined, maximum transfer credit 6 units.

Grading Option: GR (May be repeated 3 times)

Transfer: CSU\*



# Foreign Languages

## Foreign Languages

### About the Program

The Foreign Language program offers primarily first- and second-year transfer-level courses in Spanish and ASL (American Sign Language), and includes French and Italian on a rotating basis. In addition, conversation courses are also offered in many languages. The transfer-level courses are designed to prepare students to continue with their language studies in upper-division courses. In the first year of study the courses cover elementary grammar and focus on developing the student's ability to speak, read, and write the language as well as understand the spoken language. At the second-year level, there is a review of grammar and a continuing focus on speaking, reading, writing, and understanding. In addition, the reading level becomes more advanced, and there is more emphasis on learning about the culture of the people who speak the individual languages. The program is open to students who plan to major in a foreign language, as well as those who wish to study language for their own personal interest.



## French (FREN)

### FREN 1A BEGINNING FRENCH

5 UNITS

This introductory level course will enable students to begin speaking, reading and writing elementary level French as well as understanding the spoken language. Students are introduced to concepts of grammar, vocabulary and verb tenses in a variety of auditory, visual and written contexts. Strongly Recommended: Eligibility for English 1A. 5 hours. (FREN 1A + 1B = CAN FREN SEQ A)

Grading Option: OP

Transfer: CSU, UC

### FREN 1B ELEMENTARY FRENCH

5 UNITS

This is the second semester of the introductory level course and will enable students to continue to learn to speak, read and write elementary level French as well as to understand the spoken language. Students are introduced to concepts of grammar, vocabulary and verb tenses in a variety of auditory, visual and written contexts. Prerequisite: French 1A (completed with a grade of "C" or higher). 5 hours. (FREN 1A + 1B = CAN FREN SEQ A)

Grading Option: OP

Transfer: CSU, UC

### FREN 2A INTERMEDIATE FRENCH

4 UNITS

Review of grammar; reading of works of modern authors; practice in conversation and composition. Prerequisite: French 1B (completed with grade of "C" or higher). 4 hours. (FREN 2A + 2B = CAN FREN SEQ B)

Grading Option: OP

Transfer: CSU, UC

### FREN 2B ADVANCED FRENCH

4 UNITS

Reading of French authors; advanced review of grammar, emphasis on speaking and composition. Prerequisite: French 2A (completed with grade of "C" or higher). 4 hours. (FREN 2A + 2B = CAN FREN SEQ B)

Grading Option: OP

Transfer: CSU, UC

### FREN 50A CONVERSATIONAL FRENCH

2 UNITS

Development of a basic understanding of spoken French through a study of pronunciation, vocabulary, and applied grammar, and an introduction to the everyday culture of French-speaking people. 3 hours.

Grading Option: OP

### FREN 50B CONVERSATIONAL FRENCH

2 UNITS

Development of skills learned in French 50A. Understanding of spoken French through a study of pronunciation, vocabulary, and applied grammar. Introduction to everyday life of French-speaking people and the skills needed to successfully function in culture. Prerequisite: French 50A (completed with a grade of "C" or higher). 3 hours.

Grading Option: OP

**Italian (ITLN)****ITLN 1A BEGINNING ITALIAN****5 UNITS**

This introductory level course will enable students to begin speaking, reading and writing elementary level Italian as well as understanding the spoken language. Students are introduced to concepts of grammar, vocabulary and verb tenses in a variety of auditory, visual and written contexts. Strongly recommended: Eligibility for English 1A. 5 hours.

Grading Option: OP

Transfer: CSU, UC

**ITLN 1B ELEMENTARY ITALIAN****5 UNITS**

This is the second semester of the introductory level course and will enable students to continue learning to speak, read and write elementary level Italian as well as to understand the spoken language. Students are introduced to concepts of grammar, vocabulary and verb tenses in a variety of auditory, visual and written contexts. Prerequisite: Italian 1A (completed with a grade of "C" or higher) or equivalent. 5 hours.

Grading Option: OP

Transfer: CSU, UC

**ITLN 50A CONVERSATIONAL ITALIAN****2 UNITS**

Development of a basic understanding of spoken Italian through a study of pronunciation, vocabulary, and applied grammar, and an introduction to the everyday culture of Italian-speaking people. 3 hours.

Grading Option: OP

**ITLN 50B CONVERSATIONAL ITALIAN****2 UNITS**

Development of skills learned in Italian 50A. Understanding of spoken Italian through a study of pronunciation, vocabulary, and applied grammar. Introduction to everyday life of Italian-speaking people and the skills needed to successfully function in Italian culture. Prerequisite: Italian 50A (completed with a grade of "C" or higher). 3 hours.

Grading Option: OP

**Spanish (SPAN)****SPAN 1A BEGINNING SPANISH****5 UNITS**

The introductory level course will enable students to begin speaking, reading and writing elementary level Spanish as well as understanding the spoken language. Students are introduced to concepts of grammar, vocabulary and verb tenses in a variety of auditory, visual and written contexts. Strongly Recommended: Eligibility for English 1A. 5 hours. (SPAN 1A + 1B = CAN SPAN SEQ A)

Grading Option: OP

Transfer: CSU, UC

**SPAN 1B ELEMENTARY SPANISH****5 UNITS**

This is the second semester of the introductory level course and will enable students to continue to learn to speak, read and write elementary level Spanish as well as to understand the spoken language. Students are introduced to concepts of grammar, vocabulary and verb tenses in a variety of auditory, visual and written contexts. Prerequisite: Spanish 1A (completed with a grade of "C" or higher) or equivalent. 5 hours. (SPAN 1A + 1B = CAN SPAN SEQ A).

Grading Option: OP

Transfer: CSU, UC

**SPAN 2A INTERMEDIATE SPANISH****4 UNITS**

Review of grammar; reading of works of modern authors; practice in conversation and composition. Prerequisite: Spanish 1B (completed with grade of "C" or higher) or equivalent. 4 hours. (CAN SPAN 8)

Grading Option: OP

Transfer: CSU, UC

**SPAN 2B ADVANCED SPANISH****4 UNITS**

Reading of Spanish authors; advanced review of grammar; emphasis on speaking and composition. Prerequisite: Spanish 2A (completed with grade of "C" or higher) or equivalent. 4 hours. (CAN SPAN 10)

Grading Option: OP

Transfer: CSU, UC

**SPAN 50A CONVERSATIONAL SPANISH****2 UNITS**

Development of a basic understanding of spoken Spanish through pronunciation, vocabulary, and applied grammar and an introduction to the everyday culture of Spanish-speaking people. 3 hours.

Grading Option: OP

**SPAN 50B CONVERSATIONAL SPANISH****2 UNITS**

Development of skills learned in Spanish 50A. Understanding of spoken Spanish through pronunciation, vocabulary, and applied grammar. Introduction to everyday life of Spanish-speaking people and the skills needed to successfully function in culture. Prerequisite: Spanish 50A (completed with a grade of "C" or higher). 3 hours.

Grading Option: OP

# General Studies

## General Studies

### About the Program

General Studies are courses based in multiple disciplines designed to contribute to the capacity for students to succeed in college. The offerings in this area are focused on Leadership and Teaching.

### General Studies (GNST)

**GNST 10 FACULTY ASSISTANT EXPERIENCE FOR POTENTIAL TEACHERS**  
1-2 UNITS

Work as a faculty assistant to gain a variety of experiences related to teaching and learning tasks. May not assist in course sections in which enrolled. Prerequisite: Consent of instructor and Office of Academic Services. 2.5-5 hours.

Grading Option: OP (*May be repeated 3 times*)

**GNST 25 STUDENT LEADERSHIP** 1-2 UNITS

Processes and methods of communication in group situations, including parliamentary procedure, preparation of agenda and minutes, and organization accounting. Introduction to student government procedures and policies. Recommended for members of the Student Government Assembly, club officers, members of college-wide committees and others interested in leadership. 1 hour lecture, 2-4 hours laboratory.

Grading Option: OP



## Geography

### About the Program

Geography is the science of place and space. Geographers ask where things are located on the surface of the earth, why they are located where they are, how places differ from one another, and how people interact with the environment. There are two main branches of geography: human geography and physical geography. Human geography is concerned with the spatial aspects of human existence—how people and their activity are distributed in space, how they use and perceive space, and how they create and sustain the places that make up the earth's surface. Human geographers work in the fields of urban and regional planning, transportation, marketing, real estate, tourism, and international business. Physical geographers study patterns of climates, landforms, vegetation, soils, and water. They forecast the weather, manage land and water resources, and analyze and plan for forests, rangelands, and wetlands. Many human and physical geographers have skills in cartography and Geographic Information Systems (GIS). Geographers also study the linkages between human activity and natural systems, and are active in the study of global warming, desertification, deforestation, loss of biodiversity, groundwater pollution, and flooding.

Las Positas College offers a range of courses in both human and physical geography which meet a variety of general education requirements and which transfer to four-year colleges or universities. Because some variation in specific requirements may exist at a particular four-year institution, students should refer to the catalog of the prospective transfer institution and consult a counselor.

SEE ALSO: **Social Science**

## Geography (GEOG)

### GEOG 1 INTRODUCTION TO PHYSICAL GEOGRAPHY 3 UNITS

Earth's natural environments, with emphasis on spatial characteristics, change over time, interactions between environmental components, and human-environment interactions. Physical processes, techniques, and tools by which Earth's climates, soils, vegetation, water resources, and land forms are linked into integrated global patterns. Effect of natural environments on human activities and how humans modify environments. Field trips may be included. 3 hours. (CAN GEOG 2)

Grading Option: GR

Transfer: CSU, UC

### GEOG 1L INTRODUCTION TO PHYSICAL GEOGRAPHY LABORATORY 1 UNIT

Application of the concepts, techniques, tools, and materials of physical geography. Practical exercises, experiments, observations, data analyses, and computer applications/simulations which augment understanding of geographic processes, interrelationships, spatial patterns and distributions. Use of maps, remotely-sensed imagery, and geographic information systems. Includes locational reference systems, time-space relationships, weather, climate, soils, vegetation, and landforms. Field trips/field projects may be included. Prerequisite: Geography 1 (may be taken concurrently). 3 hours laboratory.

Grading Option: GR

Transfer: CSU, UC

### GEOG 2 CULTURAL GEOGRAPHY 3 UNITS

Spatial analysis of human populations, their cultural traits, and activities. Emphasis on how diverse peoples, through their interactions and through their perceptions and use of the physical environment, create distinctive cultural landscapes. Social, political, and economic elements of geography which contribute to the evolution of these global and regional cultural patterns. Field trips may be included. 3 hours. (CAN GEOG 4)

Grading Option: OP

Transfer: CSU, UC

### GEOG 5 WORLD REGIONAL GEOGRAPHY 3 UNITS

Regions of the world and the way humans live within those regions. Includes physical and cultural characteristics of world regions, how they are similar and how they are different, economic patterns, agriculture, industrial development and population dynamics. Emphasis on contemporary major issues and their geographic impact. 3 hours.

Grading Option: GR

Transfer: CSU, UC

# Geography

## **GEOG 8 INTRODUCTION TO WEATHER AND CLIMATE 3 UNITS**

Introduction to weather and climate and their impact on and modification by human activities. Emphasis on weather elements, events, and processes; climate controls; and the techniques, tools, and instruments of atmospheric science. Includes atmospheric optics, weather prediction, severe storms, air pollution, global/regional warming/cooling, ozone depletion, acid rain, El Niño, deforestation, desertification, and other topics related to everyday experience and global climate change. Field trips and observational activities may be included. 3 hours.

Grading Option: OP

Transfer: CSU, UC



## **GEOG 12 GEOGRAPHY OF CALIFORNIA 3 UNITS**

California's physical, cultural, and regional elements. The physical geographic base includes: location; geological evolution; geomorphic provinces, natural hazards, and resources; climate, water resources, vegetation, and soils. Historically developed cultural themes include: Native American and Hispanic origins; migration patterns and settlements; population growth and ethnic diversity; land use and economic activities; and Pacific Rim connections. Human-environment interactions and issues are considered throughout. Field trips may be included. 3 hours.

Grading Option: OP

Transfer: CSU, UC



## **GEOG 15 INTRODUCTION TO GEOGRAPHIC INFORMATION SYSTEMS (GIS) 3 UNITS**

GIS is a geographically-based, computer assisted information technology that captures, organizes, queries, and analyzes spatial relationships between locations and attributes of Earth's physical, cultural, and economic features. GIS facilitates visualization of spatial relationships and decision-making by interactively linking maps, databases, images, and charts. GIS is both a tool for learning across the curriculum and an integrated system and science for solving real-world spatial problems within and across every economic sector. This course introduces entry-level GIS theory, principles, concepts, applications, and operations through a combination of lectures, demonstration, interactive web sessions and tutorials, and active learning strategies. Students will acquire basic hands-on GIS experience with current industry-standard software. Field trips may be required. 3 hours.

Grading Option: OP

Transfer: CSU, UC

## Geology

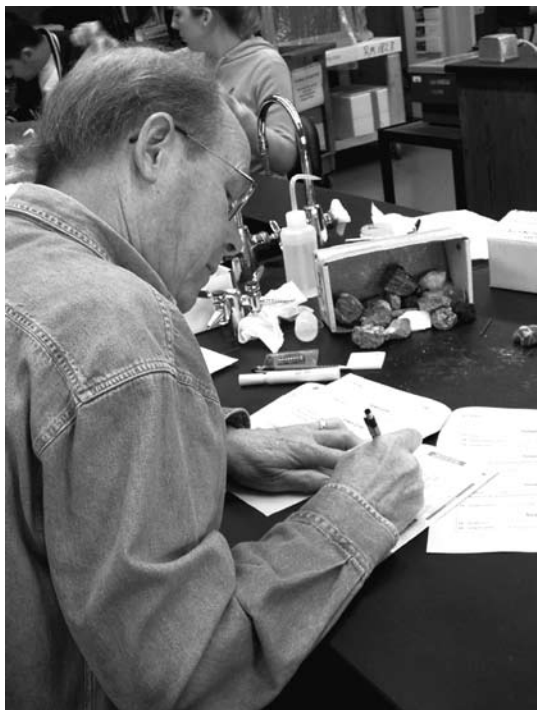
### About the Program

Geology is the study of the earth. Areas of study include but are not limited to: volcanoes; earthquakes and seismology; the Geologic Time Scale and the formation of the earth; petrology (rocks) and minerals; hydrology; erosion; oceanography, including beach systems; environmental geology; glaciers and Ice Ages; groundwater; and deserts.

The Las Positas College Geology Program features lectures and laboratories for both Geology majors and non-science majors. Lectures and accompanying required laboratory courses are offered separately to accommodate students' schedules.

For students interested in pursuing a four-year degree in Geology, the first two years of a Geology degree generally consist of: Physical Geology 1 (lecture and laboratory); Historical Geology 3 (lecture and laboratory); and Physics, Chemistry, Mathematics, and general breadth requirements. Mineralogy/Earth Materials is also a required lower-division Geology course at some four-year schools.

Geology is an applied science. The last two years of the typical four-year geology program focus on geology courses that apply scientific concepts and principles that the student learned in the first two years. All potential geology majors should consult the current college catalog for geology degree requirements at the school to which the student wishes to transfer.



## Geology (GEOL)

### GEOL 1 PHYSICAL GEOLOGY

3 UNITS

The Earth, its materials, its internal and external processes, and its development through time. Emphasis is placed on a thorough global understanding of Plate Tectonics as a framework and foundation for subsequent geologic topics and concepts. Topics include volcanoes, earthquakes and seismology, the Geologic Time Scale and the formation of the earth, rocks and minerals, hydrology, erosion, beach systems, environmental geology, glaciation, groundwater, etc. Course content includes the difference between theory and fact and the historical development of key geologic concepts. This is the foundation course for almost all subsequent geology courses for both geology majors and non-majors. 3 hours.

Grading Option: OP

Transfer: CSU, UC

### GEOL 1L PHYSICAL GEOLOGY LAB

1 UNIT

Laboratory course to supplement the physical geology lecture course. Introduction to the materials and techniques of geology. Includes minerals, rocks, topographic and geologic maps, structural geology, identification and interpretation of landforms, geologic time and relative age dating analysis, etc. Prerequisite: Geology 1 (may be taken concurrently). 3 hours laboratory.

Grading Option: OP

Transfer: CSU, UC

### GEOL 3 HISTORICAL GEOLOGY

3 UNITS

Formation and development of the earth, its oceans, atmosphere and life through time. Emphasis on the Geologic Time Scale, the fossil record, introductory biostratigraphy, radiometric dating, index fossils, fossil assemblages, mass extinctions, types of fossil preservation, Ice Ages and glacial events through time, paleogeography: plate tectonic configurations throughout time, etc. Prerequisite: Geology 1 (completed with a grade of "C" or higher). 3 hours.

Grading Option: OP

Transfer: CSU, UC

### GEOL 3L HISTORICAL GEOLOGY LABORATORY

1 UNIT

Laboratory exercises to support and reinforce the Historical Geology lecture course. Includes lab exercises in relative and absolute age-dating, biostratigraphy, radiometric dating, the construction of geologic histories from geologic map data, types of fossil preservation, fossil identification and morphology of the common and important fossils throughout the Geologic Time Scale. Formation and development of the earth, its oceans, atmosphere and life through time. Prerequisite: Geology 3 lecture (may be taken concurrently) 3 hours laboratory.

Grading Option: OP

Transfer: CSU, UC

# Geology

## GEOL 12 INTRODUCTION TO OCEANOGRAPHY 3 UNITS

Introduction to the oceans, the history of oceanic science, instrumentation and exploration; marine geology including Plate Tectonics and shoreline processes; physical and chemical properties of sea water; causes and effects of currents, tides, and waves; introduction to the basic types of marine life, the basic marine habitats and ecosystems; distribution of marine resources and the Law of the Sea. 3 hours.

Grading Option: OP

Transfer: CSU, UC

## GEOL 12L INTRODUCTION TO OCEANOGRAPHY LABORATORY 1 UNIT

Laboratory course to supplement the oceanography lecture course. Introduction to the materials and techniques of oceanic science. Includes sea floor rocks, oceanic geography, bathymetric maps, seismic reflection, seawater physics and chemistry, beach sand, tides, waves, marine life and marine fossils, sea floor spreading rates, etc. Prerequisite: Geology 12 lecture (may be taken concurrently). 3 hours laboratory.

Grading Option: C/N

Transfer: CSU, UC



## Health and Wellness

### About the Program

The Health and Wellness program consists of courses in personal health and nutrition (see the LPC Catalog section for Nutrition). These courses are intended to help students live healthfully now and for the rest of their lives. They also serve as foundations for students intending to focus their studies in the health and nutritional sciences and physical education and athletics.

### Health (HLTH)

**HLTH 1 INTRODUCTION TO HEALTH 3 UNITS**

Physiological, psychological, and social perspectives of health. Emphasis on knowledge, attitudes, and behaviors that will contribute to a healthy individual. 3 hours. \* *Transfer unit limitations, see page 63*

Grading Option: OP

Transfer: CSU, UC\*

**HLTH 2 HEALTH ISSUES 2 UNITS**

Investigation, analysis, and evaluation of selected contemporary health and ethical issues with the intent of acquiring insight into the health care delivery systems, health attitudes and behavior. Concepts and issues in contemporary health. 2 hours. \* *Transfer unit limitations, see page 63*

Grading Option: OP

Transfer: CSU, UC\*





# Health—Public Safety and EMT

## Health—Public Safety and Emergency Medical Technology - EMT

### About the Program

Emergency Medical Technology is the third arm of the Public Safety Triad (the other arms being Administration of Justice and Fire service Technology). Although fire departments retain a significant portion of emergency medical service responsibility in this country, the Emergency Medical Services (EMS) mission constitutes over 65% to 80% of a fire department's service response. The EMS mission includes pre-hospital care and transport provided by first responders, both private and public, and the advanced definitive care provided in the emergency department of hospitals. Careers within the field of EMS are in great demand due to an aging and growing populace in the United States.

Las Positas College offers two entry-level courses in the Emergency Medical Technology program. Health 61 (a full semester course), is the "First Responder" training, encompassing Cardiopulmonary Resuscitation training and Advanced First Aid skills required of all lifeguards, correctional officers, police officers and firefighters and other certified first responders in both the private and public sectors. Health 61 is also a prerequisite for the formal EMT-Basic "Emergency Medical Technician" training class, Health 81.

Health 81 or EMT-1 (Basic) is a semester long course designed to prepare the student to receive certification in the State of California as an EMT-1. Students will learn a multitude of skills including patient assessment; care and treatment of respiratory emergencies using oxygen and basic airway adjuncts, and receive classroom lectures on hazardous materials, ambulance operations, patient transport, and mass casualty training.

Students successfully completing Health 81 or EMT-1 (Basic) at a certain grade are able to register for the certifying examination for the State of California, administered through the National Registry of Emergency Medical Technicians. Emergency Medical Technician (EMT-1) is considered a prerequisite certification for those students who desire to advance their skills and knowledge to the Pre-Hospital Care Paramedic Level of training.

This area also includes EMT-1 (Basic) refresher classes, as well as courses in Community Cardiopulmonary Resuscitation and Professional Cardiopulmonary Resuscitation. These courses are designed to better prepare both the non-health care professional (i.e., interested citizen or community volunteer) and the health care professional (i.e., medical staff at a physician or dental office) to respond to emergencies as a concerned citizen in the work place and/or at home.

A course in Basic Medical Terminology is also available for those students who desire to advance their level of training and certification beyond the EMT-1 (Basic) level. This course will allow for students to be better prepared for the advanced levels of medical instruction

that they will face within a pre-hospital care paramedic program and the hospital clinical and field internships that they will be required to participate in.

### Emergency Medical Technology (HEALTH)

#### HLTH 50 ORIENTATION TO HEALTH CARE DELIVERY SYSTEM 2 UNITS

Overview of health professions and health care facilities, the roles of governmental agencies, professional associations, fiscal intermediaries and consumers. Provides a historical background of the health care delivery system and its contemporary practice. 2 hours.

Grading Option: OP

Transfer: CSU

#### HLTH 51A BASIC MEDICAL TERMINOLOGY 4 UNITS

Terminology used typically by the medical profession; explanation of the history of terminology, prefixes, suffixes, and root words, emphasis on spelling, definitions, pronunciation, and an understanding of their meanings; includes medical abbreviations, pharmaceutical terms, terminology utilized in patient records management; introduction to anatomical terms, and terms related to disease processes. 4 hours.

Grading Option: OP

Transfer: CSU

#### HLTH 51B DISEASE PROCESS AND ADVANCED MEDICAL TERMINOLOGY 4 UNITS

Introduction to the nature of disease and to the structural and functional changes of diseases as they affect the systems of the body; discussion of causes, symptoms and treatment of disease. Prerequisite: Health 51A. 4 hours.

Grading Option: OP

Transfer: CSU

#### HLTH 60 RESPONDING TO EMERGENCIES 1 UNIT

Development of knowledge and skills for recognizing and caring for emergency situations. Includes healthy lifestyles, and prevention of illness and injury. Designed to meet the needs of individuals in the community who frequently provide First Aid. Successful completion of the knowledge and skills tests qualifies for an American Red Cross Responding to Emergencies card and Adult CPR card. 1 hour lecture, 1 hour laboratory.

Grading Option: OP

Transfer: CSU

#### HLTH 61 FIRST RESPONDER 2.5 UNITS

Development of knowledge and skills necessary for recognizing and caring for emergency situations, including cardiopulmonary resuscitation, prevention of disease transmission, and automated external defibrillation. Designed for first responders in an emergency. Successful completion of the knowledge and skills tests qualifies for a National Safety Certificate and Professional Rescuer CPR card. 2 hours lecture and 2 hours laboratory.

Grading Option: GR

Transfer: CSU

#### HLTH 70A COMMUNITY CARDIOPULMONARY RESUSCITATION .5 UNIT

Development of the knowledge, skill and personal judgment necessary to initiate and perform basic life support techniques

in cardiopulmonary resuscitation. Designed for citizens in the community. Successful completion of the knowledge and skills test qualifies for American Red Cross Community CPR or American Heart Association Adult and Pediatric Heart Saver Certificate. 6 total hours lecture, 6 total hours laboratory. 2 total hours.

Grading Option: C/N (May be repeated 3 times) Transfer: CSU

**HLTH 70B PROFESSIONAL CARDIOPULMONARY RESUSCITATION - CPR . 5 UNITS**

Development of knowledge, skills and personal judgment necessary to initiate and perform basic life support techniques as a health care professional. Successful completion of the knowledge and skills tests qualifies for an American Red Cross Professional Rescuer or an American heart Association Basic Life Support Health Care Provider Certificate. Prerequisite: Health 70A (completed with a grade of "C" or higher) or equivalent. 4 total hours lecture, 5 total hours laboratory.

Grading Option: C/N Transfer: CSU

**HLTH 81 EMT-1 (BASIC) 6.5 UNITS**

Provides training in the foundation skills and knowledge required of the EMT-1 scope of practice. The EMT-1 certification is the minimum requirement for ambulance attendants and most entry-level firefighter positions. EMT-1 certification is also required for entry into paramedic training. This training proGram is accredited by the Alameda County Emergency Medical Services District. Prerequisite: Health 61 (completed with a grade of "C" or higher). 5 hours lecture, 4.5 hours laboratory.

Grading Option: GR Transfer: CSU



# History

## History

### About the Program

The History major is designed to help students comprehend the forces that have shaped the United States, as well as other nations around the world. The program fulfills the campus mission to foster growth in its students and in the community. The program offers a wide variety of courses, and all of the units are transferable. Students of history are encouraged to develop critical thinking skills and to learn to write clearly. Both skills will enable students to be successful in their chosen career fields. The discipline of history helps to nurture an informed public and is, therefore, of vital importance to a democratic society. While units in this program are transferable to many institutions, students should consult a counselor for transfer information.

SEE ALSO: **Humanities, Social Science**



## History (HIST)

### HIST 1 HISTORY OF WESTERN CIVILIZATION TO 1600 3 UNITS

Origin and development of civilization in the Mediterranean and its expansion into Europe - the Near East, Greece, Rome the Middle Ages, Renaissance and the Reformation. 3 hours. (CAN HIST 2; HIST 1 + HIST 2 = CAN HIST SEQ A)

Grading Option: GR

Transfer: CSU, UC

### HIST 2 HISTORY OF WESTERN CIVILIZATION SINCE 1600 3 UNITS

History of the Modern Western World; Romanticism and the Industrial Revolution to the present. 3 hours. (CAN HIST 4; HIST 1 + HIST 2 = CAN HIST SEQ A)

Grading Option: GR

Transfer: CSU, UC

### HIST 7 U.S. HISTORY THROUGH RECONSTRUCTION 3 UNITS

A survey of United States history from its pre-colonial, indigenous origins through the end of Reconstruction. Emphasis on (1) distinctively American patterns of political, economic, social, intellectual, and geographic developments, (2) the interaction amongst and the experiences of diverse racial, ethnic and socioeconomic groups in American History, and (3) the evolution of American institutions and ideals including the U.S. Constitution, representative democratic government, the framework of California state and local government, and the relationship between state/local government and the federal government. 3 hours. (CAN HIST 8; HIST 7 + HIST 8 = CAN HIST SEQ B)

Grading Option: GR

Transfer: CSU, UC

### HIST 8 U.S. HISTORY SINCE RECONSTRUCTION 3 UNITS

History of the United States from the post-Civil War period to the present. Emphasis on distinctively American patterns of political, economic, social, intellectual and geographic developments. 3 hours. (CAN HIST 10; HIST 7 + HIST 8 = CAN HIST SEQ B)

Grading Option: GR

Transfer: CSU, UC

### HIST 14 HISTORY AND AMERICAN CULTURES OF CALIFORNIA 3 UNITS

Historical development of California, including Spanish exploration and settlement, the Mexican Revolution and transformation, the American conquest, the Gold Rush and dynamic expansion to the present day. In addition to exploring the political, economic, cultural, and social factors affecting the development of California, the course will focus on the roles and interactions of the following groups within the context of California history: African Americans, Asian Americans, European Americans, Latino Americans, and Native Americans. 3 hours.

Grading Option: OP

Transfer: CSU, UC

**HIST 25 AMERICAN INDIAN HISTORY AND CULTURE 3 UNITS**

Historical survey of American Indians in the United States from earliest times to the present day. Emphasis on Indian societies and cultures, Indian relations with predominant cultures, Indian movement for self-preservation, and historical background necessary to understand contemporary problems of the Indians. Emphasis on the Indians of California and the West. 3 hours.

Grading Option: OP

Transfer: CSU, UC

**HIST 28 HISTORY OF AMERICAN WEST 3 UNITS**

A history of the trans-Mississippi West of the United States. Emphasis will be placed on Native American history and cultures, European and Anglo-American frontiers, expansion of the United States in the 19th century, and the interaction of Native American, European American, Asian American, African American and Hispanic American peoples, and the significance of the West in American history. 3 hours.

Grading Option: OP

Transfer: CSU, UC

**HIST 32 U.S. WOMEN'S HISTORY 3 UNITS**

A survey of United States women's history from its indigenous origins through the present. This course emphasizes the interaction and experiences of diverse racial/ethnic groups that include at least three of the following groups: African-Americans, Chicana/Latina Americans, Asian Americans, European Americans, and Native Americans. Special areas of focus include women's role in the political, economic, social, and geographic development of the United States. 3 hours.

Grading Option: OP

Transfer: CSU, UC

# Horticulture

- ✓ DEGREE
- ✓ CERTIFICATE

## Degree AS – Horticulture

## Certificate Horticulture

### About the Program

Horticulture provides a dynamic future for the career-oriented individual. The strong, private ownership base is a magnet for independent, motivated individuals. The horticulture curriculum is designed to meet the demand for trained personnel in a broad range of horticultural fields in one of the following concentration areas: landscape installation and maintenance, nursery management and operations, and floristry. Students can enter the program at the level most suited to their needs. This program is designed for direct job entry. While units in the program are transferable to many institutions, students should consult a counselor for information.

SEE ALSO: [Viticulture and Winery Technology](#)



## AS – Horticulture

### Freshman Year

Horticulture 50 (Introduction Horticulture) .....	3
Horticulture 51 (Plant Materials I) .....	3
Horticulture 52 (Plant Materials II) .....	3
Horticulture 53 (Plant Disease and Pest Control) .....	3
Horticulture Options* .....	6-7
General Education Courses	

### Sophomore Year

Horticulture 54 (Planting Media and Nutrition) .....	2
Horticulture 55 (Horticulture Management and Operations) .....	3
Horticulture 95 (Work Experience).....	2
Horticulture 96 (Work Experience Seminar).....	1
Horticulture Options* .....	6-7
General Education Courses	
<b>Total units required .....</b>	<b>60</b>

*\*Complete 1 of the 3 Horticulture Concentration Options*

### Horticulture Option 1

<b>Landscape Installation and Maintenance.....</b>	<b>13 units</b>
Horticulture 56 (Arboriculture)	
Horticulture 57 (Landscape and Turfgrass Management)	
Horticulture 58 (Landscape Construction)	
Horticulture 59 (Landscape Design)	
Horticulture 60 (Landscape Irrigation Systems)	
Horticulture 69 (Advanced Landscape Design).	

### Horticulture Option 2

<b>Nursery Management and Operations.....</b>	<b>13 units</b>
Horticulture 56 (Arboriculture)	
Horticulture 57 (Landscape and Turfgrass Management)	
Horticulture 59 (Landscape Design)	
Horticulture 60 (Landscape Irrigation Systems)	
Horticulture 67 (Interior Plantscapes)	
Horticulture 70 (Introduction to Viticulture) or Viticulture and Winery Technology10 (Introduction to Viticulture)	

### Horticulture Option 3

<b>Floristry .....</b>	<b>12 units</b>
Horticulture 64 (Basic Floristry)	
Horticulture 65 (Intermediate Floristry)	
Horticulture 66 (Advanced Floristry)	
Horticulture 67 (Interior Plantscapes)	



**Certificate of Achievement  
Horticulture**

Horticulture 50 (Introduction Horticulture) .....	3
Horticulture 51 (Plant Materials I) .....	3
Horticulture 52 (Plant Materials II) .....	3
Horticulture 53 (Plant Disease and Pest Control) .....	3
Horticulture 54 (Planting Media and Nutrition) .....	2
Horticulture 55 (Horticulture Management and Operations) .....	3
Horticulture Electives* .....	5
<b>Total units required .....</b>	<b>22</b>

**Electives\***

Select any 2 courses from the 3 Horticulture Concentration Options

**Horticulture Option 1**

**Landscape Installation and Maintenance.....13 units**

- Horticulture 56 (Arboriculture)
- Horticulture 57 (Landscape and Turfgrass Management)
- Horticulture 58 (Landscape Construction)
- Horticulture 59 (Landscape Design)
- Horticulture 60 (Landscape Irrigation Systems)
- Horticulture 69 (Advanced Landscape Design).

**Horticulture Option 2**

**Nursery Management and Operations.....13 units**

- Horticulture 56 (Arboriculture)
- Horticulture 57 (Landscape and Turfgrass Management)
- Horticulture 59 (Landscape Design)
- Horticulture 60 (Landscape Irrigation Systems)
- Horticulture 67 (Interior Plantscapes)
- Horticulture 70 (Introduction to Viticulture) or  
Viticulture and Winery Technology10 (Introduction to Viticulture)

**Horticulture Option 3**

**Floristry .....12 units**

- Horticulture 64 (Basic Floristry)
- Horticulture 65 (Intermediate Floristry)
- Horticulture 66 (Advanced Floristry)
- Horticulture 67 (Interior Plantscapes)

**Horticulture (HORT)**

**HORT 50 INTRODUCTION TO HORTICULTURE 3 UNITS**

Introduction to general horticulture, ornamental horticulture and landscape gardening. Includes vocational and hobby values of horticulture, history of horticulture, plant structure, function, growth, reproduction, and development. Plant classification, identification, propagation, and nutrition. Soils, water management, climate adaptation, ecology, pest and disease control, propagation, planting, and maintenance. 2.5 hours lecture, 1.5 hours laboratory.

Grading Option: OP Transfer: CSU

**HORT 51 PLANT MATERIALS I 3 UNITS**

Identification, landscape and garden use, growth habit, climatic adaption, ornamental value, maintenance and care of trees, shrubs, vines and other plants adapted to the northern and coastal valleys of California. Prerequisite: Horticulture 50 (may be taken concurrently). 2 hours lecture, 3 hours laboratory.

Grading Option: OP Transfer: CSU

**HORT 52 PLANT MATERIALS II 3 UNITS**

Identification, landscape and garden use, growth habit, climatic adaption, ornamental value, maintenance and care of vines, ground covers, flowers, shrublike plants and flowering trees, adapted to the northern and coastal valleys of California. Prerequisite: Horticulture 50 (completed with a grade of "C" or higher). 2 hours lecture, 3 hours laboratory.

Grading Option: OP Transfer: CSU

**HORT 53 PLANT DISEASE AND PEST CONTROL 3 UNITS**

Concepts of plant pathology, entomology, and weed science. Identification, symptoms, diagnosis, and control methods of plant diseases, insects, and weed pests. Methods and techniques of disease and pest management, chemical and non-chemical control related to garden, landscape, and other horticulture crops and plants. Disease and pest control materials with emphasis on safe handling, application, and environmental protection. 2 hours lecture, 3 hours laboratory.

Grading Option: OP Transfer: CSU

**HORT 54 PLANTING MEDIA AND NUTRITION 2 UNITS**

Soil classification, formation, and natural characteristics. Physical and chemical properties of soil and effect on plant growth and development. Propagating and planting media, soil substitutes and amendments to improve and promote plant growth. Methods and materials related to plant, soil, water, and nutrient relationships to enhance plant growth and development. Plant nutrition, essential nutrients required for plant growth and healthy development. Fertilizer materials, origin, use, and application. Strongly Recommended: Horticulture 50 or instructor's permission. 2 hours.

Grading Option: OP Transfer: CSU

# Horticulture

## **HORT 55 HORTICULTURE MANAGEMENT AND OPERATIONS 3 UNITS**

Explores many horticulture specializations including management and operations of retail and wholesale nurseries, greenhouse growers, specialized growers of trees, shrubs, flowers, hydroponics growers, vegetable growers, wholesale and retail floristry businesses, other related businesses, and botanical gardens. Emphasis on plant propagation, propagation structures, greenhouses, nursery and floral business management and operations. Employment opportunities in the horticulture industry. Prerequisite: Horticulture 50 (completed with a grade of "C" or higher). 2.5 hours lecture, 1.5 hours laboratory.

Grading Option: OP

Transfer: CSU

## **HORT 56 ARBORICULTURE 2 UNITS**

Care, maintenance, planting, and pruning of trees, shrubs, and vines. Specific pruning techniques for ornamental trees, fruit trees, shrubs, roses, and other woody plants. Tree preservation, health, growth characteristics, plant selection, planting, irrigation, fertilization, damage repair, cabling, and bracing. Methods and techniques of tree climbing, tree felling, tree removal, work hazards, and safety precautions. 1 hour lecture, 4 hours laboratory.

Grading Option: OP

Transfer: CSU

## **HORT 57 LANDSCAPE AND TURFGRASS MANAGEMENT 2 UNITS**

Principles and practices of landscape and turfgrass management as practiced by horticultural professionals, landscape contractors, and grounds keepers. Preparation, planting, irrigation, fertilization, pruning, and pest control of landscape developments for residential, commercial, public grounds, golf courses, and gardens. 1.5 hours lecture, 1.5 hours laboratory.

Grading Option: OP

Transfer: CSU

## **HORT 58 LANDSCAPE CONSTRUCTION 3 UNITS**

Design, engineering, construction techniques, and installation methods for landscape site development. Cost estimating, bidding, construction materials, methods, equipment, tools, and safety for landscape plan implementation. Contracts, specifications, and legal aspects regarding landscape installation and site development. 3 hours lecture, 1 hour laboratory.

Grading Option: OP

Transfer: CSU

## **HORT 59 LANDSCAPE DESIGN 3 UNITS**

Landscape site planning and landscape architectural design for residential properties, home gardens, and small-scale use areas. Procedures and methods required in the planning and design process; site inventory, site analysis, user group analysis, preparation of site study diagrams, preliminary designs, and master site plans. Theory and principles of design, site layout, landscape elements, and material selection. Sketching, drafting, delineation, reproduction, and coloring techniques for landscape architectural plans. Selection and use of drawing tools, materials and equipment. 2.5 hours lecture, 1.5 hours laboratory.

Grading Option: OP

Transfer: CSU

## **HORT 60 LANDSCAPE IRRIGATION SYSTEMS 3 UNITS**

Planning, design, engineering, construction, and maintenance of sprinkler and drip irrigation systems for landscape, garden, and turfgrass use. Principles of hydraulics, layout, and equipment application. Irrigation system equipment, components, methods of installation and repair. Principles and techniques of water conservation and plant-water-soil relations. 2.5 hours lecture, 1.5 hours laboratory.

Grading Option: OP

Transfer: CSU

## **HORT 61 ANIMAL PEST CONTROL 3 UNITS**

Concepts and practical applications of animal pest management and control. Identification, symptoms diagnosis, management, control methods, and materials for arthropods, mammals, and vertebrate pests. 2.5 hours lecture, 1.5 hours laboratory.

Grading Option: OP

Transfer: CSU

## **HORT 64 BASIC FLORISTRY 3 UNITS**

Overview of floral design history and theory. Construction of beginning level floral design styles. Care and conditioning of cut flowers appropriate to beginning designs. Materials, products, and containers used in the floral industry. Introduction to Japanese floral design. 2.5 hours lecture, 1.5 hours laboratory.

Grading Option: OP

Transfer: CSU

## **HORT 65 INTERMEDIATE FLORISTRY 3 UNITS**

An intermediate level course of study which explores the basic styles and variations of Western design. Continuation of study emphasizing modern marketability and European styles, techniques, and philosophy. Emphasis on speed and proficiency. Wiring and taping techniques used in corsages and hairpieces; marketability. Introduction of dried and everlasting designs and methodology. Prerequisite: Horticulture 64 (completed with grade "C" or higher) or equivalent. 2.5 hours lecture, 1.5 hours laboratory.

Grading Option: OP

Transfer: CSU

## **HORT 66 ADVANCED FLORISTRY 3 UNITS**

Continuation of knowledge and skills developed in Horticulture 65 in floral design styles covering a number of contemporary styles. Emphasis on holiday and seasonal designs, wedding designs and consultations, and funeral designs. Further study of retail aspects and customer relations. Development of personal style. Prerequisite: Horticulture 65 (completed with grade "C" or higher) or equivalent. 2.5 hours lecture, 1.5 hours laboratory.

Grading Option: OP

Transfer: CSU

## **HORT 67 INTERIOR PLANTSCAPES 3 UNITS**

Identification, use, propagation, growth, environmental adaptation, ornamental value, and care of container, indoor, and house plants. 2.5 hours lecture, 1.5 hours laboratory.

Grading Option: OP

Transfer: CSU

**HORT 69 ADVANCED LANDSCAPE DESIGN****3 UNITS**

Advanced landscape architectural design and planning for residential and commercial properties, large- and small-scale public use areas and green belts. Techniques and procedures for planning and design; environmental and user-group site analysis. Planting design, plant material usage and planting plan drawing and presentation techniques. Architectural, engineering and energy conservation values of planting design. Project cost estimating; computer-aided landscape drafting. Strongly recommended: Horticulture 59. 2.5 hours lecture, 1.5 hours laboratory.

Grading Option: OP

Transfer: CSU

**HORT 70 INTRODUCTION TO VITICULTURE****3 UNITS**

An introduction to viticulture; growing grapes, including historical aspects of grape cultivation for raisins, wine and table grapes, grape species and varieties; botany, anatomy, propagation, climate, cultivation, vineyard management, plant-soil-water relations, irrigation, fertilization, pruning, week insect pest and disease control; establishment, training and pruning grape vines, harvest and post harvest operations. Brief overview of wine making. Students who have completed or are currently enrolled in VWT 10 may not receive credit. 3 hours.

Grading Option: OP

Transfer: CSU, UC

**HORT 72 VITICULTURE FIELD MANAGEMENT AND PRACTICE****3 UNITS**

Management and field practices in grape production for growing and harvesting wine grapes, table grapes and raisins. Vineyard planning, installation, establishment, and crop management. Field practices for layout, soil preparation, propagation, planting, establishment, vine training, cultivation, irrigation, fertilization, pruning, disease and pest control. Harvest operations, grape preparation and overview of wine making. Strongly recommended: Horticulture 70. 2 hours lecture, 3 hours laboratory.

Grading Option: OP

Transfer: CSU

**HORT 80 FUNDAMENTALS OF HORTICULTURE****2 UNITS**

Introduction to basic horticulture, landscaping, and gardening. Principles, practices, and applications of propagating, growing, and maintaining plants. Basic botany, soils, landscape and garden preparation, planting, and care; irrigation, fertilization, pruning, and pest control. 2 hours.

Grading Option: OP

Transfer: CSU

**HORT 81 HOME LANDSCAPE DESIGN****2 UNITS**

Planning and design of residential landscape and garden areas. Considerations and techniques for designing outdoor areas around the home. Landscape planning techniques and concepts of design. Use area design, layout, plant selection, and drawing plans. 2 hours.

Grading Option: OP

Transfer: CSU

**HORT 95 WORK EXPERIENCE****1-3 UNITS**

Application of principles and skills through participation in on-the-job training. Prerequisite: Horticulture 50. Corequisite: Horticulture 96 and 5-15 hours of work experience per week. *See page 218 for Work Experience requirements. \*HORT 95 and HORT 96 combined, maximum transfer credit 6 units.*

Grading Option: OP

Transfer: CSU\*

**HORT 96 WORK EXPERIENCE SEMINAR****1 UNIT**

Discussion and analysis of work-experience related problems. Discussion of job opportunities in horticulture. Corequisite: Horticulture 95. 1 hour. *See page 218 for Work Experience requirements. \*HORT 95 and HORT 96 combined, maximum transfer credit 6 units.*

Grading Option: OP

Transfer: CSU\*

**HORT 99 SPECIAL TOPICS IN HORTICULTURE****.3-3 UNITS**

Designed to explore special interest subjects drawn from the field of horticulture. Emphasis will be on topics of practical use to home gardeners as well as for persons employed in horticultural industries. Typical subjects include pruning; vegetable gardening; irrigation and pest disease control .3-9 hours.

Grading Option: OP

Transfer: CSU

## Human Growth and Development

SEE: **Early Childhood Development**

## Human Services

SEE: **Psychology-Counseling**

**✓ DEGREE**

**Degree  
AA – Humanities (General)**

**About the Program**

Humanities is an interdisciplinary academic field which encourages its scholar/practitioners to interpret the world and their active role in it through a philosophical, creative and artistic immersion in a number of different but overlapping and connected fields of study. Work in the Humanities also suggests a practical professional methodology combining hermeneutics and a "dialogue-reflection-action change" process that allows students to create new or expanded world-view paradigms resulting in personal and systemic growth and change.

This degree prepares those interested in Interdisciplinary Studies, Humanities or Classical Studies/Philosophy majors for successful transfer to four-year institutions. Some variation in requirements may exist at a particular four-year transfer institution; therefore, it is essential that students refer to the catalog of the prospective transfer institution and consult a counselor. General Education courses should be carefully selected to meet the requirements of the intended transfer institution; some transfer institutions require more General Education units than required by this AA degree.

SEE ALSO **Creative Arts**  
**Philosophy**  
**Religious Studies**

**AA – Humanities (General)**

**Freshman Year**

Humanities 1 (Philosophy, The Sciences, Epic Poetry)	3
Humanities 3 (Film, Drama, Music, Visual Arts, Lyric Poetry)	3
Anthropology 5 (Cultures of the U.S.: Anthropological Perspectives on Race, Class, Gender, and Ethnicity)	3
Philosophy 4 (Introduction to Philosophy: Theory of Knowledge)	3
Humanities 10 (The American Style)	3
Religious Studies 1 (Religions of the World)	3
Art 4 (Art History: Ancient)	3
General Education Courses	

**Sophomore Year**

Humanities 28 (The Classic Myths)	3
Humanities 35 (Greek Tragedy)	3
Philosophy 2 (Introduction to Philosophy: Ethics)	3
History 1 (History of Western Civilization to 1600)	3
History 2 (History of Western Civilization since 1600)	3
Art 5 (Art History: Renaissance to Modern)	3
General Education Courses	
<b>Total units required</b>	<b>60</b>



**Humanities (HUMN)****HUMN 1 PHILOSOPHY, THE SCIENCES, EPIC POETRY 3 UNITS**

Studies in epic literature, the novel, moral-social philosophy and a variety of writings in science, religion and mythology. Emphasizes critical analysis and philosophical inquiry. 3 hours.

Grading Option: GR

Transfer: CSU, UC

**HUMN 3 FILM, DRAMA, MUSIC, VISUAL ART, LYRIC POETRY 3 UNITS**

Dramatic literature, the theater including filmic art, an introduction into the experience and appreciation of works of musical and visual art and lyric poetry. 3 hours.

Grading Option: GR

Transfer: CSU, UC

**HUMN 7 CONTEMPORARY HUMANITIES 3 UNITS**

Visual, literary, and/or musical works or art that reflect the issues and concepts of their time. A perspective through exploration of chosen works. 3 hours.

Grading Option: OP

Transfer: CSU, UC

**HUMN 10 THE AMERICAN STYLE 3 UNITS**

Humanities of the United States. Major works of literature, painting, sculpture, architecture, films, music, philosophy, science, religion and political and social institutions. Particular attention to values and meanings that reflect the American cultural experience. 3 hours.

Grading Option: OP

Transfer: CSU, UC

**HUMN 28 THE CLASSIC MYTHS 3 UNITS**

Introduction to mythic themes recurring in literature, the visual arts, and music; gods, humans, heroes; their origins, variations, historical development, and full expression in classical times and continued presence in the arts. 3 hours.

Grading Option: GR

Transfer: CSU, UC

**HUMN 35 GREEK TRAGEDY 3 UNITS**

Selected tragedies of Aeschylus, Sophocles, and Euripides; particular attention given to values and meanings characteristic of aesthetic perception, philosophic content, and historic perspective; recovery and integration of these values as a humanistic approach to Greek tragedy. 3 hours.

Grading Option: GR

Transfer: CSU, UC

**HUMN 40 INTRODUCTION TO OPERA 1-3 UNITS**

A general introduction to opera that corresponds to current local productions including the San Francisco International Opera season. Analysis of selected major operatic masterpieces with emphasis on how the libretto, the music, and the theatrical presentation contribute to the total dramatic experience. Opera attendance will be encouraged. Technical knowledge of music is not required. 1-3 hours.

Grading Option: OP

Transfer: CSU, UC

**HUMN 44 NARRATIVE FILM MUSIC 3 UNITS**

An examination of the function of music in cinema. A discovery of the contributions of classical, popular, and folk composers to the art of film-making and the influence of film music on the general culture of our time. 3 hours.

Grading Option: GR

Transfer: CSU, UC

**Independent Study****INDEPENDENT STUDY 0.5 - 2 UNITS**

Independent Study courses are open to all students and employ many combinations of media and educational techniques to create individualized, self-pacing education. Up to 18 units may be counted toward graduation. Check with the Counseling Center, Building 700, concerning transferability of Independent Study courses to four-year institutions. Independent Study may also be contracted through an instructor for research, field experience, or skill development. Independent Study may be offered under any subject area contained in the Catalog using the number 29. *\*Limited to 4 transfer units.*

*\*\*Transfer unit limitations, see page 63.*

Grading Option: OP

Transfer: CSU\*, UC\*\*

**Industrial Technology (INDT)****INDT 61 2 UNITS****MANUFACTURING PROCESSES**

Examination of machine shop, welding and general manufacturing processes; practice in the use of hand tools, basic machine tools and welding equipment; understanding the relationship between manufacturing processes and design. 1 hour lecture, 3 hours laboratory.

Grading Option: OP

Transfer: CSU

**INDT 74 3 UNITS****MEASUREMENTS AND CALCULATIONS**

Calculator techniques for whole number and decimal arithmetic problem solving, fraction-decimal conversion, percentages, ratio and proportion, algebra, geometry, areas and volumes, English metric conversion, and numerical trigonometry as applied in the industry. 3 hours.

Grading Option: OP

Transfer: CSU



# Interior Design

## Degree AS – Interior Design

## Certificate Interior Design

### About the Program

The Interior Design program prepares individuals for entry-level positions in the field of Interior Design. Most employment opportunities are in technical positions working for established interior designers and design firms, or in the retail or wholesale areas in sales of interior furnishings and accessories. Designed for direct job entry, courses in the program provide knowledge in the specifics of interior design, as well as general education to provide a breadth of knowledge suitable for living in today's society. Work experience or internships are required. While units in the program are transferable to many institutions, students should consult a counselor for information.



## AS – Interior Design

### Freshman Year

Interior Design 50 (Residential Space Planning).....	3
Interior Design 52 (History of Interiors and Furnishings) .....	3
Interior Design 54 (Principles of Interior Design).....	3
Interior Design 55 (Introduction to Textiles) .....	3
Art 10 (Design and Materials) .....	3
Art 11 (Design and Materials-Color).....	3
General Education Courses	

### Sophomore Year

Interior Design 56 (Professional Practices).....	3
Interior Design 58 (Fundamentals of Lighting).....	3
Interior Design 60 (Materials and Resources) .....	3
Interior Design 62 (Kitchen and Bath Design) .....	3
Marketing 61 (Professional Selling) .....	3
General Education Courses	
<b>Total units required</b> .....	<b>60</b>

## Certificate of Achievement Interior Design

Interior Design 50 (Residential Space Planning).....	3
Interior Design 52 (History of Interiors and Furnishings) .....	3
Interior Design 54 (Principles of Interior Design).....	3
Interior Design 55 (Introduction to Textiles) .....	3
Interior Design 56 (Professional Practices).....	3
Interior Design 58 (Fundamentals of Lighting).....	3
Interior Design 60 (Materials and Resources) .....	3
Art 10 (Design and Materials) .....	3
Art 11 (Design and Materials-Color).....	3
Marketing 61 (Professional Selling) .....	3
Electives* .....	3
<b>Total units required</b> .....	<b>33</b>

### \*Electives

Select from the following for a minimum of 3 units:

- Interior Design 62
- Interior Design 64

## Interior Design (INTD)

**INTD 50 RESIDENTIAL SPACE PLANNING 3 UNITS**  
Basic techniques in planning space for interiors. Private and group living spaces, support systems, functional planning of interior space, and color in space planning. 2 hours lecture, 3 hours laboratory.  
Grading Option: OP Transfer: CSU

**INTD 52 HISTORY OF INTERIORS AND FURNISHINGS 3 UNITS**  
A survey of the history of interiors and furnishings from Egyptian period to the present. Emphasis on furniture styles and ornamentation. 3 hours.  
Grading Option: OP Transfer: CSU

**INTD 54 PRINCIPLES OF INTERIOR DESIGN 3 UNITS**  
Elements and principles of design as they apply to interior design. Emphasis on the use of color and texture in the selection of home furnishings. 2 hours lecture, 3 hours laboratory.  
Grading Option: OP Transfer: CSU

**INTD 55 INTRODUCTION TO TEXTILES 3 UNITS**  
Introduction to textiles in the apparel and home furnishing market. Includes identification structure, and properties of fibers and yarns. Consideration of fabric design, both structural and decorative, fabric performance, labeling, and legal regulations covering textiles and apparel. 3 hours.  
Grading Option: GR Transfer: CSU

**INTD 56 PROFESSIONAL PRACTICES 3 UNITS**  
Interior design practices including business and marketing aspects, wholesale resource development, design presentation and career preparation, contractual obligations. 3 hours.  
Grading Option: OP Transfer: CSU

**INTD 58 FUNDAMENTALS OF LIGHTING 3 UNITS**  
Residential and commercial lighting systems as they apply to what constitutes a well-lit interior space. Includes an investigation of current lighting fixtures and lighting resources. 3 hours.  
Grading Option: OP Transfer: CSU

**INTD 60 MATERIALS AND RESOURCES 3 UNITS**  
Survey of residential and commercial interior furnishings with attention to product knowledge of furniture, textiles, ceramics, glass, metals, plastics and composite materials. Skills needed to perform related activities. Strongly Recommended: Interior Design 55. 3 hours.  
Grading Option: OP Transfer: CSU

**INTD 62 KITCHEN AND BATHROOM DESIGN 3 UNITS**  
Survey of the field of kitchen and bathroom designs. Includes resources, materials, trends, costs and needs, both functional and aesthetic. Strongly Recommended: Interior Design 50. 2 hours lecture, 3 hours laboratory.  
Grading Option: OP Transfer: CSU

## ✓ DEGREE

### Degree AA – International Studies

#### About the Program

The International Studies major is based upon the idea that the past 20 years have seen a series of significant changes in some of the fundamental ways in which nations have traditionally dealt with one another. There has been a shift away from the older politics of conflict and competition toward the recognition that economic and developmental strategies require international planning and management. Nations are beginning to realize that their destinies are mingled in a way and to a degree that is unprecedented. The major is designed to expose students to this new environment.

This curriculum consists of four options: (1) Business Studies, (2) Asian Studies, (3) Latin American Studies, and (4) General Studies. This degree prepares students for transfer to four-year institutions for continued studies. This program fulfills typical lower-division requirements at four-year transfer institutions. Some variation in requirements may exist at a particular four-year college or university; therefore, it is essential that the student also refer to the catalog of the prospective transfer institution and consult a counselor.

### AA – International Studies

#### Freshman Year

Foreign Language** .....	5
Anthropology 3 (Social and Cultural Anthropology) .....	3
Options* .....	0-18
General Education Courses	

#### Sophomore Year

Foreign Language** .....	5
Geography 2 (Cultural Geography) .....	3
Political Science 30 (International Relations) .....	3
Options* .....	0-18
General Education Courses	

**Total units required** ..... 60

\*Complete one of the 4 International Studies Options for a total of 18 units:

\*\*Select from Foreign Languages listed on pages 142.

#### 1. Business Option:

Business 1A/1B (Principles of Accounting)  
 Business 18 (Business Law)  
 Computer Information Systems 50 (Introduction to Computing and Information Technology)  
 Business 20 (International Business)  
 Business 30 (Business, Society, and Ethics)  
 Business 40 (Business Concepts)  
 Economics 1 (Principles of Economics: Microeconomics) and/or  
 Economics 2 (Principles of Economics: Macroeconomics)  
 Speech 1 (Fundamentals of Speech).

#### 2. Asian Studies Option:

Anthropology 5 (Cultures of the U.S.: Anthropological Perspectives on Race, Class, Gender, and Ethnicity)  
 Political Science 20 (Comparative Government)  
 Religious Studies 1 (Religions of the World)  
 Economics 1 (Principles of Microeconomics) or  
 Economics 2 (Principles of Macroeconomics)  
 Speech 1 (Fundamentals of Speech)

#### 3. Latin American Studies Option:

History 22 (Introduction to Mexican-American History and Culture)  
 Spanish 2AB (Intermediate and Advanced Spanish)  
 Anthropology 5 (Cultures of the U.S.: Anthropological Perspectives on Race, Class, Gender, and Ethnicity)  
 Economics 1 (Principles of Microeconomics) or  
 Economics 2 (Principles of Macroeconomics)  
 Political Science 20 (Comparative Government)  
 Speech 1 (Fundamentals of Speech)

#### 4. General Studies Option:

2nd Year of Foreign Language  
 Anthropology 5 (Cultures of the U.S.: Anthropological Perspectives on Race, Class, Gender, and Ethnicity)  
 Economics 1 (Principles of Microeconomics) or  
 Economics 2 (Principles of Macroeconomics)  
 Business 20 (International Business)  
 Business 40 (Business Concepts)  
 Political Science 20 (Comparative Government)  
 Speech 1 (Fundamentals of Speech)

## Internships

### About the Program

Internship opportunities are available through Las Positas College. Interested students who meet qualifications are placed in carefully structured work environments with local employers. Internships provide opportunities to apply knowledge gained in the classroom in a real-world setting and can be an important part of career development for students. Students must be concurrently enrolled in the Internship Seminar course. Placements are contingent upon the availability of an appropriate internship site, employer criteria and student qualifications, and are at the discretion of the employer. Students and employers should contact the Work-Based Learning Coordinator at 925.424.5856.

### Internship (INTN)

INTN 1    INTERNSHIP SEMINAR    1 UNIT

Taken in conjunction with an Internship Field Placement, this seminar examines issues related to work and professional development. The seminar provides the context to reflect on concrete experiences at the internship site and link these experiences to previously acquired, discipline specific, classroom based knowledge. Prerequisite: Successful completion (with a grade of "C" or higher) of 5-15 units (varies by discipline) in major field related to internship placement. 1 hour.

Grading Option: OP (May be repeated three times)    Transfer: CSU

INTN 2    INTERNSHIP FIELD PLACEMENT    1 - 3 UNITS

The student is placed in a carefully structured work environment in their planned career field. The placement allows for the application of discipline specific knowledge, skills and abilities gained in the classroom. Most internships are paid (rates will vary). Enrollment contingent upon the availability of internship sites and concurrent enrollment in the Internship Seminar course 1. Prerequisite: Successful completion (with a grade of "C" or higher) of 5-15 units (varies by discipline) in major field related to Internship Placement. 5-15 hours per week at the worksite.

Grading Option: OP (May be repeated 1 time)    Transfer: CSU

### Italian

SEE: Foreign Languages

### Journalism

SEE: Mass Communication

### Degree

AS – Laser Technology

### Certificate

Laser Technology

NOTE: Inactive 2006-2007

### About the Program

Laser Electro-Optic Technicians develop skills in laser science and electro-optics technology for a wide range of applications. Laser Electro-Optic Technicians are at home in a research and development laboratory designing and maintaining state-of-the-art lasers, as well as working in the fields of communications, computers (entertainment, consumer devices), medicine, defense, aerospace, and in many areas of scientific research. In addition to laser science and optics courses, there is a strong emphasis on electronics. The Laser Technology program is designed to prepare the student for job entry in this fast-growing field or to broaden the skills and knowledge of those technicians already working in related fields.

# Learning Skills

## Learning Skills

### About the Program

Learning Skills courses are designed for students who have learning and other cognitive disabilities to learn tools useful for academic success. These courses are offered in a small class environment to maximize learning.



## Learning Skills (LRNS)

### LRNS 116 DIAGNOSTIC CLINIC AND STUDY SKILLS 1 UNIT

Determination of eligibility for learning skills services through diagnostic testing. Includes state mandated tests. Focus on compensatory methods as derived from test results. 1 hour lecture, 1 hour laboratory.

Grading Option: C/N (May be repeated 1 time)

### LRNS 117 LEARNING SKILLS - READING 3 UNITS

Preparation for reading success in college level English. Emphasis on learning skills in reading comprehension, decoding, and vocabulary through extensive reading and practice exercises. Prerequisite: Learning Skills 116 (may be taken concurrently) and recommendation of Learning Skills 116 instructor. 2 hours lecture, 3 hours laboratory.

Grading Option: C/N (May be repeated 1 time)

### LRNS 118 LEARNING SKILLS - WRITING 3 UNITS

Preparation for writing success in college-level English. Emphasis on learning skills in sentence parts, paragraph construction, and essay writing assignments. Prerequisite: Learning Skills 116 (may be taken concurrently) and recommendation of Learning Skills 116 instructor. 3 hours.

Grading Option: C/N (May be repeated 1 time)

### LRNS 119 LEARNING SKILLS - PROBLEM SOLVING 3 UNITS

Preparation for problem solving success in college. Emphasis on learning skills in quantitative reasoning abilities needed to process and integrate work problems and related problem solving tasks. Prerequisite: Learning Skills 116 (may be taken concurrently) and recommendation of Learning Skills 116 instructor. 3 hours.

Grading Option: C/N (May be repeated 1 time)

### LRNS 120 COMPUTER ACCESS 1 UNIT

This course offers specialized computer instruction for students with disabilities. There will be an emphasis on individual learning styles, keyboarding skills, and software mastery. Strongly recommended: Learning Skills 116. 1 hour lecture, 1 hour laboratory.

Grading Option: C/N (May be repeated 1 time)



## Degree

### AA – Liberal Arts and Sciences (General)

#### About the Program

The Associate in Arts Degree in Liberal Arts and Sciences (General) is designed for students who wish a broad knowledge of liberal arts and sciences. This flexible major can be taken by students who wish to earn a general associate degree or by those who plan to transfer.

Since there are important differences among the three options, students are encouraged to meet with a counselor to determine the option which best satisfies their academic goals.

#### Option 1 (Selected Studies)

This option is designed especially for those students who desire the benefits of a general college education and the opportunity to pursue a “major” of 18 units that is designed to meet personal, vocational or other academic needs. Students who choose this degree option will meet with a counselor to develop a Student Educational Plan (SEP).

*For Option 1 complete the following requirements:*

LPC AA Degree General Education Unit Requirements .....	25
Courses for the Major* .....	18
Electives .....	
<b>Total Units Required.....</b>	<b>60</b>

*\*To be selected from at least two Areas of Concentration*

#### Option 1 - Areas of Concentration:

Students who choose Option 1 must complete 18 units selected from at least 2 of the 7 Areas of Concentration listed below:

##### 1. Business

Business  
Computer Information Systems  
Marketing  
Supervision

##### 2. Humanities

Art  
Creative Arts  
Foreign Language  
Humanities  
Library Studies  
Music  
Philosophy  
Photography  
Religious Studies  
Theater Arts  
Visual Communications

##### 3. Language Arts

English  
Mass Communications  
American Sign Language  
Speech

##### 4. Mathematics and Science

Anatomy  
Astronomy  
Biology  
Biotechnology  
Botany  
Chemistry  
Computer Science  
Ecology  
Geography 1, 1L, 8  
Geology  
Mathematics  
Microbiology  
Physical Science  
Physics  
Physiology  
Zoology

##### 5. Physical Education and Health Science

Dance  
Health  
Nutrition  
Physical Education  
Recreation and Leisure

##### 6. Social Science

Administration of Justice  
Anthropology  
Early Childhood Education  
Economics  
Geography 2, 5, 12  
History  
Political Science  
Psychology  
Psychology-Counseling  
Sociology

# Liberal Arts and Sciences

## 7. Technology and Engineering

- Automotive Technology
- Computer Networking Technology
- Design Technology
- Electronics Technology
- Engineering
- Fire Science Technology
- Horticulture
- Industrial Technology
- Interior Design
- Occupational Safety and Health
- Radiation Safety
- Vacuum Technology
- Viticulture and Winery Technology
- Welding Technology

### Option 2 (CSU Transfer)

This option is designed for students who plan to transfer to the California State University system and who want to complete and have certified the CSU General Education Breadth Requirements. Students will select courses that fulfill the CSU General Education Breadth Requirements and any additional LPC Graduation Requirements plus elective units to total 60 transfer units.

*For Option 2 complete the following requirements:*

CSU General Education Breadth Requirements (see page 59) ..... 39

Additional LPC Graduation Requirements:

American Cultures Requirement (this course can be double-counted where appropriate)

Health 1 (this course can be double-counted in Area E)

Physical Education

**Total Units Required..... 60**

### Option 3 (UC or CSU Transfer)

This option is designed for transfer students to fulfill lower-division general education requirements in either the CSU or UC system by completing the Intersegmental General Education Transfer Curriculum (IGETC). Students will select courses that fulfill the IGETC requirements and any additional LPC Graduation Requirements plus elective units to total 60 transfer units.

*For Option 3 complete the following requirements:*

IGETC (Areas 1 - 5) ..... 34-37

Foreign Language Requirement for IGETC certification (UC Transfer Students only)

Additional LPC Graduation Requirements:

American Institutions

American Cultures Requirement (this course can be double-counted where appropriate)

Health 1

Physical Education

**Total Units Required..... 60**

## Library Studies (LIBR)

LIBR 1 LIBRARY SKILLS

1 UNIT

Introduces techniques of research in a college library including development of a search strategy, location and evaluation of material in a variety of sources and formats, and preparation of a written bibliography of sources. Strongly recommended: Eligibility for English 1A. 3 hours laboratory.

Grading Option: C/N

Transfer: CSU, UC



# Mass Communications

## ✓ CERTIFICATE

### Certificate Mass Communications: Journalism

#### About the Program

The Mass Communications program is designed to provide students with a broad understanding of the principles of mass communications as well as experience in the application of these principles to the campus newspaper, the Express. Classes can be applied to meet transfer requirements at four-year institutions and for entry into careers in the media, such as reporting, public relations, print production, copy editing, and editing.

The Express is produced by students and published approximately twice each month. Students learn various aspects of newspaper production, including research, reporting, writing, editing, proofreading, meeting deadlines, electronic typesetting, graphic design, ad design, and photo scanning and sizing. To join the team, call 925.424.1240, or e-mail LPCEXpress@laspositascollege.edu, or drop by room 305.

The courses in this certificate program fulfill some of the typical lower-division requirements at four-year transfer institutions. Some variation in requirements may exist at a particular four-year college or university; therefore, it is essential that the student refer to the catalog of the prospective transfer institution and consult with a counselor.



### Certificate of Achievement Mass Communications: Journalism

Mass Communications 1 (Journalism: News Writing and Information Gathering) .....	3
Mass Communications 5 (Introduction to Mass Communications)...	3
English 1A** (Critical Reading and Composition) or English 52A (Essentials of Communication).....	3
Mass Communications 72 (Beginning Photojournalism) or Photography 72 (Documentary Photography).....	2
Electives* .....	12
<b>Total Units Required.....</b>	<b>23 units</b>

#### \*Electives

Select from the following Groups, A and/or B, for a minimum of 12 units:

#### Group A

Mass Communications 14 (Writing and Photography for a College Newspaper)	
Mass Communications 15 (Publications- Editorial Leadership and Production)	
Mass Communications 16 (Newspaper Production)	
Internship I (Seminar) and Internship 2 (Field Placement) .....	9-12

#### Group B

Mass Communications 2 (Journalism: Investigative News Writing)	
Mass Communications 3 (Journalism: Magazine and Newspaper Feature Writing) .....	0-3

\*\*Students preparing for transfer should take English 1A.



**Mass Communications (MSCM)****MSCM 1 JOURNALISM: NEWS WRITING AND INFORMATION GATHERING 3 UNITS**

Fundamentals of reporting and News Writing to develop ability to investigate, organize, write, and rewrite according to professional standards of print journalism. Analysis of exemplary journalistic models. Conceive, research, and write stories, using traditional news values. Requires source interviews or original research. Strongly recommended: Eligibility for English 1A or 52A. 3 hours. (CAN JOUR 2)

Grading Option: GR

Transfer: CSU

**MSCM 2 JOURNALISM: INVESTIGATIVE NEWS WRITING 3 UNITS**

News and feature writing, emphasizing investigative reporting, research techniques, and story presentation. Strongly recommended: Eligibility for English 1A or 52A. 3 hours.

Grading Option: GR

Transfer: CSU

**MSCM 3 JOURNALISM: MAGAZINE AND FEATURE WRITING 3 UNITS**

Feature writing, freelance journalism and how to get published in newspapers and magazines. Strongly Recommended: Eligibility for English 1A or 52A. 3 hours.

Grading Option: GR

Transfer: CSU

**MSCM 5 INTRODUCTION TO MASS COMMUNICATIONS 3 UNITS**

History of the press and mass media; the political, social and economic impact of the press on government and public opinion. Strongly Recommended: Eligibility for English 1A or 52A. 3 hours. (CAN JOUR 4)

Grading Option: GR

Transfer: CSU, UC

**MSCM 14 WRITING AND PHOTOGRAPHY FOR A COLLEGE NEWSPAPER 1 UNIT**

Journalism and photojournalism, content development/production for the weekly college newspaper. 3 hours laboratory.

Grading Option: OP (May be repeated 3 times)

**MSCM 15 PUBLICATIONS-EDITORIAL LEADERSHIP AND PRODUCTION PUBLICATION 3 UNITS**

Journalism, photojournalism, content development, and production for the college newspaper. Production of the College newspaper, including writing, business management, graphic arts, leadership, and editing. Strongly recommended: Eligibility for English 1A or 52A. 1 hour lecture, 6 hours laboratory. (Limited to 4 transfer units)

Grading Option: GR (May be repeated 3 times)

Transfer: CSU\*

**MSCM 16 NEWSPAPER PRODUCTION 3 UNITS**

Production of the College newspaper, including: using graphic design principles, preparing copy for input, preparing and manipulating photographs, typesetting, designing pages, laying out pages, proofreading, and pre-flightting. 1 hour lecture, 6 hours laboratory.

Grading Option: GR (May be repeated 3 times)

Transfer: CSU

**MSCM 31 INTRODUCTION TO MEDIA 3 UNITS**

A survey of radio, television, film, and multimedias and their impact on culture and society; includes economics, technological development, programming, ratings, legal aspects, and social control of broadcasting in America, and cross-cultural, international comparisons. Strongly recommended: Eligibility for English 1A or English 52A. 3 hours.

Grading Option: OP

Transfer: CSU

**MSCM 33A INTRODUCTION TO TELEVISION STUDIO OPERATIONS 3 UNITS**

Introduction to the theory, terminology, and operations within a television studio and control room. This introduction includes television directing, the operation of television audio equipment, TV cameras, and television switcher, fundamentals of TV lighting, graphics, video control, and video tape recording for TV and documentaries. 2 hours lecture, 3 hours laboratory. (\*MSCM 33A and 33B combined, limited to 4 transfer units)

Grading Option: OP

Transfer: CSU\*

**MSCM 33B INTERMEDIATE TELEVISION STUDIO OPERATIONS 3 UNITS**

Further experience in television studio operations, control room procedures, and basic program production. Designed to improve skills in operating television equipment and producing and directing TV programs. Emphasis is placed upon theory and practice in television production, including planning, writing, producing, staging, and directing interviews, commercials, public service announcements, dramatic pieces, multimedia, and other program segments. Prerequisite: Mass Communications 33A (completed with a grade of "C" or higher). 2 hours lecture, 3 hours laboratory. (\*MSCM 33A and 33B combined, limited to 4 transfer units)

Grading Option: OP (May be repeated 3 times)

Transfer: CSU\*

**MSCM 72 BEGINNING PHOTOJOURNALISM (REPLACES MCOM 71) 2 UNITS**

Photography exploring the documentary approach. Survey of photojournalism as a medium of mass communications. Understanding and applying photojournalistic and basic technical and visual skills in the making of successful reportage photographs. Consideration of the work of major 20th century photojournalists. Strongly recommended: Photography 50 or Mass Communications 14. 1 hour lecture, 4 hours laboratory.

Grading Option: GR (May be taken 3 times)

Transfer: CSU, UC



# Mathematics

## Mathematics

### About the Program

Mathematics is one of the oldest intellectual disciplines. Yet, it has never lost its relevance; we are continually finding new and exciting applications. An exciting area of study called Bioinformatics combines biology, mathematics, and computer science in an attempt to capitalize on the mapping of the human genome. Mathematics continues to play a role in cryptography, computer graphics, and operations research as well as in engineering, business and science. Mathematics plays an important role in many vocational disciplines such as carpentry, electronics and auto technology. The study of Mathematics can prepare students for a variety of careers. The problem solving and communication skills acquired are generally valuable in business and industry. K-12 teachers of mathematics are always in demand.

The Mathematics department at Las Positas College offers a wide range of courses in a variety of formats designed to meet the needs of a diverse student population. Whatever your educational goals, Mathematics has the courses you need to succeed. We offer a full lower-division curriculum which prepares students for transfer to four-year institutions, as well as basic skills and college preparatory math courses.

*Be Many Voices  
of Las Positas College*

"I am really grateful for the Saturday math classes (pre-algebra through trig) you offer. I work full time and occasionally have to travel, but I'm almost always back by Friday evening. That makes Saturday morning the perfect time for me to go to school....Thanks and keep up the great work!"  
—Bill, Livermore

## Mathematics (MATH)

### MATH X SUPERVISED PROGRAMMED LEARNING 1-5 UNITS

Self-paced learning in mathematics using programmed materials under instructor supervision. Credit may be earned in Mathematics 36, 55, 55A, 55B, 65, 65A, 65B, 71, and 107, according to the level of achievement. 3-5 hours. (See course descriptions for transferability.)  
Grading Option: See specific course for grading option.

### MATH 1 ANALYTIC GEOMETRY AND CALCULUS I 5 UNITS

Introduction to differential and integral calculus; functions, limits, and continuity; techniques and applications of differentiation and integration; the Fundamental Theorem of Calculus. Prerequisite: Mathematics 20 (completed with a grade of "C" or higher) or an appropriate skill level demonstrated through the Mathematics assessment process. 5 hours, 0-1 laboratory hour. (CAN MATH 18; MATH 1 + 2 = CAN MATH SEQ B, MATH 1 + 2 + 3 = CAN MATH SEQ C) \*Transfer unit limitations, see page 63

Grading Option: GR Transfer: CSU, UC\*

### MATH 2 ANALYTIC GEOMETRY AND CALCULUS II 5 UNITS

Continuation of differential and integral calculus, including transcendental, inverse, and hyperbolic functions. Techniques of integration, parametric equations, polar coordinates, sequences, series, power series and Taylor series. Introduction to three dimensional coordinate system and operations with vectors. Primarily for mathematics, physical science, and engineering majors. Prerequisite: Mathematics 1 (completed with a grade of "C" or higher) or an appropriate skill level demonstrated through the Mathematics assessment process. 5 hours lecture, 0-1 laboratory hours. (CAN MATH 20; MATH 1 + 2 = CAN MATH SEQ B; MATH 1 + 2 + 3 = CAN MATH SEQ C) \*Transfer unit limitations, see page 63

Grading Option: GR Transfer: CSU, UC\*

### MATH 3 MULTIVARIABLE CALCULUS 5 UNITS

Vector valued functions, functions of several variables, partial differentiation, multiple integration, change of variables theorem, scalar and vector fields, gradient, divergence, curl, line integral, surface integral, theorems of Green, Stokes and Gauss, applications. Prerequisite: Mathematics 2 (completed with a grade of "C" or higher). 5 hours. (CAN MATH 22; MATH 1 + 2 + 3 = CAN MATH SEQ C)

Grading Option: GR Transfer: CSU, UC

### MATH 5 DIFFERENTIAL EQUATIONS WITH COMPUTER APPLICATIONS 3.5 UNITS

Introduction to differential equations, including first and second order equations, series solutions. Laplace transforms, applications. Computing symbolic and graphical solutions using MATLAB. Prerequisite: Mathematics 2 (completed with a grade of "C" or higher). 3 hours lecture, 2 hours laboratory. (CAN MATH 24)

Grading Option: GR Transfer: CSU, UC

**MATH 7 ELEMENTARY LINEAR ALGEBRA WITH COMPUTER APPLICATIONS****3.5 UNITS**

Introduction to linear algebra: matrices, determinants, systems of equations, vector spaces, linear transformations, eigenvalues, eigenvectors, applications. Computing symbolic and graphical solutions using MATLAB. Prerequisite: Mathematics 2 (completed with a grade of "C" or higher). 3 hours lecture, 2 hours laboratory.

Grading Option: GR

Transfer: CSU, UC

**MATH 10 DISCRETE MATHEMATICS****4 UNITS**

Sets and logic, methods of proof, induction, combinatorics, analysis of algorithms, relations, recursive definitions, recurrence relations, graph theory, trees. Applications include Boolean algebra, logic circuits and automata. Designed for majors in mathematics and computer science. Prerequisite: Mathematics 1 (completed with a grade of "C" or higher). 4 hours. (CAN CSCI 26)

Grading Option: GR

Transfer: CSU, UC

**MATH 20 PRE-CALCULUS MATHEMATICS****5 UNITS**

Rational functions and relations with emphasis on logical development and graphing. Solution of polynomial equations and inequalities, graphing conic sections, mathematical induction, binomial theorem; strengthening of skills in working with exponential, logarithmic, and trigonometric functions, equations, graphs, and applications. Prerequisite: Mathematics 36 or 36Y or Mathematics 38 (completed with a grade of "C" or higher) or an appropriate skill level demonstrated through the Mathematics assessment process. 5 hours lecture, 0-1 hour laboratory. \*Transfer unit limitations, see page 63

Grading Option: GR

Transfer: CSU, UC\*

**MATH 33 FINITE MATHEMATICS****4 UNITS**

Straight lines, systems of linear equations, matrices, systems of linear inequalities, linear programming, mathematics of finance, sets and Venn diagrams, combinatorial techniques and an introduction to probability. Applications in business, economics and the social sciences. Prerequisite: Mathematics 55 or 55B or 55Y (completed with a grade of "C" or higher) or an appropriate skill level as demonstrated through the mathematics assessment process. 4 hours lecture, 0-1 hour laboratory (CAN MATH 12) \*Transfer unit limitations, see page 63

Grading Option: GR

Transfer: CSU, UC\*

**MATH 34 CALCULUS FOR BUSINESS AND SOCIAL SCIENCES****5 UNITS**

Functions and their graphs; limits of functions; differential and integral calculus of algebraic, exponential and logarithmic functions. Applications in business, economics, and social sciences and use of graphing calculators. Partial derivatives and the method of LaGrange multipliers. Prerequisite: Mathematics 55 or 55B or 55Y (completed with a grade of "C" or higher) or an appropriate skill level demonstrated through the Mathematics Assessment process. 5 hours lecture, 0 – 1 hour laboratory. (CAN MATH 34)

Grading Option: GR

Transfer: CSU, UC\*

**MATH 36 TRIGONOMETRY****3 UNITS**

Topics include trigonometric functions, trigonometric equations, graphs, triangle solutions, identities, De Moivre's Theorem. Prerequisite: Mathematics 55 or 55B or 55Y and Mathematics 57 (both completed with a grade of "C" or higher), or two years of high school algebra and one year of plane geometry and appropriate skill level demonstrated through the Mathematics assessment process. 3 hours. (CAN MATH 8)

Grading Option: GR

Transfer: CSU

**MATH 38 TRIGONOMETRY WITH GEOMETRY****5 UNITS**

Plane trigonometry with topics from plane geometry. Geometry includes congruence, properties of polygons, parallel and perpendicular lines, similarity, area, volumes, and coordinate geometry. Trigonometry includes trigonometric functions, trigonometric equations, graphs, triangle solution, identities, polar coordinates and complex numbers. Prerequisite: Mathematics 55 or 55B or 55Y (complete with a grade of "C" or higher) or an appropriate skill level demonstrated through the Mathematics assessment process. 5 hours lecture, 0-1 hour laboratory.

Grading Option: GR

Transfer: CSU

**MATH 41 STATISTICS FOR BUSINESS MAJORS****5 UNITS**

Descriptive Statistics, measure of central tendency, dispersion and position, elements of probability; confidence intervals; hypothesis tests for one and two populations; probability distributions; analysis of variance; correlation and regression; non-parametric tests; applications in various fields. Introduction to the use of a computer software package to complete both descriptive and inferential statistics problems. Prerequisite: Mathematics 34 or Mathematics 1 (completed with a grade of "C" or higher) or equivalent. 5 hours lecture, 1 hour laboratory. \*Transfer unit limitations, see page 63

Grading Option: GR

Transfer: CSU, UC\*

**MATH 42A INTRODUCTION TO PROBABILITY AND STATISTICS****3 UNITS**

Descriptive statistics, including measures of central tendency and dispersion; elements of probability; tests of statistical hypotheses; correlation and regression; applications in various fields. Introduction to the use of a computer software package to complete both descriptive and inferential statistics problems. Prerequisite: Mathematics 55 or 55B or 55Y (completed with a grade of "C" or higher) or an appropriate skill level demonstrated through the Mathematics assessment process. 3 hours lecture, 1 hour laboratory. (CAN STAT 2) \*Transfer unit limitations, see page 63

Grading Option: GR

Transfer: CSU, UC\*

**MATH 42B STATISTICAL ANALYSIS****3 UNITS**

Statistical analysis, including comparisons of two populations, chi-square applications, analysis of variance, non-parametric, regression and correlation. Use of a computer software package to complete statistics problems. Prerequisite: Mathematics 42A (completed with a grade of "C" or higher). 3 hours lecture, 1 hour laboratory. \*Transfer unit limitations, see page 63

Grading Option: GR

Transfer: CSU, UC\*

# Mathematics

## **MATH 44 STATISTICS AND PROBABILITY 5 UNITS**

Descriptive Statistics, measures of central tendency, dispersion and position; elements of probability; confidence intervals; hypothesis tests; two-population comparisons; correlation and regression; goodness of fit, analysis of variance, non-parametric tests; and application in various fields. Introduction to the use of a computer software package to complete both descriptive and inferential statistics problems. Prerequisite: Mathematics 55 or 55B or 55Y (completed with a grade of "C" or higher) or 2 years of high school algebra and an appropriate skill level demonstrated through the Mathematics assessment process. 5 hours lecture, 1 hour laboratory.

*\*Transfer unit limitations, see page 63*

Grading Option: GR

Transfer: CSU, UC\*

## **MATH 45 COLLEGE ALGEBRA 3 UNITS**

Polynomial, rational, exponential, and logarithmic functions; theory of equations; matrices and determinants; analytic geometric sequences, series and the binomial theorem; mathematical induction. Prerequisite: Mathematics 55 or 55B or 55Y (completed with a grade of "C" or higher) or an appropriate skill level demonstrated through the Mathematics assessment process. 3 hours lecture, 0-1 hour laboratory.

Grading Option: GR

Transfer: CSU, UC

## **MATH 55 INTERMEDIATE ALGEBRA 5 UNITS**

Concepts involving complex numbers, quadratic equations, parabolas and circles, functions and their graphs, systems of equations, rational exponents, radical equations, absolute value equations and inequalities, exponential and logarithmic functions and equations. Prerequisite: Mathematics 65, 65B or 65Y (completed with a grade of "C" or higher) or an appropriate skill level demonstrated through the Mathematics assessment process. Equivalent to Mathematics 55X and Mathematics 55Y. May not receive credit if Mathematics 55B or 55 Y have been completed. 5 hours lecture, 0-1 hour laboratory.

Grading Option: OP

## **MATH 55A INTERMEDIATE ALGEBRA A 3 UNITS**

Concepts covered in the first half of Mathematics 55 including complex numbers, quadratic equations, radical expressions, radical equations, rational exponents, absolute value equations and inequalities, and functions and their graphs. Prerequisite: Mathematics 65 or 65B or 65Y (completed with a grade of "C" or higher) or an appropriate skill level demonstrated through the Mathematics assessment process. May not receive credit if Mathematics 55 or Mathematics 55X has been completed. 3 hours lecture, 0-1 hour laboratory.

Grading Option: OP

## **MATH 55B INTERMEDIATE ALGEBRA B 3 UNITS**

Concepts covered in the second half of Mathematics 55 including parabolas and circles, function composition, inverse functions and their graphs, systems of equations, and exponential and logarithmic functions and equations. Prerequisite: Mathematics 55A or 55X (completed with a grade of "C" or higher). May not receive credit if Mathematics 55 or 55Y has been completed. 3 lecture hours, 0-1 laboratory hour.

Grading Option: OP

## **MATH 57 PLANE GEOMETRY 3 UNITS**

Topics in plane geometry include: congruence, similarity, parallel lines, and properties of polygons and circles. Prerequisite: Mathematics 65 or Mathematics 65B or Mathematics 65Y (completed with a grade of "C" or higher) or an appropriate skill level demonstrated through the Mathematics assessment process. 3 hours.

Grading Option: OP

## **MATH 60 MATH STUDY SKILLS 1 UNIT**

This course is designed to assist students in learning mathematics through the development of successful study skills and exam taking methods. Designed primarily for students in beginning or intermediate algebra, this course addresses learning styles, how to read a math book, completing homework assignments, how to take notes and exams, basics of calculator operations and techniques for overcoming math anxiety. 1 hour.

Grading Option: C/N (May be repeated one time.)

## **MATH 65 ELEMENTARY ALGEBRA 5 UNITS**

Elementary concepts, including signed numbers, integral exponents, polynomials and rational expressions, linear, quadratic and rational equations; linear inequalities; introduction to graphs and set theory; systems of equations. Prerequisite: Mathematics 106, 107Y or 105 (completed with a grade of "C" or higher) or an appropriate skill level demonstrated through the Mathematics assessment process. Equivalent to Mathematics 65X and 65Y. May not receive credit if Mathematics 65B or 65Y has been completed. 5 hours, 0-1 laboratory hour.

Grading Option: OP

## **MATH 65A ELEMENTARY ALGEBRA A 3 UNITS**

Concepts covered in the first half of Mathematics 65, including signed numbers, polynomials and integer exponents; linear equations and inequalities; introduction to graphs; set theory. Designed for those with no previous algebra background. Prerequisite: Mathematics 106 or 107Y (completed with a grade of "C" or higher) or an appropriate skill level demonstrated through the Mathematics assessment process. May not receive credit if Mathematics 65 or 65X has been completed. 3 lecture hours, 0-1 laboratory hour.

Grading Option: OP

**MATH 65B ELEMENTARY ALGEBRA B****3 UNITS**

Concepts covered in the second half on Mathematics 65, including factoring, rational expressions and complex fractions; system of linear equations, quadratic and rational graphing. Prerequisite: Mathematics 65A or 65X (completed with a grade of "C" or higher). May not receive credit if Mathematics 65 or 65Y has been completed. 3 lecture hours, 0-1 laboratory hour.

Grading Option: OP

**MATH 71 APPLIED MATHEMATICS FOR TECHNICIANS****3 UNITS**

Calculator techniques for whole number and decimal arithmetic problem-solving, fraction-decimal conversions, geometry, numerical trigonometry; conversions between the U.S. and metric systems; emphasis on application from technical fields. 3 hours.

Grading Option: OP

**MATH 106 BASIC MATHEMATICS****3.5 UNITS**

Review and practice in fundamental computational skills including operations with whole numbers, common fractions, decimals, percents, ratios, and proportions. Metric and English systems of measurement geometric formulas. Introduction to algebra including signed numbers and simple linear equations. (May not receive credit if Mathematics 107 has been completed.) 3 hours lecture, 2 hours laboratory.

Grading Option: OP

**MATH 107 PRE-ALGEBRA****4 UNITS**

Review and practice in fundamental computational skills including operations with whole numbers, common fractions, decimals, percents, ratios, and proportions. Metric and English systems of measurement and geometric formulas. Introduction to algebra including signed numbers and simple linear equations. Basic Statistics and consumer mathematics. May not receive credit if Mathematics 106 has been completed. 4 hours.

Grading Option: OP



**Microbiology**  
SEE: **Biological Sciences**

## DEGREE

Degree  
AA - Music

Certificate  
Beginning Piano Pedagogy  
Intermediate Piano Pedagogy

### About the Program

The Music major offers a secure foundation for further study in music. Courses in the Music Department are designed to fulfill the needs of music majors, professional musicians, and those whose interest is avocational or recreational. Students are encouraged to contact a counselor and consult the Catalog for guidance when planning to transfer to a four-year institution in this major.



## AA - Music

### Freshman Year

Music 8A (Harmony and Musicianship I).....	4
Music 8B (Harmony and Musicianship II).....	4
Music 21A (Beginning Piano).....	1
Music 21B (Beginning Piano-Intermediate).....	1
Music Electives*.....	2
Performance Electives**.....	4-5
General Education Courses	

### Sophomore Year

Music 10A (Chromatic Harmony and Musicianship).....	4
Music 10B (Post-Romantic and Twentieth Century Harmony).....	4
Music Electives*.....	2
Performance Electives**.....	4-5
General Education Courses	
<b>Total units required</b> .....	<b>60</b>

### Music Electives\*:

Select course(s) from the following, for a minimum of 4 units:

- Music 23A (Elementary Voice I)
- Music 23B (Elementary Voice II)
- Music 30 (Study of Guitar)
- Music 31 (Study of Piano)
- Music 33 (Study of Voice)
- Music 38 (Individual Study)

### Performance Electives\*\*:

Select course(s) from the following, for a minimum of 8 units:

- Music 12 (College Band)
- Music 14 (Jazz Ensemble)
- Music 15 (Jazz Band)
- Music 44 (Concert Choir) or
- Music 45 (Chamber Choir)



### Certificate of Completion Beginning Piano Pedagogy

Music 25 (Teaching Beginning Piano) .....	2
Music 26 (Methods and Materials for Piano Teachers) .....	2
Music 8A (Harmony and Musicianship I).....	4
Music 8B (Harmony and Musicianship II) .....	4
Music 38* (Individual Study).....	2
<b>Total units required .....</b>	<b>14</b>

\*Two semesters required

### Certificate of Completion Intermediate Piano Pedagogy

Music 27 (Teaching Intermediate Piano) .....	2
Music 28 (Keyboard Skills) .....	1
Music 10A (Chromatic Harmony and Musicianship) .....	4
Music 10B (Post-Romantic and 20th Century Harmony) .....	4
Music 1 (Introduction to Music) .....	3
Music 38* (Individual Study).....	2
<b>Total units required .....</b>	<b>16</b>

\*Two semesters required for a total of 4 units

### Music (MUS)

#### Literature, Theory and Musicianship

##### MUS 1 INTRODUCTION TO MUSIC 3 UNITS

Music for enjoyment and understanding through informed listening, analysis, evaluation and discernment of musical elements, forms, and repertoire. Attendance at concerts and listening to a variety of music may be required. 3 hours.

Grading Option: GR Transfer: CSU, UC

##### MUS 2 WORLD MUSIC AND CULTURES 3 UNITS

A survey of the dominant musical cultures of the world with influences and comparisons to Western thought and music. Explore the music literature and traditions of Asia, India, Indonesia and Australia, Africa, the Middle East, Europe, Latin and Indigenous America. Examine the historical as well as the cultural, philosophical and social conditions in which the music developed and how music is used for inner awareness and aesthetic experiences. 3 hours.

Grading Option: OP Transfer: CSU, UC

##### MUS 4 JAZZ IN AMERICAN CULTURE 3 UNITS

History, trends and influences of the phenomenon of jazz through integration of the cultures of (but not limited to) African-American, European-American and the Latin-American communities. Required listening, reading and concert attendance will guide the student to value jazz as a form of self expression and improve the ability to listen and understand the various eras in jazz from pre-Dixieland to present day. 3 hours.

Grading Option: GR Transfer: CSU, UC

##### MUS 5 AMERICAN CULTURES IN MUSIC 3 UNITS

Music in twentieth century United States through the study of contributions of three selected groups from the following: African-Americans, Latin-Americans, Asian-Americans, European-Americans, and Native Americans. Emphasis on understanding diverse styles, and on integrating these styles into American music. Concert, religious, and folk-pop music will be included. 3 hours.

Grading Option: OP Transfer: CSU, UC

##### MUS 6 BASIC MUSIC SKILLS 2 UNITS

Essentials of music through notation, times elements, melody, harmony, and tonality, texture, dynamics and knowledge of the keyboard. Sight singing and ear training. 2 hours.

Grading Option: OP Transfer: CSU, UC

##### MUS 8A HARMONY AND MUSICIANSHIP I 4 UNITS

Elements of diatonic harmony through part writing and ear training exercises as typified by musical practice from 1600 to the present. Includes keys, modes, scales, tonality, intervals, solfeggio, consonance/dissonance, rhythmic organization, chord structure, chord and interval recognition, melodic and rhythmic dictation, voice leading principles, non-chord tones, four-part voice leading with selected primary and secondary chords, and figured bass realization. Strongly recommended: Music 6 or equivalent skills. 3 hours lecture, 2 hours laboratory.

Grading Option: GR Transfer: CSU, UC

##### MUS 8B HARMONY AND MUSICIANSHIP II 4 UNITS

Continues diatonic harmony through part writing and ear training exercises as typified by musical practice from 1600 to the present, continues solfeggio, chord recognition, melodic and rhythmic dictation, diatonic four-part voice leading, and figured bass realization. Introduces harmonic dictation, cadential elaboration, non-dominant seventh chords, and tonicization/modulation to the dominant. Prerequisite: Music 8A (completed with a grade of "C" or higher). 3 hours lecture, 2 hours laboratory.

Grading Option: GR Transfer: CSU, UC

##### MUS 10A CHROMATIC HARMONY AND MUSICIANSHIP 4 UNITS

Elements of both diatonic and chromatic harmony through part writing and ear training exercises as typified by musical practice from 1600 to the present. Continues solfeggio; chord recognition; melodic, rhythmic, and harmonic dictation; and figured bass realization. Introduces chorale dictation, chromatic four-part voice leading, chord progression and succession techniques, non-chord tones using figuration and rhythmic displacement, and mode mixture. Prerequisite: Music 8B (completed with a grade of "C" or higher). 3 hours lecture, 2 hours laboratory.

Grading Option: GR Transfer: CSU, UC

##### MUS 10B POST ROMANTIC AND 20TH CENTURY HARMONY 4 UNITS

Continues chromatic harmony through part writing and ear training exercises as typified by musical practice from 1600 to the present. Furthers study in solfeggio; melodic, rhythmic, and chorale dictation;

# Music

chromatic four-part voice leading; figured bass realization; and chord succession and progression techniques. Introduces secondary dominants; diatonic modulation, extended chords; Neapolitan, augmented sixth, augmented, and altered dominant chords; chromatic embellishing chords; and chromaticism in larger contexts. Prerequisite: Music 10A (completed with a grade of "C" or higher).  
Grading Option: GR Transfer: CSU, UC

## Performance

### MUS 12 COLLEGE BAND 2-2.5 UNITS

Band repertoire of all styles and periods. Emphasis on group participation and public performance. Attendance at all scheduled performances required. 4-5 hours. (\*Transfer unit limits; see counselor)  
Grading Option: GR (May be repeated 3 times) Transfer: CSU\*, UC

### MUS 14 JAZZ ENSEMBLE 2 UNITS

Reading, preparation and performance of contemporary Jazz music. Opportunity to apply improvisation techniques in a group setting. 4 hours. (\*Transfer unit limits; see counselor)  
Grading Option: GR (May be taken 3 times) Transfer: CSU\*, UC

### MUS 15 JAZZ BAND 2 UNITS

Reading, preparation and performance of contemporary Jazz music, arranged for Jazz band. Opportunity to arrange and compose for the band as well as to conduct. 4 hours. (\*Transfer unit limits; see counselor)  
Grading Option: GR (May be taken 3 times) Transfer: CSU\*, UC

### MUS 16 COLLEGE ORCHESTRA 2 UNITS

Survey of string and symphony orchestra literature through rehearsal and performance of selected works. Emphasis on the development of ensemble playing technique. Designed for those with proficiency in playing an orchestral instrument. 4 hours.  
Grading Option: OP (May be taken 3 times) Transfer: CSU, UC

### MUS 43 VOCAL ENSEMBLE 1 UNIT

Instruction for the advanced singer; an opportunity to explore and perform vocal chamber music. 2 hours.  
Grading Option: GR (May be taken 3 times) Transfer: CSU, UC

### MUS 44 CONCERT CHOIR .5-2.5 UNITS

Development of vocal and musical ability to interpret and perform the highest calibre of choral literature. Designed for those with experience and/or ability in choral singing. 1-5 hours. (\*Transfer unit limits; see counselor)  
Grading Option: GR (May be taken 3 times) Transfer: CSU\*, UC

### MUS 45 CHAMBER CHOIR .5-2.5 UNITS

Development of sufficient vocal and music ability to interpret and perform a variety of vocal chamber music. Designed for the advanced singer. 1-5 hours.  
Grading Option: GR (May be taken 2 times) Transfer: CSU, UC

### MUS 46A BEGINNING JAZZ CHOIR 2 UNITS

The various aspects of performing in a vocal jazz ensemble. Emphasis on developing the rudiments of vocal jazz technique. Strongly recommended: Music 6. 4 hours.  
Grading Option: GR (May be repeated 3 times) Transfer: CSU, UC

### MUS 46B ADVANCED JAZZ CHOIR 2 UNITS

The various aspects of performing in a vocal jazz ensemble. Emphasis on developing advanced vocal jazz technique. Prerequisite: Music 46A. 4 hours.  
Grading Option: GR (May be taken 3 times) Transfer: CSU, UC

### MUS 47 COLLEGE PRODUCTIONS - MUSIC 1-5 UNITS

Participation in scheduled music productions. Includes music support for drama productions, college musicals, and other major performances. Enrollment is for the duration of the production. 3-15 laboratory hours.  
Grading Option: OP (May be taken 3 times) Transfer: CSU, UC

## Applied

### MUS 20 ELEMENTARY GUITAR 1 UNIT

Beginning guitar using a combination of folk and classic approaches to playing technique, utilizing basic scales and chords in first position, and music notation. Strongly Recommended: Music 6. 2 hours. (\*Transfer unit limits; see counselor)  
Grading Option: GR Transfer: CSU\*, UC

### MUS 21A BEGINNING PIANO 1 UNIT

Group instruction in piano with emphasis on developing technique, reading music, and performing. Strongly recommended: Music 6. 2 hours. (\*Transfer unit limits; see counselor)  
Grading Option: GR Transfer: CSU\*, UC

### MUS 21B BEGINNING PIANO: INTERMEDIATE 1 UNIT

Development of skills learned in Music 21A. Emphasis on further development of technique and performance. Prerequisite: Music 21A (completed with a grade of "C" or higher). 2 hours. (\*Transfer unit limits; see counselor)  
Grading Option: GR Transfer: CSU\*, UC

### MUS 23A ELEMENTARY VOICE I 1 UNIT

Group singing with emphasis on solo performance. Tone production, breathing, diction, and interpretation in regard to song literature. Strongly Recommended: Music 6. 2 hours. (\*Transfer unit limits; see counselor)  
Grading Option: GR Transfer: CSU\*, UC

### MUS 23B ELEMENTARY VOICE II 1 UNIT

Development of skills learned in Music 23A. Emphasis on further development of vocal production and performance. Prerequisite: Music 23A (completed with a grade of "C" or higher). 2 hours. (\*Transfer unit limits; see counselor)  
Grading Option: GR Transfer: CSU\*, UC

**MUS 25 TEACHING BEGINNING PIANO 2 UNITS**

Principles of successful piano teaching with emphasis upon development of technique and reading ability in beginner level students; private and group piano teaching methods; personal development as teacher and musician. Observation of piano lessons or classes and supervised practice teaching of private or class piano students may be required. Intended for pianists with intermediate or advanced skills. Strongly recommended: Music 21B 2 hours.

Grading Option: OP

Transfer: CSU

**MUS 26 METHODS AND MATERIALS FOR PIANO TEACHERS 2 UNITS**

Examination of various methods in print for use in teaching piano; setting up a teaching studio and maintaining the business; finding and selecting supplementary literature; preparing for recitals and other special events. Intended for pianists with intermediate or advanced skills who are engaged in the teaching of piano or who would like to prepare to teach. Strongly recommended: Music 21B. 2 hours.

Grading Option: OP

Transfer: CSU

**MUS 27 TEACHING INTERMEDIATE PIANO TEACHING INTERMEDIATE PIANO 2 UNITS**

Principles of successful piano teaching with emphasis upon continued development of technique and reading ability in intermediate level students; private and group piano teaching methods; selection of intermediate literature; Baroque, Classical, Romantic and 20th Century styles: studio organization and personal development as teacher and musician. Observation of piano lessons or classes and supervised practice teaching of private or class piano students may be required. Strongly recommended: Music 21B. 2 hours.

Grading Option: OP

Transfer: CSU

**MUS 28 KEYBOARD SKILLS 1 UNIT**

Emphasis on correct harmonization of melodies and various styles of piano accompaniments; transposition; improvisation; modulation; sight reading; principles of accompanying soloists and groups; playing by ear. Frequent solo and ensemble performances in class. Intended for piano teachers or classroom music teachers. Strongly recommended: Music 21B. 2 hours.

Grading Option: OP (May be repeated 1 time)

Transfer: CSU

**MUS 30 STUDY OF GUITAR 1 UNIT**

Development of skills and knowledge from Music 20. Emphasis on playing techniques and performance. Designed for the intermediate and advanced performer. Prerequisite: Music 20 (completed with a grade of "C" or higher) or equivalent. 2 hours. (\*Transfer unit limits; see counselor)

Grading Option: OP (May be repeated 3 times)

Transfer: CSU\*, UC

**MUS 31 STUDY OF PIANO 1 UNIT**

Development of functional piano skills. Designed for knowledge and skill of intermediate or advanced level. Prerequisite: Music 21B (completed with a grade of "C" or higher). 2 hours. (\*Transfer unit limits; see counselor)

Grading Option: GR (May be repeated 3 times)

Transfer: CSU\*, UC

**MUS 33 STUDY OF VOICE 1 UNIT**

Individual improvement of the technical facility, tone quality, and range of the singing voice in solo performances; designed to extend knowledge of the literature in general and help acquire a basic repertory. Required for voice majors. Prerequisite: Music 23B (completed with a grade of "C" or higher) or equivalent. 2 hours.

Grading Option: GR (May be repeated 3 times)

Transfer: CSU, UC

**MUS 38 INDIVIDUAL STUDY 1 UNIT**

Specialized study of voice or instrument. Designed for music major or minor to increase opportunities in individualized study of voice or instrument. 2 hours. (\*Transfer unit limits; see counselor)

Grading Option: OP (May be repeated 3 times)

Transfer: CSU\*

**MUS 39 MUSICAL THEATER WORKSHOP 1 UNIT**

Training in performance skills for musical theater, with emphasis on vocal technique. Corequisite: Theater Arts 39. 2 hours.

Grading Option: OP (May be repeated 3 times)

Transfer: CSU, UC

**MUS 40 PASSPORT TO MUSIC 1-3 UNITS**

Supervised participation in scheduled performances of the music department in performer, accompanist, and or/or technical assistant capacity. Hour value to be determined by the instructor, after audition, based upon the scope of the performance or technical assignment. Enrollment is for the duration of one particular performance, workshop, or concert tour. 1-6 hours.

Grading Option: OP (May be repeated 3 times)

Transfer: CSU

**MUS 42 VOCAL REPERTOIRE 1 UNIT**

Vocal repertoire with emphasis on solo performance. Includes vocal solo literature of the Baroque, Classical, Romantic, and Contemporary periods in French, German, English, Italian, and Spanish. Prerequisite: Music 23B or Music 33 (May be taken concurrently). 2 hours.

Grading Option: OP (May be repeated 3 times)

Transfer: CSU, UC



# Nutrition

## Nutrition

### About the Program

The Nutrition program is part of the Health and Wellness program (see also the LPC Catalog section for Health, page 149). These courses are intended to help students live healthfully now and for the rest of their lives. They also serve as foundations for students intending to focus their studies in the nutrition and health sciences and physical education and athletics.

## Nutrition (NUTR)

**NUTR 1 NUTRITION 3 UNITS**

The basics of nutrition, including nutrients, nutritional needs, digestion/absorption, and the role of nutrition in the maintenance of health. Designed to meet the needs of students majoring in the science and/or health fields. Strongly recommended: Chemistry 30A. 3 hours. (CAN FCS 2)

Grading Option: OP

Transfer: CSU, UC

**NUTR 3 NUTRITION FOR HEALTH AND WELLNESS 3 UNITS**

Optimal diet and food choices to promote health, and prevent disease. Role of nutrition and fitness in health. Impact of harmful eating patterns. Evaluation of diets and nutrition information. Issues of current interest. 3 hours.

Grading Option: OP

Transfer: CSU

**NUTR 5 NUTRITION FOR PERFORMANCE AND SPORT 3 UNITS**

Students will study the role of nutrition in sports, performance and physical fitness. Optimal food, nutrient, and activity choices to maximize athletic performance and support health will be addressed. 3 hours.

Grading Option: OP

Transfer: CSU



**Degree**  
**AS - Occupational Safety and Health**

**Certificate**  
**Occupational Safety and Health**

**About the Program**

The Occupational Safety and Health worker implements mandated health and safety regulations in an effort to control occupational accidents and diseases, property losses and injuries due to unsafe working conditions. The scope of this position includes the identification of physical hazards and the design and implementation of remediation, the evaluation of potential toxic agent risk to the employer, the development of safety management and employee training/management programs. The safety and health worker may specialize in fire and property, chemical and radiological safety, emergency response, general workplace safety, transportation, construction, systems or product design.

The Associate in Science degree and the Certificate of Completion in Occupational Safety and Health are designed for direct job entry and/or career enhancement. Completion of the degree or the certificate may be used to provide work experience credit toward OHST (Occupational Health and Safety Technician) certification requirements. Completion of the degree may be used to provide work experience credit toward CSP (Certified Safety Professional) certification requirements. Continuing Education Units for Registered Nurses and Licensed Vocational Nurses may be awarded for certain coursework upon application. Students interested in work experience credit toward OHST or CSP certification or in C.E.Units for RNs and LVNs should consult their instructor, the Class Schedule, or the Office of Academic Services (925.424.1104) for information.

While units in the program are transferable to many institutions, students should consult a counselor for information.

**AS – Occupational Safety and Health**

**Freshman Year**

Occupational Safety and Health 50 (Introduction to Occupational Safety and Health).....	3
Occupational Safety and Health 67 (Comprehensive Regulatory Requirements and Human Factors).....	3
Chemistry 1A (General College Chemistry) or Chemistry 30A (Introductory and Applied Chemistry).....	4-5
Computer Information Systems 50 (Introduction to Computing and Information Technology) .....	3
Ecology 10 (Humans and the Environment) .....	3
Electives* .....	3-5
General Education Courses	

**Sophomore Year**

Occupational Safety and Health 60 (Elements of Industrial Hygiene).....	3
Occupational Safety and Health 62 (Physical Hazards) .....	3
Physics 2A (Introduction to Physics) or Physics 10 (Descriptive Physics) .....	3-4
Radiation Safety 40ABC (Radiation Safety) .....	4
Psychology 1 (General Psychology) .....	3
Electives* .....	3-5
General Education Courses	
<b>Total units required .....</b>	<b>60</b>

**\*Electives**

Select one course from Group A and one course from Group B, for a minimum of 6 units:

**Group A**

- Chemistry 1B (General College Chemistry)
- Chemistry 30B (Introductory and Applied Chemistry)
- Mathematics 42A (Introduction to Probability and Statistics)

**Group B**

- Anatomy 1 (General Human Anatomy)
- Biology 50 (Anatomy and Physiology)
- English 70 (Report Writing)
- Fire Service Technology 52 (Fire Fighter Safety and Public Education)
- Physiology 1 (Introduction to Human Physiology)



# Occupational Safety and Health

## Certificate of Completion

Occupational Safety and Health	
Occupational Safety and Health 50 (Introduction to Occupational Safety and Health).....	3
Occupational Safety and Health 60 (Elements of Industrial Hygiene)	3
Occupational Safety and Health 62 (Physical Hazards) .....	3
Occupational Safety and Health 67 (Comprehensive Regulatory Requirements and Human Factors).....	3
<b>Electives*</b> .....	<b>3-4</b>
<b>Total units required</b> .....	<b>15-16</b>

### \*Electives

Select from the following for a minimum of 3 units:

- Chemistry 30A (Introductory and Applied Chemistry) or equivalent
- Fire Service Technology 52 (Fire Fighter Safety and Public Education)
- Physics 10 (Descriptive Physics) or equivalent
- Radiation Safety 40ABC (Radiation Safety)

## Occupational Safety and Health(OSH)

### OSH 50 INTRODUCTION TO OCCUPATIONAL SAFETY AND HEALTH 3 UNITS

Introduction to the principles and techniques of occupational safety and health. Includes historical evolution, professional make-up of the occupational and safety specialist, and analysis and implementation of a typical safety program. 3 hours.

Grading Option: GR

Transfer: CSU

### OSH 60 ELEMENTS OF INDUSTRIAL HYGIENE 3 UNITS

Introduction to the major subject areas of Industrial Hygiene. This includes anticipation, recognition, evaluation, and control of workplace hazards; effects of toxic agents on the body; measurement of these agents; general methods for their control; as well as State and Federal regulatory requirements. 3 hours.

Grading Option: GR

Transfer: CSU

### OSH 62 PHYSICAL HAZARDS 3 UNITS

Examination of physical hazards in the work environment and methods of control. Includes hazards associated with human factors, layout and planning, machine guarding, electrical safety, materials handling, rigging, conveyors, power tools, personal protective equipment, compressed gases, illumination, and working surfaces. Emphasis on methods for safety observation and inspection. 3 hours.

Grading Option: GR

Transfer: CSU

### OSH 67 COMPREHENSIVE REGULATORY REQUIREMENTS AND HUMAN FACTORS 3 UNITS

State and federal Occupational Safety and Health Acts, awareness of life safety, fire safety and building codes and standards, Workers' Compensation laws, and other regulations as they relate to occupational safety and health. Includes human factors in accident causation, behavioral stereotypes, human engineering, and man-machine trades and functional significance. 3 hours.

Grading Option: GR

Transfer: CSU

## Philosophy (PHIL)

### PHIL 1 GOD, NATURE, HUMAN NATURE 3 UNITS

Nature and range of philosophical inquiry in relation to everyday problems of humans as individuals, as citizens, as existing in nature, and as creators of works of the arts and of the spirit. Analysis of primary philosophical documents that concentrate on these broad areas of human concern. Introduction to philosophy by the philosophers' own works, their methods of procedure and inquiry; attention given to the development of skills for reading, analyzing, and pursuing philosophical argument. NOTE: Philosophy 2, 4 and 25 are also introductory courses and may be taken before Philosophy 1 if a more detailed examination of ethical problems, the theory of knowledge, or political philosophy is desired. 3 hours. (CAN PHIL 2) Grading Option: GR Transfer: CSU, UC

### PHIL 2 INTRODUCTION TO PHILOSOPHY: ETHICS 3 UNITS

Problems of good and evil, right and wrong, individual and/or social action; the principles, criteria or starting points for these issues and decisions as discussed and developed in great writings of the philosophical-literary tradition. 3 hours. (CAN PHIL 4) Grading Option: GR Transfer: CSU, UC

### PHIL 4 INTRODUCTION TO PHILOSOPHY: THEORY OF KNOWLEDGE 3 UNITS

Primary works in the areas of Knowledge, Truth, and Thought. Systematic analysis of documents that constitute the major statements in the Theory of Knowledge; the functions of reasoning, intuition, and sense experience. 3 hours. Grading Option: GR Transfer: CSU, UC

### PHIL 7 CONTEMPORARY PROBLEMS 3 UNITS

Perspective on contemporary issues. Defined using contemporary documents as source material and re-defined and evaluated in light of philosophical documents. 3 hours. Grading Option: GR Transfer: CSU, UC

### PHIL 25 INTRODUCTION TO POLITICAL AND SOCIAL PHILOSOPHY 3 UNITS

Philosophical-political analysis of value conflicts in the area of political thought and theory. Philosophical investigation of political principles which affect our lives as well as the role of theory in regard to the nature of the individual in a modern technological democracy. 3 hours. Grading Option: GR Transfer: CSU, UC

SEE ALSO: **Humanities**



# Photography

## ✓ CERTIFICATE

### Certificate Photography

#### About the Program

The Las Positas College Photography program offers a broad array of course opportunities crossing a full spectrum of the imaging field. The Certificate assures a solid grounding in photography fundamentals upon which to build one's further photographic field experiences.

Students become familiar with traditional film-based and digital (electronic) imaging technologies for making artistically rendered, captivating photographic images (both black & white and color) used in all areas of visual communications and media. Students do hands-on work in the College's well-equipped studio, darkroom and computer laboratory. They master digital imaging in preparation for print and web distribution, create short programs in videography, and work with artificial lighting for portrait and commercial applications.

Most students take a history of photography class and a course concentrating on doing documentary work. Short-term courses on special photographic topics, each focusing on a unique aspect of photography or tutorial study with well-known professionals, are also offered on a regular basis.

SEE ALSO: **Art, Visual Communications**



### Certificate of Completion Photography

Photography 50 (Introduction to Photography) .....	3
Photography 51 (Individual Projects).....	1
Photography 56 (Introduction to Digital Photography).....	2
Photography 60 (Black & White Materials and Processes) .....	3
Photography 64 (Artificial Light Photography) .....	3
Electives* .....	4
<b>Total units required .....</b>	<b>16</b>

#### \*Electives:

*Select from the following for a minimum of 4 units.*

Photo 58 (Introduction to Videography).....	2
Photography 66 (Digital Imaging) .....	3
Photography 67 (History of Photography) or	
Photo 68 (Color Slide Photography) .....	2
Photography 72 (Documentary Photography).....	2
Photography 99 (Photographic Topics) .....	.5 - 2

**Photography (PHOT)****PHOT 50 INTRODUCTION TO PHOTOGRAPHY 3 UNITS**

Introduction to the history and development of photography, basic process, various types of cameras, materials, basic shooting, processing developing, and printing of photographs. 2 hours lecture, 4 hours laboratory. (CAN ART 18)

Grading Option: OP

Transfer: CSU, UC

**PHOT 51 INDIVIDUAL PROJECTS 1 UNIT**

Individual projects in photography or graphic communications at the intermediate to advanced level. Development of knowledge and skills acquired in previous or current photography work with emphasis on current projects. Prerequisite: Photography 50 (completed with a grade of "C" or higher). 4 hours laboratory.

Grading Option: C/N (May be repeated 3 times)

Transfer: CSU

**PHOT 52 BEGINNING CAMERA USE 2 UNITS**

Camera handling techniques, basic exposure principles, camera accessories, photographic composition, and slide presentation. 2 hours.

Grading Option: C/N

Transfer: CSU

**PHOT 56 INTRODUCTION TO DIGITAL PHOTOGRAPHY 2 UNITS**

Basics for the beginner's use of digital cameras, film and flatbed scanners; use of Adobe software for image adjustments. Exploration of digital photography compared with traditional photographic approaches and processes. Operation of Adobe digital imaging software for preparation of web site photos and print output, in both black and white and in color. 1 hour lecture, 4 hours laboratory.

Grading Option: OP (May be repeated 1 time)

Transfer: CSU

**PHOT 58 INTRODUCTION TO VIDEOGRAPHY 2 UNITS**

Introduction to the theory and practice of video production and desktop video editing: project production phases, time-based visual and sound design, digitizing footage, video output issues, working creatively in a collaborative environment, industry standards. 1 hour lecture, 4 hours laboratory.

Grading Option: OP (May be repeated 1 time)

Transfer: CSU

**PHOT 60 BLACK AND WHITE MATERIALS AND PROCESSES 3 UNITS**

Using exposure/development controls related to black and white negative materials. Development of intermediate/ advanced print making skills. Emphasis on visual and critical problems related to black and white photography. Prerequisite: Photography 50 (completed with a grade of "C" or higher). 2 hours lecture, 4 hours laboratory.

Grading Option: GR (May be repeated 1 time)

Transfer: CSU, UC

**PHOT 64A ARTIFICIAL LIGHT PHOTOGRAPHY 3 UNITS**

Photography using light sources selected and manipulated by the photographer. Use of light sources in a controlled situation to achieve technically accurate renditions of subject matter and to make successful visual statements. Lighting techniques for product, still life and portrait photography. Prerequisite: Photography 50 (completed with a grade of "C" or higher). 2 hours lecture, 4 hours studio/laboratory.

Grading Option: GR (May be repeated 1 time)

Transfer: CSU

**PHOT 66 DIGITAL IMAGING 3 UNITS**

Desktop digital imaging systems: scanning, camera and software. Methods and devices for image input, storage and output. Use of traditional photographic controls to enhance image quality in the digital medium. Designing an image for digital manipulation using software such as Photoshop and Live Picture. Strongly recommended: camera/photography and Macintosh computer experience, or Visual Communications 50. 2 hours lecture, 4 hours laboratory.

Grading Option: OP (May be repeated 1 time)

Transfer: CSU

**PHOT 67 HISTORY OF PHOTOGRAPHY 3 UNITS**

A broad chronological survey of photography from its invention to the present. Considers the medium's dual role as technology and art. Addresses a multiplicity of photographic themes and purposes. Considers the intersections of photography and technology, history, art, and everyday life. 3 hours.

Grading Option: GR

Transfer: CSU, UC

**PHOT 68 COLOR FIELD PHOTOGRAPHY 2 UNITS**

Use of either digital photography or color slide film to explore the solution of special technical and visual problems encountered in location shooting. 2 hours.

Grading Option: GR (May be repeated 1 time)

Transfer: CSU

**PHOT 72 DOCUMENTARY PHOTOGRAPHY 2 UNITS**

Photography exploring the documentary approach. Survey of photojournalism as a medium of mass communications. Understanding and applying photojournalistic and basic technical and visual skills in the making of successful reportage photographs. Consideration of the work of major 20th century photojournalists. Strongly recommended: Camera/photography experience. 1 hour lecture, 4 hours laboratory.

Grading Option: OP

Transfer: CSU

**PHOT 99 TOPICS IN PHOTOGRAPHY 0.5-3 UNITS**

Workshops on a variety of specialized topics in photography or visual communications, which are relevant to a general audience and/or those working at the intermediate to advanced level. Development of knowledge and skills acquired in previous or current photography work with emphasis on professional approach, specific topic, media, or technique. Strongly recommended: Photography 60. 9 to 54 total hours. \*Limited to 4 transfer units.

Grading Option: C/N (May be repeated 3 times)

Transfer: CSU\*

# Physical Education

- DEGREE
- CERTIFICATE

## Degree

### AA – Physical Education (TRANSFER PREPARATION)

- Certificate
- Sports Medicine
- Coaching

### About the Program

The physical education department offers a variety of activity classes that provide exercise for the improvement of health and physical fitness, training in sports, dance, and movement awareness.

### Athletics

Las Positas College offers an Intercollegiate Athletics program dedicated to assisting each student in achieving the highest possible academic and athletic success. Our faculty and coaches subscribe to the philosophy that athletics plays an integral role in the total educational process and that athletics helps to promote the growth of values in leadership, character, sportsmanship, and teamwork.

## AA – Physical Education (TRANSFER PREPARATION)

### Freshman Year

Chemistry 30A (Introductory and applied Chemistry) .....	4
Biology 31 (Introduction to College Biology) .....	4
Physical Education 17 (Introduction to Athletic Training) .....	3
Physical Education 20 (Introduction to Physical Education) .....	3
Physical Education 24 (Sport Psychology) .....	3
Physical Education* 1, 2 or 3 (Physical Education Activity) .....	0-4
General Education Courses	

### Sophomore Year

Anatomy 1 (General Human Anatomy) .....	4
Physiology 1 (Human Physiology) .....	5
Nutrition 1 (Nutrition) or	
Nutrition 3 (Nutrition for Health and Wellness) .....	3
Health 1 (Introduction to Health) .....	3
Physical Education 27 (Principles of Coaching) .....	2
Physical Education 28 (Components of Physical Fitness—	
The Human Body) .....	3
Physical Education* 1, 2 or 3 (Physical Education Activity) .....	0-4
General Education Courses	

**Total Units** ..... 60

*\*Select courses from the following categories for a total of 4 units:*

- Team Sports
- Individual Sport
- Fitness Activity (e.g. Weight Training, Step Aerobics)





**Certificate of Completion  
Sports Medicine**

Biology 50 (Anatomy and Physiology) or  
 Physiology 1 (Human Physiology) ..... 4-5  
 Nutrition 1 (Nutrition) or  
 Nutrition 3 (Nutrition for Health and Wellness) ..... 3  
 Physical Education 17 (Introduction to Athletic Training) ..... 3  
 Physical Education 28 (Components of Physical Fitness—The  
 Human Body) or  
 Physical Education 24 (Sport Psychology) ..... 3  
 Physical Education 1, 2 or 3 (Physical Education Activity) ..... 2  
**Total Units Required..... 15-16**

**Certificate of Completion  
Coaching**

Physical Education 23 (Sports Officiating) ..... 2  
 Physical Education 24 (Sport Psychology) ..... 3  
 Physical Education 27 (Principles of Coaching) ..... 2  
 Physical Education 28 (Components of Physical Fitness—  
 The Human Body) ..... 3  
 Physical Education 20 (Introduction to Physical Education) ..... 2  
 Work Experience 95 (Occupational Work Experience Education).... 1  
 Work Experience 96 (Occupational Work Experience Seminar)..... 1  
**Total Units Required..... 17**



**Physical Education (PE)**

**PE 1 PHYSICAL EDUCATION ACTIVITY .5 UNIT**

The physical education program offers a variety of activity sections that provide exercise for improvement of health and physical fitness, training in sports and dance, and movement awareness. All activities teach life-long physical education skills that promote wellness, physical and emotional fitness, and the importance of a healthy lifestyle. Each activity can be found under its specific section title, i.e., basketball, golf, jazz dance, or yoga in the Class Schedule. Each section meets 1.5 hours per week, or 27 hours laboratory per semester. \* *Transfer unit limitations, see page 63*

Grading Option: OP (May be repeated 3 times) Transfer: CSU, UC \*

**PE 2 PHYSICAL EDUCATION ACTIVITY 1 UNIT**

The physical education program offers a variety of activity sections that provide exercise for improvement of health and physical fitness, training in sports and dance, and movement awareness. All activities teach life-long physical education skills that promote wellness, physical and emotional fitness, and the importance of a healthy lifestyle. Each activity can be found under its specific section title, i.e., basketball, golf, jazz dance, or yoga in the Class Schedule. Each section meets 3 hours per week, or 54 hours laboratory per semester. \* *Transfer unit limitations, see page 63*

Grading Option: OP (May be repeated 3 times) Transfer: CSU, UC\*

**PE 3 PHYSICAL EDUCATION ACTIVITY 2 UNITS**

The physical education program offers a variety of activity sections that provide exercise for improvement of health and physical fitness, training in sports and dance, and movement awareness. All activities teach life-long physical education skills that promote wellness, physical and emotional fitness, and the importance of a healthy lifestyle. Each activity can be found under its specific section title, i.e., basketball, golf, jazz dance, or yoga in the Class Schedule. Each section meets 6 hours per week, or 108 hours laboratory per semester. \* *Transfer unit limitations, see page 63*

Grading Option: OP (May be repeated 3 times) Transfer: CSU, UC\*

**PE 17 INTRODUCTION TO ATHLETIC TRAINING 3 UNITS**

Basic taping skills, introduction to modality usage, and basic rehabilitation principles of athletic training. Includes work with intercollegiate sports programs. Designed to be preparatory for further education and a career in athletic training. 2 hours lecture, 3 hours laboratory.

Grading Option: OP Transfer: CSU

**PE 20 INTRODUCTION TO PHYSICAL EDUCATION 3 UNITS**

Survey of Physical Education with emphasis on basic elements, foundations, specialty areas of further study, career opportunities and the relationship of Physical Education to other fields. This course will broaden student's understanding of how the philosophies and programs of physical education, exercise and sport have evolved to their current status. 3 hours.

Grading Option: OP Transfer: CSU, UC

# Physical Education

## PE 21 THEORY OF SOCCER 2 UNITS

The examination and analysis of theories and strategies in international soccer. This course includes examination of offensive and defensive strategies, and playing styles used at all levels of soccer play (club, amateur, collegiate, and professional). Students will study current and historic trends in international soccer strategy and play. Proper care of facilities and equipment, and proper safety procedures will also be covered. Students will apply principles and theories through videotape analysis of various team play and their own play on the field. 1 hour lecture, 3 hours laboratory. *\*Transfer unit limitations, see page 63*

Grading Option: OP (May be repeated 1 time) Transfer: CSU, UC\*

## PE 23 SPORTS OFFICIATING 2 UNITS

Theory and practical applications of sports officiating. Discussion, study, and Implementation of rule enforcement, mechanics, and techniques used by officials in officiating athletic contests. 1 hour lecture, 3 hours laboratory. *\*Transfer unit limitations, see page 63*

Grading Option: OP (May be repeated 3 times) Transfer: CSU, UC\*

## PE 24 SPORT PSYCHOLOGY 3 UNITS

A formal introduction to the study of sport psychology focusing upon both the psychological factors that influence participation in sport and exercise and the psychological effects derived from that participation. Emphasis on understanding the psychological processes involved in

human performance, models of intervention that can enhance and improve learning and performance conditions, and the strategies which can elicit and influence favorable psychological perceptions and outcomes. Students who have completed or are enrolled in Psychology 24 may not receive credit. 3 hours.

Grading Option: OP Transfer: CSU

## PE 27 PRINCIPLES OF COACHING 2 UNITS

Theory, principles, and ethics of coaching sports with emphasis on the fundamentals and techniques of coaching. Course completion certificate available upon completion (with grade of "C" or higher). 2 hours lecture, 1 hour laboratory. *\*Transfer unit limitations, see page 63*

Grading Option: OP Transfer: CSU, UC\*

## PE 28 COMPONENTS OF PHYSICAL FITNESS—THE HUMAN BODY 3 UNITS

Introduction to the science of exercise including basic anatomy, exercise physiology, kinesiology, body mechanics, and nutrition. Applied principles of exercise science including physical fitness assessment, exercise program design, body composition assessment, and professionalism in the fitness field. 3 hours.

Grading Option: OP Transfer: CSU

## PE 31 INTERCOLLEGIATE BASKETBALL (MEN'S) 1 UNIT

Training for intercollegiate competition. Daily practice. 5 hours. *\*Transfer unit limitations, see page 63*

Grading Option: OP (May be repeated 3 times) Transfer: CSU, UC\*

## PE 36 INTERCOLLEGIATE ATHLETICS: CROSS COUNTRY 2 UNITS

Training for intercollegiate competition. Daily practice. 10 hours laboratory weekly. *\*Transfer unit limitations, see page 63*

Grading Option: OP (May be repeated 2 times) Transfer: CSU, UC\*

## PE 38 INTERCOLLEGIATE ATHLETICS: SOCCER 2 UNITS

Training for intercollegiate competition. Daily practice. 10 hours laboratory weekly. *\*Transfer unit limitations, see page 63*

Grading Option: OP (May be repeated 2 times) Transfer: CSU, UC\*

## PE 41 INTERCOLLEGIATE BASKETBALL (WOMEN'S) 1 UNIT

Training for intercollegiate competition. Daily practice. 5 hours.

*\*Transfer unit limitations, see page 63*

Grading Option: OP (May be repeated 3 times) Transfer: CSU, UC\*

## PE 46 INTERCOLLEGIATE ATHLETICS: WOMEN'S CROSS COUNTRY 2 UNITS

Training for intercollegiate competition. Daily practice. 10 hours laboratory weekly. *\*Transfer unit limitations, see page 63*

Grading Option: OP (May be repeated 2 times) Transfer: CSU, UC\*

## PE 48 INTERCOLLEGIATE ATHLETICS: WOMEN'S SOCCER 2 UNITS

Training for intercollegiate competition. Daily practice. 10 hours laboratory weekly. *\*Transfer unit limitations, see page 63*

Grading Option: OP (May be repeated 2 times) Transfer: CSU, UC\*



## Degree AS - Physics

### About the Program

The Physics AS degree prepares students for transfer to four-year institutions for continued study in the field of physics, mathematics, engineering and other related physical science fields. The physics program includes the lower-division requirements typical of four-year transfer institutions. General Education courses should be selected carefully to meet the requirements of the intended transfer institution. Some transfer institutions require more general education units than are required by the AS degree. Some variation in requirements may exist at a particular four-year college or university; therefore, it is essential that the student also refer to the catalog of the prospective transfer institution and consult a counselor.

## AS - Physics

### Freshman Year

Physics 8A (General Physics I).....	5
Physics 8B (General Physics II).....	5
Mathematics 1 (Analytic Geometry and Calculus I).....	5
Mathematics 2 (Analytic Geometry and Calculus II).....	5
General Education Courses	

### Sophomore Year

Physics 8C (General Physics III).....	5
Physics 8D (General Physics IV).....	3
Mathematics 3 (Multivariable Calculus).....	5
Mathematics 5 (Differential Equations with Computer Applications).....	3.5
General Education Courses	
<b>Total units required .....</b>	<b>60</b>



# Physics

## Physics (PHYS)

### PHYS 2A INTRODUCTION TO PHYSICS I 4 UNITS

Introduction to the major principles of classical mechanics and electricity using pre-calculus mathematics. Includes Newtonian mechanics, energy, Gravitation, fluids, thermodynamics, vibration waves, and electrostatics. Prerequisite: Mathematics 20, 36, or 38 (completed with a grade of "C" or higher). 3 hours lecture, 3 hours laboratory. (CAN PHYS 2; CAN PHYS SEQ A = PHYS 2A + 2B)

*\*Transfer unit limitations, see page 63*

Grading Option: GR

Transfer: CSU, UC\*

### PHYS 2B INTRODUCTION TO PHYSICS II 4 UNITS

Electro-circuits, electromagnetic waves, optics and modern physics. Prerequisite: Physics 2A (completed with a grade of "C" or higher). 3 hours lecture, 3 hours laboratory. (CAN PHYS 4; CAN PHYS SEQ A = PHYS 2A + 2B) *\*Transfer unit limitations, see page 63*

Grading Option: GR

Transfer: CSU, UC\*

### PHYS 8A GENERAL PHYSICS I 5 UNITS

Introduction to the principles of Newtonian Mechanics and analytical methods of physics using calculus as needed. Vectors, kinematics, dynamics, energy, momentum, rotation, Gravitation and fluid mechanics. Prerequisite: Mathematics 1 (completed with a grade of "C" or higher). 4 hours lecture, 3 hours laboratory. *\*Transfer unit limitations, see page 63*

Grading Option: GR

Transfer: CSU, UC\*

### PHYS 8B GENERAL PHYSICS II 5 UNITS

Introduction to electricity and magnetism, circuits, Maxwell's equations and electromagnetic waves. Prerequisites: Physics 8A (completed with Grade of "C" or higher) and Mathematics 3 (may be taken concurrently). 4 hours lecture, 3 hours laboratory. *\*Transfer unit limitations, see page 63*

Grading Option: GR

Transfer: CSU, UC\*

### PHYS 8C GENERAL PHYSICS III 5 UNITS

Introduction to oscillations, mechanical waves, thermodynamics, light and optics. Prerequisites: Physics 8A and Mathematics 2 (both completed with a Grade of "C" or higher). Strongly recommended: Physics 8B. 4 hours lecture, 3 hours laboratory. *\*Transfer unit limitations, see page 63*

Grading Option: GR

Transfer: CSU, UC\*

### PHYS 8D GENERAL PHYSICS IV 3 UNITS

Introduction to relativity and modern physics, including: introduction to quantum theory; atomic, molecular, nuclear and particle physics; condensed matter physics; astrophysics and cosmology. Prerequisite: Physics 8B (completed with a grade of "C" or higher). 2 hours lecture, 3 hours laboratory. *\*Transfer unit limitations, see page 63*

Grading Option: GR

Transfer: CSU, UC\*

### PHYS 10 DESCRIPTIVE PHYSICS 3 UNITS

Motion, Gravitation, heat, light, sound, electricity, magnetism, atoms, and nuclei. Understanding present day scientific problems and developments such as alternative energy sources, solar energy, nuclear power, lasers, relativity and black holes. Designed for non-majors in physical science. Strongly Recommended: Mathematics 105, 105M, or 107. 3 hours. *\*Transfer unit limitations, see 63*

Grading Option: GR

Transfer: CSU, UC\*

### PHYS 10L DESCRIPTIVE PHYSICS LABORATORY 1 UNIT

Introduction to laboratory principles and techniques with emphasis on the basic concepts of physics such as mechanics, thermodynamics, energy, electricity, magnetism, and optics. Prerequisite: Physics 10 (may be taken concurrently). 3 hours laboratory. *\*Transfer unit limitations, see page 63*

Grading Option: GR

Transfer: CSU, UC\*

## Political Science

### About the Program

Political Science students study public issues of the day, as well as the timeless issues of government, public policy, and the political process as preparation for a wide variety of careers. At Las Positas College, courses cover the full spectrum of the political science discipline, from American Government, California State and Local Government, Comparative Government, Political Theory, and International Relations. The academically rigorous program provides opportunities for learning about the political process, fulfilling general education requirements, as well as preparation for transfer, fulfilling the typical lower-division requirements at a four-year institution. The course curriculum is designed for building critical thinking and analytical skills necessary for a variety of careers but also offers avenues for students to actively participate in the political process.



### Political Science (POLI)

#### POLI 7 INTRODUCTION TO AMERICAN GOVERNMENT 4 UNITS

Introduction to the principles, problems and basic issues of government with particular emphasis on the national government in the United States, including discussion of the American Constitution, and California state and local government. Strongly recommended: Eligibility for English 1A. 4 hours. (CAN GOVT 2)

Grading Option: OP

Transfer: CSU, UC

#### POLI 12 INTRODUCTION TO CALIFORNIA STATE AND LOCAL GOVERNMENT 3 UNITS

Organization and operation of government and politics at the state, county and municipal level; emphasis on current issues and the influences of historical, geographical, political, economic and social factors on public policy. Strongly Recommended: Eligibility for English 1A. 3 hours.

Grading Option: OP

Transfer: CSU

#### POLI 20 COMPARATIVE GOVERNMENT 3 UNITS

Contemporary forms of government, institutions and political problems of selected national governments. Strongly recommended: Political Science 1 or Political Science 7 and English 1A. 3 hours.

Grading Option: OP

Transfer: CSU, UC

#### POLI 25 INTRODUCTION TO POLITICAL THEORY 3 UNITS

Various theoretical approaches to politics including selected aspects of political thought from ancient times to the present with application to current political thought. Strongly Recommended: Political Science 7 and Eligibility for English 1A. 3 hours.

Grading Option: OP

Transfer: CSU, UC

#### POLI 30 INTERNATIONAL RELATIONS 3 UNITS

Introduction to international relations, politics, theories and institutions with an emphasis on contemporary practices. Strongly Recommended: Political Science 7 and Eligibility for English 1A. 3 hours.

Grading Option: OP

Transfer: CSU, UC

#### POLI 45 SELECTED TOPICS IN POLITICAL SCIENCE 2-3 UNITS

An examination of a current topic/issue in Political Science, including such areas as international relations, economic/social policy issues, comparative government, elections and political parties, political theory and American foreign affairs, with emphasis on an examination of public policy alternatives. Topics/areas of study will vary with class offering, designed to meet the interests of students. Strongly Recommended: A college course in political science and/or American History. 2-3 hours. \*Transfer unit limitations, see page 63

Grading Option: OP

Transfer: CSU, UC\*



# Psychology

## DEGREE

### Degree

#### AA – Psychology (TRANSFER PREPARATION)

##### About the Program

Psychology is the science of behavior and mental experiences. Psychology includes a variety of subfields including biological, developmental, clinical, counseling, school, and experimental psychology. The Psychology program at Las Positas College offers an AA degree that provides students with a basic understanding of behavior and motivation that is valuable in many careers in business, government, and education. To become a “psychologist,” however, requires graduate-level training. The program provides preparation for transfer, fulfilling the typical lower-division requirements at four-year institutions. Some variation in requirements may exist at a particular four-year college or university; therefore, it is essential that the student also refer to the catalog of the prospective transfer institution and consult a counselor.



#### AA – Psychology (TRANSFER PREPARATION)

##### Freshman Year

Psychology 1 (General Psychology).....	3
Psychology 4 (Brain, Mind, and Behavior) .....	3
Biology 10 (Introduction to the Science of Biology) or Biology 31 (Introduction to College Biology) .....	4
Sociology 4 (Marriage and Family Relations) or Early Childhood Development 62 (Child, Family and Community)...	3
Electives* .....	0-3
General Education Courses	

##### Sophomore Year

Psychology 6 (Abnormal Psychology).....	3
Psychology 12 (Life-Span Psychology) .....	3
Psychology 15 (Problems of Childhood) .....	3
Mathematics 42A (Introduction to Probability and Statistics) or Mathematics 44 (Statistics and Probability) .....	3-5
Psychology 3 (Social Psychology) or Anthropology 3 (Social and Cultural Anthropology).....	3
Electives* .....	0-3
General Education Courses	
<b>Total Units Required.....</b>	<b>60</b>

##### \*Electives

Select from the following for a minimum of 3 units:

- Psychology 24 (Sport Psychology)
- Psychology 10 (Psychology of Human Sexuality)
- Psychology/Counseling 11 (Interpersonal Relationships)
- Sociology 3 (American Cultural and Racial Minorities)
- Business 48 (Human Relations in the Workplace) or  
Supervision 81 (Human Relations in the Workplace)



**Psychology (PSYC)****PSYC 1 GENERAL PSYCHOLOGY 3 UNITS**

Basic psychological concepts underlying human and animal behavior in such areas as learning, motivation, perception, personality and social behavior. Strongly Recommended: Eligibility for English 1A. 3 hours. (CAN PSY 2)

Grading Option: OP

Transfer: CSU, UC

**PSYC 2 INTRODUCTION TO PSYCHOLOGICAL METHODOLOGY 3 UNITS**

Introduction to scientific method in the study of human and animal behavior. Experience in designing, performing, and reporting behavioral science experiments and surveys. Includes fundamentals of research design, hypothesis testing, and reasoning in inferential statistics. Strongly recommended: Psychology 1.

Grading Option: OP

Transfer: CSU, UC

**PSYC 3 PROBLEMS AND METHODS IN INDIVIDUAL AND SOCIAL PSYCHOLOGY 3 UNITS**

Research and theory regarding psychological processes within individuals such as attitudes, perception, cognition that influence or are influenced by the physical setting in which they occur and the social groups to which individuals belong. Strongly recommended: Psychology 1 or Sociology 1 or Anthropology 3. 3 hours.

Grading Option: OP

Transfer: CSU, UC

**PSYC 4 BRAIN, MIND, AND BEHAVIOR 3 UNITS**

Introduction to the field of biopsychology. The biopsychology of cognitive, perceptual, emotional, developmental, and social processes. Includes the biopsychology of personality, gender, emotions, learning, learning disabilities, drugs, neurological and developmental disorders, and mental health. Examination of information and theory for practical application. 3 hours.

Grading Option: OP

Transfer: CSU, UC

**PSYC 6 ABNORMAL PSYCHOLOGY 3 UNITS**

Introduction to abnormal psychology. Mental health and mental health disorders in adults and children. Includes disorders of anxiety, mood, personality, sexuality, substance abuse, psychosis and other disorders. Major psychological, biological, and sociocultural models of mental health disorders and their treatment. 3 hours.

Grading Option: OP

Transfer: CSU, UC

**PSYC 10 PSYCHOLOGY OF HUMAN SEXUALITY 3 UNITS**

Physiological and psychosocial aspects of sexual health in our contemporary society. Understanding the interrelationship of attitude and behavior as it relates to sexual well-being and sexual integrity. 3 hours.

Grading Option: OP

Transfer: CSU, UC

**PSYC 12 LIFE-SPAN PSYCHOLOGY 3 UNITS**

Introduction to the psychological, physiological, and socio-cultural factors influencing development from conception through death. Emphasis on the process of normal development and its variations. Examination of theoretical models and research for practical application. 3 hours.

Grading Option: OP

Transfer: CSU, UC

**PSYC 15 PROBLEMS OF CHILDHOOD 3 UNITS**

An exploration of the emotional, cognitive, developmental, and behavioral problems of childhood and adolescence. Topics include: common stresses and problems of adjustment; the effects of stress, abuse, and traumas on development; mental retardation, autism and other developmental disabilities; normal and abnormal problems of attention, conduct, mood anxiety, sleep, eating, sex, learning and speech. Examination of theories of cause of mental health problems in children and adolescents and approaches to treatment. Examination of information and theory for practical application. Students who have completed or are enrolled in Early Childhood Development 15 may not receive credit. 3 hours.

Grading Option: OP

Transfer: CSU

**PSYC 24 SPORT PSYCHOLOGY 3 UNITS**

A formal introduction to the study of sport psychology focusing upon both the psychological factors that influence participation in sport and exercise and the psychological effects derived from that participation. Emphasis on understanding the psychological processes involved in human performance, models of intervention that can enhance and improve learning and performance conditions, and the strategies which can elicit and influence favorable psychological perceptions and outcomes. Students who have completed or are enrolled in Physical Education 24 may not receive credit. 3 hours.

Grading Option: OP

Transfer: CSU



# Psychology/Counseling

## ✓ CERTIFICATE

### Certificate Human Services

#### About the Program

Psychology-Counseling courses were developed to help educate students about the programs and resources of Las Positas College. These courses enable students to explore and develop a personal career plan, and improve and enhance study skills for success in college. These courses are also offered to increase students' knowledge in multiculturalism. Additionally, they provide students with a means to learn theoretical knowledge, gain hands-on experience, and explore career opportunities in the field of Human Services.



### Certificate of Completion Human Services

*Approval by the State Chancellor's Office is pending.*

Psychology-Counseling 5 (Introduction to Human Services).....	3
Psychology-Counseling 3 (Introduction to Counseling Theory) .....	3
Psychology-Counseling 6 (Human Services Case Management Theory).....	3
Psychology-Counseling 13 (Multicultural Issues in Human Services) 3	
Internship 1 (Internship Seminar).....	1
Internship 2 (Internship Field Placement).....	1
Electives* .....	2-3
<b>Total units required .....</b>	<b>16-17</b>

#### \*Electives

*Select from the following for a minimum of 2 units:*

- Anthropology 3 (Social and Cultural Anthropology)
- Early Childhood Development 62 (Child, Family and Community)
- Internship 2 (Internship Field Placement)
- Psychology 1 (General Psychology)
- Psychology 6 (Abnormal Psychology)
- Psychology 12 (Life Span Psychology)
- Psychology-Counseling 7 (Contemporary Issues)
- Psychology-Counseling 10 (Interpersonal Relationships)
- Sociology 4 (Marriage and Family Problems)
- Sociology 6 (Social Problems)

**Psychology/Counseling (PSCN)****PSCN 3 INTRODUCTION TO COUNSELING THEORY AND SKILLS****3 UNITS**

Introduction to counseling theory and practice with emphasis on fundamental principles of counseling process including diagnostic methodologies, behavioral assessment, goal setting, multicultural sensitivity and need to understand client reality and to facilitate change. Focus on essential counseling theories, major diagnostic categories, problems and solutions of recovery, cultural diversity, and ethical issues. 3 hours.

Grading Option: OP

Transfer: CSU

**PSCN 5 INTRODUCTION TO HUMAN SERVICES****3 UNITS**

Course examines the history, theory, ethics, values and principles at work in the Human Services field. Emphasis is placed on modern theory, methods, and critical skills that lead to effective human service work. Students will examine theoretical systems, agency and community resources, a multicultural approach to diverse populations, personal motivation and professional characteristics needed to succeed in Human Services. 3 hours.

Grading Option: OP

Transfer: CSU

**PSCN 6 INTRODUCTION TO COUNSELING CASE MANAGEMENT FOR HUMAN SERVICES****3 UNITS**

Introduction to case management theory, models and techniques, multicultural issues affecting case management theory. Emphasis placed on case management philosophy, ethical issues, concepts and practices. Analysis of needs, documentation and confidentiality, and individualized consumer plan development. Strongly recommended: Psychology-Counseling 5. 3 hours.

Grading Option: OP

Transfer: CSU

**PSCN 7 CONTEMPORARY ISSUES****1-3 UNITS**

Contemporary life issues related to social effectiveness, and educational and career development. Explores issues through an examination of current counseling related research findings and resource materials. Limit of 6 units. 1-3 hours.

Grading Option: OP (May be repeated 3 times)

Transfer: CSU

**PSCN 10 CAREER AND EDUCATIONAL PLANNING****2 UNITS**

Exploration of the concept of educational/career planning focusing on personal career development through self-assessment, psychological testing, and individual counseling. Emphasis on clarification of individual interests, values, needs, and abilities and investigation of occupational opportunities in the world of work. Designed for those undecided or uncertain about their career and educational plans. May not receive credit if Psychology-Counseling 10A or 10B have been completed. 2 hours.

Grading Option: OP

Transfer: CSU

**PSCN 11 INTERPERSONAL RELATIONSHIPS****2 UNITS**

Exploration of behavior in interactions with others. Designed to improve interpersonal relationships for the benefit of academic, career, and personal development. 2 hours.

Grading Option: C/N (May be repeated 2 times)

Transfer: CSU

**PSCN 13 MULTICULTURAL ISSUES IN CONTEMPORARY AMERICA****3 UNITS**

Exploration of issues relating to the multicultural community in which we live today. Interpersonal relations and communication. Focus on improving the individual's understanding of other cultures and how those cultures impact the American lifestyle. Includes exploration of myths and misunderstandings. Discussion of four specific cultures or sub-cultures from the following groups: (1) African-American, (2) Asian-American, (3) Hispanic American, (4) Native-American, (5) Middle Eastern-American, (6) European-American, (7) Gay/Lesbian American and (8) Disabled American. 3 hours.

Grading Option: OP

Transfer: CSU, UC

**PSCN 15 COLLEGE STUDY SKILLS****2 UNITS**

Review of study skill techniques for success in college. Emphasis on time management, personal learning style, active listening, note-taking and test-taking strategies. Includes modeling, practice, and evaluation of study skill techniques. 2 hours.

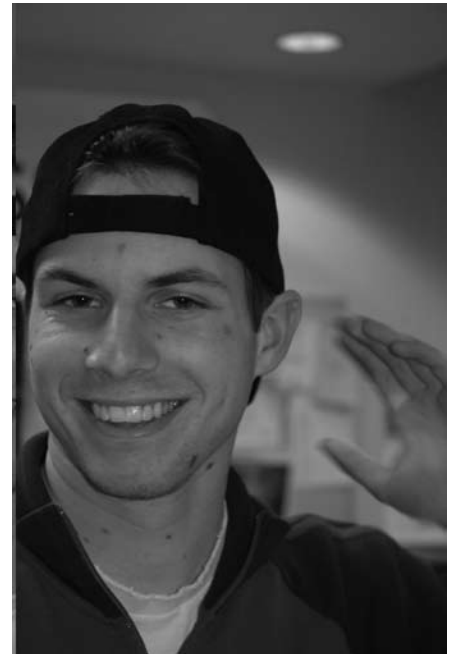
Grading Option: OP

Transfer: CSU

**PSCN 24 COLLEGE ORIENTATION/EXPO LPC****.5 UNIT**

Introduction to strategies for college success through an exploration of college programs and services and introduction to College faculty, staff and students. This orientation process includes assessment and its interpretation and program planning based upon the student's assessed skills and stated interests. 9 total hours.

Grading Option: C/N



# Radiation Safety

## Radiation Safety (RADS)

RADS 40ABC RADIATION SAFETY 2-4 UNITS

A modularized course designed to provide basic radiation safety instruction. Includes identification of the sources of radiation and radioactive materials, the nature of ionization radiation, biological effects, risk assessment, protection strategies, environmental impacts, and waste handling. RADS 40A, Radiation Safety Basics, 2 units. Strongly Recommended: Mathematics 65, 71, or appropriate skill level demonstrated through the Mathematics assessment process. RADS 40B, Emergency Response and Monitoring. 1 unit. Prerequisite: Radiation Safety 40A (completed with a grade of "C" or higher). RADS 40C, Safety Controls and Regulation, 1 unit. Prerequisite: Radiation Safety 40B (completed with a grade of "C" or higher). 18 total hours per unit.

Grading Option: OP

Transfer: CSU

## Recreation and Leisure Services (RECL)

RECL 71L FUNDAMENTALS OF BACKPACKING 2 UNITS

Introduction to concepts and techniques associated with backpacking. Skills emphasized in this course are designed to increase recreation leadership potential in outdoor recreation and education careers. 1.5 hours lecture, 2 hours laboratory.

Grading Option: OP

Transfer: CSU

SEE ALSO: **Physical Education**

## Religious Studies

### Religious Studies (RELS)

RELS 1 RELIGIONS OF THE WORLD 3 UNITS

Introduction to religion by examining several religions; basic principles of each shown by fundamental scriptures and works in the visual and musical arts. 3 hours.

Grading Option: GR

Transfer: CSU, UC

RELS 2 THE BIBLE: HISTORY AND LITERATURE 3 UNITS

Study of the historical context and literary forms of the Hebrew Bible and New Testament. Emphasis on social, political and economic origins of the works, their literary motifs, and how their creation reflected ongoing cultural values. 3 hours.

Grading Option: GR

Transfer: CSU, UC

RELS 11 THE NATURE OF ISLAM 3 UNITS

Introduction to the nature of Islam as a religion or system for life, its culture and its impact on Muslim individuals and groups. Includes a brief history of Islam and Muslims in relation to the basic sources of Islam. 3 hours.

Grading Option: OP

Transfer: CSU, UC

SEE ALSO: **Humanities**



## Degree AS – Science Technology

### About the Program

A science technician is an individual trained to work in a variety of laboratory settings, generally as a member of a team under the supervision and guidance of a scientist. The Science Technology program provides core knowledge in both science and technology. Students specialize in either a Physical Science or Biological Science emphasis area. This broad background should prepare students for entry-level career positions as laboratory technicians. Employment opportunities vary in research and development in science, medicine, or industry. The technician may be involved in observation, experimentation, computation, instrumentation, and communication.



## AS – Science Technology

### Freshman Year

Computer Information Systems 50 (Introduction to Computing and Information Technology) or  
 Computer Science 1 (Computing Fundamentals I)..... 3-5  
 Mathematics 65 (Elementary Algebra) or  
 Mathematics 71 (Applied Mathematics for Technicians) or  
 Industrial Technology 74 (Measurements and Calculation) ..... 3-5  
 Chemistry 30A (Introductory and Applied Chemistry) or  
 Chemistry 31 (Introduction to College Chemistry) ..... 3-4  
**Options\*** ..... 6-7  
 General Education Courses

### Sophomore Year

Speech 1 (Fundamentals of Speech Communications) or  
 Speech 10 (Interpersonal Communications) ..... 3  
 Electronics Technology 70 (Introduction to Electronics) or  
 Electronics Technology 50 (Fundamentals of Electronics) ..... 2 or 6  
 Physics 2A (Introduction to Physics I) or  
 Physics 10 (Descriptive Physics) and  
 Physics 10L (Descriptive Physics Lab)..... 4  
**Options\*** ..... 6-7  
 General Education Courses  
 Electives (Work Experience or Internship suggested)  
**Total units required** ..... 60

*\*Complete 1 Science Technology Concentration Option*

### Science Technology Option 1

Physical Science Emphasis Concentration..... 13 units  
 Design Technology 52 (Technical Graphics)  
 Vacuum Technology 60A (Vacuum Concepts I)  
 Design Technology 75 (Design Materials Technology)  
 Industrial Technology 61\*\* (Manufacturing Processes) or  
 Machine Tool Technology 70\*\* (Introduction to Machine Shop)

### Science Technology Option 2

Biological Sciences Emphasis Concentration..... 13 units  
 Biology 31 (Introduction to College Biology)  
 Chemistry 30B (Introductory and Applied Chemistry)  
 Biotechnology 1 (Introductory Biotechnology Methods)

*+May be used to meet General Education requirements as well as degree major requirements*

**\*\* Chabot College**

## ✓ DEGREE

### Degree AA – Social Science (General)

#### About the Program

Social Science is designed to provide a broad interdisciplinary foundation for further study. It can also serve as a foundation from which students continue study in specialized fields. This is a general field that includes courses in Anthropology, Economics, Cultural Geography, History, Political Science, Psychology and Sociology. Students may complete lower-division requirements for transfer in general in individual social science disciplines. Some variation in requirements may exist at a particular four-year college or university; therefore, it is essential that students refer to the catalog of the prospective transfer institution and consult a counselor. General Education courses should be carefully selected to meet the requirements of the intended transfer institution; some transfer institutions require more General Education units than required by this AA degree.



### AA – Social Science (General)

#### Freshman Year

Anthropology 1 (Physical Anthropology).....	3
Geography 2 (Cultural Geography).....	3
<i>Complete 1 of the following combinations for a total of 6 units:</i>	
History 1 (History of Western Civilization to 1600) and History 2 (History of Western Civilization since 1600) or History 7 (U.S. History through Reconstruction) and History 8 (U.S. History Since Reconstruction).....	6
Electives* .....	0-9
General Education Courses	

#### Sophomore Year

Economics 1 (Principles of Microeconomics) or Economics 2 (Principles of Macroeconomics).....	3
Political Science 7 (Introduction to American Government).....	4
Psychology 1 (General Psychology).....	3
Sociology 1 (Principles of Sociology).....	3
Electives* .....	0-9
General Education Courses	
<b>Total units required .....</b>	<b>60</b>

#### \*Electives

Select 3 courses from the following for a minimum of 9 units.

- Anthropology 2 (Introduction to Archaeology:  
Prehistory and Culture Growth)
- Anthropology 3 (Social and Cultural Anthropology)
- Anthropology 5 (Cultures of the U.S.: Anthropological  
Perspectives on Race, Class, Gender, and Ethnicity)
- Geography 5 (World Regional Geography)
- History 14 (History and American Cultures of California)
- History 25 (American Indian History and Culture)
- History 28 (History of American West)
- Political Science 20 (Comparative Government)
- Political Science 30 (International Relations)
- Psychology 3 (Problems and Methods in  
Individual and Social Psychology)
- Psychology 4 (Brain, Mind, and Behavior)
- Psychology 6 (Abnormal Psychology)
- Psychology 10 (Human Sexuality)
- Psychology 24 (Sport Psychology)
- Sociology 3 (American Cultural and Racial Minorities)
- Sociology 4 (Marriage and Family Relations)
- Sociology 6 (Social Problems)
- Sociology 7 (Human Sexuality)
- Sociology 11 (Sociology of Gender)

## Sociology

### About the Program

Courses in Sociology are designed to prepare students for further study in Sociology leading to the BA, MA, MSW, and/or PhD degrees. Sociologists with graduate degrees may teach at the high school, college, or graduate levels. They may also become Research Sociologists in both the public and private sectors and work in areas of public policy, the law, and international studies. Applied Sociologists may work with social service agencies and community programs on behalf of others—often underrepresented or neglected groups.

### Sociology (SOC)

#### SOC 1 PRINCIPLES OF SOCIOLOGY 3 UNITS

The sociological perspective: scientific study of human interaction and society as a whole with emphasis on impact of groups on social behavior; systematic examination of culture and social organization, and methodology. 3 hours. (CAN SOC 2)

Grading Option: OP

Transfer: CSU, UC

#### SOC 3 AMERICAN CULTURAL AND RACIAL MINORITIES 3 UNITS

Analysis of racial and ethnic relations in the United States. Includes race, ethnicity, prejudice, discrimination and stereotyping, as well as theories and patterns of intergroup relations. Focus on contemporary minorities; African Americans, Chicano/Latinos, Asian Americans, and Native Americans. Strongly recommended: Sociology 1 or Anthropology 3 or Psychology 1. 3 hours.

Grading Option: OP

Transfer: CSU, UC

#### SOC 4 MARRIAGE AND FAMILY RELATIONS 3 UNITS

This course looks at the changing roles and formations of family over time with a particular emphasis on the impact of industrialization on our definitions of family. This includes changing courtship patterns, reproductive strategies and the meanings of childhood and parenthood. Current issues such as work/family balance and divorce are also covered. 3 hours.

Grading Option: OP

Transfer: CSU, UC

#### SOC 6 SOCIAL PROBLEMS 3 UNITS

This course takes an in-depth look at selected social problems from a sociological perspective. Topics will vary from semester to semester. Each class will cover at least one of each of the following: a social problem dealing with social inequality, a social problem of national concern, and a social problem of global concern. Current topics include: the current trend of "wilding" behavior by individuals and institutions, the growth of inner cities, the social consequences of the globalization of labor, and terrorism. 3 hours. (CAN SOC 4)

Grading Option: OP

Transfer: CSU, UC

#### SOC 7 SOCIOLOGY OF SEXUALITY 3 UNITS

This course looks at the social forces that influence, and are influenced by, our construction of sexuality. Topics covered include: the social construction of the erotic, the creation of sexual identities, gender and sexuality, religion and sexuality, sexual commerce, and global issues such as birth control and STDs. 3 hours.

Grading Option: OP

Transfer: CSU, UC

#### SOC 11 SOCIOLOGY OF GENDER 3 UNITS

This course examines the social construction of masculinity and femininity historically and cross-culturally. It analyzes the impact of economic and political change on gender expectations and performance. This class focus includes both macro-analyses of how institutions shape gender and micro-analyses of how individuals "do" or practice gender. Topics include: work, violence, sexual roles, early childhood socialization, and the impact of media images. 3 hours.

Grading Option: OP

Transfer: CSU, UC

### Spanish SEE: Foreign Languages

### Special Studies

#### 99 SPECIAL STUDIES 0.3-19.25 UNITS

Special studies in a specialized technical-vocational major. Typically offered for a particular occupation or skill. Course may be offered under any course title contained in the Catalog, using the number 99. 0.3-1056 hours. \*Limited to 4 transfer units.

Grading Option:

Transfer: CSU\*

**DEGREE**

**Degree  
AA - Speech**

**About the Program**

The Speech program is designed to provide students with fundamental understanding of the principles of speech communication as well as experience in the application of these principles. Classes prepare students for transfer to four-year institutions and entry into careers in which effective communication skills are important, such as teaching, public relations and law. This program fulfills typical lower-division requirements at four-year transfer institutions and offers opportunities to participate in Intercollegiate competition in the areas of public speaking and oral interpretation. Some variation in requirements may exist at a particular four-year college or university; therefore, it is essential that the student also refer to the catalog of the prospective transfer institution and consult a counselor.



**AA - Speech**

**Freshman Year**

Speech 1 (Fundamentals of Speech Communication).....	3
Speech 48* (Activities in Forensics).....	2-8
Speech 2A (Oral Interpretation of Literature).....	3
Speech 10 (Interpersonal Communication).....	3
Electives*	
General Education Courses	

**Sophomore Year**

Speech 46 (Argumentation and Debate).....	3
Speech 48* (Activities in Forensics).....	2-8
Option (Speech/Related Discipline)**.....	3
Electives*	
General Education Courses	
<b>Total units required .....</b>	<b>60</b>

**\*Electives**

Select from the following for a minimum of 3 units:

- Speech 2B (Interpretation of Literature II)
- Speech 3 (Group Communication)
- Speech 5 (Readers Theater)
- Theater Arts 25 (Fundamentals of Stage Speech)

\*\*Speech 48 should be taken for a minimum of 4 units and a maximum of 16 units.

## Speech (SPCH)

### SPCH 1 FUNDAMENTALS OF SPEECH COMMUNICATION 3 UNITS

Fundamentals of speech communication; emphasis on developing, stating, organizing, and researching ideas, and presenting to an audience; includes developing the faculties of critical listening and problem-solving. Strongly Recommended: Eligibility for English 1A. 3 hours. (CAN SPCH 4)

Grading Option: OP

Transfer: CSU, UC

### SPCH 2A ORAL INTERPRETATION OF LITERATURE I 3 UNITS

Development of skill in reading quality literature aloud; practice in writing scholarly criticism of the literature presented orally. 3 hours.

Grading Option: OP

Transfer: CSU, UC

### SPCH 2B ORAL INTERPRETATION OF LITERATURE II 3 UNITS

Further development of skills and knowledge of individual oral interpretation from more difficult and specialized literary sources. Explores other forms of performance such as duet reading and chamber theater. Development of dialect and further vocal characterization. Prerequisite: Speech 2A (completed with a grade of "C" or higher). 3 hours.

Grading Option: OP

Transfer: CSU, UC

### SPCH 3 GROUP COMMUNICATION 3 UNITS

Communication in small group situations. Role of communication in various group processes, including norms, roles, leadership and decision-making, with application to modern concepts of organizational communication. Includes participation in simulation exercises and group activities. 3 hours. (CAN SPCH 10)

Grading Option: OP

Transfer: CSU, UC

### SPCH 5 READERS THEATER 3 UNITS

Introduction to various media and techniques used in readers theater and the arrangement and programming of literature. Performance and/or arrangement of programs for specific audiences; children, young adults, and adults by using live theater presentation, television, and/or radio. 3 hours.

Grading Option: OP

Transfer: CSU, UC

### SPCH 10 INTERPERSONAL COMMUNICATION 3 UNITS

Exploration, discussion, and evaluation of the components of the verbal and non-verbal communication process. Strongly recommended: eligibility for English 1A or 52A. 3 hours. (CAN SPCH 8)

Grading Option: OP

Transfer: CSU

### SPCH 11 INTERCULTURAL COMMUNICATION 3 UNITS

Intercultural communication with a focus on the analysis and comparisons of message perception and transmission in interactions between people from different cultures. Emphasis on practical application of skills for effective communication between people of different domestic and international cultures. 3 hours.

Grading Option: GR

Transfer: CSU, UC

### SPCH 43 PROFESSIONAL COMMUNICATIONS 4 UNITS

This course is designed to help students develop and refine the written and oral communication skills necessary to communicate effectively in a business environment. This will be accomplished through the planning, composing, and evaluating of written communication; report writing; and oral presentations. Additional focus will be placed on developing interpersonal skills, team participation skills, and professionalism. Students who have completed or are enrolled in Business 43, Computer Networking Technology 43, Computer Information Systems 43, Computer Science 43, or English 43 may not receive credit. Strongly recommended: Eligibility for English 1A. 4 hours.

Grading Option: OP

Transfer: CSU

### SPCH 46 ARGUMENTATION AND DEBATE 3 UNITS

Analysis of contemporary questions through written and spoken discourse. Analysis, criticism, and synthesis of contemporary moral, political, economic and philosophical issues of a diverse, multicultural society, using traditional and modern models of argumentation. Strongly Recommended: English 1A. 3 hours. (CAN SPCH 6)

Grading Option: OP

Transfer: CSU, UC

### SPCH 48 ACTIVITIES IN FORENSICS 1-4 UNITS

Intercollegiate competition in the areas of public speaking and oral interpretation. Other activities include performance in workshops, festivals, concert readings, and the community. 4-12 hours.

Grading Option: OP (May be repeated 3 times)

Transfer: CSU





**✓ DEGREE**

**Degree  
AA – Theater Arts**

**About the Program**

The Theater Arts major is designed to provide knowledge, training, and practical experience in all aspects of theater arts. The curriculum provides the essential lower-division courses necessary for transfer to similar programs at four-year institutions, as well as assisting students towards employment in professional, academic and community theater. This program fulfills typical lower-division requirements at four-year transfer institutions. Some variation in requirements may exist at a particular four-year college or university; therefore, it is essential that the student also refer to the catalog of the prospective transfer institution and consult a counselor.



**AA – Theater Arts**

**Freshman Year**

- Theater Arts 1A (Theory and Practice of Acting)..... 3
- Theater Arts 1B (Theory and Practice of Acting) ..... 3
- Select from the following courses for a total of 6 units:
- Theater Arts 5 (Children’s Theater) or  
Theater Arts 30 (Drama Workshop) or  
Theater Arts 46 (College Theater Management) or  
Theater Arts 47 (College Theater Acting) or  
Theater Arts 48 (College Theater Technical)..... 6
- Theater Arts 10 (Introduction to Dramatic Arts) ..... 3
- General Education Courses

**Sophomore Year**

- Theater Arts 40 (Introduction to Technical Theater)\*\* ..... 2
- Select from the following courses for a total of 6 units:
- Theater Arts 5 (Children’s Theater) or  
Theater Arts 30 (Drama Workshop) or  
Theater Arts 46 (College Theater Management) or  
Theater Arts 47 (College Theater Acting) or  
Theater Arts 48 (College Theater Technical)..... 6
- Theater Arts Electives\* ..... 3
- Related Discipline Electives\*\* ..... 3
- General Education Courses:
- Total units required ..... 60**

**\*Theater Arts Electives**

Select from the following for a minimum of 3 units:

- Theater Arts 3 (Improvisation)
- Theater Arts 11 (Stage to Film)
- Theater Arts 12 (Film as Art and Communication)
- Theater Arts 14 (Bay Area Theater)
- Theater Arts 25 (Fundamentals of Stage Speech)
- Theater Arts 39 (Musical Theater Workshop)

**\*\*Related Discipline Electives**

Select from any of the following 4 disciplines for a minimum of 3 units:

**Dance**

- Dance 1 (Dance Technique)
- Dance 5 (Dance Workshop)
- Dance 6 (Dance Production)

**Mass Communications**

- Mass Communications: 33A (Introduction to Television Studio Operations)
- Mass Communications 33B (Intermediate Television Studio Operations)

**Music**

Music 7 (Basic Music Skills)  
 Music 23A (Elementary Voice I)  
 Music 23B (Elementary Voice II)  
 Music 33 (Study of Voice)  
 Music 39 (Musical Theater Workshop)  
 Music 42 (Vocal Repertoire)  
 Music 43 (Vocal Ensemble)  
 Music 44 (Concert Choir)  
 Music 45 (Chamber Choir)  
 Music 46 (Jazz Choir)

**Speech**

Speech 2 (Oral Interpretation of Literature)  
 Speech 5 (Reader's Theater)

*\*\*\*6 units of Arts 48 (College Technical Theater) should be selected if Theater Arts 40 is not offered.*

**Theater Arts (THEA)****THEA 1A THEORY AND PRACTICE OF ACTING I 3 UNITS**

An introduction to the techniques and theories of acting, explored through improvisation, exercises and scene study. Students should be able to demonstrate the following skills: development of the physical and psychological resources for acting including relaxation, concentration, creativity, believability, and commitment. Strongly recommended: Eligibility for English 1A. 3 hours.

Grading Option: GR

Transfer: CSU, UC

**THEA 1B THEORY AND PRACTICE OF ACTING II 3 UNITS**

Continued exploration of the theory and practice of acting, focusing on more complex characterization and character analysis. Introduction to theatrical styles and period acting with emphasis on monologues and scenes. Prerequisite: Theater Arts 1A (completed with a grade of "C" or higher) or equivalent. 3 hours.

Grading Option: GR

Transfer: CSU, UC

**THEA 3 THEATER IMPROVISATION 3 UNITS**

Introduction to Improvisation. Workshop exercises in theater experience through the operational structure of the game. Mimes, characterizations, scene setting, mood and material for extended ensemble improvisation. Recommended for non-theater as well as theater majors. 3 hours.

Grading Option: OP (May be repeated 3 times)

Transfer: CSU, UC

**THEA 4 AMERICAN CULTURES IN THEATER 3 UNITS**

The history, representation and contributions of various ethnic groups in American theater and the study of theater as an instrument for expressing and understanding cultural identity. The focus will be on at least three of the following cultural groups: African Americans, Asian Americans, European Americans, Latin Americans and Native Americans. Strongly recommended: Eligibility for English 1A. 3 hours.

Grading Option: GR

Transfer: CSU

**THEA 5 CHILDREN'S THEATER 1-3 UNITS**

Introduction to the techniques of formal children's theater. Creation and performance of a theatrical production designed for children. Casting subject to audition. 1-3 hours.

Grading Option: OP (May be repeated 3 times)

Transfer: CSU

**THEA 10 INTRODUCTION TO DRAMATIC ARTS 3 UNITS**

The dramatic arts, including the history, values, and theatrical techniques that have shaped them. 3 hours.

Grading Option: OP

Transfer: CSU, UC

**THEA 11 STAGE TO FILM 3 UNITS**

Major plays which subsequently have been made into films. Analysis of each playscript augmented by a viewing and analysis of the film adaptation. Major areas of concentration will vary from semester to semester. 3 hours.

Grading Option: GR

Transfer: CSU, UC

# Theater Arts

## THEA 12 FILM AS ART AND COMMUNICATION 4 UNITS

Introduction to film as art and communication. Analysis of film expression including narrative, documentary, and experimental. 4 hours.

Grading Option: OP

Transfer: CSU, UC

## THEA 14 BAY AREA THEATER 1-3 UNITS

Appreciation of currently available theater performance by reading, evaluating, and having the option of attending as many as eight plays concurrently in performance in the area. Credit for more than 1 unit requires completion of special projects. 1-3 hours.

Grading Option: GR (May be repeated 1 time)

Transfer: CSU, UC

## THEA 25 FUNDAMENTALS OF STAGE SPEECH 3 UNITS

Theory and practice of speech improvement for acting with emphasis on development of the voice, articulation, and pronunciation for theater production. 3 hours. (CAN DRAM 6)

Grading Option: GR

Transfer: CSU, UC

## THEA 30 DRAMA WORKSHOP 1-3 UNITS

Participation in experimental workshop plays, original student scripts, and other projects, possibly leading to scheduled performances. Casting subject to audition. 3-9 hours laboratory. (\*Any combination of THEA 30, 47, 48, limited to 6 transfer units)

Grading Option: GR (May be repeated 3 times)

Transfer: CSU\*, UC

## THEA 39 MUSICAL THEATER WORKSHOP 3 UNITS

Training in performance skills for the musical theater, with emphasis on acting and stage movement. Corequisite: Music 39. 3 hours.

Grading Option: GR

Transfer: CSU, UC

## THEA 40 INTRODUCTION TO TECHNICAL THEATER 2 UNITS

Introduction to the technical aspects of theatrical production, including theater architecture and scenic design, set construction and painting, drafting and rendering, production organization, lighting and sound design. 1 hour lecture, 3 hours laboratory.

Grading Option: GR

Transfer: CSU, UC

## THEA 41 PASSPORT TO THEATER 1-6 UNITS

Supervised participation in scheduled performances of the theater department as an actor or backstage worker. Hour value to be determined by the instructor, after audition, based upon the scope of the performance of technical assignment. Enrollment is for the duration of the rehearsals and performances. 3-18 hours.

Grading Option: OP

Transfer: CSU

## THEA 46 COLLEGE THEATER MANAGEMENT 1-2 UNITS

Participation in the business operation of scheduled productions in theater. Enrollment is for the duration of the production. 3-6 hours laboratory each.

Grading Option: OP (May be repeated; limit 8 units.)

Transfer: CSU

## THEA 47 COLLEGE THEATER ACTING 1-6 UNITS

Participation in cast of scheduled major production. Enrollment is for the duration of the production. Enrollment by audition only. 3-18 hours laboratory. (\*Any combination of THEA 30, 47, 48, limited to 6 transfer units)

Grading Option: OP (May be repeated; limit 24 units.)

Transfer: CSU\*, UC

## THEA 48 COLLEGE THEATER TECHNICAL 1-6 UNITS

Participation in scheduled productions as crew members and/or constructing its technical elements. Enrollment is for the duration of the production. 3-18 hours laboratory. (\*Any combination of THEA 30, 47, 48, limited to 6 transfer units)

Grading Option: OP (May be repeated; limit 24 units.)

Transfer: CSU\*, UC

## Tutoring

### About the Program

The Las Positas College Tutorial program offers all students free tutoring in many classes and is dedicated to students' educational success. All tutors must take a training class at the beginning of their tutorial experience in order to know how to manage tutorial sessions, understand the ethics of tutoring, enhance communication and listening skills, work with each learning style and avoid common mistakes in tutoring. Tutor training is conducted through a variety of educational means to best meet the schedules and learning needs of the tutors. Advanced levels of training are available for those wishing to learn more about learning disabilities, leadership and innovative techniques. The training is designed to fulfill the College Reading and Learning Association's (CRLA) certification requirements. Students who pass classes with an "A" or "B" grade and enjoy working with people are encouraged to be tutors. Tutoring may be done for pay or college credit.

### Tutoring (TUTR)

**TUTR 15 TRAINING FOR TUTORS** 2 UNITS

Training for college tutors to acquire specific skills and techniques for tutoring in academic and vocational subject matter areas and basic skills. Required course for tutors participating in the College's Tutorials Instructional Program. 2 hours.

Grading Option: C/N

**TUTR 17 TUTOR TRAINING** .5 UNITS

An introduction to tutoring and tutoring skills. The course will provide a conceptual frame work of tutoring to guide student's work in leading effective tutoring sessions. Total of 3 lecture hours and 25 laboratory hours per semester.

Grading Option: C/N

Transfer: CSU

**TUTR 29 INDEPENDENT STUDY-TUTORING** .5-2 UNITS

A practical experience to help other students learn and succeed in school-related activities. Provides opportunities to gain experience in the field of education in preparation for making career choices. For .5 unit, .5 lecture hour, 1 hour tutoring; for 1 unit, 1 hour lecture, 2 hours tutoring; for 2 units, 1 hour lecture, 4 hours tutoring.

*\*Limited to 4 transfer units*

Grading Option: C/N (May be repeated 3 times)

Transfer: CSU\*

**TUTR 200 SUPERVISED TUTORING** VARIABLE

Individualized student tutoring (supplemental learning assistance) provided to students requesting assistance or referred by a counselor or an instructor. Trained tutors and instructors will provide tutoring in basic skills, academic and vocational subject matter areas. Hours variable.

Grading Option: Non-credit



# Vacuum Technology

- ✓ DEGREE
- ✓ CERTIFICATE

## Degree AS – Vacuum Technology

## Certificate Vacuum Technology

### About the Program

Vacuum technology is the process of creating a controlled environment that is exclusive of atmospheric effects. Vacuum technicians design, develop, construct or fabricate, operate, and maintain vacuum systems and devices. These devices are required in diverse fields, particularly in manufacture of microelectronic devices, outer space simulation, solar energy, magnetic and inertial fusion energy, physics and cryogenics. Most high-tech manufacturing now entails vacuum processes. The skills necessary include knowledge of the physics of vacuum, equipment for developing vacuum, types of pumps, gauges, containers and materials. Also required is a knowledge of physics, drafting, machining or manufacturing practices.

The Associate in Science degree program offers three areas of concentration: Electronics, Mechanics or Process Technology. This program is designed for direct job entry. While units in the program are transferable to many institutions, students should consult a counselor for information.



## AS – Vacuum Technology

### Freshman Year

Vacuum Technology 60A (Introduction to Vacuum Concepts I) 3 units  
 Vacuum Technology 60B (Introduction to Vacuum Concepts II) ..... 4 units  
 Mathematics 65 (Elementary Algebra) or  
 Mathematics 65A (Elementary Algebra) and  
 Mathematics 65B (Elementary Algebra B) ..... 5-6 units  
 Physical Sciences: Physics 10 (Descriptive Physics) or  
 \*\*Chemistry 30A (Introductory and Applied Chemistry) or  
 Chemistry 31 (Introduction to College Chemistry) ..... 3-4 units  
 Industrial Technology: Welding Technology  
 70 (Introduction to Welding) or  
 Occupational Safety and Health 62 (Physical Hazards) or  
 Laser Technology 50 (Introduction to Laser Technology) or  
 Design Technology 54 (Manufacturing Processes) ..... 2-3 units  
 General Education Courses  
 Electives

### Sophomore Year

Design Technology 52 (Machine Drafting) ..... 3 units  
 Machine Tool Technology 70 (Introduction to  
 Machine Shop) Chabot Course, or  
 Industrial Technology 61 (Manufacturing  
 Processes) Chabot Course, or  
 Automotive Technology 55 (Automotive Service)\*\*, or  
 Design Technology 75 (Design Materials Technology)\*\* ..... 2-3 units  
 Vacuum Technology Options\* ..... 7-11 units  
 General Education Courses  
**Total Units Required** ..... 60

### \*Options

Complete one of the following Vacuum Technology Concentration Options:

### Option 1 (Electronics) ..... 8-11 units

Electronics Technology 50 (Fundamentals of Electronics)  
 Electronics Technology 53 (Fabrication and Repair Techniques)  
 Design Technology 61 (Electronic Design)  
 Design Technology 62A (Computer Aided Design)

### Option 2 (Mechanical) ..... 8-10 units

Electronics Technology 70 (Introduction to Electronics)  
 Machine Tool Technology 60A (Machine Tool Technology I)  
 Design Technology 75 (Design Materials Technology)\*\*  
 Design Technology 66A (Mechanical Design Concepts)  
 Welding Technology 62A or  
 Welding Technology 62AL (Beginning T.I.G. Welding)  
 Automotive Technology 55 (Automotive Service)\*\*

### Option 3 (Process Technology) ..... 7-10 units

Chemistry 30A (Introductory and Applied Chemistry)\*\*  
 Chemistry 30B (Introductory and Applied Chemistry)



Design Technology 62A (Computer Aided Design)  
 Design Technology 75 (Design Materials Technology)\*\*  
 Design Technology 66A (Mechanical Design Concepts)  
 Automotive Technology 55 (Automotive Service)\*\*

*\*\*Automotive Technology 55, Chemistry 30A, or Design Technology 75 may be used either to fulfill Program Core requirements or Option electives, but may not be double-counted in both areas.*

**Certificate of Completion  
 Vacuum Technology**

Vacuum Technology 60A (Introduction to Vacuum Concepts I) .....	3
Vacuum Technology 60B (Introduction to Vacuum Concepts II).....	4
Physics 10 (Descriptive Physics).....	3
Mathematics 65 (Elementary Algebra) or Mathematics 65A (Elementary Algebra A) and Mathematics 65B (Elementary Algebra B) .....	5-6
<b>Total units required .....</b>	<b>15-16</b>

**Vacuum Technology (VACT)**

**VACT 60A INTRODUCTION TO VACUUM CONCEPTS I 3 UNITS**

Introduction to the concept of vacuum, review of mathematics, introduction to Gas Laws, sub-atmospheric pressure measurement, roughing pumps, booster pumps, diffusion pumps, turbo pumps, cryogenic pumps, ion pumps, getter pumps, leak detection fundamentals, and partial pressure analysis. Strongly Recommended: Mathematics 65. 3 hours.

Grading Option: GR

Transfer: CSU

**VACT 60B INTRODUCTION TO VACUUM CONCEPTS II 4 UNITS**

Interpretation of partial pressure data, kinetic theory of gases, flow of gases in tubes, vacuum system design calculations, cleaning of materials for use in a vacuum, vacuum hardware, vacuum sealing techniques, attaining ultra-high vacuum, vacuum processes. Prerequisite: Vacuum Technology 60A (completed with a grade of "C" or higher). 3 hours lecture, 3 hours laboratory.

Grading Option: GR

Transfer: CSU

**VACT 99 SELECTED TOPICS IN VACUUM TECHNOLOGY**

**0.3 - 3 UNITS**

Designed to explore special interest subjects drawn from the field of Vacuum Technology. Emphasis will be on topics of practical use for persons employed in the vacuum technology field as well as for the person interested in learning about this technology. Prerequisites may vary for specific topics. 0.3-9 hours. *\*Limited to 4 transfer units*

Grading Option: OP

Transfer: CSU\*

# Visual Communications

- ✓ DEGREE
- ✓ CERTIFICATE

## Degree

### AA - Visual Communications

## Certificate

### Visual Communications, Emphasis in Print

### Visual Communications, Emphasis in Web

## About the Program

The Visual Communications (VCOM) program encompasses all the visual arts—drawing, painting, photography—but instead of traditional tools and media, students use computers and industry standard software. All areas of design and composition, typography, photographic specification and manipulation, drawing, print and web page layout, and an array of technical skills using the newest versions of Illustrator, Photoshop, InDesign, Acrobat, GoLive Dreamweaver and Flash are taught through project-based work. Starting at the intermediate level, students gain direct experience creating client-based work for print, web or screen, contracted through VCOM's business, the Design Shop. In terms of vocation, VCOM students develop a broad base of creative, technical, aesthetic and practical business skills while building a professional-level portfolio. Certificate graduates are ready to enter the field of visual communications design; degree graduates often transfer to a four-year college.

Skills development courses, mainly designed for professionals who wish to learn new technical skills, or ramp up skills in the latest versions of our software, and those wishing to explore the field, should refer to courses denoted "150" and above. These credit/no credit courses have identical content, and are scheduled simultaneously with corresponding degree and certificate courses. Most prerequisites have been relaxed to allow ease of access. Refer to specific course descriptions for details of skills necessary for success.

SEE ALSO: [Art, Photography](#)



## AA – Visual Communications

### Freshman Year

Visual Communications 48 (Introduction to a Design Studio) ....	0.3
Visual Communications 50 (Visual Communications and the Process of Design).....	2
Visual Communications 51 (Color for Digital Design) .....	2
Visual Communications 52 (Introduction to Typography).....	3
Visual Communications 53 (Photoshop I for Design) .....	2
Visual Communications 54 (Illustrator I for Design).....	2
Visual Communications 55 (Web Design I).....	3
Visual Communications 56 (Digital Design Concepts I) .....	3
General Education Courses	

### Sophomore Year

Visual Communications 57 (Digital Design Concepts II) .....	3
Visual Communications 58 (Photoshop II for Design) or	
Visual Communications 59 (Illustrator II for Design).....	3
Visual Communications 60 (Creative Portfolio and Self-Promotion) or	
Visual Communications 61 (Independent Studies Leading to	
Advanced Portfolio Work).....	3
Visual Communications 64 (InDesign I and Layout Techniques) .....	3
General Education Courses	
<b>Total units required</b> .....	<b>60</b>



**Certificate of Achievement  
Visual Communications**

Visual Communications 48 (Introduction to a Design Studio)....	0.3
Visual Communications 50 (Visual Communications and the Process of Design).....	2
Visual Communications 51 (Color for Digital Design) .....	2
Visual Communications 52 (Introduction to Typography).....	3
Visual Communications 53 (Photoshop I for Design) .....	2
Visual Communications 54 (Illustrator I for Design).....	2
Visual Communications 55 (Web Design I).....	3
Visual Communications 56 (Digital Design Concepts I) .....	3
Visual Communications 57 (Digital Design Concepts II) .....	3
Visual Communications 58 (Photoshop II for Design)	
Visual Communications 59 (Illustrator II for Design).....	3
Visual Communications 60 (Creative Portfolio and Self-Promotion) or	
Visual Communications 61 (Independent Studies Leading to	
Advanced Portfolio Work).....	3
Options* .....	8-16
<b>Total Units Required.....</b>	<b>34.3-42.3</b>

\*To receive a Certificate Emphasis in Print or Web, complete 1 of the 2 Visual Communications Options for a minimum of 8 units.

Students may receive an additional Certificate if they complete both options. In that case, VCOM 66 must be repeated.

**Option 1 - Emphasis in Multimedia**

- Visual Communications 62 (Web Design II)
- Visual Communications 63\*\* ( Web Site and Multimedia Production)
- Visual Communications 66\*\* (Internship)

**Option 2 - Emphasis in Print**

- Visual Communications 64 (InDesign I and Layout Techniques)
- Visual Communications 65\*\* (Electronic Pre-Press and Print Production)
- Visual Communications 66\*\* (Internship)

\*\*Visual Communications 66 must be taken concurrently with Visual Communications 63 and Visual Communications 65

**Visual Communications (VCOM)**

**VCOM 48 INTRODUCTION TO A DESIGN STUDIO 0.3 UNITS**

A self-paced basic skills course introducing software, hardware and peripheral equipment available in a design studio. Emphasis is placed on navigating the desktop, server and back-up media cross-platform, (Apple and PC operating systems); using and saving documents and folders to industry standards; downloading and saving images from a camera or reader; and accessing fonts and "Help" if unassisted. 12 total studio hours.

Grading Option: OP

**VCOM 50 VISUAL COMMUNICATIONS AND THE PROCESS OF DESIGN 2 UNITS**

Introduction to the vocation of visual communication and the creative processes, methods and tools used in developing concepts and final designs for print or web. Emphasis is placed on exploring the conceptual design process, learning the language of design, and basic level technical skills and techniques used across industry standard software, cross-platform operating systems, and hardware. Prerequisite: Visual Communications 48 (May be taken concurrently). 1 hour lecture, 4 hours studio.

Grading Option: OP (May be repeated 1 time) Transfer: CSU

**VCOM 51 COLOR FOR DIGITAL DESIGN 2 UNITS**

A basic-level course highlighting color as an element for communication and expression in visual communications. Covers key color systems and their relevance to graphic arts, creative and technical aspects of color available in the Adobe Creative Suite applications including color expression, color theory, color interaction, color psychology, color perception, using color for an ethnically diverse, international audience, color theories of the 20th century including Josef Alber's and Johannes Itten, color trends, color reproduction, pre-press and screen view considerations. Strongly Recommended: Visual Communications 50. 1 hour lecture, 4 hours studio.

Grading Option: OP (May be repeated 1 time) Transfer: CSU

**VCOM 52 INTRODUCTION TO TYPOGRAPHY 3 UNITS**

This course examines letterforms and fundamental typographic principles, with emphasis on the vocabulary of typographic form and its relationship to message/purpose in graphic design. Typography is the backbone of graphic design, and the ability to design effectively with type is essential for a graphic designer. Course includes applied history and theory highlighting type as an element for communication and expression, exploration of appropriate use of type families, type trends and typographic design used for an ethnically diverse, international audience. In-class focus on the mechanics of type design, type legibility, visual appropriateness, and project-based work exploring creative and technical aspects involved in designing text using the newest versions of Adobe Creative Suite software. Strongly recommended: Visual Communications 50. 2 hours lecture, 4 hours studio.

Grading Option: OP (May be repeated 1 time) Transfer: CSU

# Visual Communications

## VCOM 53 PHOTOSHOP I FOR DESIGN

2 UNITS

Technical and skill development course using the most recent version of Photoshop at the basic-to intermediate-level to create and manipulate digital paintings, photographs and illustrations. Emphasis on basic- to intermediate-level techniques and tools used to create image files suitable for print and screen. Design principles emphasized to create effective output through computer-based composition. Strongly Recommended: Visual Communications 48. 1 hour lecture, 4 hours studio.

Grading Option: OP

Transfer: CSU

## VCOM 54 ILLUSTRATOR I FOR DESIGN

2 UNITS

Technical and drawing skill development course using the most recent version of Illustrator at the basic- to intermediate-level to render 2- and 3-D digital drawings and illustrations. Emphasis on basic- to intermediate-level techniques and tools used to create image files suitable for print and screen. Design principles emphasized to create effective output through computer-based composition. Strongly Recommended: Visual Communications 48. 1 hour lecture, 4 hours studio.

Grading Option: OP (May be repeated 1 time)

Transfer: CSU

## VCOM 55 WEB DESIGN I

3 UNITS

This basic-level web design course takes a visual communications approach to the creation of web sites, and the fundamental techniques required to format text, illustrations, tables, and images for the web. Emphasis is placed on appropriate design for the web—beginning with a graphic user interface that is functional, logical, and attractive, and bringing the concept to life using the latest versions of Dreamweaver and Adobe GoLive. Also included is a brief overview of html code, cascading style sheets, and detailed instruction of how to use Dreamweaver and GoLive to create web content. Strongly recommended: Visual Communications 51 and either Visual Communications 53 or Visual Communications 54. 2 hours lecture, 4 hours studio.

Grading Option: OP (May be repeated 1 time)

Transfer: CSU

## VCOM 56 DIGITAL DESIGN CONCEPTS I

3 UNITS

Design and skills development course that further explores the creative processes, methods, strategies and tools used in developing concepts and final designs for print and web, historically and culturally. Emphasis is placed on experience applying traditional art aesthetics, theory, and design principles and conventions to create 2- and 3-dimensional graphic design work; use of computers as digital design tool along with basic manual techniques relating to effective preparation, presentation, craftsmanship and professionalism in presentation. Strongly Recommended: Visual Communications 51 and Visual Communications 52 and either Visual Communications 53 or Visual Communications 54. 2 hours lecture, 4 hours studio.

Grading Option: OP

Transfer: CSU

## VCOM 57 DIGITAL DESIGN CONCEPTS II

3 UNITS

Design and technical skills intermediate-level course in the creative processes, methods and tools used from concept to final design in developing materials for commercial purposes in print and web, including historical and cultural aspects (e.g., logos, related brand symbols, collateral materials, simple business publications, print and screen advertising, and packaging). Emphasis is placed on the designer/client relationship—designing compelling graphics specifically to client project brief, target audience, and deadline; conducting research, presenting concept and final design orally and in writing; producing industry-standard digital documents; and working individually and in teams. Course includes designing minimum of one major project contracted through the Design Shop—the Visual Communications Program business that mirrors an industry-standard creative design agency. Design Shop client attends class to participate in briefing, Q & A, concept presentation, feedback and critique sessions. Prerequisite: Visual Communications 53 or Visual Communications 54 and Visual Communications 56 (both completed with a grade of “C” or higher). 2 hours lecture, 4 hours studio.

Grading Option: OP

Transfer: CSU

## VCOM 58 PHOTOSHOP II FOR DESIGN

3 UNITS

Technical and design skill development course using the latest version of Photoshop at the intermediate to advanced-level to create and manipulate images, illustrations, text and animations. Emphasis on intermediate- through advanced-level techniques and tools used to create or manipulate image files suitable for print and screen. Design principles emphasized to create effective output through computer-based composition. Course includes minimum of one project contracted through the Design Shop—the Visual Communications Program business that mirrors an industry-standard creative design agency. Design Shop client attends class to participate in briefing, Q & A, presentation, feedback and critique sessions. Prerequisite: Visual Communications 53 (completed with a grade of “C” or higher). Strongly recommended: Visual Communications 51 and Visual Communications 52. 2 hours lecture, 4 hours studio.

Grading Option: OP (May be repeated 1 time)

Transfer: CSU

## VCOM 59 ILLUSTRATOR II FOR DESIGN

3 UNITS

Technical and design skill development course using the most recent version of Illustrator at the intermediate to advanced-level to render 2- and 3-D digital drawings, illustrations, graphs and animations. Emphasis on intermediate- through advanced-level techniques and tools used to create image files suitable for print and screen. Design principles emphasized to create effective output through computer-based composition. Course includes minimum of one project contracted through the Design Shop—the Visual Communications Program business that mirrors an industry-standard creative design agency. Design Shop client attends class to participate in briefing, Q & A, presentation, feedback and critique sessions. Prerequisite: Visual Communications 54 (completed with a grade of “C” or higher). Strongly recommended: Visual Communications 50 and Visual Communications 51 and Visual Communications 52. 2 hours lecture, 4 hours studio.

Grading Option: OP (May be repeated 1 time)

Transfer: CSU

**VCOM 60 CREATIVE PORTFOLIO AND SELF-PROMOTION 3 UNITS**

Individual projects, development and refinement of the creative portfolio and strategies for effective self-promotion of ideas and skills in the working visual communications world. Includes use of effective techniques of oral and visual presentation. Selecting, updating, and highlighting of individual skills to best present individual and their portfolio. Prerequisites: VCOM 55, VCOM 57, VCOM 58, VCOM 59 (all completed with a grade of "C" or higher). 1 hour lecture, 8 hours laboratory.

Grading Option: OP

Transfer: CSU

**VCOM 61 INDEPENDENT STUDIES LEADING TO ADVANCED PORTFOLIO WORK 3 UNITS**

This course is designed for students who are ready to create advanced individual portfolio work in print and/or multimedia prior to seeking employment and/or applying for transfer to a 4-year institution. This course is available only during semesters when VCOM 60 is not offered. Students will work one-on-one with a mentor instructor to develop and refine a creative portfolio, and research and adapt strategies for effective self-promotion of ideas and skills in the working visual communications world. Advanced creative work will be highlighted to best present the individual and their portfolio. Prerequisites: VCOM 55, VCOM 57, VCOM 58, VCOM 59 (all completed with a grade of "C" or higher). 1 hour lecture, 8 hours laboratory.

Grading Option: OP

Transfer: CSU

**VCOM 62 WEB DESIGN II 3 UNITS**

Technical and design skill intermediate- through advanced-level course in creation of web sites including user interface considerations, and Cascading Style Sheets techniques. Emphasis placed on functional, logical, attractive, accessible and appropriate web site design for the client and end-user. Including intermediate- through advanced-level techniques and tools required to format text, create animations and other content for the web. Programs covered are latest versions of Dreamweaver and Flash, Adobe GoLive. Course includes minimum of one project contracted through the Design Shop—the Visual Communications Program business that mirrors an industry-standard creative design agency. Design Shop client attends class to participate in briefing, Q & A, presentation, feedback and critique sessions. Prerequisite: Visual Communications 55 (completed with a grade of "C" or higher). 2 hours lecture, 4 hours studio.

Grading Option: OP (May be repeated 1 time)

Transfer: CSU

**VCOM 63 WEBSITE AND MULTIMEDIA PRODUCTION 3 UNITS**

Culminating class in study of technical and creative design techniques necessary to build industry-standard interactive multimedia products. Course includes individual and team-based projects; role play; visual and oral presentation; field trips; and work experience internship. Upon completion, students should be able to show mastery of creative process and technology use in producing individual and team-based work to client and industry specifications. Prerequisites: VCOM 60, VCOM 62 (completed with a grade of "C" or higher), VCOM 60 may be taken concurrently; Corequisite: VCOM 66. 2 hours lecture, 5 hours laboratory

Grading Option: OP

Transfer: CSU

**VCOM 64 INDESIGN I AND LAYOUT TECHNIQUES 3 UNITS**

An introductory- through intermediate-level course emphasizing layout and typographical, technical and aesthetic skills using the latest version of Adobe InDesign, for print and other media. This course addresses migrating to InDesign from Quark or Pagemaker, and how InDesign can be used to increase productivity and workflow when working with other applications in the Adobe Creative Suite. Course includes minimum of one project contracted through the Design Shop—the Visual Communications Program business that mirrors an industry-standard creative design agency. Design Shop client attends class to participate in briefing, Q & A, presentation, feedback and critique sessions. Prerequisite: Visual Communications 52 (completed with a grade of "C" or higher). Strongly recommended: Visual Communications 50 and Visual Communications 51 and either Visual Communications 53 or Visual Communications 54. 2 hours lecture, 4 hours studio.

Grading Option: OP (May be repeated 1 time)

Transfer: CSU

**VCOM 65 ELECTRONIC PRE-PRESS AND PRINT PRODUCTION 3 UNITS**

Culminating class in study of technical and creative design techniques necessary to develop industry-standard printed materials. Course includes individual and team-based projects; role play; visual and oral presentation; field trips; and required concurrent work experience internship class. Upon completion, students should be able to show mastery of creative process and technology use in producing individual and team-based work to client and industry specifications. Prerequisites: VCOM 60, VCOM 64 (completed with a grade of "C" or higher); VCOM 60 may be taken concurrently; Corequisite: VCOM 66. 2 hours lecture, 5 hours laboratory.

Grading Option: OP

Transfer: CSU

**VCOM 66 INTERNSHIP 2 UNITS**

This course provides students a professional design work experience through a directed and evaluated internship within the community. On-the-job training will allow students to learn first hand responsibilities including deadlines, employer demands, bidding, pricing, working with a client, and becoming familiar with advertising agencies, design studios, service bureaus, print or multimedia production houses. Prerequisites: VCOM 62 and/or VCOM 64 (both completed with a grade of "C" or higher). Corequisites: VCOM 63 and/or VCOM 65. 1 hour lecture, 4 hours laboratory.

Grading Option: OP

Transfer: CSU

**VCOM 150-166 TECHNICAL SKILLS COURSES FOR PROFESSIONALS**

Skills development courses, mainly designed for professionals who wish to learn new technical skills, or ramp-up skills in the latest versions of our software, and those wishing to explore the field, are denoted "150" and above. These credit/no credit courses have identical content, and are scheduled simultaneously with corresponding degree and certificate courses. Most prerequisites have been relaxed to allow ease of access. Please refer to specific course descriptions for details of skills necessary for success.



# Viticulture and Winery Technology

- ✓ DEGREE
- ✓ CERTIFICATE

**Degree**  
**AS – Viticulture**  
**AS – Enology**

**Certificate**  
**Viticulture**  
**Enology**

**Transfer Program**  
**Viticulture and Enology**

## About the Program

California's wine industry, the second largest agricultural industry in the state, encompasses aspects of agriculture, science and business and enjoys an international reputation. Viticulture—grape growing, enology—wine making, marketing, sales, distribution, and consumption are a multi-billion dollar industry and are continuing to grow.

Las Positas College is situated in the heart of Livermore's historic wine growing region which makes it an ideal home for a viticulture and enology program. All of the courses in this program are designed for direct entry, so students can pick from any of the course offerings to suit their needs.

Degrees and certificates are offered in either of two tracks—Viticulture and Enology. These programs are designed to prepare students for careers in the wine industry and to provide an opportunity for those currently employed in the wine industry to upgrade their skills and knowledge. In addition, individuals can further their knowledge in the study of wine and food pairing, viticulture and wine making. A track is also available for students interested in transferring to a four-year university to pursue a Bachelor's Degree. Most VWT courses are not transferable in this major, so students seeking to transfer should consult a counselor for specific information.

SEE ALSO: **Horticulture**

## AS – Viticulture

### Freshman Year

Viticulture and Winery Technology 10 (Introduction to Viticulture) or Horticulture 70 (Introduction to Viticulture) .....	3
Viticulture and Winery Technology 12 (Vineyard Soils, Fertilizers and Irrigation) .....	3
Viticulture and Winery Technology 14 (Applied Viticultural Practices) .....	3
Biology 10** (Introduction to the Science of Biology) or Biology 31** (Introduction to College Biology) or Botany 1** (General Botany).....	4-5
Chemistry 30A** (Introduction and Applied Chemistry) or Geography 1** (Introduction to Physical Geography) and Geography 1L** (Introduction to Physical Geography Lab) or Geography 15** (Introduction to Geographic Information Systems).....	3-4
Electives*	2-3
General Education Courses	

### Sophomore Year

Viticulture and Winery Technology 20 (Introduction to Enology).....	3
Viticulture and Winery Technology 31 (Vineyard Operations I).....	3
Viticulture and Winery Technology 32 (Vineyard Operations II).....	3
Viticulture and Winery Technology 35 (Vineyard Pest and Disease Management).....	3
Viticulture and Winery Technology 29 (Independent Study) or Work Experience 95 (Occupational Work Experience Education) and Work Experience 96 (Work Experience Seminar).....	2-4
Electives*	2-3
General Education Courses:	
<b>Total Units Required</b> .....	<b>60</b>

### \*Electives

Select from the following for a minimum of 4 units:  
 Viticulture and Winery Technology 38 (Vineyard Management)  
 Viticulture and Winery Technology 47 (Wine Regions and Wines of California)  
 Viticulture and Winery Technology 48 (Winery Management)  
 Viticulture and Winery Technology 50 (Wine Marketing and Sales)

\*\*Meets General Education Requirements

## Certificate of Achievement

### Viticulure

Viticulure and Winery Technology 10 (Introduction to Viticulure) or Horticulture 70 (Introduction to Viticulure) .....	3
Viticulure and Winery Technology 12 (Vineyard Soils, Fertilizers and Irrigation) .....	3
Viticulure and Winery Technology 14 (Applied Viticultural Practices) .....	3
Viticulure and Winery Technology 20 (Introduction to Enology).....	3
Viticulure and Winery Technology 31 (Vineyard Operations I).....	3
Viticulure and Winery Technology 32 (Vineyard Operations II).....	3
Viticulure and Winery Technology 35 (Vineyard Pest and Disease Management).....	3
Biology 10 (Introduction to the Science of Biology) or Biology 31 (Introduction to College Biology) or Botany 1 (General Botany).....	4-5
Chemistry 30A (Introductory and Applied Chemistry) or Geography 1 (Introduction to Physical Geography) and Geography 1L (Introduction to Physical Geography Lab) or Geography 15 ((Introduction to Geographic Information Systems) .....	3-4
Viticulure and Winery Technology 29 (Independent Study) or Work Experience 95 (Occupational Work Experience Education) and Work Experience 96 (Work Experience Seminar).....	2-4
Electives* .....	2-3
<b>Total Units Required.....</b>	<b>32-37 Units</b>

#### \*Electives

Select from the following for a minimum of 2 units:

- Viticulure and Winery Technology 38 (Vineyard Management)
- Viticulure and Winery Technology 47 (Wine Regions and Wines of California)
- Viticulure and Winery Technology 48 (Winery Management)
- Viticulure and Winery Technology 50 (Wine Marketing and Sales)

## AS – Enology

### Freshman Year

Viticulure and Winery Technology 20 (Introduction to Enology).....	3
Viticulure and Winery Technology 25 (Sensory Analysis of Wine) ..	3
Chemistry 30A** (Introductory and Applied Chemistry) .....	4
Chemistry 30B (Introductory and Applied Chemistry) .....	4
Biology 10** (Introduction to the Science of Biology) or Biology 31**.....	4
Electives* .....	2-3
General Education Courses	

### Sophomore Year

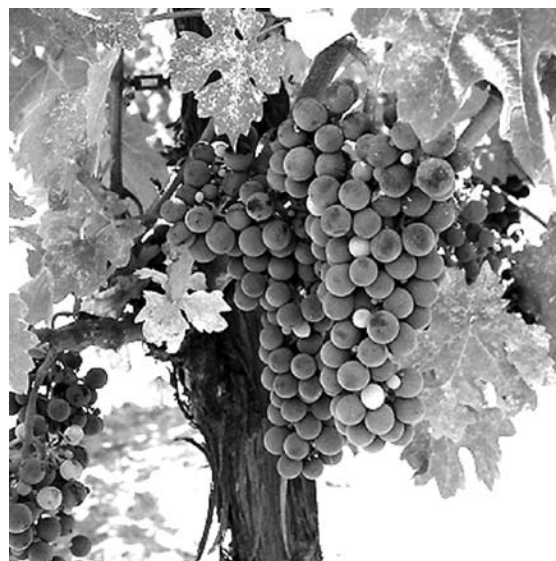
Viticulure and Winery Technology 10 (Introduction to Viticulure) or Horticulture 70 (Introduction to Viticulure) .....	3
Viticulure and Winery Technology 41 (Winery Operations I).....	3
Viticulure and Winery Technology 42 (Winery Operations II).....	3
Viticulure and Winery Technology 44 (World Viticulure and Wines).....	3
Viticulure and Winery Technology 45 (Food and Wine Pairing).....	1
Viticulure and Winery Technology 29 (Independent Study) or Work Experience 95 (Occupational Work Experience Education) and Work Experience 96 (Work Experience Seminar).....	2-4
Electives* .....	2-3
General Education Courses	
<b>Total Units Required.....</b>	<b>60</b>

#### \*Electives

Select from the following for a minimum of 2 units:

- Viticulure and Winery Technology 38 (Vineyard Management)
- Viticulure and Winery Technology 47 (Wine Regions and Wines of California)
- Viticulure and Winery Technology 48 (Winery Management)
- Viticulure and Winery Technology 50 (Wine Marketing and Sales)

\*\*Meets General Education Requirements



# Viticulture and Winery Technology

## Certificate of Achievement Enology

Viticulture and Winery Technology 10 (Introduction to Viticulture) or Horticulture 70 (Introduction to Viticulture) .....	3
Viticulture and Winery Technology 20 (Introduction to Enology).....	3
Viticulture and Winery Technology 25 (Sensory Analysis of Wine) ..	3
Viticulture and Winery Technology 41 (Winery Operations I).....	3
Viticulture and Winery Technology 42 (Winery Operations II).....	3
Viticulture and Winery Technology 44 (World Viticulture and Wines) .....	3
Viticulture and Winery Technology 45 (Food and Wine Pairing).....	1
Biology 10 (Introduction to the Science of Biology) or Biology 31(Introduction to College Biology) .....	4
Chemistry 30A (Introductory and Applied Chemistry) .....	4
Chemistry 30B (Introductory and Applied Chemistry) .....	4
Viticulture and Winery Technology 29 (Independent Study) or Work Experience 95 (Occupational Work Experience Education) and Work Experience 96 (Work Experience Seminar).....	2-4
Electives* .....	2-3
<b>Total Units Required.....</b>	<b>35-38 Units</b>

### \*Electives

Select from the following for a minimum of 2 units:

Viticulture and Winery Technology 38 (Vineyard Management)	
Viticulture and Winery Technology 47 (Wine Regions and Wines of California)	
Viticulture and Winery Technology 48 (Winery Management)	
Viticulture and Winery Technology 50 (Wine Marketing and Sales)	

*Be Many Voices  
of Las Positas College*

"I joined LPC at the age of 40+ to follow my passions: photography and wine appreciation (new viticulture program). I now have a job in each field! Not only that, I know first hand what a wonderful place LPC is and can tell my daughter/son and other students/parents about my positive experience with our great local college."

—Judy, Pleasanton

## Viticulture and Enology

Preparation for students transferring to UC Davis

### First Year

Chemistry 1A (General College Chemistry).....	5
Chemistry 1B (General College Chemistry).....	5
Viticulture and Winery Technology 10 (Introduction to Viticulture) ..	3
Viticulture and Winery Technology 20 (Introduction to Enology).....	3
English 1A (Critical Reading and Composition).....	3
Mathematics 1 (Analytic Geometry and Calculus.....	5
Mathematics 2 (Analytic Geometry and Calculus II) .....	5
General Education Requirements*	

### Second Year

Physics 2A (Introduction to Physics I) .....	4
Physics 2B (Introduction to Physics II).....	4
Biology 1 (Introduction to Cell Biology) .....	5
Botany 1 (General Botany).....	5
Chemistry 12A (Organic Chemistry) .....	5
Chemistry 12B (Organic Chemistry) .....	5
Speech 1 (Fundamentals of Speech Communication).....	3
General Education Requirements*	

\* Students are advised to consult with a counselor for advice about the appropriate General Education pattern of courses

## Viticulture and Enology

Preparation for students transferring to CSU Fresno

### First Year

Chemistry 1A** (General College Chemistry) .....	5
Chemistry 1B (General College Chemistry).....	5
Viticulture and Winery Technology 10 (Introduction to Viticulture) ..	3
Viticulture and Winery Technology 20 (Introduction to Enology).....	3
English 1A (Critical Reading and Composition).....	3
Biology 31** (Introduction to College Biology.....	4
Mathematics 45 (College Algebra) or Mathematics 42A (Introduction to Probability and Statistics)** .....	3
General Education Requirements*	

### Second Year

Physics 10 (Descriptive Physics).....	3
Physics 10L (Descriptive Physics Laboratory).....	1
Botany 1 (General Botany).....	5
Chemistry 12A (Organic Chemistry) .....	5
Chemistry 12B (Organic Chemistry) .....	5
Speech 1 (Fundamentals of Speech Communication).....	3
General Education Requirements*	

\*Students are advised to consult with a counselor for advice about the appropriate General Education pattern of courses.

## Viticulture and Winery Technology (VWT)

### VWT 10 INTRODUCTION TO VITICULTURE 3 UNITS

An introduction to viticulture; growing grapes, including historical aspects of grape cultivation for raisins, wine and table grapes, grape species and varieties; botany, anatomy, propagation, climate, cultivation, vineyard management, plant-soil-water relations, irrigation, fertilization, pruning, weed, insect, pest and disease control; establishment, training and pruning grape vines, harvest and post harvest operations. Brief overview of wine making. Students who have completed or are enrolled in Horticulture 70 may not receive credit. 3 hours.

Grading Option: OP

Transfer: CSU, UC

### VWT 12 VINEYARD SOILS, FERTILIZERS AND IRRIGATION 3 UNITS

Introduction to the basic principles of soil science, mineral nutrition, components installation, and plant/water relationships for grape production. Planning, design and maintenance of sprinklers and drip irrigation systems for winery vineyards. 3 hours.

Grading Option: OP

Transfer: CSU

### VWT 14 APPLIED VITICULTURAL PRACTICES: GRAPEVINE CULTIVARS, CLONES, AND ROOTSTOCKS, GRAPEVINE PROPAGTION, PRUNING, AND TRELLISING AND CANOPY MANAGEMENT 3 UNITS

Introduction and evaluation of vitis vinifera cultivars and clones, and the rootstocks suitable to this area. Introduction to the theory and practices of grapevine propagation, including field budding, T-budding, side-whip grafting, root cutting, and cuttings to change varieties. Introduction to trellising options for vinegrape production including principles and practices of canopy management which focus on the improvement of winegrape quality. Introduction to the theory and practice of pruning grapevines. 2.5 hours lecture, 1 hour laboratory.

Grading Option: OP

Transfer: CSU

### VWT 20 INTRO TO ENOLOGY 3 UNITS

Introduction to the science of winemaking, including history and geographical distribution; grape varieties and wine types; influence of climate and soil; wine fermentation, handling, storage and bottling methods; wine disorders; winery sanitation; legal compliance. Students must be 21 years of age or older to participate in wine tasting. 3 hours.

Grading Option: OP

Transfer: CSU, UC

### VWT 25 SENSORY ANALYSIS OF WINES 3 UNITS

A sensory course designed for individuals to learn organoleptic tasting techniques, characteristics and styles of wine varieties, wine sensory evaluation methods including statistical analysis of trials, philosophy of wine styles, and the common evaluation methods used in sensory testing. Students must be 21 years of age or older, and this class has a materials fee above regular enrollment fee. 3 hours.

Grading Option: OP

Transfer: CSU

### VWT 31 VINEYARD OPERATIONS I 3 UNITS

Viticulture practices for the fall and winter seasons including harvesting, pruning, varietal selection, erosion control, fertilization, weed control, propagation, and vineyard development. Emphasis on practical applications of viticulture. 2 hours lecture, 3 hours laboratory.

Grading Option: OP

Transfer: CSU

### VWT 32 VINEYARD OPERATIONS II 3 UNITS

Viticulture practices for the spring and summer seasons including cultivation, planting and training a new vineyard, pest and disease control, soils, frost control, irrigation practices, quality control measures and vineyard equipment use. Emphasis on practical applications of viticulture. 2 hours lecture, 3 hours laboratory.

Grading Option: OP

Transfer: CSU

### VWT 35 VINEYARD PEST AND DISEASE MANAGEMENT 3 UNITS

A study of the identification and the biology of common vineyard pests and diseases. Techniques and strategies for sampling and monitoring and effective control measures. Pest management strategies for insects, weeds and diseases, including bio-control and sustainable agriculture practices in addition to pesticide use, safety and compliance. 3 hours.

Grading Option: OP

Transfer: CSU

### VWT 38 VINEYARD MANAGEMENT 3 UNITS

Responsibilities of vineyard management including: diagnosis and correction of problems, vineyard development, financial projections, and budgeting, labor contracting and supervision, and crop sale contracts. 3 hours.

Grading Option: OP

Transfer: CSU

### VWT 41 WINERY OPERATIONS 1 3 UNITS

Winery operations for the summer and fall seasons, including grape maturity monitoring; grape harvesting; fermentation, handling and storage of new wines; maintenance of wines from previous vintages; general cellar practices. Student must be 21 years of age or older to participate in wine tasting. 2 hours lecture, 3 hours laboratory.

Grading Option: OP

Transfer: CSU

### VWT 42 WINERY OPERATIONS II 3 UNITS

Winery operations for the winter and spring seasons, including handling and storage of new wines; maintenance of wines from previous vintages; general cellar practices. Student must be 21 years of age or older to participate in wine tasting. 2 hours lecture, 3 hours laboratory.

Grading Option: OP

Transfer: CSU

# Viticulture and Winery Technology

## **VWT 44 WORLD VITICULTURE AND WINES 3 UNITS**

A survey of world viticulture wine industries, and wine producing regions and their wines. History of viticulture, worldwide grape growing and wine production and consumption, and world wine regions and wine styles, includes sensory evaluation of representative wines. Student must be 21 years of age or older. There is a materials fee associated with this class. 3 hours.

Grading Option: OP

Transfer: CSU

## **VWT 45 FOOD AND WINE PAIRING 1 UNIT**

An introduction to the concepts involved in food and wine pairing through formal tasting, cooking, and lectures. Introduction to the use of sensory abilities to identify those ingredients in both food and wine that complement each other. Participation in palate exercises in which food and wines are paired. Student must be 21 years of age or older. 1 hour lecture, 1 hour laboratory.

Grading Option: OP

Transfer: CSU

## **VWT 47 WINE REGIONS AND WINES OF CALIFORNIA 2 UNITS**

Introduction to wines produced in California by region, including history, viticultural practices and wine making styles. Sensory evaluation of representative California wines. Laboratory Fee. Students must be 21 years of age or older. 2 hours.

Grading Option: OP

Transfer: CSU

## **VWT 48 WINERY MANAGEMENT 3 UNITS**

An introductory level course on winery management, including annual plans and budgets, labor management and supervision, legal compliance, and record keeping. 3 hours.

Grading Option: OP

Transfer: CSU

## **VWT 50 WINE MARKETING AND SALES 3 UNITS**

An introductory overview of the wine industry: production, planning, marketing channels, advertising, promotion, packaging, pricing, retail/wholesale distribution and public relations. 3 hours.

Grading Option: OP

Transfer: CSU





## Degree AS - Welding Technology

## Certificate Welding Technology

### About the Program

This program is designed to prepare students for positions as shielded arc, flux core or MIG and TIG welders in research laboratories, in structural fabrication shops or in general welding shops. Completion of the certificate/AS degree requirements prepares students to take the welding certification tests. Students may begin this program any semester and enter with either Welding Technology 61 or Welding Technology 62 as the starting series.

This program is designed to teach theoretical concepts in one course and skills in a companion course. These companion courses must be taken concurrently.

While units in the program are transferable to many institutions, students should consult a counselor for information.

## AS -- Welding Technology

### Freshman Year

Welding Technology 61A (Beginning Arc, Flux-Core Welding, and Blueprint Reading Theory) .....	1
Welding Technology 61AL (Beginning Arc and Flux-Core Welding Skills) .....	2
Welding Technology 61B (Advanced Stick, Flux-Core Welding, and Blueprint Reading Theory) .....	1
Welding Technology 61BL (Advanced Stick, Flux-Core and Blueprint Reading Skills) .....	2
Welding Technology 62A (Beginning TIG, MIG Welding and Blueprint Reading Theory) .....	1
Welding Technology 62AL (Beginning TIG, MIG Welding and Blueprint Reading Skills) .....	2
Welding Technology 62B (Advanced TIG, MIG Welding and Blueprint Reading Theory) .....	1
Welding Technology 62BL (Advanced TIG, MIG Welding and Blueprint Reading Skills) .....	2
Welding Technology 63 (Welding Layout and Fitting) .....	2
Welding Technology 67A (Welding Skills Laboratory).....	2
Welding Technology 67B (Advanced Welding Skills Laboratory).....	2
Design Technology 55 (Blueprint Reading and Sketching) .....	2
Industrial Technology 61 (Manufacturing Processes).....	2
Industrial Technology 74 *(Measurements and Calculations) or Mathematics 71* (Applied Mathematics for Technicians) .....	3
General Education Courses	

### Sophomore Year

Welding Technology 66** (Welding Inspection and Testing) .....	3
Welding Technology 69A** (Fabrication and Installing Piping Systems).....	3
Welding Technology 69B** (Advanced Pipe Welding).....	3
General Education Courses	
<b>Total units required .....</b>	<b>60</b>

\* Satisfies Mathematics requirement for graduation

\*\* Offered alternating years



# Welding Technology

## Certificate of Achievement Welding Technology

Welding Technology 61A (Beginning Arc, Flux-Core Welding, and Blueprint Theory) .....	1
Welding Technology 61AL (Beginning Arc and Flux-Core Welding Skills) .....	2
Welding Technology 61B (Advanced Stick, Flux-Core Welding, and Blueprint Reading Theory) .....	1
Welding Technology 61BL (Advanced Stick, Flux-Core and Blueprint Reading Skills) .....	2
Welding Technology 62A (Beginning TIG, MIG Welding and Blueprint Reading Theory) .....	1
Welding Technology 62AL (Beginning TIG, MIG Welding and Blueprint Reading Skills) .....	2
Welding Technology 62B (Advanced TIG, MIG Welding and Blueprint Reading Theory) .....	1
Welding Technology 62BL (Advanced TIG, MIG Welding and Blueprint Reading Skills) .....	2
Welding Technology 63 (Welding Layout and Fitting) .....	2
Welding Technology 67A (Welding Skills Laboratory).....	2
Welding Technology 67B (Advanced Welding Skills Laboratory).....	2
Design Technology 55 (Blueprint Reading and Sketching) .....	2
Industrial Technology 74 (Measurements and Calculations) or Mathematics 71 (Applied Mathematics for Technicians).....	3
<b>Total units required</b> .....	<b>23</b>



## Welding Technology (WELD)

### WELD 61A BEGINNING ARC, FLUX-CORE WELDING, AND BLUEPRINT READING THEORY 1 UNIT

Theory and safety of Arc (SMAW) and Flux-core (FCAW) welding of steel, flame cutting, plasma and carbon arc cutting. American Welding Society nomenclature; electrode and wire selection; examination of job opportunities. Blueprint reading and welding symbols for welders and Hazardous Material Regulations. Corequisite: Welding Technology 61 AL or Welding Technology 61 BL. 1 hour.

Grading Option: OP (May be repeated 3 times) Transfer: CSU

### WELD 61AL BEGINNING ARC AND FLUX-CORE WELDING SKILLS 2 UNITS

Skills of Shielded Metal Arc (SMAW) and Flux-Core Arc (FCAW) welding in the flat, horizontal, and vertical positions to code specifications. Oxy-fuel flame, plasma, and carbon arc cutting. Corequisite: Welding Technology 61A or Welding Technology 61B. 6 hours laboratory.

Grading Option: OP (May be repeated 3 times) Transfer: CSU

### WELD 61B ADVANCED STICK, FLUX-CORE WELDING, AND BLUEPRINT READING THEORY 1 UNIT

Advanced theory and safety of Stick (SMAW) and Flux-core Arc (FCAW) welding of steel, flame cutting, plasma and carbon arc cutting. American Welding Society nomenclature, electrode and wire selection, job opportunities. Blueprint reading, welding symbols for welders and hazardous material regulations. Corequisite: Welding Technology 61AL or Welding Technology 61BL. 1 hour.

Grading Option: OP (May be repeated 3 times) Transfer: CSU

### WELD 61BL ADVANCED STICK, FLUX-CORE, AND BLUEPRINT READING SKILLS 2 UNITS

Advanced skills in Stick (SMAW) and Flux-core (FCAW) welding of steel in the horizontal, vertical and overhead positions to A.W.S. codes. Safety and proper use of SMAW and FCAW equipment, oxy-fuel welding and cutting, plasma cutting. Blueprint usage in welding shop environment. Pipe and tubing fit-up and welding. Prerequisite: Welding Technology 61AL (completed with a grade "C" or higher) or metal trades experience (with instructor approval). Corequisite: Welding Technology 61A or Welding Technology 61B. 6 hours laboratory.

Grading Option: OP (May be repeated 3 times) Transfer: CSU

### WELD 62A BEGINNING TIG, MIG WELDING, AND BLUEPRINT READING THEORY 1 UNIT

Theory of fuel and inert gas welding steel and aluminum alloys; oxyacetylene brazing, flame cutting, and plasma cutting. TIG (GTAW) or Gas Tungsten Arc (GTAW) and MIG or Gas Metal Arc (GMAW) welding equipment and supplies. Nomenclature and metallurgy of steel and aluminum alloys. Introduction to blueprint reading, Hazardous Material Regulations and Material Safety Data Sheets. Corequisite: Welding Technology 62AL or Welding Technology 62 BL. 1 hour.

Grading Option: OP (May be repeated 3 times) Transfer: CSU

**WELD 62AL BEGINNING TIG, MIG WELDING AND BLUEPRINT READING SKILLS 2 UNITS**

Skills of TIG (GTAW) and MIG (GMAW) welding of ferrous and non-ferrous alloys in the flat, horizontal, and vertical positions to A.W.S. codes. Safety and proper use of TIG and MIG equipment, oxy-fuel welding and cutting, plasma cutting. Blueprint usage in welding shop environment. Corequisite: Welding Technology 62A or Welding Technology 62B. 6 hours laboratory.

Grading Option: OP (May be repeated 3 times) Transfer: CSU

**WELD 62B ADVANCED TIG, MIG WELDING AND BLUEPRINT READING THEORY 1 UNIT**

Theory and safety of TIG (GTAW) and MIG (GMAW) welding of steel, flame cutting, plasma and carbon arc cutting. American Welding Society nomenclature, electrode and wire selection, job opportunities. Blueprint reading, welding symbols for welders and hazardous material regulations. Corequisite: Welding Technology 62AL or Welding Technology 62BL.

Grading Option: OP (May be repeated 3 times) Transfer: CSU

**WELD 62BL ADVANCED TIG, MIG WELDING AND BLUEPRINT READING SKILLS 2 UNITS**

Advanced skills in TIG (GTAW) and MIG (GMAW) welding of ferrous and non-ferrous alloys in the horizontal, vertical and overhead positions to A.W.S. codes. Safety and proper use of TIG and MIG equipment, oxy-fuel welding and cutting, plasma cutting. Blueprint usage in welding shop environment. Pipe and tubing fit-up and welding. Prerequisite: Welding Technology 62AL (completed with a grade of "C" or higher) or metal trades experience (with instructor approval). Corequisite: Welding Technology 62A or Welding Technology 62B. 6 hours laboratory.

Grading Option: OP (May be repeated 3 times) Transfer: CSU

**WELD 63 WELDING LAYOUT AND FITTING 2 UNITS**

Interpretation of welding blueprints by making welding layouts and fitups. Current methods, practices, and recommended procedures. Use of jigs, fixtures, holding devices, and welding sequences. Methods of straightening and restoring dimensions to finished product. Laboratory includes Arc, MIG, TIG, and Fluxcore welding, plasma and fuel cutting. Prerequisites: Welding Technology 62BL (May be taken concurrently) and Industrial Technology 74 or Mathematics 71. 1 hour lecture, 3 hours laboratory.

Grading Option: OP (May be repeated 3 times) Transfer: CSU

**WELD 66 WELDING INSPECTION AND TESTING 2 UNITS**

Theory and skills in performing inspections and tests using destructive and nondestructive methods. Tensile and hardness testing; dye penetrant, magnetic particle, radiographic, ultrasonic, and metallographic inspection. Prerequisite: Welding Technology 62BL. Industrial Technology 74, or Math 71. 1 hour lecture, 3 hours laboratory.

Grading Option: OP (May be repeated 3 times) Transfer: CSU

**WELD 67A WELDING SKILLS LABORATORY 2 UNITS**

Development and improvement of skills in Arc (SMAW), Flux-core (FCAW), MIG (GMAW), and TIG (GTAW) welding. Prerequisite: Welding Technology 61AL or experience in the metals industry. 6 hours laboratory.

Grading Option: OP (May be repeated 3 times)

**WELD 67B ADVANCED WELDING SKILLS LABORATORY 2 UNITS**

Advanced development and improvement of skills in Arc (SMAW), Flux-core (FCAW), MIG (GMAW), and TIG (GTAW) welding. 6 hours laboratory.

Grading Option: OP (May be repeated 3 times)

**WELD 68 CERTIFICATION PREPARATION .5 UNIT**

Welding processes preparation for certification exams. Theory of American Welding Society D1.1, American Society of Mechanical Engineers Section IX, American Petroleum Institute 1104. Includes laboratory practice in skills needed to take these exams. Prerequisite: Welding experience. 1.5 to 6 hours laboratory.

Grading Option: (May be repeated 3 times)

**WELD 69A FABRICATION AND INSTALLING PIPING SYSTEMS 3 UNITS**

Theory and skills of pipe joint fabrication and code welding of pipe. Analysis of joint configuration, plasma and flame cutting and welding of pipe. Prerequisite: Welding Technology 62BL (completed with a grade of "C" or higher) or certification. 1 hour lecture, 6 hours laboratory.

Grading Option: OP (May be repeated 3 times)

**WELD 69B ADVANCED PIPE WELDING 3 UNITS**

Theory and skills of code pipe welding utilizing SMAW, GMAW, and GTAW welding processes. Prerequisite: Welding Technology 69A (completed with a grade of "C" or higher) or certification. 1 hour lecture, 6 hours laboratory.

Grading Option: OP (May be repeated 3 times)

**WELD 70 INTRODUCTION TO WELDING 2 UNITS**

Arc, TIG, MIG, Flux-core, gas and braze welding, plasma and fuel gas welding and cutting. Theory and care of welders equipment with emphasis on safe practices. 1 hour lecture, 3 hours laboratory.

Grading Option: OP (May be repeated 3 times) Transfer: CSU

**WELD 71 ART WELDING 1 UNIT**

Introduction to Arc, MIG, TIG, oxyacetylene welding, brazing, soldering, plasma and flame cutting as applied to metalworking. Emphasis on safety and skill development. 3 hours laboratory.

Grading Option: OP (May be repeated 3 times) Transfer: CSU

# Work Experience

## Work Experience Requirements

To participate in Work Experience Education programs, students must:

- Pursue a planned program of Work Experience that includes new or expanded responsibilities or learning opportunities beyond those experienced during periods of previous employment;
- Have paid or volunteer employment in a field directly related to the college major;
- Have the approval of the instructor/coordinator.

Additionally, students must meet the requirements of either of the following plans.

### I. Parallel Plan

- A. Be enrolled in a minimum of 7 units including Work Experience;
- B. Be currently enrolled in a course in their major or planned academic program which is related to the Work Experience.

Under the Parallel Plan, one unit of credit is granted for 5 hours of work each week to a maximum of 3 units for 15 or more hours each week. Students must also attend a one hour weekly seminar class.

### II. Alternate Plan

- A. May not be enrolled in more than one additional course;
- B. May not transfer from the alternative plan to the parallel plan, or vice versa, without having completed 7 units in between plans.

Under the Alternate Plan, students may earn four to eight units of credit for working 20 to 40 hours each week. Regularly scheduled meetings with the instructor are required throughout the semester.

For either plan a cumulative total of 16 units may be earned (including the seminar units).

SEE ALSO: **Business Studies**

**Early Childhood Development**

**Fire Science Technology**

**Horticulture**

**Viticulture and Winery Technology**

## Work Experience (WEXP)

### WEXP 95 OCCUPATIONAL WORK EXPERIENCE EDUCATION 1-3 UNITS

College-supervised on-the-job training for students working in an occupation related to their major or educational and occupational goals. The training may be either paid or volunteer work experience, including an internship. Students through the cooperation of their supervisor contract to accomplish new learning objectives or broadening experiences for each semester enrolled. Corequisite: Work Experience 96. 5-15 hours or more of paid employment per week or 4-12 hours of volunteer work each week. (May be repeated to a total of 16 units, including the Work Experience 96 class. \*95 and 96 combined, maximum transfer credit 6 units. Refer to program requirements, this page.)

Grading Option: OP (May be repeated 3 times)

Transfer: CSU\*

### WEXP 96 OCCUPATIONAL WORK EXPERIENCE SEMINAR 1 UNIT

Focal point for the coordination of the student's curriculum with college supervised part-time or full-time employment in the student's major field. Case studies, job related problems, student cases and presentations, and material related to employment, organizations and management are discussed; emphasis on building strong working relationships with supervisors, subordinates, and co-workers. Corequisite: Work Experience Education 95. 1 hour. (May be repeated 3 times; refer to program requirements, this page. \*95 and 96 combined, maximum transfer credit 6 units.)

Grading Option: OP

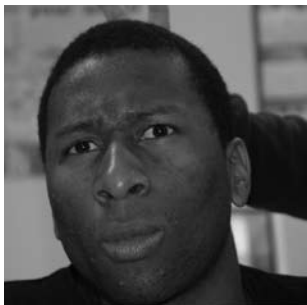
Transfer: CSU\*

### WEXP 98 OCCUPATIONAL WORK EXPERIENCE: ALTERNATE PLAN 4-8 UNITS

College-supervised on-the-job training enabling students to attend college full-time one semester and work full-time the following semester. The on-the-job experience must be related to the student's educational and occupational goals or college major. The training may be paid or volunteer, like an internship. 20-40 hours of work experience each week is required. (May be repeated to a total of 16 units.)

Grading Option: OP (May be repeated 3 times)







## **District Academic Administrators**

Chancellor  
**SUSAN A. COTA** (1996)  
B.A., Immaculate Heart College  
M.S., San Francisco State University  
Ed.D., University of San Francisco

Vice Chancellor of Educational Services and Planning  
**JOEL L. KINNAMON** (2003)  
B.S., Oklahoma State University  
MBA, Oklahoma City University  
Ed.D., Nova Southeastern University

Vice Chancellor of Business Services  
**LORENZO LEGASPI** (2005)  
MBA Organizational Management, College Of Notre Dame  
BA Business Management, University of Guam  
BA Accounting, University of Guam

## **Non-Academic Administrators**

<b>JENNIFER L. ARIES</b>	District Director, Public Information and Marketing
<b>MAZIE L. BREWINGTON</b>	Controller
<b>VACANT</b>	District Director, Facilities Planning and Management
<b>JULIA A. DOZIER</b>	Contract Education Program Director
<b>JEANNINE P. METHE</b>	Chief Technology Officer
<b>ANITA L. MORRIS</b>	Director of Human Resources
<b>TIM C. NELSON</b>	Director, Maintenance and Operations

## Las Positas College Academic Administrators

President, Las Positas College  
**KAREN E. HALLIDAY** (2002)  
 B.A., University of California, Santa Barbara  
 M.S. Purdue University

Vice President of Academic Services  
 VACANT

Vice President of Student Services  
**PAMELA T. LUSTER** (2000)  
 B.A., M.A. San Jose State University

Dean of Academic Services, Arts and Communication  
**PHILIP MANWELL** (2004)  
 B.M., M.S., Juilliard School  
 Ed.D., University of San Francisco

Dean of Academic Services, Business, Computing and  
 Applied Sciences  
**BIRGITTE RYSLINGE** (2004)  
 B.S., M.A., University of the Pacific  
 M.B.A., U.C. Berkeley;  
 M.A. Alliant University

Dean of Academic Services, Math, Sciences,  
 Engineering and Public Safety  
**NEAL M. ELY** (1998)  
 B.S., Ph.D., Texas A & M University

Dean of Academic Services, Social Sciences and Wellness  
 VACANT

Dean of Student Services  
**JEFF H. BAKER** (2005)  
 B.A., M.A., St. Mary's College Counseling

### Non-Academic Administrators

<b>ROBERT S. KRATOCHVIL</b>	Vice President, Business Services
<b>SYLVIA R. RODRIGUEZ</b>	Assistant Dean, Admissions and Records
<b>ANN MARIE "AMBER" MACHAMER, Ph.D.</b>	Director of Research and Planning
<b>RICHARD J. BUTLER</b>	Director of Safety and Security
<b>TED KAYE, Ph.D.</b>	CEO LPC Foundation

### Faculty Senate

**MELISSA A. KORBER** President, Academic Senate

### Classified Senate

**TODD A. STEFFAN** President, Classified Senate

# Faculty

<b>Christine S. Acacio</b> (2001)	A.A., CHABOT COLLEGE; B.A., California State University, Hayward; M.S., California State University, Hayward; Counselor	<b>Elena C. Cole</b> (1997)	A.A., OHLONE COLLEGE; B.A., University of California, Berkeley; M.A., San Francisco State University; English
<b>Lawrence F. Aguiar</b> (1977)	B.S., CALIFORNIA STATE UNIVERSITY, HAYWARD; M.A., Stanford University; Physical Education	<b>Anthony J. Costello</b> (2005)	B.A., SAN JOSE STATE UNIVERSITY; M.A., U.S. International University; M.A., St. Mary's College; Physical Education/ Basketball Coach
<b>Andrea C. Alvarado</b> (2005)	B.A., UNIVERSITY OF CALIFORNIA, SAN DIEGO; M.S., San Francisco State University; Counselor/Articulation Officer	<b>Gilbert E. Cruz</b> (2000)	B.S., CALIFORNIA POLYTECHNIC STATE UNIVERSITY; M.S., Santa Clara University; Licensed Professional Mechanical Engineer; Engineering
<b>Kevin M. Ankoviak</b> (2000)	B.S., UNIVERSITY OF MICHIGAN; M.S., UCLA; Ph.D., UCLA; Physics	<b>Gregory T. Daubenmire</b> (2000)	A.S., COLLEGE OF SAN MATEO; B.S., San Jose State University; B.A., San Jose State University; M.S., San Jose State University; Mathematics
<b>Michael A. Ansell</b> (2002)	B.S., CALIFORNIA STATE UNIVERSITY, CHICO; M.S., University of Oregon; Ph.D., University of Oregon; Chemistry	<b>Moh Daoud</b> (2002)	A.S., COLLEGE OF SAN MATEO; B.S., Ecole Nationale D'Electronique, Paris, France; Computer Information Systems
<b>Robert H. August, JR.</b> (2001)	B.S., ARMSTRONG ATLANTIC STATE UNIVERSITY; M.S., Western Kentucky University; Mathematics	<b>James L. Dobson</b> (2001)	A.A., COLLEGE OF DUPAGE, ILLINOIS; B.S., Northern Arizona University, M. A., California State University, Chico; Speech
<b>Carolyn S. Baranouskas</b> (1990)	A.A., CHABOT COLLEGE; B.A., DePauw University; Design/Drafting Technology	<b>Richard J. Dry</b> (1999)	B.A., UNIVERSITY OF CALIFORNIA, BERKELEY; M.A., San Francisco State University; English
<b>Evan D. Barshack</b> (2005)	A.A., ESSEX COMMUNITY COLLEGE; B.S., University of Baltimore; M.B.A., University of Baltimore; J.D., University of Baltimore; Business	<b>Catherine M. Eagan</b> (2003)	B.A., UNIVERSITY OF CALIFORNIA, BERKELEY; Ph.D., Boston College; English
<b>Teriann Bengevino</b> (2001)	B.A., SAN JOSE STATE UNIVERSITY; M.A., San Jose State University; Ph.D., University of Hawaii; History	<b>David R. Everett</b> (2005)	VWT COORD.; Viticulture and Winery Technology
<b>R. Toby Bielawski</b> (1999)	B.A., SMITH COLLEGE; M.A., Mills College; English	<b>Lisa R. Everett</b> (2000)	B.S., UNIVERSITY OF CALIFORNIA, SAN DIEGO; M.S., San Francisco State University; Physical Education/Health
<b>Dale P. Boercker</b> (1988)	B. S., AUSTIN PEAY STATE UNIVERSITY; M.S., California State University, Hayward; M. Ed., University of Florida; Mathematics/ Computer Science	<b>Debbie J. Fields</b> (1990)	A.A., PENN STATE UNIVERSITY; B.S., Virginia Commonwealth University; M.B.A., Golden Gate University; Computer Information Systems
<b>Janet A. Brehe Johnson</b> (1986)	B.A., SAN DIEGO STATE UNIVERSITY; M.A., San Francisco State University; Speech Communication	<b>Gale</b>	B.A., SAN JOSE STATE UNIVERSITY; M.A., San Francisco State University; Early Childhood Education
<b>Robert F. Breuer</b> (1990)	B.A., CALIFORNIA STATE UNIVERSITY, NORTHRIDGE; M.A., University of California, Los Angeles; M.A., University of California, Berkeley; Art/Graphic Art	<b>James A. R. Forcier</b> (1976)	B.S., SAN JOSE STATE UNIVERSITY; C.P.A., University of Santa Clara; M.B.A. University of Santa Clara; Business
<b>Lindell R. Bruce</b> (1985)	B.A., SOUTHERN ILLINOIS UNIVERSITY; M.A., Southern Illinois University; English	<b>James J. Gioia</b> (2001)	A.A., MIAMI DADE COLLEGE; B.S. University of California, Berkeley; M.S., California State University, Hayward; Ph.D., California School of Professional Psychology, DSPS Counselor
<b>Steven E. Bundy</b> (1976)	B.S., UNIVERSITY OF WASHINGTON; M.S., San Jose State University; Counselor	<b>John S. Gonder</b> (2002)	CISCO CERTIFICATION; Computer Networking Technology
<b>Mary E. Campbell</b> (1990)	B.S., ILLINOIS STATE UNIVERSITY; M.A., California State University, Hayward; Music	<b>Michelle C. Gonzales</b> (2005)	B.A., MILLS COLLEGE; M.F.A., Mills College; English
<b>Peggy C. Carter</b> (1989)	B.A., CALIFORNIA STATE UNIVERSITY, HAYWARD; M.L.S., University of California, Berkeley; Librarian	<b>Estela L. Guerra</b> (2002)	A.A., FRESNO CITY COLLEGE; B.S., California Polytechnic Institute, San Luis, Obispo; M.S., California State University, Hayward; Mathematics
<b>Fredda K. Cassidy</b> (2002)	B.A., CITY COLLEGE OF NEW YORK; M.A., University of Michigan; Visual Communications		

<b>Brian J. Hagopian</b> (2005)	A.S., FRESNO CITY COLLEGE	<b>Cecelia J. Kennerly</b> (1989)	B.S., CALIFORNIA STATE UNIVERSITY, HAYWARD; M.S., California State University, Hayward; M.S., University of Laverne; Learning Disabilities
<b>Ruth L. Hanna</b> (1991)	A.A., HARTNELL COMMUNITY COLLEGE; B.S., University of California, Davis; M.S., University of California, Davis; Geology	<b>Cynthia M. Keune</b> (2004)	B.A., CORNELL COLLEGE; M.S., Iowa State University; M.B.A., San Diego State University; Mathematics
<b>Barbara W. Hardy</b> (1988)	B.A., STANFORD UNIVERSITY; M.L.S., San Jose State University; Librarian	<b>Candace L. Klaschus</b> (2005)	A.A., COLUMBIA JUNIOR COLLEGE; B.A., San Francisco State University; M.A., San Francisco State University; Ph.D., University of New Mexico; Humanities
<b>Eric W. Harpell</b> (1988)	B.A., UNIVERSITY OF CALIFORNIA, SAN DIEGO; M.S., University of California, Los Angeles; Physics	<b>Melissa A. Korber</b> (1999)	B.A., MONTANA STATE UNIVERSITY; J.D., University of Pacific-McGeorge School of Law; English/Mass Communications
<b>Lavaughn M. Hart</b> (2000)	A.A., LAS POSITAS COLLEGE; CSF Coord., Business Information Technology; Computing Studies	<b>Marilyn M. Marquis</b> (1991)	A.A., PIERCE COLLEGE; B.A., California State University, Northridge; M.A., California State University, Dominguez Hills; English/English as a Second Language
<b>Lauren W. Hasten</b> (2004)	B.A., BROOKLYN COLLEGE; M.A., Columbia University; Anthropology	<b>Abigail Mccann</b> (1990)	B.A., DOMINICAN COLLEGE; M.A., Dominican College; Ph.D. University of Wisconsin; English
<b>James B. Heiner</b> (1981)	B.A., SAN JOSE STATE UNIVERSITY; M.A., San Jose State University; Music	<b>Jane C. Mccoy</b> (1994)	B.A. LOYOLA UNIVERSITY, CHICAGO; M.A., California State University, Hayward; History
<b>Timothy D. Heisler</b> (1995)	A.A., CHABOT COLLEGE, HAYWARD; B.A., California State University, Hayward; M.A., California State University, Hayward; Speech	<b>Stuart J. Mcelderry</b> (2000)	B.A., UNIVERSITY OF CALIFORNIA, BERKELEY; M.A., San Francisco State University; Ph.D., University of Oregon; History
<b>Teresa D. Henson</b> (2000)	B.A., UNIVERSITY OF COLORADO; M.S., University of Colorado; Mathematics	<b>Jason M. Morris</b> (2001)	B.A., UNIVERSITY OF TEXAS; M.A., University of New Mexico; Mathematics
<b>Susan K. Hiraki</b> (1990)	B.A., UNIVERSITY OF CALIFORNIA, BERKELEY; M.A., John F. Kennedy University; Psy.D., John F. Kennedy University; Counselor/Coordinator, Extended Opportunity Programs and Services	<b>Barbara J. Morrissey</b> (1991)	B.S., UNIVERSITY OF HAWAII; M.S., University of California, Davis; M.S., California State University, Hayward; Counselor
<b>Nan Ho</b> (1995)	B.S., STANFORD UNIVERSITY; M.S., Stanford University; Biology	<b>Steven J. Navarro</b> (1995)	B.A., CHAPMAN UNIVERSITY; M.A., California State University, Long Beach; Physical Education
<b>Frances M. Hui</b> (2000)	B.A., SAN DIEGO STATE UNIVERSITY; M.L.S., UCLA; Librarian	<b>Maureen P. O'herin</b> (2003)	B.A., ST. MARY'S COLLEGE; M.A., San Francisco State University; English
<b>Ronald J. Johansen</b> (2005)	FST COORD.; A.A., Chabot College	<b>Thomas M. Orf</b> (2005)	B.A., UNIVERSITY OF NORTHERN COLORADO; M.S., University of Northern Colorado; Ph.D., University of Kentucky; Geography
<b>Terry K. Johnson</b> (1999)	AUTOMOTIVE CERTIFICATION, COLLEGE OF ALAMEDA; Automotive Technician Program, Chabot/Las Positas Colleges; ASE Master Technician; Automotive Technology	<b>Brian H. Owyong</b> (1997)	B.A., CALIFORNIA STATE UNIVERSITY, HAYWARD; M.A. University of San Francisco; Th.M. Dallas Theological Seminary; Psy.D. California School of Professional Psychology; Counselor, Disabled Students Programs and Services
<b>Keith E. Jolly</b> (1984)	A.A., VENTURA COLLEGE; B.A., M.A., Arizona State University; M.S., University of California, Santa Barbara; Computer Science	<b>William Paskewitz, JR.</b> (1988)	B.F.A., COOPER UNION; M.F.A., Queens College; Art
<b>Ernest D. Jones</b> (1991)	A.A., CONTRA COSTA COMMUNITY COLLEGE; B.A., San Francisco State University; M.S., San Francisco State University; Psychology	<b>Karen B. Pihl</b> (1976)	B.A., RANDOLPH MACON WOMAN'S COLLEGE; Ph.D., University of Delaware; Biology

## Faculty

<b>Patrick L. Pohl</b> (1971)	A.A., ORANGE COAST JUNIOR COLLEGE; B.A., California State University, Long Beach; M.A., California State University, Long Beach; Ed.D., University of Utah; Physical Education
<b>Sophie C. Rheinheimer</b> (1975)	B.A. UNIVERSITY OF CALIFORNIA, BERKELEY; M.A., University of California, Berkeley; Physical Education
<b>Zina L. Rosen-simon</b> (2001)	B.S., MICHIGAN STATE UNIVERSITY; M.A.T. Oakland University; AD ED, San Jose State University; Early Childhood Development
<b>Cynthia W. Ross</b> (2001)	B.S., BAYLOR UNIVERSITY, M.S., CALIFORNIA STATE UNIVERSITY, HAYWARD; Psychology
<b>Ken Ross</b> (1990)	B.A. ELMHURST COLLEGE; M.A., San Francisco State University; M.F.A., United States International University; Theater Arts
<b>Michael R. Sato</b> (2002)	B.A., UNIVERSITY OF CALIFORNIA, SANTA CRUZ; M.A., California State University, Sacramento; English
<b>Geoffrey C. Smyth</b> (1990)	B.A., UNIVERSITY OF THE PACIFIC, STOCKTON; M.A., University of the Pacific, Stockton; Physical Education/ Soccer Coach
<b>Karin S. Spirn</b> (2005)	B.A., UNIVERSITY OF CALIFORNIA, BERKELEY; M.A., University of Michigan; Ph.D., University of Michigan; English
<b>Mark S. Tarte</b> (2002)	B.A., ST. MARY'S COLLEGE; Administration of Justice
<b>Randolph J. Taylor</b> (1990)	B.A., CALIFORNIA STATE UNIVERSITY, SACRAMENTO; M.S., California Polytechnic State University, San Luis Obispo; M.S., California Polytechnic State University, San Luis Obispo; M.S., University of California, Berkeley; Computer Science, Mathematics
<b>Sarah K. Thompson</b> (1996)	B.A., HAMILTON COLLEGE; M.A., Rutgers University; Sociology
<b>Paul S. Torres</b> (2001)	A.A., DEANZA COLLEGE; B.A., San Jose State University; M.A., University of California, Riverside; Political Science
<b>Angella Ven John</b> (1999)	B.S., UNIVERSITY OF IOWA; M.A., California State University, Sacramento; Student Interventions Developer
<b>Gilberto N. Victoria</b> (1995)	A.A., CHABOT COLLEGE; B.A., University of California, Irvine; M.S., California State University, Hayward; Counselor
<b>Cheryl L. Warren</b> (2004)	B.A., GEORGIA SOUTHERN UNIVERSITY; M.S.L.S., University of North Carolina; Librarian
<b>Lisa T. Weaver</b> (2004)	B.S., MINOR STATE UNIVERSITY, ND; M.B.A., Concordia University; Ph.D., Concordia University; Business/Economic Development

## Faculty Emereti

BYFORD H. SCOTT, Instructor	1962-1979
STUART J. INGLIS, Instructor	1965-1984
GEORGIA E. OWENS, Instructor	1964-1985
HAL LUBIN, Instructor	1961-1988
GEORGE ANNA TOW, Instructor-Counselor	1975-1989
GERALD D. FRIEDEL, Instructor	1967-1991
IRVING BATZ, Dean of Student Services	1968-1991
DONALD V. NILSEN, Instructor	1974-1991
JOHN T. HEALEY, Instructor	1966-1992
MARGARET C. EMERY, Instructor	1975-1993
JOHN WILLIAM RATH, Dean of Academic Services	1984-1993
MASON C. LAYMAN, Counselor-Instructor	1975-1994
JUANITA R. FOCHA, Instructor	1967-1995
EDWARD G. CATES, Instructor	1970-1995
JERALD T. BALL, Instructor	1964-1996
ROBERT E. DAHL, Instructor	1967-1996
JANICE M. ALBERT, Instructor	1962-1997
JOAN H. LONG, Instructor	1980-1997
LOLA BERMUDEZ, Acting Dean, Academic Services	1981-1997
ROBERT P. DICKINSON, Jr., Instructor	1977-1998
RUTH S. FELDMAN, Instructor	1969-1999
DAVID A. WRIGHT, Instructor	1965-1999
LINDA L. LUCAS, Dean of Academic Services	1969-2000
LAVERE ADAMS, Instructor	1980-2000
ESTHER S. GOLDBERG, Instructor	1970-2001
VICTOR G. WILLITS, Instructor	1986-2001
ARTHUR S. DELERAY, Instructor	1970-2002
ROBERT J. WOOD, Instructor	1970-2002
DEE D. ROSHONG, Dean of Student Services	1965-2003
AILEEN T. FURUYAMA, Librarian	1992-2003
JULIETTE A. BRYSON, Instructor	1971-2004
ANNE M. POWELL, Instructor	1974-2004
CAROL E. CLOUGH, Instructor	1977-2004
ALENE H. HAMILTON, Counselor-Instructor	1980-2004
WALTER T. MARA, Instructor	1984-2004
RICHARD I. SOLOMON, Instructor	1991-2004
DONALD R. MILANESE, Vice President of Academic Services	1970-2005
RONALD E. LILJEDAHL, Instructor	1980-2005
JAMES L. LANDRE, Instructor	1982-2005
GARY F. SVIHULA, Instructor	1982-2005
MARGARET E. RILEY, Instructor	1985-2005
WILLIAM R. DUNN, Instructor	1987-2005
DENISE VAN HORN-LANDRE, Articulation Officer	1995-2005
MARIA ELENA PELLINEN, Instructor	1975-2006
ARTHUR S. TENBRINK, Counselor-Instructor	1980-2006
LUCY A SPONSLER., Instructor	1991-2006
ERIC GOLANTY, Instructor	1993-2006



**Classified Staff**

Chabot-Las Positas Community College District  
5020 Franklin Drive  
Pleasanton, CA 94599

STANLEY E. BARNES Grounds Supervisor  
CHARLES BENDER Maintenance Supervisor  
ROBERT C. BRUSSTAR Custodian II  
MICHAEL J. HALLECK Custodian II  
SHARON KEICK Custodial Supervisor  
BOB KINT Maintenance Supervisor  
MARIETTA LAURELLA Custodian I  
JOSEPH PIMENTAL Lead Custodian  
RODNEY RIBALDI Grounds I  
SONIA A. RIOS Custodian II  
ELIZABETH SALAS Custodian I  
DONALD A. SAUGAR Lead Custodian  
MARK STEWART Custodian I  
CARL K. YAMASAKI Grounds II

**Las Positas College**

JENNIFER R. ADAMS Executive Assistant to the College President  
CYNTHIA A. AHRE Instructional Assistant II  
FRANKIE L. ALEXANDER Security Dispatch Clerk  
JOHN M. ARMSTRONG Student Records Evaluator/Outreach Specialist  
SAUNDRA L. ASHBURN Telephone Operator/Receptionist  
CYNTHIA J. BALERO International Student Program Coordinator  
MICHELLE BALERO A&R Assistant I  
REBECCA A. BARACONI Instructional Tech Support Specialist  
HAYWOOD BEAIRD Computer/Network Support Specialist II  
CONNIE A. BISH Instructional Assistant II  
DAVID P. BOEHM Instructional Asst. II/Auto/Welding  
JEFF W. BURNS Security Officer  
FERNANDO G. CALZADA Instructional Assistant II  
LETTIE J. CAMP Career/Transfer/Employment Coordinator  
JANICE A. CANTUA Admissions and Records Assistant III  
CHRISTINE D. CAPIROTTI Admissions and Records Assistant I  
ETHAN L. CASTOR Computer Network Support Specialist II  
THERESA M. COSTA Student Counseling Assistant I  
ALEXANDRA C. CROSETTI Instructional Assistant II  
SHARON A. DAVIDSON College Administrative Assistant  
FRANCES M. DE NISCO Community Education Program Coordinator  
DIANNE M. DUFFY Instructional Assistant II  
SHARRON L. DUPREE International Admissions Specialist  
DEBORAH G. EARNEY Admissions and Records Assistant II  
WILLIAM S. EDDY Physical Education/Athletic Assistant  
VIRGINIA EDWARDS Learning Resources Assistant III  
MARGARET EGAN Counselor Assistant I  
GAIL H. EHRHORN Staff Assistant  
FRAN M. ENGELKE Learning Resources Assistant II  
LINUS C. GIBSON Technical Mentor  
GERRY L. GIRE Laboratory Technician II/Bio-Chem  
LESLIE D. GRAVINO Work Based Learning Program Coordinator  
STEPHEN J. GUNDERSON Computer/Network Support Specialist II  
HELENE HA Laboratory Technician II  
VINCENT E. HAMILTON Counselor Assistant I  
JUDITH K. HANSON Academic Services Specialist II  
TIFFANY HART Security Officer  
DONNA S. HAWKINSON Student Counseling Assistant II  
CONSTANCE HILDEBRAND Counselor Assistant II  
DEANNA A. HORVATH Laboratory Technician II/Photo  
DONNA J. IMPEY Instructional Assistant II  
VERONICA J. JENNINGS Administrative Assistant II/Student Staff Liaison Office Specialist

GREGORY S. JOHNS Instructional Computer Laboratory Specialist  
ANN A. JONES Student Services Specialist II  
LARYSA V. KARPLOVYCH Instructional Assistant II  
MITSUKO KASHIWAMURA Library Technician I  
CARIE L. KINCAID Administrative Assistant II  
KAREN A. KIT Executive Assistant to the Vice President of Student Services  
DIANA NAVARRO-KLEINSCHMIDT Library Technician III  
MONICA I. KOLLER Counselor Assistant I  
MARTHA K. KONRAD Executive Assistant to the Vice President of Academic Services  
JAMES A. LAVINE Security Officer  
JEFFREY T. LAWES Admissions & Records Assistant II  
JADIN LEE-FORBES Telephone Operator/Receptionist  
SHERMAN LINDSEY Instructional Systems Specialist  
LILIA C. LOPEZ Staff Assistant  
BRIAN R. LOYOLA Laboratory Technician II  
CARMEN L. MCCAULEY Administrative Assistant II  
HELEN MACHUGA Instructional Assistant II  
JUDITH D. MARTINEZ Staff Assistant  
MARY "MINDY" MAXEDON College Business Office Supervisor  
LUIS M. MONTANEZ Security Officer  
NATASHA R. MOSSET Fiscal & Administrative Services Technician  
ALICE M. MOYER Instructional Assistant II  
ELIZABETH L. NOYES Web Master  
NOLAN W. O'BRIEN Instructional Assistant II  
JENNIFER I. ORTIZ Instructional Assistant II  
LINDA L. PEIFER Administrative Assistant II  
MARTHA L. PETERSON Accompanist  
SEAN L. PRATHER Security Officer  
ERIC W. POON Instructional Assistant II  
TERESITA C. RABON Telephone Operator/Receptionist  
CONNIE L. REDING Staff Assistant  
MARYLIN RIDDLE College Clerk II  
MICHAEL J. RINALDI Technical Theater/Performing Arts Instructional Specialist  
CHERYL A. ROTHMAN, Administrative Assistant II  
BAUDELIA L. SANCHEZ Bookstore Operations Clerk  
JOCELYN N. SANTOS Admissions & Records Assistant II  
HERMINA SARKIS-KELLY Instructional Assistant II  
ANDRA P. SCHREIBMAN Financial Aid Officer  
DORIS SCOTT Counselor Assistant II  
CAROLYN I. SMUTNY Staff Assistant  
TODD A. STEFFAN Financial Aid/Veterans Benefits Specialist  
MARY A. STRAIGHT Assessment/Tutorials Specialist  
BARBARA M. STUART Counselor Assistant I  
MEGHAN C. SWANSON Instructional Assistant II  
JESSE TOSCANO Security Officer  
HEIDI ULRECH Telecommunications Coordinator  
SCOTT A. VIGALLON Instructional Technology/Learning Coordinator  
DAVID B. VIGIL Laboratory Technician IV  
JEANNE M. VIRGILIO ECD Professional Development Coordinator  
DANNY G. WILLIAMS Instructional Assistant II  
KAREN M. ZEIGLER Alternative Media Technology Specialist

**LAS POSITAS COLLEGE BOOKSTORE**

NOLAN M. HOWE Manager  
JEANNE M. MADEIRA Customer Service Manager  
HEIDI M. CAREY Shipping and Receiving

# Staff

## Classified Staff Emeriti

VIRGINIA I. MACCROSSEN,	Admissions and Records Clerk II 1973-1986
MARJORIE R. O'LEARY,	Executive Secretary 1971-1989
FAYE L. GLEASON,	Secretary I 1980-1991
LOUIE C. ABAITUA,	Ass't. Maintenance Supervisor 1972-1992
JOHN R. RODRIGUEZ,	Grounds Technician 1965-1993
JOAN M. CAMPANILE,	Secretary to the President 1966-1993
ELIZABETH E. INGLIS,	Instructional Assistant II 1976-1993
WILLIAM H. COX,	Lead Custodian 1984-1994
PATRICIA J. RICHMOND,	Counselor Assistant I 1979-1997
JOAN D. NEWSOM,	Cashier/Buyer Bookstore 1981-1997
BARRY J. DEADDER,	Security Supervisor 1982-1998
PHILLIP "BABE" M. CASTILLO,	Ass't Custodial Supervisor 1962-1998
KAREN O. ALBERTSON,	Instruct'l Computer Lab Spec'l'st. 1981-1999
WINEGARNER, JANICE E.,	Student/Staff Liaison, Office Specialist/Secretary II 1990-2001
ABERT, CAROL L.,	Instruct'l Asst. II 1979-2004
BENHAM, JANE E.,	Instruct'l Asst. II 1989-2004
ADAMS, JAMES H.,	Science Education Technician 1979-2005
KWAN, ALICE Y.,	A&R Assistant II 1988-2005
CADWALADER, SHARON A.,	Executive Asst. to LPC President 1986-2005
MCCARTHY, WILLIAM,	Security Officer 1990-2005

## Accounting/Business

Charlene Abendroth	California State University, Hayward
Kathleen M. Alameda	Sallman, Yang & Alameda
Carol Clough	Las Positas College
Suzanne Busch	California State University, Hayward
Jim Forcier	Las Positas College
Steve Kau	CPA
Annie Mergens	Accountemps
Libby Mihalka	Altamont Capital Management
James Owen	Dublin High School
Birgitte Ryslinge	Las Positas College
Carolyn Strickler	Ohlone College
Lisa Weaver	Las Positas College

## Administration of Justice

Lt. Brian Ballard	Alameda County Sheriffs Office Regional Training Center
Marty Brown	District Attorney's Office
Dr. Neal Ely	Las Positas College
Officer Floyd Gill	Dublin Police Department/ School Resource Officer
Lt. William Gordillo	Dublin Police Services
Captain John Hardester	Alameda County Sheriffs Office Regional Training Center
Chief Steve Krull	Livermore Police Department
Officer Dave Lang	Tri-Valley ROP/ Retired Livermore Police Department
Michele McKay-McCoyLas	Positas College
Chief Timothy Neal	Pleasanton Police Department
Sgt. Shawn Petersen	Alameda County Sheriffs Office Regional Training Center
Office Scott Rohovit	Pleasanton Police Department/ Tri-Valley ROP
Chief James Rose	Pinole Police Department
Robert Shipway	Alameda County Public Defender's Office
Jackie Slabaugh	Tri-Valley ROP
Mark Tarte	Las Positas College
Chief Gary Thuman	Dublin Police Department
Sgt. John Worley	Alameda County Sheriffs Office Regional Training Center

## Applied Technology (Automotive and Welding)

Max Thomas	Las Positas College
Brian Hagopian	Las Positas College
Terry Johnson	Las Positas College
Don Minor	Dublin High School
Ray Newbury	Livermore High School
Don Danner	Granada High School
Ernest Holm	Snap-On Tools
Del Vasquez	Tri-Valley ROP/Auto Collision
Bob Middleton	Tri-Valley ROP
Don Nilson	Las Positas College-Retired
Birgitte Ryslinge	Las Positas College
Dave Vigil	Las Positas College
Larry Nobriga	Las Positas College
Karl Cortese	Alameda/Contra Costa/ San Francisco Automotive Committee
Rick Maynard	Chrysler Training Facility
Stewart Thomas	Retired-Independent Consultant
Lisa Weaver	Las Positas College

## Accounting/General Business/Marketing

Charlene Abendroth	California State University, Hayward
Scott Adams	Shea Homes
Angie Alamallio	Alameda County EDD
Evan Barshack	Las Positas College
Suzanne Busch	California State University, Hayward
Rajeev Chopra	Adjunct Las Positas College
Robert D'Elena	Adjunct Las Positas College
Steve Davis	Ross Dress for Success
William Denyear	Adjunct Las Positas College
Michelle Devine	Safeway
Teri Donat	Adjunct Las Positas College
Bob Eddy	Adjunct Las Positas College
Debbie Fields	Las Positas College
James Forcier	Las Positas College
Ray Gilmore	Adjunct Las Positas College
Leslie Gravino	Las Positas College
LaVaughn Hart	Las Positas College
Lorrie Hern	Amador Valley High School
Emily Herndon	Stoneridge Mall
Steve Kau	CPA
Heidi Kenniston	PeopleSoft
Anne Khoury	Lawrence Livermore National Lab
Tom Matteson	Marriott Hotels
Pat Mayfield	Author and Professional Speaker
Kim Melton	Gloria Jean's
Denise Merlin	Livermore ROP
Sarah Messer	Wal Mart
Bob Middleton	Tri-Valley ROP
Libby Mihalka	Altamont Capitol Management
Doug Miller	Adjunct Las Positas College
Krystal Murray	Foothill DECA
Ian Myles	Independent Business Consultant
Debbie Nelson	Granada High School
John Noonan	Attorney at Law
Julie Oates	CSAA
Lisa Pong	Dublin High School
Tami Raaker	Foothill High School
Birgitte Ryslinge	Las Positas College
Gib Souza	Bay East Association of Realtors
Carolyn Strickler	Ohlone College
Candice Tamisea	Adjunct Las Positas College
Lisa Weaver	Las Positas College
Joyce Woo	Safeway
Curtis Young	Kimball and Young

## Computer Networking Technology/Electronics

Robert Cooley	Tri-Valley ROP
Guy Cummins	Verizon Wireless
Dave Curtis	WeCare Wireless Networks
Moh Daoud	Las Positas College
Matt Dralle	Lawrence Livermore National Lab
Debbie Fields	Las Positas College
John Gonder	Las Positas College
Leslie Gravino	Las Positas College
LaVaughn Hart	Las Positas College
Neil Hennessey	PeopleSoft
Michele Kahn	Sandia National Labs
Bob Kreitz	Tri-Valley ROP
Jeff Locke	Hewlett Packard
Greg Mayer	SBC
Brad McInroy	Sybase, Inc.
Rodney Sepulveda	Cisco Systems
Sheryl Stewart	Sandia National Labs
Vince Tabone	KLA-Tencor
Diana Pereira	Sandia National Labs
Dave Peterson	Hacienda Data Systems
Wayne Phillips	Chabot College
Nick Rica	Form Factor, Inc.
Norberto Ruiz	Chabot College
Linda Uhrenholt	SBC

# Advisory Boards

Felix Valadez

Brown & Caldwell

## Disabled Students Programs and Services

Toby Bielawski	Las Positas College
Dale Boercker	Las Positas College
John Carter	Granada High School
Sandy Cline	California High School
James Gioia	Las Positas College
Gina Gourley	Pleasanton Unified School District
Pam Luster	Las Positas College
Susan Hiraki	Las Positas College
Linda Hoover	Livermore Unified School District
Cecelia Kennerly	Las Positas College
Kim Kerrigan	Las Positas College
Jennifer Mosel	
Alice Moyer	Las Positas College
Nora Mukai-Rosenbaum	Department of Rehabilitation
Brian Owyong	Las Positas College
Zina Rosen-Simon	Las Positas College
Theresa Woo	CVE, Department of Rehabilitation

## Early Childhood Development

Pam Campion	Dublin High School
Susan Canfield	Rancho Las Positas Elementary
Sheryl Common-Vranek	Early Years Children's Center
Barbara Correia	Foothill High School
Diana Curl	Chabot College
Judy Del Tredici	Livermore High School/Tri-Valley ROP
Jackie Fitzgerald	Las Positas College
Susan Gohs	Hacienda Child Care Center
Linda Guthrie	LARPD
Kathie Hammer	John Knox Co-op Preschool
Debbie Harvey	Amador High School
Leonard Heid	Kids Country
Pat Keegan	Foothill High School/ROP
Barbara Kraybill	LARPD
Philip Manwell	Las Positas College
Diana McGregor	Chabot College
Bob Middleton	Tri-Valley ROP
George Philipp	Every Child Counts
Laura Reno	LLNL Children's Center
Edna Rodriggus	Chabot College
Zina Rosen-Simon	Las Positas College
Rossnina Ruggieri	Child Care Links
Andrea Scheib	Family Child Care Provider
Becky Silva	CAPE, Inc.
Sondra Simpson	Extended Day Child Care
Penna Steele	Sonshine Enrichment Center
Christine Tibbetts	Pleasanton Unified School District
Jeanne Vigilio	Las Positas College
Catherine Wolfe	Granada High School
Nancey Wright	Las Positas College

## Engineering/Engineering Technology

Carolyn Baranouskas	Las Positas College
Gilbert Cruz	Las Positas College
Dr. Mo Dehghani	Lawrence Livermore National Laboratory
Dr. Neal Ely	Las Positas College
Dr. Gary Ford	UC Davis
Dr. Gary R. Martin	University of the Pacific
Dr. Saeid Moltavalli	California State University, East Bay
Ken Petersen	LPZA
Tim Sammons	Bechtel Nevada
Dan Walsh	Cal Poly
Alec Willis	Sandia National Laboratories

## Environment/Safety and Health Advisory Board

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Dr. James S. Johnson	Lawrence Livermore National Laboratory
Gregory Jones	Lawrence Livermore National Laboratory
Harold Juhala	Safety Consultant
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Steve McConnell	Lawrence Livermore National Laboratory
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Kathleen Shingleton	Lawrence Livermore National Laboratory
Danielle Stefani	Livermore-Pleasanton Fire Department
William Vance	Livermore National Laboratory
Annamarie Wood-Zika	Lawrence Livermore National Laboratory

## Extended Opportunities Programs and Services

Christine Acacio	Las Positas College
Steven Bundy	Las Positas College
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**Fire Service Technology/EMT**

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Chief Derek Krause	San Ramon Valley Fire Protection District/Las Positas College
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Chief Dave Lord	Alameda County Fire Department
John McPartland	Chabot College/BART
Chief Patrick Reid	Camp Parks
Capt. Edward Silveira	Alameda County Fire Department/Las Positas College
Tim Simpkins	San Ramon Valley Fire Protection District
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Chief Jeff Zolfarelli	Livermore-Pleasanton Fire Department

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Dr. Linda E. Ault	Cedar Mountain Winery
Harriet Cole	Friends of the Vineyards
James Concannon	Concannon Vineyard
Dr. Neal Ely	Las Positas College
David Everett	Las Positas College
Mike Gatzman	Gatzman Consulting Services
Patrick Kirkendall	Livermore High School/ Tri-Valley ROP
Robert B. Luehrs	Helping Hand Landscape Design
Tom O'Malley	Tri-Valley Business Council
Ralph Riva	Wente Vineyards
John Silva	Caltrans, Retired
Splend Splendorio	Splendorio Estate & Vineyard/Livermore Winegrowers Association
Lynn R. Wallace	Livermore Winegrowers Association
Jacquie Williams-Courtright	Alden Lane Nursery

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Veronica Fenchel	The Design Place
Nancy Hill-Sapp	Sroban & Associates
Jo Ann Hirsch	Kaleidoscope Interior Design
Jill Hornbeck	Las Positas College
Joan Long, FIFDA	Porceus Program Development, Las Positas College
Philip Manwell	Las Positas College
Marilyn Nauertz	J.C. Penney's
Denise Owen	Ohlone College
Susie Sayad	Home Depot
Terri Tinucci	Tinucci Interiors
Vada Ulrech	Kitchen & Bath Design Consultant
Jennifer Upper	Lion Interiors
Nancy Wallrath	ASID, NCIDQ, CIC
Michele Wittkop	Shea Homes

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Bill Andrews	Penzoil
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Beckee Breadon	Office Team
Kimberly Brenner-Lorton	Heald Business College
Sarah Burns	Tri-Valley ROP
Carol Clough	Las Positas College
Steve Davis	Ross Dress for Success
Kristin Fiser	Office Team
Lorrie Hern	Amador Valley High School
Emily Herndon	Stoneridge Mall
Heidi Kenniston	PeopleSoft
Karen Meeks	Parent
Kim Melton	Gloria Jean's
Bob Middleton	Tri-Valley ROP
Krystal Murray	Foothill DECA
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Tami Raaker	Foothill High School
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Mass Communications/Journalism	
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Kelly Gust	Valley Times
William Johnson	Chabot College
Sarah Jones	Las Positas College
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Les Mahler	San Francisco Examiner
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Bruce Engle	AV Images
Loni Frankland	Arts Unlimited Advertising
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Tim Hern	Tri-Valley ROP
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Jorja Ivie	Dublin High School
Jeff Main	AMP Printing
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Mark Shawver	Shawver Associates
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The mission of the Las Positas College Foundation is to support and advance the College and its students through active resource development and effective community partnerships.

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