
CHABOT-LAS POSITAS COMMUNITY COLLEGE DISTRICT

CHABOT COLLEGE

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HAYWARD, CALIFORNIA 94545
TELEPHONE: (510) 723-6600

CHABOT COLLEGE WORLDWIDE WEB

URL: [HTTP://WWW.
CHABOTCOLLEGE.EDU](http://www.chabotcollege.edu)
FAX: (510) 782-9315

DISTRICT OFFICE

5020 FRANKLIN DRIVE
PLEASANTON, CALIFORNIA 94588
TELEPHONE: (925) 485-5208

**THIS CATALOG IS AVAILABLE IN ALTERNATE FORMAT. CONTACT THE DISABLED
STUDENT RESOURCE CENTER, BUILDING 2400 OR CALL 510-723-6725.**

CHABOT COLLEGE

SERVING THE . . .

Castro Valley Unified School District
Dublin Unified School District
Hayward Unified School District
Livermore Valley Joint Unified School District
New Haven Unified School District
Pleasanton Unified School District
San Leandro Unified School District
San Lorenzo Unified School District
Sunol Glen Elementary School District

Robert E. Carlson

President Chabot College



Welcome to Chabot College!

This coming year is a special one as Chabot College celebrates its 45th year of meeting the educational needs of the East Bay's growing population.

Chabot has experienced much change to the make up of the college since it opened its doors to residents of Southern Alameda County on September 11, 1961. Now, thanks to the support of community members who voted “yes” on Measure B, Chabot will experience \$250 million worth of physical changes through the upgrading, refurbishing and enhancing of older buildings, as well as building new structures. The more immediate of these changes will be the modernization of the Performing Arts Center and the Planetarium.

Plans for new buildings include the college's future signature building, the Student Access Center, a \$30 million, two-story facility that will house all student-oriented services.

So beginning this year, and continuing for the next decade, you will see major changes as Chabot gets a much-needed facelift and regains its luster. While the College undergoes its magnificent makeover, Chabot will continue to maintain its long tradition of offering academic excellence and providing something for everyone.

Chabot College is committed to excellence! Come celebrate 45 years of educational excellence by taking classes and exploring new worlds. Founding President Dr. Reed Buffington said it best in 1961, and it still holds true today: “The thing I want instructors to be known for, and the thing I stand for, is quality. Quality in everything we do.”

Robert E. Carlson, Ed.D.

President

BOARD OF TRUSTEES



The Chabot-Las Positas Community College District is governed by a Board of Trustees that is responsible for all policy decisions. Those serving on the board in 2006 are Isobel Dvorsky, president; Dr. Arnulfo Cedillo, secretary; Donald L. “Dobie” Gelles, Dr. Hal G. Gin, Dr. Alison Lewis, Dr. Barbara Mertes, and Carlo Vecchiarelli.

Dr. Cedillo has been a member of the board since 1985, representing Trustee Area 3. He resides in Union City.

Mrs. Dvorsky has represented Trustee Area 2 since her first election to the board in 1985. She resides in San Leandro.

Mr. Donald L. “Dobie” Gelles was elected in 1998 to represent Trustee Area 4. He resides in Castro Valley.

Dr. Gin was appointed in August 2005, representing Trustee Area 6. He resides in San Lorenzo.

Dr. Lewis has been a member of the board since 1991, representing Trustee Area 1. She resides in Hayward.

Dr. Mertes was first elected to the board in 2000, representing Trustee Area 7. She resides in Livermore.

Mr. Vecchiarelli has been a member of the board since 2004, representing Trustee area 5. He resides in Pleasanton.

TRUSTEES EMERITI

E.J. “Jay” Chinn*1961–1985
Elva M. Cooper1987–1996
Ann H. Duncan1971–1984
Dorothy S. Hudgins1967–1987
Lawrence R. Jarvis*1975–1987
James S. Martin1969–1975

**Deceased*

Fred M. Duman1967–1991
Edward E. Martins1961–1967
Fredrick T. Sullivan1961–1971
William A. Tenney1961–1967
L. Arthur Van Etten*1961–1985
Margaret R. Wiedman1977–1989
Gary R. Craig1985–2005

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FALL SEMESTER 2006

JULY

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31						

Orientation Week	
August 14, 15	New Faculty Orientation
August 16	District Convocation
August 17	Staff Development Day
August 18.....	College/Division Day
August 21.....	INSTRUCTION BEGINS
August 26**	Instruction Begins Saturday Classes
September 2**	No Saturday Classes
September 1.....	Last Day to Withdraw from Classes with a No-Grade-of-Record in-person
September 4.....	Last Day to Withdraw from Classes with a No-Grade-of-Record online
September 4*	Labor Day-Holiday
September 5	CENSUS DAY
September 22	Deadline for Petitioning to Complete Classes on a “Credit/No Credit” Basis
November 9.....	Last Day to Withdraw from Class with Automatic “W” in-person
November 10.....	Last Day to Withdraw from Class with Automatic “W” online
November 10*	Veterans Day-Holiday No Instruction
November 22*, 23*, 24*, 25*	Thanksgiving Recess- No Instruction
December 15	LAST DAY OF CLASSES
December 16**	Final Examination Saturday Classes
December 18–22.....	FINAL EXAMINATION PERIOD AND FILING OF GRADES
December 25–January 15.....	Semester Recess- No Instruction

*Holiday-All Employees
**Saturday Only Classes

NOTE:

For deadline dates for short term and late start classes, consult instructor, Admissions and Records, or go to website www.chabotcollege.edu.

SPRING SEMESTER 2007

JANUARY

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APRIL

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MAY

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JUNE

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24	25	26	27	28	29	30

January 16.....	INSTRUCTION BEGINS
January 20**	Instruction Begins Saturday Classes
February 2.....	Last Day to Withdraw from Classes with a No-Grade-of-Record in person
February 4.....	Last Day to Withdraw from Classes with a No-Grade-of-Record online
February 5	CENSUS DAY
February 15	Deadline for Petitioning to Complete Classes on a “Credit/No Credit” Basis
February 15.....	Flex Day
February 16*, 17**	Lincoln’s Day-Holiday-No Instruction
February 19*.....	Washington’s Day-Holiday-No Instruction
April 6	Last Day to Withdraw from Classes with Automatic “W” in person & online
April 9–14.....	Spring Break-No Instruction
April 20.....	DEADLINE TO APPLY FOR GRADUATION END OF SPRING SEMESTER 2007
May 12**	Last Day of Saturday Classes
May 18	LAST DAY OF CLASSES
May 19**	Final Examinations Saturday Classes
May 21–25.....	FINAL EXAMINATION PERIOD AND FILING OF GRADES
May 25	Commencement

*Holiday-All Employees

**Saturday Only Classes

NOTE:

The 2007–2008 calendar will appear in a catalog addendum to be published spring 2007.

NOTE:

For deadline dates for short term and late start classes, consult instructor, Admissions and Records, or go to website www.chabotcollege.edu.

TELEPHONE (510) 723-6600

	TELEPHONE NUMBER
PRESIDENT	723-6640
Institutional Planning	
Program Review	
Institutional Research	
Marketing and Community Relations	
Grant Development	
College Foundation	
Alumni Association	
Staff Development	
Vice-President, Business Services.....	723-6618
Fiscal Services	
Budget Development and Management	
Purchasing Control	
College Bookstore	
College Box Office	
College Bursar	
College Master Calendar	
Facilities Rental	
College Mailroom	
College Maintenance and Operations	
College Capital Construction	
College Switchboard	
Director, Campus Safety.....	723-6771
Manager, Bookstore.....	723-6925
Assistant Manager, Bookstore.....	723-6925
ACADEMIC SERVICES	
Vice-President	723-6626
Director, Media Services	723-6756
Television Station	
Publication Graphics	
Duplicating Center	

	TELEPHONE NUMBER
Dean, Applied Technology and Business	723-6652
Business Sciences (Accounting, Business Administration, Computer Application Systems, Marketing, Real Estate, Work Experience)	
Technology and Engineering (Apprenticeship, Automotive Technology, Electronics and Computer Technology, Fire Technology, Industrial Technology, Machine Tool Technology, Welding Technology)	
Campus Computer Support	
Instructional Technology Center	
VTEA	
Vocational Education (CCCAOE)	
Economic Development	
Tech Prep	
2+2 Programs	
Dean, Arts and Humanities.....	723-6828
Architecture, Art, Digital Media, Humanities, Interior Design, Mass Communications, Music, Philosophy, Photography, Religious Studies, Theater Arts.	
Performing Arts Center	
Community Education	
Continuing Education	
Dean, Science and Mathematics	723-6897
Anatomy, Astronomy, Biological Sciences (<i>Biology,</i> <i>Ecology, Microbiology, Physiology</i>), Chemistry, Computer Science, Engineering, Geology, Mathematics, Physics.	
Dean, Language Arts.....	723-6805
English, English As A Second Language, Foreign Languages (<i>Chinese, French, German, Japanese,</i> <i>Portuguese, Spanish</i>), Interdisciplinary Studies in Letters and Science, Sign Language, Speech, Tutoring.	
Dean, Health Physical Education and Athletics	723-7202
Dance, Dental Hygiene, Health, Health Information Technology, Medical Assisting, Nursing, Nutrition, Physical Education.	
Dean, Social Sciences	723-6669
Administration of Justice, Anthropology, Early Childhood Development, Economics, Geography, History, Political Science, Psychology, Recreation and Rehabilitation Therapies, Sociology.	
QUEST	
PACE	

INFORMATION DIRECTORY

TELEPHONE
NUMBER

TELEPHONE
NUMBER

STUDENT SERVICES

Vice-President	723-6744
Community Outreach	723-7502
Dean, Counseling	723-6717
Counseling (Psychology Counseling)	
Career/Transfer Center	
Course and Program Articulation	
Matriculation	
International Students	
Director, Admission and Records	723-6703
Student Online Services Center (SOS)	
Special Student Admissions	723-6715
Veterans Services	723-6910
Director, Financial Aid	723-6714
Dean, Special Programs and Services	723-6916
EOPS/CARE	
DSP&S	
CalWORKS	
Daraja Program	
Puente Program	
AmeriCorps/Teacher Prep	
Director of Student Life.....	723-6914
Student Activities	
Associated Student Government	
ASCC Scholarship Program	
Clubs and Organizations	
Flea Market	
Off-Campus Housing	
Student Health Center	
Director, Children's Center	723-7483

DISTRICT OFFICE

(Use Area Code 925 for telephone numbers with a 485 prefix.)

BUSINESS OFFICE/FISCAL SERVICES

Vice Chancellor	Lorenzo Legaspi	485-5203
Accounting.....		485-5224
Buyer	Annie Harris	485-5205
Controller	Mazie Brewington	485-5231
Maintenance and Operations...	Tim Nelson	723-6648
CHANCELLOR		485-5206
(Board of Trustees, Operation of District)		
District Director, Public Information and Marketing	Jennifer L. Aries	485-5215
CHABOT-LAS POSITAS		
COLLEGES FOUNDATION		485-5214
ECONOMIC DEVELOPMENT AND CONTRACT EDUCATION		
Director	Julia Dozier	485-5212
CHIEF MANAGEMENT		
INFORMATION OFFICER		723-6621
PERSONNEL OFFICE		
Personnel Information	485-5236	
Human Resources Director.....	Anita Morris	485-5235
PLANNING, DEVELOPMENT AND RESEARCH		
Vice Chancellor		485-5204

**THE CHABOT-LAS POSITAS COMMUNITY
COLLEGE DISTRICT**

HISTORY

The Chabot-Las Positas Community College District is in its 40th year of providing educational opportunities to residents of the Bay Area.

The formation of a “junior college district” was approved by the voters on January 10, 1961, and the first board of trustees elected on April 18, 1961. Chabot College opened for classes on September 11, 1961, on a seven and one-half acre temporary site in San Leandro with an enrollment of 1,163 students. The 94-acre Chabot College site on Hesperian Boulevard in Hayward opened for its first day of classes on September 20, 1965.

Chabot College primarily serves residents of Alameda County in the East Bay area, including the district communities of Castro Valley, Hayward, San Leandro, San Lorenzo and Union City.

The site for Las Positas College on 147 acres in Livermore was purchased in October, 1964, and the college-known then as Chabot College’s Valley Campus-opened for instruction on March 31, 1975, in four buildings designed for 600 students.

The institution was designated California’s 107th community college by the California Community Colleges Board of Governors in October, 1988.

Las Positas College primarily serves residents of Alameda County and a portion of Contra Costa County in the Tri-Valley area, including the district communities of Dublin, Livermore, Pleasanton and Sunol.

The 2002 fall semester registration totaled 22,000 day, evening and Saturday students at Chabot College and Las Positas College. The district serves 18 public high schools and four parochial schools.

ACCREDITATION

Chabot College is accredited by the Western Association of Schools and Colleges. Chabot College is also accredited by the Council on Dental Education, American Dental Association, the Committee on Allied Health Education and Accreditation in collaboration with the American Hospital Health Information Management Association and the American Medical Assisting Association. The Program in Nursing is accredited by the California Board of Registered Nursing. The college is approved by the California State Department of Education and is a member of the American Association of Community and Junior Colleges and the Community College League of California.

Appropriate courses are fully accepted on transfer by the University of California, the state college and university system, and by private four-year colleges and universities.

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

BOARD PRIORITIES 2006–2008

The Chabot-Las Positas Community College District’s Board of Trustees will work as an ethical and cohesive team in supporting the Chancellor’s maintenance of a fiscally sound and creative learning environment for students and a productive and rewarding environment for staff. The Board joins with the Chancellor in judging their effectiveness by:

1. Requiring regular and accurate fiscal reports that include all major expenditures which affect the economic health of the colleges and the District;
2. Adhering to Board Policies that require regular, timely and consistent evaluations in order to improve staff and student performance;
3. Requiring all Board reports to be well documented, timely, and thoughtfully prepared with all appropriate and accurate legal information so that the Board Members will have a solid basis upon which to make fair decisions;
4. Operating in an open, honest, and ethical decision-making process;
5. Maintaining open communication channels with the local communities through the formation of working partnerships with business, industry, education, and government;
6. Keeping informed on appropriate State and Federal policies affecting community colleges.

**CHABOT COLLEGE VISION, MISSION AND
VALUE STATEMENTS**

VISION

Chabot College is a learning-centered institution with a culture of thoughtfulness and academic excellence, committed to creating a vibrant community of life-long learners.

MISSION

Chabot College is a public comprehensive community college that prepares students to succeed in their education, progress in the workplace, and engage in the civic and cultural life of the global community. The college furthers student learning and responds to the educational needs of our local population and economy. The college serves as an educational leader, contributing its resources to the intellectual, cultural, physical, and economic vitality of the region. Recognizing that learning is a life-long journey, the college provides opportunities for the intellectual enrichment and physical well-being of all community members who can benefit.

VALUES

The colleges’ vision and mission are supported by the following collective values:

LEARNING AND TEACHING

- supporting a variety of teaching philosophies and learning modalities

- providing an environment conducive to intellectual curiosity and innovation
- encouraging collaboration that fosters learning
- engaging in ongoing reflection on learning, by students and by staff
- cultivating critical thinking in various contexts
- supporting the development of the whole person

COMMUNITY AND DIVERSITY

- building a safe and supportive campus community
- treating one another with respect, dignity, and integrity
- practicing our work in an ethical and reflective manner
- honoring and respecting cultural diversity
- encouraging diversity in our curriculum and community of learners

INDIVIDUAL AND COLLECTIVE RESPONSIBILITY

- taking individual responsibility for our own learning
- cultivating a sense of social and individual responsibility
- developing reflective, responsible and compassionate citizens
- playing a leadership role in the larger community
- embracing thoughtful change and innovation

CHABOT COLLEGE STRATEGIC PLANNING THEMES

Institutional objectives were developed through a college-wide strategic planning process that was guided by the Institutional Planning and Budget Council (IPBC). Initial college-wide workshops and meetings in Fall 2000 led to the identification of major planning themes and goals. During 2002–03, “theme teams,” composed of a cross-section of members of the college community, identified issues facing the college and proposed objectives and activities under each theme. These objectives are reviewed and prioritized each year by the IPBC.

THEME A: Excellence in Education. Focus on Teaching/Learning.

THEME B: Creation of a Healthy College Community. Focus on Valuing People.

THEME C: Community Service, Partnerships, and Collaboration. Focus on Development of a College Without Boundaries.

THEME D: Visioning, Leading and Communicating. Focus on Managing for Innovation.

THEME E: Strategic Planning for Continuous Improvement. Focus on Future and Mission.

THEME F: Supporting Operations of the College. Focus on Efficient Services to Core Operations.

THEME G: Support for Student Access, Equity and Success. Focus on Student Development.

COLLEGEWIDE LEARNING GOALS

Collegewide Learning Goals are statements of the knowledge, skills, and abilities the individual student will possess and can demonstrate upon completion of a learning experience or sequence of learning experiences (e.g., course, program, degree).

PROCESSES FOR DEFINING LEARNING GOALS

1. Core Competencies
 - define core skills (goals)
 - institutionalize them by incorporating into programs and courses
 - provide for evolution of core skills to allow for change (developmental)
2. Research
 - review literature (broad environmental scan) to see what others have done
 - make it your own; personalize/modify from your college
3. Structure/Design
 - try to make sure that goals are achievable
 - have some linkage to mission, vision, and values
4. Process
 - determine expectations of key external constituencies, including
 - industry
 - legislative
 - external accrediting bodies
 - national standards
 - K-12 and four-year institutions
 - determine views/expectations of key internal groups/partners
 - board
 - missions/values
 - K-12 and four-year institutions
 - faculty teams (x discipline), staff, and administrators

Implementation strategies

- Compile a list of suggested goals
- Summarize goals around common themes
- Present themes to group on Nov. 23rd
- Develop courses to introduce students to outcomes
- Establish diverse strategies to incorporate goal achievement throughout curriculum and programs

STATEMENT OF THE OBJECTIVES OF THE GENERAL EDUCATION PROGRAM

General education programs have come to be 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 which introduces the student to areas of study that mature the mind, enrich family and widen social and ethnic relationships, and develop skills and aptitudes that can aid the student in furthering personal and social usefulness, and to live in the environment as a thinking and contributing citizen.

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, cultural, social and political problems.

EDUCATIONAL PROGRAM

In keeping with its Philosophy and Objectives, Chabot College offers a two-year curriculum designed to (1) permit students to transfer typically as juniors, to leading four-year colleges and universities; (2) provide technical training to prepare students for employment in occupations requiring two years of study or less, or to assist persons already employed; (3) make continuing education available to residents desiring to increase their knowledge and skills. (A list of Degree and Certificate Programs may be found on pages 29–31). Special courses and instructional services are also available to students with ethnic interests.

DEGREES AND CERTIFICATES

Chabot College is authorized by the Board of Governors of the California Community Colleges to confer the *Degree of Associate in Arts or Associate in Science* 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 pages 17–20.

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

The *Certificate of Completion* is awarded upon successful completion of a minimum of 10 semester units, with a grade-point average of 2.0 or higher.

Students may develop an Individual Occupational Major, by working out the program with a counselor, for approval by the Division Dean of the Occupational Major and the Dean of Counseling.

Application for the Associate in Arts, Associate in Science and Certificates requires the student to submit a petition in the admission and records office by the appropriate date. (Students should refer to the College Calendar to verify dates.)

CITIZENS' ADVISORY BOARDS

Citizens' Advisory Boards, composed of leaders in business, industry, labor, public agencies, and the professions are working with the administration to develop curricula.

The Advisory Boards assure that instructional programs are developed in accordance with the needs of business, industry and professions in the District.

The Advisory Boards advise the colleges on the need or desirability of a particular educational program or course, content of such programs or courses, performance standards, equipment and facilities, selection of students,

placement of students, technical information evaluation, teacher recruitment and financial and legislative matters.

The following Advisory Boards presently operate: Accounting, Administration of Justice, Architectural, Automotive, Computer Applications Systems, Dental Health Programs, Design Technology, Early Childhood Development, Electronics, Engineering, Fire Technology, Graphic Communications, Health Information Technology, Inspection, Interior Design, Machine Tool and Manufacturing, Medical Assisting, Nursing, Radio and Television Broadcasting, Real Estate, Service to Seniors, Welding. As new needs are identified, other Advisory Boards will be appointed to assist the college in developing appropriate programs.

CHABOT COLLEGE

Chabot College offers students a unique educational opportunity. The facilities have been planned to take advantage of new approaches to learning, to facilitate the development of experimental programs and to be adaptable to changes brought about by new technology.

As the college's population has grown since its opening in 1961, many modifications have taken place to accommodate changing curriculum and to help ensure students' academic success. Students can now go to the Tutorials Center or to the WRAC Center (Writing and Reading Across the Curriculum) for additional help with their studies. A newly renovated Disabled Student Resource Center offers high-tech equipment and personal counseling. The Employment and Career Services Center helps students find jobs and look toward their future. A new state-of-the-art computer lab in the Library has more than 120 Internet-ready computers available to students.

The Media Center contains a television studio equipped to send closed circuit educational television programs to many classrooms throughout the campus and to send programming over cable television.

Work was completed on a \$6 million project to remove architectural barriers to disabled students which includes the construction of elevators, and installation of new door-knobs and electric doors, and renovation of 70 restrooms.

Chabot's newest facility is the 40,000-square-foot computer and science building. Installation of indirect lighting and completion of state-of-the-art ballasts were completed in the Library. A 27,000-square-foot addition to the Ceramic and Sculpture labs was recently completed.

The campus has a main lecture hall seating 160 persons and lecture halls are provided in many of the other buildings. Each faculty office building contains seminar rooms which are divisible for conferences and meetings.

Other buildings house classrooms and laboratories for social science, language arts, humanities, international language, art, music, drama, physics and mathematics and physical education. Additional buildings house the student center, bookstore, and faculty and administration offices.

Special features include a 1,500-seat Performing Arts Center, planetarium, two gymnasiums, five athletic fields, 12 tennis courts, indoor handball and racquetball courts, new strength-training facilities, a 400-meter track, and a state-of-the-art fitness center.

The 1,500-seat Performing Arts Center was financed jointly under an agreement with the Hayward Area Recreation and Park District.

LIBRARY

The Chabot College Library is located in Building 100 and offers an extensive range of services to students, faculty, and staff. Print, non-print and electronic resources are available. Remote access to many of these resources, including the catalog of books and audiovisual materials and the magazine, journal and newspaper databases, is available via the Library's web page (www.chabotcollege.edu/library). Contact the Reference Desk for details 510-723-6764. The Library has courses in library research skills and Internet skills. The librarians, in collaboration with instructional faculty, offer orientations tailored to specific class needs. There is an electronic classroom for this purpose. Additionally, the Library has a large student computer lab, an audiovisual center, and group study rooms.

MEDIA SERVICES CENTER

The center provides multimedia products and services designed to support and enhance faculty instruction, class projects, and campus events. Some of the services provided are graphic arts, desktop publishing, offset printing, digital reproduction, media installation and circulation, and audiovisual system maintenance.

DISTANCE EDUCATION

Distance Education (DE) is an alternative mode of course delivery which provides students a flexible means of receiving education. At Chabot College, DE courses are presented in online, telecourse, CD-ROM, and multimedia formats.

OCCUPATIONAL WORK EXPERIENCE EDUCATION

The Occupational Work Experience Program enjoys a wide participation 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 opportunity to examine and utilize the latest techniques, procedures, and equipment in community agencies and business firms makes the student's classwork even more functional and relevant. Close coordination and supervision by the college insures that the Work Experience Program becomes a real learning opportunity related to that area of the student's studies.

RELATED OCCUPATIONAL WORK EXPERIENCE COURSES

The plan allows students to concurrently enroll in college courses while working. The course descriptions are found on page 139.

Work Experience Education is a requirement for graduation in many of the Occupational programs at the college. Students majoring in a program requiring Work Experience should enroll in that program's Work Experience course. All other students seeking elective or transferable credit may enroll in the Occupational Work Experience Courses.

Regulations governing the operation of Work Experience Education programs require that students meet the following:

1. Pursue a planned program of Work Experience which includes new or expanded responsibilities or learning opportunities beyond those experienced during periods of previous employment.
2. Have paid or volunteer employment in a field directly related to the college major.
3. Have the approval of the instructor/coordinator.

Additionally students must meet the following:

1. Students must be enrolled in a minimum of 7 units including Work Experience.
2. Be currently enrolled in a course in their major or planned academic program which is related to the Work Experience.

Under the Program 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. A cumulative total of 16 units may be earned (including the seminar units).

Additional information may be obtained from the Work Experience Office at Chabot College.

GENERAL EXPENSES

Every effort is made by the colleges to keep student expenses as low as possible. Major costs will be for books, supplies, and enrollment fees. Students who desire to park on college parking lots must also purchase a parking permit. The total cost to a typical student for these things is estimated to be \$400 per semester or \$800 per year. Partial costs of some textbooks can be recovered by reselling them to the college bookstore. Students are encouraged, however, to retain their books for future reference. Costs for room, board, transportation, clothing, recreation, medical and dental care, phone calls, postage, and spending money must be considered as standard living expenses incurred by all college students.

FEES

Enrollment Fee: \$26.00 per unit (subject to change).

Nonresident Tuition: Out-of-state students are required to pay \$152.00 per semester unit in addition to the enrollment fee and basic fees.

GENERAL INFORMATION

International, Non-immigrant Visa Tuition: International students and non-immigrant aliens attending on other visa types are required to pay \$155.00 per semester unit in addition to the enrollment fee and basic fees.

Mailing Fee: Students may pay a \$3.00 mailing charge each semester. This money is used for mailing costs for the registration card, grade report and registration appointment cards.

Student Body Fee: This is an optional \$5.00 fee.

Parking Fees: Students who wish to park their vehicles on College parking lots must purchase their parking permit or a ticket for each day that parking is desired. The fee is \$30.00 per semester-4 wheel vehicle; \$15.00 per semester-motorcycle, and \$2.00 for daily parking.

Student Health Fee: Mandatory health service fee of \$12 per semester to support health services for enrolled students. Information on exemptions may be obtained from the Director of Student Life, Room 2355, Building 2300 or by calling (510) 723-6915.

Admissions and Records Fees:

Transcripts	\$ 3.00
On-demand transcript	\$10.00
(includes one copy of transcript)	
Enrollment verification.....	\$ 2.00
Replacement of lost records	\$ 2.00
Application fee for international students.....	\$100.00

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. Updates to fee information will be made available on the College website at www.chabotcollege.edu or by contacting the Office of Admissions and Records at (510) 723-6703.



The academic and vocational programs at Chabot College reflect the diverse educational/career goals of our student population. Whether students are attending Chabot College to prepare to transfer to a four-year institution, gaining technical skills to enter a vocational field, or enriching their lives by pursuing an individualized education plan, they have the opportunity to have their efforts acknowledged by being awarded an Associate Degree, a Certificate of Achievement or a Certificate of Completion.

The program of study leading to the **Associate in Arts Degree (A.A.)** and the **Associate in Science Degree (A.S.)** has two primary components, (1) a focus of study in some field of knowledge (the major) and (2) a broad exposure to additional subject areas that are designed to prepare the student to acquire a greater understanding of the self, the physical and the social world (general education requirements). Students are eligible to receive an Associate in Arts or Associate in Science Degree after they have successfully completed an outlined program of study of a minimum of 60 semester units with a grade-point average of 2.0 or better and meet the graduation requirements as set forth on pages 17–20.

A **Certificate of Achievement** is designed to offer the student an opportunity to develop skills in a specific technical and/or vocational field. A Certificate of Achievement is awarded to those students who have successfully completed a minimum of 20 semester units of specifically approved courses, with a grade-point average of 2.0.

A **Certificate or Certificate of Completion** is designed to augment other degrees or occupational areas by targeting a very specific series of courses in the academic, vocational and/or technical field. A Certificate or Certificate of Completion is awarded to those students who have completed a minimum of 10 semester units of specifically approved courses, with a grade-point average of 2.0.

Students may develop an Individual Occupational Major, by working out the program with a counselor, for approval by the Division Dean of the Occupational Major and the Dean of Counseling.

Students earning a certificate, A.S., or A.A. degree in an Occupational/Technical area must complete a minimum of 12 units in residency at Chabot College within the degree major or certificate program. Students in articulated degree/transfer or Liberal Studies programs will need a total of 12 units of residency at Chabot College in general education, major, or elective courses.

Grades earned in non-degree-applicable courses (numbered 100–299) will not be used when calculating a student's degree applicable grade point average. No courses below the English 1A requirement are degree applicable.

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 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 which shall 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 or two quarters during the academic year on a continuing basis without a break of more than one semester excluding summer session. Any academic record symbol (A-F, 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 Chabot-Las Positas Community College Catalog Requirements and Continuous Attendance policy does 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.

GRADUATION REQUIREMENTS

REQUIREMENTS FOR THE DEGREE OF ASSOCIATE IN ARTS

A student is eligible for graduation with the ASSOCIATE IN ARTS DEGREE after completing all General Education requirements and all MAJOR requirements, plus electives to total 60 semester units of work with a cumulative grade point average of 2.0 or better. The General Education Requirements for the Associate in Arts Degree are listed below.

I. ASSOCIATE IN ARTS DEGREE (A.A.)

A. LANGUAGE AND RATIONALITY:

English Composition Complete a minimum of 3 SEM UNITS

English 1A, 52A, 70

Writing and Critical Thinking Complete a minimum of 3 SEM UNITS

Business 10 French 2A*, 2B
English 4, 7, 52B

Communication and Complete a minimum of 3 SEM UNITS

Analytical Thinking
Business 14, 16, 31 Industrial Technology 74
Computer Application Library Studies 3
Systems 8, 91 Mass Communications 8, 32
Computer Science 8, 10, Mathematics 1, 2, 12, 20, 31, 32,
14, 15, 19A, 91, 92 33, 35, 36, 37, 40, 43, 54, 54L,
Electronics and Computer 55, 55A, 55B, 65, 65B, 65L
Technology 65 Philosophy 12
Foreign Language 1A*, 1B* Psychology 5
Geography 20* Speech 1, 2B, 10, 11*, 30, 46
History 5*, 12* Theater Arts 25*

* May be used to fulfill one area only.

B. NATURAL SCIENCE . . . Complete a minimum of 3 SEM UNITS

Anatomy 1 Geography 1*, 1L, 8, 20*
Anthropology 1*, 1L Geology 1A, 10, 10L
Astronomy 1, 10, 20, 30 Microbiology 1
Biology 2A, 2B, 5, 10, 20, Physical Education 17
31, 50 Physical Science 15
Chemistry 1A, 8, 10, 30A, Physics 2A, 4A, 4B, 4C, 5, 11
30B, 31 Physiology 1
Ecology 10, 11, 12

* May be used to fulfill one area only.

C. HUMANITIES Complete a minimum of 3 SEM UNITS

Architecture 2A, 2B, 4A, Italian 1A*, 1B*
4B, 8A, 8B, 12, 14, 16 Japanese 1A*, 1B*
Art 1, 2A, 3A, 4, 5, 6, 10, Music 1, 2A, 2B, 2C, 2D, 3, 4, 12A,
16A, 17, 54, 67 14A, 43, 44, 45, 50
English 12, 13, 20, 21, 22, Philosophy 2, 4, 25, 50
32, 33, 34, 38, 45, 47, 48 Photography 50, 53A, 67
Foreign Language 2A Religious Studies 7, 50, 64, 65, 72
French 1A*, 1B*, 2A Sign Language 64, 65
General Studies 30*, 31 Spanish 1A*, 1B*, 5, 2A
German 1A*, 1B* Speech 2A, 5
History 1*, 2* Theater Arts 1A, 10, 12, 25*, 47,
Humanities 28, 50, 65, 48, 50
72, 75

* May be used to fulfill one area only.

D. SOCIAL AND BEHAVIORAL

SCIENCES Complete a minimum of 3 SEM UNITS

Administration of Justice Mass Communications 31
50, 60 Political Science 1*, 2*, 12*, 20*,
Anthropology 1*, 2, 3, 5, 25*, 30*, 40*
8, 12 Psychology 1, 2, 3, 6, 8, 12, 18,
Business 17, 36, 40 33, 45
Early Childhood 40, 87 Psychology-Counseling 1, 4, 13
Economics 1, 2, 5, 10, 12 Sociology 1, 2, 3, 4, 8, 10, 11, 30,
General Studies 30*, 39 31, 32
Geography 1*, 2, 3, 5, 12 Speech 11*
Health 8
History 1*, 2*, 5*, 7*, 8*,
12*, 19, 20*, 21*, 22*, 25*,
27*, 44

* May be used to fulfill one area only.

E. WELLNESS

1. Areas of Health Complete 3 SEM UNITS

a. Health 1, 4, Physical Education 18 or
b. A.A. Degree in Nursing or Dental Hygiene

2. Physical Education Complete 1 SEM UNIT

Physical Education 1, 2, 3, 4, 5, 6, 7, 12, 13, 13R, 14, 30–48, 50
Dance 1

Exemption is allowed for illness or physical disability by filing a physician's statement at the Admissions and Records Office. Students who hold an A.A./A.S. Degree or higher are also exempt.

AMERICAN INSTITUTIONS: Complete a minimum of 3 SEM UNITS

History 7*, 8*, 12*, 20*, 21*, 22*, 25*, 27*
Political Science 1*, 2*

* May be used to fulfill one area only.

AMERICAN CULTURES: (for new and returning students effective Fall 1995 and thereafter)

Complete one course identified as meeting the American Cultures requirement with a grade of "C" or higher or "CR". Where it is appropriate, the course can simultaneously satisfy other graduation or disciplinary requirements. Other courses meeting this requirement may be added during the academic year.

Anthropology 5 Psychology-Counseling 1, 13
English 32, 33 Sociology 1, 3, 30
History 5, 7, 8, 12, 27
Humanities 65

MATHEMATICS PROFICIENCY:

Proficiency in mathematics is required by passing one of the following courses with a grade of “C” or higher or “CR”. When appropriate, the course can simultaneously satisfy other graduation or disciplinary requirements.

Business 16

Electronics and Computer Technology 65

Industrial Technology 74

Mathematics 1, 2, 20, 31, 32, 33, 35, 36, 37, 40, 43, 54, 54L, 55, 55A, 55B, 65, 65B, 65L

Psychology 5

II. ADDITIONAL REQUIREMENTS

1. For career majors, all requirements for the major must be met plus electives to total 60 semester units.
2. In reference to unit requirements the Title 5 regulations state that at least 12 semester units must be completed in residence at the college granting the degree.
3. All transcripts from other colleges must be submitted to the Admissions and Records Office before a graduation evaluation may be made.

Students earning a certificate, A.S. or A.A. degree in an Occupational/Technical area must complete a minimum of 12 units in residency at Chabot College within the degree major or certificate program. Students in articulated degree or Liberal Studies programs will need a total of 12 units of residency at Chabot College in general education, major, or elective courses.

III. OTHER GRADUATION INFORMATION

1. Commencement exercises are held in late May or early June. All students receiving degrees during the current academic year are cordially invited to participate.
2. Students may receive degrees or certificates at the end of any semester or the summer session. Students should petition no later than the fifth instructional week of the semester in which they plan to complete the requirements. “Request for course evaluation for A.A./A.S. degree or certificate” forms are available at the Admissions and Records Office or online at <http://www.chabotcollege.edu/admissions/evaluation/requestdegcert.asp>



REQUIREMENTS FOR THE DEGREE OF ASSOCIATE IN SCIENCE

A student is eligible for graduation with the ASSOCIATE IN SCIENCE DEGREE after completing all General Education requirements and all MAJOR requirements, plus electives to total 60 semester units of work with a cumulative grade point average of 2.0 or better. The General Education Requirements for the Associate in Science Degree are listed below.

I. ASSOCIATE IN SCIENCE DEGREE (A.S.)

A. LANGUAGE AND RATIONALITY:

English Composition (Language and Rationality) Complete a minimum of 3 SEM UNITS

English 1A, 52A or 70

Communication and Analytical Thinking . . . Complete a minimum of 3 SEM UNITS

Business 14, 16, 31	Industrial Technology 74
Computer Application Systems 8, 91	Library Studies 3
Computer Science 8, 10, 14, 15, 19A, 91, 92	Mass Communications 8, 32
Electronics and Computer Technology 65	Mathematics 1, 2, 12, 20, 31, 32, 33, 35, 36, 37, 40, 43, 54, 54L, 55, 55A, 55B, 65, 65B, 65L
Foreign Language 1A*, 1B*	Philosophy 12
History 5*, 12*	Psychology 5
Geography 20*	Speech 1, 2B, 10, 11*, 30, 46
	Theater Arts 25*

** May be used to fulfill one area only.*

B. NATURAL SCIENCE. Complete a minimum of 3 SEM UNITS

Anatomy 1	Geography 1*, 1L, 8, 20*
Anthropology 1*, 1L	Geology 1A, 10, 10L
Astronomy 1, 10, 20, 30	Microbiology 1
Biology 2A, 2B, 5, 10, 20, 31, 50	Physical Education 17
Chemistry 1A, 8, 10, 30A, 30B, 31	Physical Science 15
Ecology 10, 11, 12	Physics 2A, 4A, 4B, 4C, 5, 11
	Physiology 1

** May be used to fulfill one area only.*

C. HUMANITIES Complete a minimum of 3 SEM UNITS

Architecture 2A, 2B, 4A, 4B, 8A, 8B, 12, 14, 16	Italian 1A*, 1B*
Art 1, 2A, 3A, 4, 5, 6, 10, 16A, 17, 54, 67	Japanese 1A*, 1B*
English 12, 13, 20, 21, 22, 32, 33, 34, 38, 45, 47, 48	Music 1, 2A, 2B, 2C, 2D, 3, 4, 12A, 14A, 43, 44, 45, 50
Foreign Language 2A	Philosophy 2, 4, 25, 50
French 1A*, 1B*, 2A	Photography 50, 53A, 67
General Studies 30*, 31	Religious Studies 1, 7, 50, 64, 65, 72
German 1A*, 1B*	Sign Language 64, 65
History 1*, 2*	Spanish 1A*, 1B*, 2A, 5
Humanities 28, 50, 65, 72, 75	Speech 2A, 5
	Theater Arts 1A, 10, 12, 25*, 47, 48, 50

** May be used to fulfill one area only.*

D. SOCIAL AND BEHAVIORAL

SCIENCES Complete a minimum of 3 SEM UNITS

Administration of Justice 50, 60	Mass Communications 31
Anthropology 1*, 2, 3, 5, 8, 12	Political Science 1*, 2*, 12*, 20*, 25*, 30*, 40*
Business 17, 36, 40	Psychology 1, 2, 3, 6, 8, 10, 12, 18, 33, 45
Early Childhood 40, 87	Psychology-Counseling, 1, 4, 13
Economics 1, 2, 3, 5, 10, 12	Sociology 1, 2, 3, 4, 8, 10, 11, 30, 31, 32
General Studies 30*, 39	Speech 11*
Geography 1*, 2, 3, 5, 12	
Health 8	
History 1*, 2*, 5*, 7*, 8*, 12*, 19, 20*, 21*, 22*, 25*, 27*, 44	

** May be used to fulfill one area only.*

E. HEALTH or AMERICAN INSTITUTIONS AND PHYSICAL EDUCATION

1. Health Education or American Institutions: Complete 3 SEM UNITS

Health 1, 4, Physical Education 18 or
History 7*, 8*, 12*, 20*, 21*, 22*, 25*, 27*, or
Political Science 1*, 2*

** May be used to fulfill one area only.*

2. Physical Education. Complete 1 SEM UNIT

Physical Education 1, 2, 3, 4, 5, 6, 7, 12, 13, 13R, 14, 30–48, 50
Dance 1

Exemption is allowed for illness or physical disability by filing a physician's statement at the Admissions and Records Office. Students who hold an A.A./A.S. Degree or higher are also exempt.

AMERICAN CULTURES: (Effective Fall 1995 and thereafter)

Complete one course identified as meeting the American Cultures requirement with a grade of "C" or higher or "CR". Where it is appropriate, the course can simultaneously satisfy other graduation or disciplinary requirements. Other courses meeting this requirement may be added during the academic year.

Anthropology 5	Psychology-Counseling 1, 13
English 32, 33	Sociology 1, 3, 30
History 5, 7, 8, 12, 27	
Humanities 65	

MATHEMATICS PROFICIENCY:

Proficiency in mathematics is required by passing one of the following courses with a grade of “C” or higher or “CR”. When appropriate, the course can simultaneously satisfy other graduation or disciplinary requirements.

Business 16

Electronics and Computer Technology 65

Industrial Technology 74

Mathematics 1, 2, 20, 31, 32, 33, 35, 36, 37, 40, 43, 54, 54L, 55, 55A, 55B, 65, 65B, 65L

Psychology 5

II. ADDITIONAL REQUIREMENTS

1. For career majors, all requirements for the major must be met plus electives to total 60 semester units.
2. In reference to unit requirements the Title 5 regulations state that at least 12 semester units must be completed in residence at the college granting the degree.
3. All transcripts from other colleges must be submitted to the Admissions and Records Office before a graduation evaluation may be made.

Students earning a certificate, A.S. or A.A. degree in an Occupational/ Technical area must complete a minimum of 12 units in residency at Chabot College within the degree major or certificate program. Students in articulated degree or Liberal Studies programs will need a total of 12 units of residency at Chabot College in general education, major, or elective courses.

III. OTHER GRADUATION INFORMATION

1. Commencement exercises are held in late May or early June. All students receiving degrees during the current academic year are cordially invited to participate.
2. Students may receive degrees or certificates at the end of any semester or the summer session. Students should petition for graduation no later than the fifth instructional week of the semester in which they plan to complete the requirements. “Request for course evaluation for A.A./A.S. degree or certificate” forms are available at the Admissions and Records Office or online at <http://www.chabotcollege.edu/admissions/evaluation/requestdegcert.asp>



This section of the catalog is designed to help students plan an academic program for transfer to a four-year college or university. It includes information about the transfer process as well as general education and lower division major requirements.

Chabot College provides the equivalent of the first two years of a four-year college or university program. Students with intentions to transfer to four-year colleges and universities may complete their lower division general education requirements AND lower division major field courses while at Chabot College. Students are advised to meet regularly with a counselor to assure a smooth transition to the transfer institution.

Current transfer flyers and official articulation agreements outlining specific transfer requirements are available in the Transfer Center, the Counseling Center, and the Articulation Office.

TRANSFER CENTER

The Chabot College Transfer Center specializes in working with students who intend to transfer to a 4-year college or university. The Transfer Center is located in Building 100, Room 146. For more information, students may call 723-6720. The following resources are available through the Transfer Center:

- Transfer assistance and information.
- College Catalogs
- Representatives from local universities available for transfer assistance
- Concurrent Enrollment and Cross Registration information
- Transfer related workshops
- Admission Application forms
- Personal statement assistance (UC)
- Transfer Admission Agreements (TAA) - forms and information (See page 23)
- Transfer application workshops
- University Transfer Day and Transfer Night
- Internet access to national and international transfer opportunities: ASSIST, College Source On-line, University transfer application
- Colleges and University Websites
- Education and scholarship information
- Major preparation information and assistance
- Scheduled tours to selected transfer institutions
- Other materials and assistance available as well

CONCURRENT ENROLLMENT AND CROSS REGISTRATION

Chabot College student have the opportunity to take courses at CSU East Bay and Mills College under "Cross Registration" or at UC Berkeley under "Concurrent Enrollment". Information, requirements, applications and assistance is available in the Transfer Center or see a counselor for further information.

CROSS-REGISTRATION WITH CALIFORNIA STATE UNIVERSITY, EAST BAY

Students who have completed 20 semester units at Chabot College may be eligible to cross-register with California State University, East Bay, while completing the requirements for transfer or an Associate in Arts Degree at Chabot College. Chabot College students who elect to "cross-register" may enroll in courses at the four year institution which are either: (1) upper division or (2) not offered at any time by Chabot College. For further information, contact the Counseling Center, Building 100.

CROSS-REGISTRATION WITH MILLS COLLEGE, OAKLAND

Students who have completed 20 semester units at Chabot College may be eligible to cross-register with Mills College, Oakland, while completing the requirements for transfer or an Associate in Arts Degree at Chabot College. Such students should contact the Director of Admissions and Records, Room 192, Chabot College, for further information.

CONCURRENT ENROLLMENT - UC BERKELEY

Chabot College students who have completed 20 UC transferable units and have at least a 2.4 G.P.A. in the transferable course work, may be eligible to participate in concurrent enrollment with UC Berkeley. Students will be allowed to take ONE lower division course a semester, for a maximum of two semesters. For further information, contact the Counseling Center, Building 100, 723-6718, for an appointment with a counselor.

R.O.T.C. (RESERVE OFFICERS TRAINING CORP) PROGRAM CROSS-TOWN AGREEMENT WITH THE 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 Chabot 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 Director of Admissions and Records, Room 170, Chabot College, for further information.

CONCURRENT ENROLLMENT

Chabot College provides opportunities for minor students to enroll in college level degree applicable courses for advance scholastic or advance vocational purposes. Students who desire to participate in concurrent enrollment must be recommended by their principal and have written parental permission. Concurrently enrolled students will be permitted to enroll in no more than 6 units per semester or 2 classes. The students will be treated as regular college students and are expected to comply with all College rules and regulations. At the completion of the course, the student receives college credit. They must arrange for their

own transportation to and from the College and provide their own books and equipment. (*This policy is subject to change, please contact the VP of Student Services for current information.*)

ARTICULATION

The Articulation Office procures and maintains course-to-course and major preparation agreements with 4-year transfer institutions, UC, CSU, private institutions, and Out-of-State schools. Chabot articulation services enables a seamless transfer for students. The Articulation Office maintains IGETC and CSU/GE Certification informational flyers, AA/AS GE flyers, reports curriculum updates to transfer schools, as well as ASSIST. The Articulation Office also provides resources and assistance for counselors, instructional faculty and students with course transferability concerns.

TRANSCRIPTS FROM OTHER COLLEGES AND UNIVERSITIES

Any student enrolled at Chabot College who have academic credit for courses taken at other accredited colleges/universities must submit official transcripts of that work to the Admissions and Records Office. The official transcripts are required for the following academic transactions:

1. AA/AS degree evaluations
2. Academic Renewal petitions
3. Prerequisite verifications or challenges
4. Financial Aid student education plans
5. Certification of CSU/GE or IGETC.

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

1. The course(s) must have been taken at an accredited college/university.
2. The course(s) must be lower division.
3. 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. (IGETC Certification requires a grade of "C")
4. The content of the course(s) must be recognized as equivalent to the current Chabot College course standards. The Dean of Counseling at Chabot College shall be responsible for determining course equivalency.

Under certain circumstances set forth in the College Academic Renewal Policy and Procedures, the student's substandard grades (D's and F's) may be excluded from the computation of current academic standing at Chabot College.

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 Admissions and Records Office at Chabot College. See a counselor for assistance with an unofficial evaluation of your courses and petition for an official evaluation.

ARTICULATION WITH 4-YEAR SCHOOLS

Many baccalaureate level courses offered at Chabot College have been articulated with UC, CSU and Private Institutions. Depending on the transferability of the course, the UC and CSU will accept up to 70 semester units of Chabot courses. The Articulation Office provides Chabot the following UC and CSU transferable and general education certification lists. Look for the following in the Counseling Office and/or Transfer Center.

- FLYER #100 - Transferable courses to CSU
- FLYER #101 - CSU/General Education Breadth Certification information
- FLYER #102 - Transferable courses to UC
- FLYER #129 - IGETC (UC/CSU) Certification information

ASSIST

www.assist.org

ASSIST, a data base computer software program, is specifically designed to provide course comparability information between the three public post-secondary systems in California, UC, CSU and CCC (California Community College). A CCC student transferring from the community colleges to the UC or CSU quickly realizes the complexity of determining which courses are comparable, since course number will probably be different from institution to institution. ASSIST provides that information. ASSIST also displays, major preparation agreements between the CCC and many of the CSU/UC transfer schools, as well as complete lists of courses acceptable for transfer (UC & CSU) and IGETC and CSU/GE lists for all the CCCs. Chabot College strongly recommends that students see a counselor for assistance.

CALIFORNIA ARTICULATION NUMBER (CAN) SYSTEM AND CSU. LDTP: LOWER DIVISION TRANSFER PATTERNS

Chabot College participates in the California Articulation Number (CAN) System. The CAN System, based on course-to-course articulation, simplifies the identification of transferable, lower division courses by assigning an identifying CAN number to courses that are comparable from different institutions. Course numbers from different institutions may be different, but their CAN number will be the same, thus enabling easier course identification. The CAN number for those Chabot courses that are qualified is cited following the course description in the Chabot catalog. Chabot currently has over 80 CAN qualified courses. A list of qualified CAN courses is available in the Counseling Office.

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 ultimate goal of the LDTP is to 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. Anticipated implementation of this program is Fall 2007. Check with the Transfer Center or a counselor for more details.

PREPARATION OF STUDENTS FOR TRANSFER

A Chabot College student can transfer to a four-year college or university as a junior by completing the following requirements with the grade point required by the specific transfer institution:

1. **Lower-division Major Requirements.** Courses in the major allow one to concentrate in depth in a field of study. Students should take the specific lower division courses required for their chosen major. Articulation agreements which list detailed information concerning specific majors and which describe course transferability and applicability between Chabot College and baccalaureate degree granting institutions are available from a counselor or in the Articulation Office of Chabot College.
2. **General Education Requirements.** General education reflects the belief that a portion of a student's education should be devoted to broadening a student's awareness. Courses in writing, critical thinking, mathematics, sciences, arts and humanities, and the social sciences are included in general education. Several different patterns of general education courses can be used to fulfill the lower division general education breadth requirements at four-year institutions. They include UC and CSU campus-specific patterns, CSU's General Education Breadth Requirements, and the Intersegmental General Education Transfer Curriculum (IGETC).
3. **Electives.** These are courses of choice taken in addition to courses for the major and general education requirements. The list of elective transferable courses to the UC or CSU may be obtained through the Transfer Center or Counseling Area.

TRANSFER ADMISSION AGREEMENTS (TAA)

A TAA is a formal, written agreement that outlines the 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. Chabot College has Transfer Admission Agreements with the following four-year institutions: UC Davis, UC Riverside, UC Santa Cruz, CSU San Jose, CSU East Bay, CSU Monterey Bay, and University of Santa Clara. Please consult with your counselor for additional

information about Transfer Admission Agreements, or the Transfer Center.

CALIFORNIA STATE UNIVERSITY (CSU)

WWW.CSUMENTOR.EDU

ADMISSION REQUIREMENTS FOR TRANSFERS

If you have completed college units after leaving high school, you are considered a "transfer" student. Students who have completed college units before they graduated from high school or during the summer between high school graduation and CSU enrollment are considered first-time freshmen and must meet those CSU admission requirements for first-time freshman.

There are two types of transfer students, lower division transfer and upper division transfer. **Lower division** transfer students are those who have completed less than 60 or fewer transferable semester units (90 quarter units). **Upper division** transfers have completed 60 or more transferable semester units (90 quarter units).

Lower Division Transfer Admission Requirements:

You are eligible for admission to the CSU if you:

- Have a college GPA (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 CSU admission requirements for first-time freshman or have successfully completed necessary course to make up deficiencies you had in high school if you did not complete the 1 5-unit pattern of college preparatory subjects.
- Meet the eligibility index required of a first-time freshman to CSU.
- Some CSU campuses require completion of English Composition and GE Math.
- Contact the CSU campus of your choice to determine your status as a lower division transfer student and whether that CSU accepts lower division transfers.

Upper Division Transfer Admission Requirements:

You are eligible for admission to the CSU if you:

- Completed or will complete 60* semester (90) quarter or more CSU transferable units with an overall GPA of 2.0 or better. Check with a counselor concerning individual campus limitations regarding taking classes during the semester prior to admissions.
- 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 semester units (45 quarter units) of courses equivalent to general education requirements with

* Some CSU institutions may allow 56 units. Check with individual campuses for their requirements. Check with a counselor for assistance.

a grade of C or better (See Flyer #101, Areas A-E) including general education requirements in A1. Oral Communication, A2. English Composition, A3. Critical Thinking and B4. Mathematics/Quantitative Reasoning (See Flyer # 101, Area A 1, A2, A3 and B4 all with a "C" grade)

- CSU will apply up to 70 transferable lower division units toward the baccalaureate degree.

GENERAL EDUCATION REQUIREMENTS FOR CALIFORNIA STATE UNIVERSITY

To earn a bachelor's degree from the California State University, each student must complete a program of general education. Chabot College offers two general education patterns which enable students to meet, prior to transfer, all of the lower-division general education requirements. Students can complete either the Intersegmental General Education Transfer Curriculum (IGETC) or the CSU General Education Breadth Requirements.

Intersegmental General Education Transfer Curriculum (IGETC) FLYER #129

1. English Communication—9 sem units
2. Mathematical Concepts and Quantitative Reasoning—3 sem units
3. Arts and Humanities—9 sem units
4. Social and Behavioral Sciences—9 sem units
5. Physical and Biological Sciences—7-9 sem units
6. U.S. History, Constitution and American Ideals—6 sem units

The IGETC *must be completed in its entirety prior* to transfer. Students who do not complete the entire program before transfer will be subject to the general education requirements of the campus or college to which they transfer. Each class must have a "C" or "CR" or better grade. Advanced Placement (AP) scores of 3, 4, or 5 can be used to satisfy IGETC requirements (see the Advanced Placement Chart in this catalog) if Chabot College offers a comparable course.

CSU General Education Breadth Requirements FLYER #101

- A. Communications in the English Language and Critical Thinking—9 sem units
- B. Physical and Life Sciences, Mathematics—9 sem units
- C. Arts, Literature, Philosophy, Foreign Languages—9 sem units
- D. Human Social, Political and Economic Institutions and Behavior—9 sem units
- E. Understanding and Self Development—3 sem units

California State University also has an U.S. History, Constitution and American Ideals graduation requirement which can be satisfied prior to transfer. See your counselor for the list of courses that satisfies this requirement.

UNIVERSITY OF CALIFORNIA (UC)

WWW.UNIVERSITYOFCALIFORNIA.EDU

ADMISSION REQUIREMENTS FOR TRANSFERS

(Effective Fall 1998)

Current Requirements

1. Students who were eligible for admission to the University when they graduated from high school—meaning they satisfied the Subject, Scholarship, and Examination Requirements—are eligible to transfer if they have a "C" (2.0) average in their transferable college coursework.
2. Students who met the Scholarship Requirement and examination requirements but did not satisfy the Subject Requirement must take transferable college courses in the subjects they are missing, earn a grade of "C" or better in each of these required courses, and earn an overall "C" (2.0) average in all transferable college coursework to be eligible to transfer.
3. Students who met the Scholarship Requirement but did not meet the Examination Requirement must complete a minimum of 12 semester (18 quarter) units of transferable work and earn an overall "C" (2.0) average in all transferable college coursework completed.
4. Students who were not eligible for admission to the University when they graduated from high school because they did not meet the Scholarship Requirement must:
 - a. Complete 60 semester or 90 quarter units of transferable college credit with a grade point average of at least 2.4, *and*
 - b. Complete a course pattern requirement to include:
 1. Two transferable college courses (3 semester or 4-5 quarter units each) in English composition; and
 2. One transferable college course (1 semester or 4-5 quarter units) in Mathematical Concepts and Quantitative Reasoning; and
 3. Four transferable college courses (3 semester or 4-5 quarter units each) chosen from at least two of the following subject areas; the Arts and Humanities, the Social and Behavioral Sciences, the Physical and Biological Sciences.

Important note: Higher grade point averages than those listed above are required at some campuses and for some majors.

GENERAL EDUCATION REQUIREMENTS FOR THE UNIVERSITY OF CALIFORNIA

To earn a bachelor's degree from the University of California, each student must complete a program of general education. To meet the general education requirements for most majors within the UC, students can complete either the Intersegmental General Education Transfer Curriculum (IGETC) or the general education requirements of the

transfer campus. It is not advisable for all transfer students to follow IGETC. Some students may be better served by taking courses which fulfill the requirements of the UC campus to which they plan to transfer. The counseling office has a list of four-year schools and majors for which the IGETC is not advisable. Students are advised to consult a counselor for information about the general education pattern that will be best for them. www.assist.org is also a good resource.

Intersegmental General Education Transfer Curriculum (IGETC) Certification FLYER #129

1. English Communication—6 sem units/8–9 qtr units
2. Mathematical Concepts and Quantitative Reasoning—3 sem units/4–5 qtr units
3. Arts and Humanities—9 sem units/12–15 qtr units
4. Social and Behavioral Sciences—9 sem units/12–15 qtr units
5. Physical and Biological Sciences—7–9 sem units/9–12 qtr units
6. Language other than English (UC requirement only)

Students shall demonstrate proficiency in a language other than English equal to 2 years of high school study in the same language.

The IGETC must be completed in its entirety prior to transfer. Students who do not complete the entire program before transfer will be subject to the general education requirements of the campus or college to which they transfer. Each class must have a “C”, “CR” or better grade. Advanced Placement (AP) scores of 3, 4, or 5 can be used

to satisfy IGETC requirements (see the Advanced Placement Chart in this catalog) if Chabot College offers a comparable course.

PARTIAL IGETC CERTIFICATION

If a student is unable to complete one or two IGETC requirements (areas 3–5), the last term before transfer, due to “extenuating circumstances,” partial IGETC certification may be possible prior to transfer. See a Counselor for details.

CERTIFICATION OF GENERAL EDUCATION FOR TRANSFER TO UC OR CSU

Upon a student’s request Chabot College will certify the completion of the Intersegmental General Education Transfer Curriculum (IGETC) or the CSU General Education Breadth Requirements. Students who transfer without certification will have to meet the general education requirements of the specific campus to which they are transferring. Certification is not automatic and must be requested after the completion of the last term prior to transfer. This request should be made in the Admissions and Records Office when final transcripts are sent to the transfer school. Students are encouraged to seek the advice of a Counselor, Building 100.



ADVANCED PLACEMENT PROGRAM

ADVANCED PLACEMENT PROGRAM

Chabot College recognizes the following courses and credits for the following Advanced Placement (AP) Exam scores. These will apply to the completion of GE requirements for AA/AS Degrees, CSU General Breadth Certification and IGETC Certification and Chabot prerequisite requirements. Official copies of the AP Exam scores must be on file with Chabot College and an evaluation requested with the Admissions & Records Office.

Because each college and university evaluates AP scores

differently, students should contact the institution to which they are transferring regarding AP scores meeting specific requirements. For example, some AP scores may meet university GE requirements, but not requirements for specific majors. See a Chabot counselor for assistance.

Students will not receive credit for a course if they have already been granted credit for that course using AP examination results. Transfer institutions may not grant credit for taking a course that was awarded AP examination credit.

CHABOT COLLEGE COLLEGE BOARD ADVANCED PLACEMENT (AP) EXAMINATION CREDITS

AP Examination	AP Score	Subject Credit Given For:	Prerequisite Met For The Following Course(s)	Chabot Credits Issued For Graduation	1. AA/AS GE 2. CSU/GEB 3. IGETC Requirements Met
ART, History	3, 4, 5	Art 4 or 5	n/a	3 units	1. Satisfies Area C 2. 3 units toward Area C1 3. 3 units toward Area 3, Art
ART, Studio	3, 4, 5	n/a	n/a	3 units portfolio review required	1. Satisfies Area C 2. Not applicable 3. Not applicable
BIOLOGY	3, 4, 5	Biology 31	Anatomy 1 Microbiology 1	4 units	1. Satisfies Area B 2. 3 units toward Area B2 (no lab units) 3. Area 5, Group B (no lab units)
CALCULUS AB	3, 4, 5	Math 1	Math 2 Math 8 Math 35 Physics 4A	5 units	1. Area A, C.A.T. and Math Proficiency 2. 3 units toward Area B4 3. Satisfies Area 2
CALCULUS BC	3, 4, 5	Math 2	Math 3 Math 4 Math 6 Physics 4B	5 units	1. Area A, C.A.T. and Math Proficiency 2. 3 units toward Area B4 3. Satisfies Area 2
CHEMISTRY	3, 4, 5	Chemistry 1A	Biology 2A Chemistry 1B Engineering 45	5 units	1. Satisfies Area B 2. 6 units toward Area B1 and B3 (lab) 3. Satisfies Area 5, Group A (no lab units)
ECONOMICS MICRO	3, 4, 5	Economics 1	n/a	3 units	1. Satisfies Area D 2. 3 units toward Area D2 3. 3 units toward Area 4
ECONOMICS MACRO	3, 4, 5	Economics 2	n/a	3 units	1. Satisfies Area D 2. 3 units toward Area D2 3. 3 units toward Area 4
ENGLISH Language & Composition	3, 4, 5	English 1A	English 4 or 7	3 units	1. 3 units toward Area A (1.1) 2. 3 units toward Area A2 3. Satisfies Area 1, Group A

ADVANCED PLACEMENT PROGRAM

AP Examination	AP Score	Subject Credit Given For:	Prerequisite Met For The Following Course(s)	Chabot Credits Issued For Graduation	1. AA/AS GE 2. CSU/GEB 3. IGETC Requirements Met
ENGLISH Literature & Composition	3, 4, 5	English 1A	English 4 or 7	3 units	1. 3 units toward Area A (1.2) 2. 6 units toward Area A2 and Area C2 3. Satisfies Area 1, Group A or 3 units toward Area 3, Humanities
EUROPEAN HISTORY	3, 4, 5	History 1 or 2	n/a	3 units	1. Satisfies Area C 2. 3 units toward Area D6 3. 3 units toward Area 4
FRENCH Language	3, 4, 5	French 1B	French 2A	5 units	1. Satisfies Area A, C.A.T., C 2. 6 units toward Area C2 3. Satisfies Language Proficiency
GERMAN Language	3, 4, 5	German 1B	n/a	5 units	1. Area 1, C.A.T. and/or Area C 2. 6 units toward Area C2 3. Satisfies Language Proficiency
GOVERNMENT & POLITICS United States	3, 4, 5	Political Science 1	n/a	3 units	1. Satisfies American Institutions, Poli Sci 1 2. 3 units toward Area D8 (not used for A.1.) 3. 3 units toward Area 4
GOVERNMENT & POLITICS Comparative	3, 4, 5	Political Science 20	n/a	3 units	1. Satisfies American Institutions, Poli Sci 20 2. 3 units toward Area D8 (not used for A.1.) 3. 3 units toward Area 4
MUSIC THEORY	3, 4, 5	Music 2A & 2B	n/a	8 units	1. Not applicable 2. 3 units toward Area C1 3. 3 units toward Area 3A
PHYSICS B	3, 4, 5	Physics 4A	Engineering 36 Engineering 43 Engineering 45 Physics 4B	5 units	1. Satisfies Area B 2. 6 units toward Area B1 & B3 3. Satisfies Area 5, Group A (no lab units)
PHYSICS C, Mechanical	3, 4, 5	Physics 4A	Physics 4B	5 units	1. Satisfies Area B 2. 3 units toward Area B1 & B3 3. Satisfies Area 5, Group A (no lab units)
PHYSICS, Electricity, Magnetism	3, 4, 5	Physics 4B	Physics 4C	5 units	1. Satisfies Area B 2. 3 units toward Area B1 and B3 (lab) 3. Area 5, Group A (no lab units)
PSYCHOLOGY	3, 4, 5	Psychology 1	n/a	3 units	1. Satisfies Area D 2. 3 units toward Area D9 3. 3 units toward Area 4

ADVANCED PLACEMENT PROGRAM

AP Examination	AP Score	Subject Credit Given For:	Prerequisite Met For The Following Course(s)	Chabot Credits Issued For Graduation	1. AA/AS GE 2. CSU/GEB 3. IGETC Requirements Met
SPANISH Language	3, 4, 5	Spanish 1B	Spanish 2A	5 units	1. Area A, C.A.T., C 2. 3 units toward Area C2 3. Satisfies Language Proficiency
STATISTICS	3, 4, 5	Math 43	n/a	4 units	1. Satisfies 3 units, Area A, C.A.T. and Math Proficiency 2. 3 units toward Area B4 3. Satisfies Area 2
U.S. HISTORY	3, 4, 5	History 7 or 8	n/a	3 units	1. Satisfies American Institutions (Hist 7 or 8) 2. 3 units toward Area D6 (not for A.I.) 3. 3 units toward Area 4

Students will not receive credit for a course if they have already been granted credit for that course using AP examination results. Transfer institutions may not grant credit for taking a course that was awarded AP examination credit.

DEGREE AND CERTIFICATE PROGRAMS

Program	Associate in Arts	Associate in Science	Certificate of Achievement	Certificate of Completion	Certificate
Accounting		X			
Accounting Technician				X	
Administration of Justice	X				
Administrative Assistant		X	X		
Aquatics			X	X	
Architecture	X	X			
Art (General)	X				
Art-Emphasis/Ceramics	X				
Art-Emphasis/Painting	X				
Art-Emphasis/Sculpture	X				
Automotive Technology		X			
Automotive Maintenance Technology			X		
Automotive Chassis Technology			X		
Automotive Drivetrain Technology			X		
Automotive Engine Machining			X		
Automotive Engine Performance Technology			X		
Behavioral Science (General)	X				
Biology	X				
Biology/Emphasis in Allied Health	X				
Business		X			
Business Administration	X				
Chemistry		X			
Coaching			X	X	
Computer Application Systems—Software Specialist		X			
Computer Science (General)	X	X			
Computer Science (Emphasis in Mathematics)	X	X			
Creative Writing					X
Dental Hygiene	X				
Early Childhood Development	X				
Early Childhood Development (Basic Teacher)			X		

DEGREE AND CERTIFICATE PROGRAMS

Program	Associate in Arts	Associate in Science	Certificate of Achievement	Certificate of Completion	Certificate
Early Childhood Development (Associate Teacher)				X	
Electronics & Computer Technology		X	X		
Electronics Assembly				X	
Engineering Technology - Electronics		X			
Engineering Technology - Manufacturing		X			
Ethnic Studies	X				
Fire Technology	X		X		
Fitness Instructor			X	X	
French	X				
Geography	X				
Graphic Design	X			X	
Humanities (General)	X				
Illustration					X
Industrial Technology		X			
Inspection and Pipe Welding				X	
Interior Design		X	X		
International Studies	X				
Journalism	X				
Liberal Studies	X				
Machine Tool Technology		X			
Machinist			X		
Management				X	
Marketing			X		
Mass Communications	X				
Mathematics	X	X			
Medical Assisting	X		X		
Multicultural Awareness/Relations Service Provider				X	

DEGREE AND CERTIFICATE PROGRAMS

Program	Associate in Arts	Associate in Science	Certificate of Achievement	Certificate of Completion	Certificate
Multicultural Awareness/Self Reflection				X	
Music	X				
Numerical Control		X			
Numerical Control Programmer (Machinist)			X		
Nursing	X				
Nursing Program for LVN	X				
Office Technology			X	X	
Photography	X			X	
Physical Education	X	X			
Physics		X			
Psychology-Counseling-Human Services	X	X			
Radio & Television Broadcasting	X				
Real Estate	X		X		
Retail Management		X	X		
Retailing				X	
Small Business Management				X	
Social Science (General)	X				
Software Specialist			X		
Spanish	X				
Speech Communication	X				
Sports Injury Care			X	X	
Technical Illustration		X			
Tool Maker			X		
Welding			X		
Welding Technology		X			
Writing					X

Semester Units—All courses in this catalog are described in semester units. One unit is equivalent to three hours of recitation, study or laboratory work per week throughout a semester.

Numbering System and Transferability of Courses—The system used in designation of courses is established to indicate the intent of the course and its relationship to the offerings of four year colleges and universities. Courses numbered 100 and above are not for A.A. Degree, A.S. Degree or transfer credit. Students may not receive more than 30 semester units for precollegiate basic skills courses (ESL and learning disabled students are exempted).

Special Numbers and Rubrics—The following special numbers and rubrics are used with a variety of course subject titles. Refer to the catalog listing for further description.

- 9 Colloquia
- 29 Independent Study (Transfer)
- 49 Contemporary Studies
- 97 Apprentice Courses
- 99 Special Studies
- 100–149 Basic Skills
- 150–199 Continuing Education Studies
- 200–299 Community Interest Studies (Non-Credit)

CLASS SCHEDULE—The specific information regarding the days, hours, instructors and rooms in which classes will be held in the coming semester is contained in the Class Schedule which is available from the Bookstore prior to the start of the semester.

REGISTRATION—A student must be registered in a course within the officially designated time, to receive credit.

CALIFORNIA ARTICULATION NUMBER (CAN) SYSTEM—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 campus that has been 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. See a counselor if you need assistance.

COURSE ATTRIBUTES AND TRANSFER DESIGNATIONS—Look at the end of course descriptions to see the course attributes for application to the AA/AS Degree on transfer.

The following chart explains the attribute designations.

AA/AS: Course will satisfy a GE area for the AA/AS degree.

CSU: Course will transfer to the California State University. Refer to Flyer #100.

CSU: “Letter/number”: indicates the CSU/GE Area satisfied by this course. For example “B2” means that the course will satisfy a Life Science lecture requirement. See Flyer #101 for the CSU/GE requirements.

UC: Course will transfer to the University of California. Refer to Flyer #102.

IGETC: “Area letter/number”: indicates the IGETC area satisfied by this course. For example IGETC Area 4 means that the course will satisfy a Social and Behavioral Science requirement. Refer to Flyer #129.

CAN: See description above

ACCOUNTING

(See Business)

ACCOUNTING TECHNICIAN

(See Business)

ADMINISTRATION OF JUSTICE (ADMJ)

DEGREE

AA—ADMINISTRATION OF JUSTICE

The Administration of Justice curriculum is designed to prepare students for careers in the fields of law enforcement, probation, parole, security, and related criminal justice fields along with related technical occupations. The two-year program combines instruction in corrections, law enforcement and security with general education courses required for graduation. Students can earn an Associate in Arts degree in Administration of Justice or Certificates of Completion in Correctional Science or Security. The program has been authorized by the Commission on Peace Officer Standards and Training and the Board of Corrections to offer certain technical and special courses.

ADMINISTRATION OF JUSTICE
ASSOCIATE IN ARTS DEGREE

FRESHMAN YEAR FALL SPRING

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

SOPHOMORE YEAR FALL SPRING

Administration of Justice 63 (Criminal Investigation) . . .	3
Administration of Justice 70 (Community Relations)	3
Administration of Justice**	4-6
Health 60 (Responding to Emergencies)	1
Total	23-25

General Education Courses
For specific General Education courses refer to catalog section on Graduation Requirements.
Total minimum units required **60**

**Administration of Justice Options are to be selected from:
Administration of Justice 55, 59, 62, 69, 74, 79, and 89.

ADMINISTRATION OF JUSTICE
(ADMJ)

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 various subsystems, role expectations, and their interrelationships; theories of crime, punishment, and rehabilitation; ethics, education and training for professionalism in the system. 3 hours. Transfer: CSU, UC; AA/AS; CSU/GE: DO; (CAN AJ 2).

54 INVESTIGATIVE REPORTING **3 UNITS**

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

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. Transfer: CSU.

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. Transfer: CSU.

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 and other code sections; case law, methodology, and concepts of law as a social force. 3 hours. Transfer: CSU, UC; AA/AS; CSU/GE: D8; (CAN AJ 4).

61 EVIDENCE **3 UNITS**

(Included in CORE curriculum of baccalaureate degree-granting institutions.)
Origins, 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. Transfer: CSU.

62 THE JUSTICE SYSTEM **3 UNITS**

(Included in CORE curriculum of baccalaureate degree-granting institutions.)
Role and responsibilities of each segment within the Administration of Justice System: law enforcement, judicial, corrections. Past, present and future exposure to each sub-system procedure from initial entry to final disposition and the relationship each segment maintains with its system members. Prerequisite: Administration of Justice 50 *(completed with a grade of "C" or higher)*. 3 hours. Transfer: CSU, UC.

63 CRIMINAL INVESTIGATION **3 UNITS**

(Police Academy does not satisfy prerequisite.)
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. Transfer: CSU (CAN AJ 8).

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.

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. Transfer: CSU, UC.

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.

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 be murder, suicide, accidental or natural. Emphasis on importance of the death scene related to investigation of course. 3 hours.

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. Transfer: CSU.

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.

91 RESERVE MODULE A: FIREARMS **1 1/2 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)*. 24 total hours.

ADMINISTRATIVE ASSISTANT

(See Computer Applications Systems)

ANATOMY

(See Biological Sciences)

ANTHROPOLOGY (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. Transfer: CSU, UC; AA/AS; CSU/GE: B2, D1; IGETC: Area 4, 5B; (CAN ANTH 2).

1L PHYSICAL ANTHROPOLOGY LABORATORY 1 UNIT

Laboratory exercises developed as an adjunct to Anthropology I (introduction to Physical Anthropology) including the identification of fossils through examination of fossil casts, the study of human artifacts, observation of primate behavior and structure, and problem solving in case studies of human genetics. Prerequisite: Anthropology I (may be taken concurrently). 3 hours laboratory. Transfer: CSU, UC; AA/AS; CSU/GE: B3; IGETC: Area 5B LAB.

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. Transfer: CSU, UC; AA/AS; CSU/GE: D1; IGETC: Area 4; (CAN ANTH 6).

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. May be offered in Distance Education delivery format. 3 hours. Transfer: CSU, UC; CSU/GE: D1; IGETC: Area 4; (CAN ANTH 4).

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 IQ, testing. 3 hours. Transfer: CSU, UC; AA/AS; CSU/GE: D1, D3; IGETC: Area 4.

8 NATIVE AMERICAN CULTURES 3 UNITS

Survey of the Native American cultures of North America from an anthropological perspective, including cultural developments from prehistory to the present. Emphasis on the great variety of Native American perspectives and traditions, including kinship, religion, political, social and economic institutions, and attitudes towards humans, animals, and nature. Current issues including movements for social and political justice and cultural survival. 3 hours. Transfer: CSU, UC; AA/AS; CSU/GE: D1, D3; IGETC; Area 4.

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. Transfer: CSU, UC; AA/AS; CSU/GE: D1, D3; IGETC: Area 4.

APPRENTICESHIP

Each and every apprenticeship program approved for offering in California has a "Related Instruction" component to accompany the on-the-job training associated with that particular apprenticeship. The Instruction is offered by a local educational agency, usually a community college, in cooperation with a local Joint Apprenticeship Committee who has operational responsibility for the apprenticeship program. Each registered apprentice takes classes covering such topics as principles and practices of the occupation, laws, relating to the workers, safety procedures, tools and equipment of the trade, communications, mathematics and science. Chabot College is approved by the Chancellor's Office California Community Colleges, to offer Related Instruction for the following programs:

- Automotive Apprenticeship
- Electrical Apprenticeship
- Roofing Apprenticeship
- Sound & Communications Apprenticeship
- Telecommunications Apprenticeship

To enroll as an apprentice or inquire about VA benefits for apprentices, a person must contact the Joint Apprenticeship Committee for the individual trade. For information on how to contact a Joint Apprenticeship Committee, call the Chabot College Division of Applied Technology and Business at 510.723.6653.

ARCHITECTURE (ARCH)

ARCHITECTURE TRANSFER PREPARATION

RECOMMENDED COURSES

This recommendation is based on the classes accepted for transfer by California State Colleges and Universities. These courses are designed to satisfy lower-division major requirements at four-year institutions. Variations in requirements exist at specific universities or for specific programs. Therefore, it is essential that students refer to catalogs of proposed universities and consult counselors and architecture faculty as they prepare their programs. The classes listed represent a minimum for most schools; additional courses will improve level of preparation. This recommended course list assumes high school preparation including Trigonometry, Pre-calculus Mathematics, Physics, Art, and English.

FRESHMAN YEAR	FALL	SPRING
Architecture 2A (Architectural Drawing and Graphics I)	3	
Architecture 31A (Photoshop I)	1½	
Architecture 32A (Illustrator I)	1½	
Architecture 68 (AutoCAD for Architecture and Interior Design)	3	
Mathematics 1 (Calculus I)	5	
Architecture 2B (Architectural Drawing and Graphics II)	3	
Architecture 33 (3-D Modeling with Form•Z)	3	
Architecture 14 (California Architecture and Urban Design)	3	
Mathematics 2 (Calculus II)	5	

SOPHOMORE YEAR	FALL	SPRING
Architecture 4A (Architectural Drafting Principles I)	3	
Architecture 8A (Fundamentals of Architectural Design I)	4	
Architecture 12 (Construction Materials and Methods)	3	
Physics 4A (General Physics I)	5	
Architecture 4B (Architectural Drafting Principles II)	3	
Architecture 8B (Fundamentals of Architectural Design II)	4	
Architecture 16 (Landscape Architecture)	2	
Total		52

ARCHITECTURE DEGREE: AA—ARCHITECTURE AS—ARCHITECTURE

Students can earn an Associate in Arts or Associate in Science degree in Architecture.

ARCHITECTURE

ASSOCIATE IN ARTS OR ASSOCIATE IN SCIENCE DEGREE
FRESHMAN YEAR FALL SPRING

Architecture 2A (Architectural Drawing and Graphics I)	3
Architecture 31 A (Photoshop I)	1½
Architecture 32A (Illustrator I)	1½
Architecture 68 (AutoCAD for Architecture and Interior Design) or Interior Design 68 (AutoCAD for Architecture and Interior Design)	3
Architecture 2B (Architectural Drawing and Graphics II)	3
Architecture 33 (3-D Modeling with Form•Z)	3
Architecture 14 (California Architecture and Urban Design)	3

SOPHOMORE YEAR FALL SPRING

Architecture 4A (Architectural Drafting Principles I)	3
Architecture 8A (Fundamentals of Architectural Design I)	4
Architecture 12 (Construction Materials and Methods)	3
Architecture 4B (Architectural Drafting Principles II)	3
Architecture 8B (Fundamentals of Architectural Design II)	4
Architecture 16 (Landscape Architecture)	2
Total	37

General Education Courses
For Specific General Education courses refer to catalog section on Graduation Requirements
Total minimum units required **60**

ARCHITECTURE (ARCH)

2A ARCHITECTURAL DRAWING AND GRAPHICS I 3 UNITS

Introduction to freehand and mechanically constructed drawings employing orthographic, axonometric and linear perspective drawing systems to represent three-dimensional form and environments on two-dimensional surfaces. Emphasis on the understanding of basic drawing conventions, their implications and applications. Strongly recommended: Art 2A (may be taken concurrently), 2 hours lecture, 4 hours studio. Transfer: CSU, UCB; AA/AS.

2B ARCHITECTURAL DRAWING AND GRAPHICS II 3 UNITS

Continuation of the content and issues introduced in Architecture 2A plus the theories and methods for applying shadows, reflections, materials, entourage, and color in a variety of drawing types. Layout and integration of composite drawings in support of the process and presentation of architectural designs. Prerequisite: Architecture 2A (completed with a grade of "C" or higher). 2 hours lecture, 4 hours studio. Transfer: CSU, UCB; AA/AS.

4A ARCHITECTURAL DRAFTING PRINCIPLES I 3 UNITS

Introduction to principles and practice of architectural drafting with emphasis on working drawings for wood frame construction; introduction to drafting concepts and conventions for architectural working drawings, basic building systems, and architectural applications of computer-aided drafting technology. Prerequisite: Architecture 68 (completed with a grade of "C" or higher)*. 2 hours lecture, 4 hours studio. Transfer: CSU; AA/AS.

*Or equivalent.

4B ARCHITECTURAL DRAFTING PRINCIPLES II**3 UNITS***(May be repeated 3 times)*

Continuation of Architecture 4A with emphasis on architectural working drawings of non-residential buildings with wood, masonry, steel and concrete structures. Application of advanced computer-aided drafting techniques for architectural construction documents will be reviewed, as will the use of Internet resources, and CD-ROM based information sources, including *Architectural Graphic Standards*, *Sweets Catalogs*, and the *Uniform Building Code*. Prerequisite: Architecture 4A (completed with a grade of "C" or higher). 2 hours lecture, 4 hours studio. Transfer: CSU; AA/AS.

8A FUNDAMENTALS OF ARCHITECTURAL DESIGN I**4 UNITS**

Introduction to the theories, principles, and methods of architectural design using traditional and digital media. Studio projects emphasize composing two- and three-dimensional organizations to convey intended concepts and meanings. Aesthetic, environmental, social, and technological factors which inform architectural design are investigated. Course work is supplemented with lectures, discussions, and readings. Prerequisite: Architecture 2B, 31A, 32A, 33 (all completed with a grade of "C" or higher). 3 hours lecture, 3 hours studio. Transfer: CSU, UCB.

8B FUNDAMENTALS OF ARCHITECTURAL DESIGN II**4 UNITS**

Continuation of the content and issues introduced in Architecture 8A. Emphasis on generating and developing design concepts, incorporating structure, materials, and energy considerations as determinants of form. Emphasis on applied traditional and digital graphic communications tools, including scale models to convey intended concepts and meanings. Prerequisite: Architecture 8A (completed with a grade of "C" or higher). 3 hours lecture, 3 hours studio. Transfer: CSU, UCB; AA/AS.

12 CONSTRUCTION MATERIALS AND METHODS**3 UNITS**

Introduction to the methods and materials used in contemporary and historical building construction. Wood, steel, masonry, and concrete structural systems will be explored, as will major interior and exterior finish systems. The relationships between occupancy and construction types will be reviewed as will the influence of building codes, climate, labor supply, and economic factors. 3 hours. Transfer: CSU, AA/AS.

14 CALIFORNIA ARCHITECTURE AND URBAN DESIGN**3 UNITS**

California architecture and urban design from indigenous beginnings to the contemporary avant garde. Historic, cultural, and environmental influences in the shaping of California's distinctive buildings and cities. Work reviewed ranges from anonymous adobes to historic masterpieces by Maybeck and Morgan to new works by Gehry, Moss, and others. 3 hours. Transfer: CSU, UCB; CSU/GE: Cl; AA/AS.

16 LANDSCAPE ARCHITECTURE**2 UNITS**

Principles of landscape architecture emphasizing design concepts as they relate to site, building, and client requirements. Includes site analysis, land use patterns, circulation, layout, planting materials, irrigation, and the general design process. 1 hour lecture, 3 hours laboratory. Transfer: CSU, UCB; AA/AS.

31A PHOTOSHOP I**1 ½ UNITS***(See also Art 31A, Interior Design 31A, Photography 31A)*

Introduction to the use of PhotoShop, the premiere imaging software. Overview of the PhotoShop interface, tools and menus. Projects will focus on using basic tools to compose images. Topics include file management, selections and paths, layers, masks, alpha channels, color management and mapping, digital painting and brushes. Apple Mac platform. May not receive credit if Art 31A, Interior Design 31A, or Photography 31A has been completed. 1 hour lecture, 2 hours studio. Transfer: CSU.

31B PHOTOSHOP II**1 ½ UNITS***(See also Art 31B, Interior Design 31B, Photography 31B)*

Continuation of the content and skills introduced in Photography 31A, PhotoShop 1. Topics include advanced layer controls, filters, distortion and effects, drawing path tools, alpha channels, and applying text to images. Color management and Mapping. Printing fundamentals. Prerequisite: Architecture 31A (completed with a grade of "C" or higher). May not receive credit if Art 31B, Interior Design 31B, or Photography 31B has been completed. 1 hour lecture, 2 hours studio. Transfer: CSU.

32A ILLUSTRATOR I**1 ½ UNITS***(See also Art 32A, Interior Design 32A, Photography 32A)*

Introduction to the use of Illustrator, Adobe's powerful vector-based software for digital illustration. Emphasis on the basics of drawing with the shapes, pen and pencil, transformation and liquefy tools. Palettes for the control of layers, colors, patterns and gradients. Methods for the creative application of text to images. May not receive credit if Art 32A, Interior Design 32A, or Photography 32A has been completed. 1 hour lecture, 2 hours studio. Transfer: CSU

32B ILLUSTRATOR II**1 ½ UNITS***(See also Art 32B, Interior Design 32B, Photography 32B)*

Continuation of the content and skills introduced in Architecture 32A. Adobe Illustrator I. Paintbrush and pattern tools and palettes, gradient mesh tools, creating and modifying clipping masks will be covered. Exploration of the powerful morphing blends and transparency tools use of symbol tools and palettes, filters and effects, and related appearance and styles palettes. Process of importing and manipulating images as elements of digital compositions. Prerequisite: Architecture 32A (completed with a grade of "C" or higher). May not receive credit if Art 32B, Interior Design 32B or Photography 32B has been completed. 1 hour lecture, 2 hours studio. Transfer: CSU.

33 3-D MODELING WITH FORM•Z**3 UNITS***(See also Art 33, Interior Design 33, Photography 33)*

Introduction to 3-dimensional digital modeling using Form•Z software. Emphasis on learning basic commands to create 3-dimensional objects including building interiors and exteriors, and defining photo-realistic views with appropriate light sources. May not receive credit if Art 33, Interior Design 33, or Photography 33 has been completed. 2 hours lecture, 4 hours studio. Transfer: CSU.

68 AUTOCAD FOR ARCHITECTURE AND INTERIOR DESIGN**3 UNITS***(May be repeated 3 times) (See also Interior Design 68)*

Introduction to computer-aided drafting using AutoCAD. Topics include command basics including drawing entity creation and modification, industry layering standards, text and dimensioning systems appropriate to architecture, creating symbol libraries, external reference techniques, model and paper space commands, and plotting techniques. (May not receive credit if Interior Design 68 has been completed.) 2 hours lecture, 4 hours studio. Transfer: CSU.

ART (ART)

DEGREE:

AA—ART (GENERAL)

AA—ART (EMPHASIS IN CERAMICS)

AA—ART (EMPHASIS IN PAINTING)

AA—ART (EMPHASIS IN SCULPTURE)

AA—GRAPHIC DESIGN

CERTIFICATE:

ILLUSTRATION

The art curriculum offers instruction in art theory, practice and history. These three areas of study constitute the foundation courses needed to begin a career in graphic design (for example: illustration, graphics, etc.) or fine arts (for example: painting, ceramics, etc.). The foundation courses meet prerequisite requirements to UC, CSU systems and four-year art schools.

The Graphic Design two-year diploma program provides students who have demonstrated artistic ability with practical, theoretical, and computer training in layout and design, preparation of reproduction art, printing processes, computer graphics, typography and illustration. In addition to course assignments, students are involved in projects typical of the graphic design field.

ART (GENERAL)

ASSOCIATE IN ARTS DEGREE

FRESHMAN YEAR	FALL	SPRING
Art 1 (Introduction to Art)	3	
Art 2A (Introduction to Drawing)	3	
Art 10 (Design and Materials)	3	
Art 2B (Drawing Color and Composition)	3	
Art 17 (Ceramic Sculpture)	3	
Art 11 (Design, Materials and Color)	3	

SOPHOMORE YEAR	FALL	SPRING
Art 12A (Oil/Acrylic Painting, Beginning I)	3	
Art 3A (Figure and Composition I)	3	
Art 4 (Art History, Ancient)	3	
Art 5 (Art History, Renaissance to Modern)	3	
Art 7A (Introduction to Watercolor Painting)	3	
Art 16A (Introduction to Ceramics I)	3	
Total		36

General Education Courses

For specific General Education courses refer to catalog section on Graduation Requirements.

Total minimum units required 60

ART (EMPHASIS IN CERAMICS)

ASSOCIATE IN ARTS DEGREE

FRESHMAN YEAR	FALL	SPRING
Art 1 (Introduction to Art)	3	
Art 10 (Design and Materials)	3	
Art 16A (Introduction to Ceramics)	3	
Art 16B (Introduction to Ceramics II)	3	

SOPHOMORE YEAR	FALL	SPRING
Art 4 (Art History, Ancient)	3	
Art 16C (Introduction to Ceramics III)	3	
Art 5 (Art History, Renaissance to Modern)	3	
Art 16D (Ceramics Intermediate)	3	
Art 17 (Ceramic Stone Sculpture)	3	
Total		27

General Education Courses

For specific General Education courses refer to catalog section on Graduation Requirements.

Total minimum units required 60

ART (EMPHASIS IN PAINTING)

ASSOCIATE IN ARTS DEGREE

FRESHMAN YEAR	FALL	SPRING
Art 2A (Introduction to Drawing)	3	
Art 12A (Oil/Acrylic Painting, Beginning I)	3	
Art 3A (Figure and Composition I)	3	
Art 1 (Introduction to Art)	3	
Art 2B (Drawing, Color and Composition)	3	
Art 12B (Oil/Acrylic Painting, Beginning II)	3	

SOPHOMORE YEAR	FALL	SPRING
Art 4 (Art History, Ancient)	3	
Art 12C (Oil/Acrylic Painting, Advanced I)	3	
Art 10 (Design and Materials)	3	
Art 5 (Art History, Renaissance to Modern)	3	
Art 12D (Oil/Acrylic Painting, Advanced II)	3	
Art 3B (Figure and Composition II)	3	
Art 7A (Introduction to Watercolor Painting)	3	
Total		39

General Education Courses

For specific General Education courses refer to catalog section on Graduation Requirements.

Total minimum units required 60

ART (EMPHASIS IN SCULPTURE)

ASSOCIATE IN ARTS DEGREE

FRESHMAN YEAR	FALL	SPRING
Art 1 (Introduction to Art)	3	
Art 17 (Ceramic Sculpture)	3	
Art 10 (Design and Materials)	3	
Art 3A (Figure and Composition I)	3	
Art 18 (Wood and Stone Sculpture)	3	
Art 11 (Design, Materials and Color)	3	
Art 3B (Figure and Composition II)	3	

SOPHOMORE YEAR	FALL	SPRING
Art 2A (Introduction to Drawing)	3	
Art 4 (Art History, Ancient)	3	
Art 19 (Metal Sculpture)	3	
Art 5 (Art History, Renaissance to Modern)	3	
Art 20* (All Media Sculpture)	2	
Total		35

General Education Courses

For specific General Education courses refer to catalog section Graduation Requirements.

Total minimum units required 60

*Concurrent with Art 19.

GRAPHIC DESIGN ASSOCIATE IN ARTS DEGREE

FRESHMAN YEAR FALL SPRING

Art 2A (Introduction To Drawing)	3
Art 40 (Graphic Design Principles)	3
Art 55 (Introduction To Graphic Design Careers)	2
Art 1 (Introduction To Art)	3
Art 2B (Drawing and Composition)	3

SOPHOMORE YEAR FALL SPRING

Art 61 (Illustration)	3
Photography 66 (Digital Design)	3
Art 45 (Creative Portfolio and Self-Promotion)	2
Art 50 (Introduction To Digital Design)	3
Total	25

General Education Courses

For specific General Education courses refer to catalog section on Graduation Requirements.

Total minimum units required 60

GRAPHIC DESIGN CERTIFICATE OF COMPLETION

FALL SPRING

Art 40 (Graphic Design Principles)	3
Art 50 (Introduction to Digital Design)	3
Art 55 (Introduction To Graphic Design Careers)	2
Art 45 (Creative Portfolio and Self-Promotion)	2
Art 61 (Illustration)	3
Photography 66 (Digital Imaging)	3
Total	16

ILLUSTRATION CERTIFICATE

FALL SPRING

Art 2A (Introduction To Drawing)	3
Art 55 (Introduction To Graphic Design Careers)	2
Art 61 (Illustration)	3
Art 2B (Drawing and Composition)	3
Art 45 (Creative Portfolio and Self-Promotion)	2
Art 54 (Illustrating Children's Books)	3
Total	16

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. Transfer: CSU, UC; CSU/GE: CI; IGETC: Area 3; AA/AS.

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. Transfer: CSU, UC; CSU/GE: CI; AA/AS; (CAN ART 8).

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. Transfer: CSU, UC.

3A FIGURE AND COMPOSITION I 3 UNITS

Skill development drawing the figure with charcoal, conte, pencil, and ink with emphasis on composition. 2 hours lecture, 4 hours studio. Transfer: CSU, UC; CSU/GE: CI; AA/AS. (CAN ART 24)

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. Transfer: CSU, UC.

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. Transfer: CSU, UC.

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. Transfer: CSU, UC.

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. Transfer: CSU, UC; CSU/GE: CI; IGETC: Area 3; AA/AS; (CAN ART 2); with ART 5: (CAN ART SEQA).

5 ART HISTORY—RENAISSANCE TO MODERN 3 UNITS

History of Western art from Early Renaissance through High Renaissance, Mannerism, Baroque, Neoclassicism, Romanticism, Realism, Impressionism, Post-Impressionism, and 20th Century developments of American art. 3 hours. Transfer: CSU, UC; CSU/GE: CI; IGETC: Area 3; AA/AS; (CAN ART 4); with ART 4: (CAN ART SEQ A).

6 MUSEUM STUDIES 4½ UNITS

Historical overview of museums and practical, hands-on instruction in skills basic to museum and gallery workers. Held in Chabot's student art gallery with visits to local museums, galleries and/or historical societies. Social role of museums, art handling, curating, registration, preparation, exhibition and art education. Culminates in the hanging of an on-campus art exhibition. Prerequisites: any two of the following four courses: Art 1, Art 4, Art 5, or Art 67/Photo 67 (completed with a grade of "C" or higher). 3 hours lecture, 5 hours laboratory. Transfer: CSU; CSU/GE: CI; AA/AS.

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 2B. 2 hours lecture, 4 hours studio. Transfer: CSU, UC.

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. Transfer: CSU, UC.

7C ADVANCED WATERCOLOR PAINTING I 3 UNITS

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

- 7D ADVANCED WATERCOLOR PAINTING II** **3 UNITS**
Development and knowledge and skills introduced in Art 7C directed towards individualized needs. Prerequisite: Art 7C (*completed with a grade of "C" or higher*). 2 hours lecture, 4 hours studio. Transfer: CSU, UC.
- 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. Transfer: CSU, UC; CSU/GE: C1; AA/AS; (CAN ART 14).
- 11 DESIGN, MATERIALS, AND COLOR** **3 UNITS**
Color theory as it applies to two and three dimensional design. 2 hours lecture, 4 hours studio. Transfer: CSU, UC; CSU/GE: C1; (CAN ART 22).
- 12A OIL/ACRYLIC PAINTING—BEGINNING I** **3 UNITS**
Beginning projects in oil or acrylic painting with an emphasis on fundamental painting techniques and approaches. Strongly recommended: Art 2A*. 2 hours lecture, 4 hours studio. Transfer: CSU, UC.
- 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*). 2 hours lecture, 4 hours studio. Transfer: CSU, UC.
- 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*). 2 hours lecture, 4 hours studio. Transfer: CSU, UC.
- 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*). 2 hours lecture, 4 hours studio. Transfer: CSU, UC.
- 13A ACRYLIC PAINTING—BEGINNING I** **3 UNITS**
Projects in acrylic painting with an emphasis on fundamental painting techniques and approaches. Strongly recommended: Art 2A*. 2 hours lecture, 4 hours studio. Transfer: CSU, UC.
- 13B ACRYLIC PAINTING—BEGINNING II** **3 UNITS**
Projects in acrylic painting with an emphasis on fundamental painting techniques and approaches. Prerequisite: Art 13A* (*completed with a grade of "C" or higher*). 2 hours lecture, 4 hours studio. Transfer: CSU, UC.
- 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* (*completed with a grade of "C" or higher*). 2 hours lecture, 4 hours studio. Transfer: CSU, UC.
- 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* (*completed with a grade of "C" or higher*). 2 hours lecture, 4 hours studio. Transfer: CSU, UC.
- 16A INTRODUCTION TO CERAMICS I** **3 UNITS**
Introduction to the fundamental techniques of wheel thrown and hand constructed clay forms. Survey of clay and glaze materials and their reaction to fire. Introduction to the methods of decorating leather-hardware. 2 hours lecture, 4 hours studio. Transfer: CSU, UC; AA/AS; (CAN ART 6)

*Or equivalent.

- 16B INTRODUCTION TO CERAMICS II** **3 UNITS**
Further development of the technical skills of wheel thrown and hand constructed clay forms. Continued exploration of surface decoration using various glazing techniques and methods of slip decoration. Prerequisite: Art 16A (*completed with a grade of "C" or higher*). 2 hours lecture, 4 hours studio. Transfer: CSU, UC.

- 16C INTRODUCTION TO CERAMICS III** **3 UNITS**
Further development of technical skills with emphasis on the creative expression of form. Introduction to kiln loading and firing. Continued development of various hand constructed clay forms. Prerequisite: Art 16B (*completed with a grade of "C" or higher*). 2 hours lecture, 4 hours studio. Transfer: CSU, UC.

- 16D CERAMICS-INTERMEDIATE** **3 UNITS**
(*May be repeated 2 times*)
Further development of technical skills of wheel thrown and hand constructed clay forms. Glaze exploration and experimentation, contemporary ceramic history. Prerequisite: Art 16C (*completed with a grade of "C" or higher*). 2 hours lecture, 4 hours studio. Transfer: CSU, UC.

- 17 BEGINNING SCULPTURE** **3 UNITS**
(*May be repeated 1 times*)
Construction methods in clay through design of three dimensional and relief sculptures. Includes an introduction to ceramic art history and fundamentals of ceramic glaze and firing technology. Elements and principles of three dimensional design are emphasized in oral and written critiques. Designed for art majors as well as general education students. 2 hours lecture, 4 hours laboratory. Transfer: CSU, UC; CSU/GE: C1; AA/AS.

- 18 WOOD AND STONE SCULPTURE** **3 UNITS**
Investigation into basic materials of sculpture and their application in-the-round and in relief forms. Wood and stone are the primary materials. 2 hours lecture, 4 hours studio. Transfer: CSU, UC.

- 19 METAL SCULPTURE** **3 UNITS**
Introduction to techniques of metal sculpture-welding, forging, brazing, and casting of various metals. Application to sculptural forms in relief and three dimensional statements. Strongly recommended: Art 10 and 17. 2 hours lecture, 4 hours studio. Transfer: CSU.

- 20 ALL MEDIA SCULPTURE** **2 UNITS**
(*May be repeated 3 times*)
Concentrated individual studies in sculpture, designed to provide opportunity for continued investigation in the possibilities of a particular sculptural medium for the purpose of creating individual expression. Repeatable for credit if medium is changed and appropriate recommended courses are completed. 1 hour lecture, 3 hours studio. Transfer: CSU, UC; CSU/GE: C1.

- 31A PHOTOSHOP I** **1 ½ UNITS**
(*See also Architecture 31A, Interior Design 31A, Photography 31A*)
Introduction to the use of PhotoShop, the premiere imaging software. Overview of the PhotoShop interface, tools and menus. Projects will focus on using basic tools to compose images. Topics include file management, selections and paths, layers, masks, alpha channels, color management and mapping, digital painting and brushes. Apple Mac platform. May not receive credit if Architecture 31A, Interior Design 31A, or Photography 31A has been completed. 1 hour lecture, 2 hours studio. Transfer: CSU.

- 31B PHOTOSHOP II** **1 ½ UNITS**
(*See also Architecture 31B, Interior Design 31B, Photography 31B*)
Continuation of the content and skills introduced in Photography 31A, PhotoShop 1. Topics include advanced layer controls, filters, distortion and effects, drawing path tools, alpha channels, and applying text to images. Color management and Mapping. Printing fundamentals. Prerequisite: Art 31A (*completed with a grade of "C" or higher*). May not receive credit if Architecture 31B, Interior Design 31B, or Photography 31B has been completed. 1 hour lecture, 2 hours studio. Transfer: CSU.

32A ILLUSTRATOR I**1 ½ UNITS***(See also Art 32A, Interior Design 32A, Photography 32A)*

Introduction to the use of illustrator, Adobe's powerful vector-based software for digital illustration. Emphasis on the basics of drawing with the shapes, pen and pencil, transformation and liquefy tools. Palettes for the control of layers, colors, patterns and gradients. Methods for the creative application of text to images. May not receive credit if Architecture 32A, Interior Design 32A, or Photography 32A has been completed. 1 hour lecture, 2 hours studio. Transfer: CSU.

32B ILLUSTRATOR II**1 ½ UNITS***(See also Art 32B, Interior Design 32B, Photography 32B)*

Continuation of the content and skills introduced in Architecture 32A, Adobe Illustrator I. Paintbrush and pattern tools and palettes, gradient mesh tools, creating and modifying clipping masks will be covered. Exploration of the powerful morphing blends and transparency tools use of symbol tools and palettes, filters and effects, and related appearance and styles palettes. Process of importing and manipulating images as elements of digital compositions. Prerequisite: Art 32A (completed with a grade of "C" or higher). May not receive credit if Architecture 32B, Interior Design 32B or Photography 32B has been completed. 1 hour lecture, 2 hours studio. Transfer: CSU.

33 3-D MODELING WITH FORM•Z**3 UNITS***(See also Art 33, Interior Design 33, Photography 33)*

Introduction to 3-dimensional digital modeling using Form•Z software. Emphasis on learning basic commands to create 3-dimensional objects including building interiors and exteriors, and defining photo-realistic views with appropriate light sources. May not receive credit if Architecture 33, Interior Design 33, or Photography 33 has been completed. 2 hours lecture, 4 hours studio. Transfer: CSU.

40 GRAPHIC DESIGN PRINCIPLES**3 UNITS**

Problems and processes in visual communication through graphic design. Use of computer as an electronic design tool along with basic manual techniques relating to effective preparation and presentation. 2 hours lecture, 4 hours studio. Transfer: CSU.

41 APPLIED GRAPHIC DESIGN**3 UNITS**

Application of concepts in layout and design of printed products. Solving graphic design problems through creative manual and computer techniques. Design principles applied to specific exercises in creation of corporate signage, brochures, posters, and packages for mass printing production. Pre-press considerations and the inter-relations between illustration, design, and type. Prerequisite: Art 40 (completed with a grade of "C" or higher). 2 hours lecture, 4 hours studio.

43 TYPOGRAPHY AND PUBLICATION DESIGN**3 UNITS**

Layout and overall pre-press design process in preparing publications. Application of type styles and typographical design for graphic communication products from brochures and books to posters and magazine spreads. Includes work with computers on major page design software. Strongly recommended: Art 40. 2 hours lecture, 4 hours studio. Transfer: CSU.

45 CREATIVE PORTFOLIO AND SELF-PROMOTION**2 UNITS**

Development and refining of artist a portfolio and strategies for self promotion of ideas and skills to work effectively in the design world. Development of effective techniques of presentation. Selection, updating and highlighting of individual skills to present artist's portfolio to the best advantage. 2 hours lecture, 1 hour studio. Transfer: CSU.

48 PERSPECTIVE DRAWING**3 UNITS**

Theory and practice of perspective in drawing and painting. Includes history, concepts and variations on the use of different mediums of perspective drawing. 2 hours lecture, 4 hours studio. Transfer: CSU.

50 INTRODUCTION TO DIGITAL DESIGN**3 UNITS**

Introduction to computer hardware and software fundamentals for the graphic designer. Operations of the Macintosh computer (or system with equivalent functionality) and the current software applications for projects in graphic design. 2 hours lecture, 4 hours laboratory. Transfer: CSU, UC.

54 ILLUSTRATING CHILDREN'S BOOKS**3 UNITS***(May be repeated 3 times)*

Creation of two different childrens books in any medium. Overview of the field of illustrating childrens books. The relationship between words and images, page layout, character development, and illustration styles. Illustrate existing books or students' own stories. 2 hours lecture, 4 hours studio. Transfer: CSU; AA/AS.

55 INTRODUCTION TO GRAPHIC DESIGN CAREERS**2 UNITS**

Opportunities in graphic design. Presentation of art work by design specialists highlighting a variety of careers and opportunities in the graphic design industry. Speakers may include designers, art directors, illustrators, and others in the graphic design industry. 2 hours. Transfer: CSU.

60 ADVERTISING PRODUCTION**3 UNITS**

Advertising layout and paste-up idea from rough layout through camera-ready copy; color separation overlays. Introduction to the Macintosh computer and software. 2 hours lecture, 4 hours studio. Transfer: CSU.

61 ILLUSTRATION**3 UNITS**

Creation and execution of conceptual ideas in illustration. Includes a variety of mediums and contemporary application styles. Emphasis on skills in draftsmanship, craftsmanship and presentation. Strongly recommended: Art 40. 2 hours lecture, 4 hours laboratory. Transfer: CSU.

65 PRESENTATION ART**3 UNITS**

Development of a professional portfolio. Resume writing, job search methods and interviewing techniques. Strongly recommended: Art 40, 41, 43 and 50. 2 hours lecture, 4 hours studio. Transfer: CSU.

67 HISTORY OF PHOTOGRAPHY**3 UNITS***(See also Photography 67)*

A broad chronological survey of photography from its invention to the present. Considers the mediums 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. May not receive credit if Photography 67 has been completed. 3 hours. Transfer: CSU; UC; CSU/GE: CI; IGETC: Area 3; AA/AS.

200 INTRODUCTION TO DRAWING AND PAINTING**NON-CREDIT**

Individualized program of drawing and painting for residents in skilled-nursing facilities. Application of basic principles of composition, color, and line. Study of artistic practices of diverse cultures, including African design principles and European painting. 3 hours.

ASTRONOMY (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 lab, Astronomy 30 is available. Strongly recommended: Mathematics 36 and Physics 2A, 4A or 10. 3 hours. Transfer: CSU, UC; CSU/GE: B1; IGETC: Area 5A; AA/AS.

**10 INTRODUCTION TO ASTRONOMY:
THE SOLAR SYSTEM 3 UNITS**

Introduction to history and physical principles of astronomy, focusing on our Solar System. Includes: constellations; distance scales; historical development of astronomy; gravitation; motion of the Earth, Moon, and Planets; astronomical tools; formation and evolution of the solar system; physical properties, atmosphere, and evolution of the Earth, Moon, and planets within the solar system; asteroids, comets, and other small bodies; discovery of extra-solar planets; possibilities for life beyond Earth. Designed for non-majors in mathematics or physical science. A companion science lab, Astronomy 30, is also available. May be offered in Distance Education delivery format. 3 hours. Transfer: CSU, UC; CSU/GE: B1; IGETC: Area 5A; AA/AS.

**20 INTRODUCTION TO ASTRONOMY:
STARS AND THE UNIVERSE 3 UNITS**

Introduction to the study of stars, galaxies, and cosmology. Includes the nature of light and matter, telescopes, spectroscopy, stellar formation and evolution, galaxies, quasars, and cosmology. Designed for non-majors in mathematics or a physical science. A companion science lab, Astronomy 30, is also available. May be offered in Distance Education delivery format. 3 hours. Transfer: CSU, UC; CSU/GE: B1; IGETC: Area SA; AA/AS.

30 INTRODUCTION TO ASTRONOMY LAB 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/Corequisite: Astronomy 1, 10, or 20. 3 hours laboratory. Transfer: CSU, UC, CSU/GE: B3; IGETC: Area 5A & Lab; AA/AS.

50 CONSTELLATIONS AND THE NIGHT SKY ½ UNIT

Introduction to the night sky, motions of the stars and planets, and constellations visible during the year. Mythology of constellations and star names. Applications of the scientific method studying the motions of the stars. May not be taken for credit if Astronomy 10 or 20 have been successfully completed. 10 total hours. Transfer: CSU.

AUTOMOTIVE TECHNOLOGY (ATEC)

**DEGREE:
AS—AUTOMOTIVE TECHNOLOGY**

**CERTIFICATE OF ACHIEVEMENT:
AUTOMOTIVE MAINTENANCE
TECHNOLOGY
AUTOMOTIVE CHASSIS
TECHNOLOGY
AUTOMOTIVE DRIVETRAIN
TECHNOLOGY
AUTOMOTIVE ENGINE MACHINING
AUTOMOTIVE ENGINE
PERFORMANCE TECHNOLOGY**

The automotive technology program prepares the student for employment in many areas of the automotive field, including dealerships, independent garages, fleet shops, service stations, and specialty shops. Students enrolling in the

curriculum of automotive mechanics will have the opportunity to receive instruction and “hands-on” experience in all areas of mechanical and electrical diagnostic systems and repair of current automobiles.

Automotive courses meet the needs of the beginner, the mechanic who wants to update skills and the do-it-yourself person. The automotive programs may also help students enter the automotive field in positions other than auto mechanic. The automotive department offers a two-year associate of applied science degree, three one-year technical certificates, and two two-year certificates.

**AUTOMOTIVE TECHNOLOGY
ASSOCIATE IN SCIENCE DEGREE**

The Automotive Technology Degree involves completing the core curriculum plus any one of the following Certificates: Automotive Engine Performance Technology, Automotive Engine Machining, Automotive Drivetrain Technology, Automotive Chassis Technology, or Automotive Maintenance Technology and the General Education requirements. Only one AS Degree in Automotive Technology may be earned.

FRESHMAN YEAR FALL SPRING

Automotive Technology 50 (Automotive Fundamentals)	2½
Automotive Technology 60A* (Automotive Electrics/Electronics I)	4
Automotive Technology 65*** (Automotive Breaking Systems)	3
Automotive Technology 62**** (Automotive Air Conditioning Cooling and Heating Systems)	2½
Automotive Technology 66 (Automotive Steering, Suspension and Alignment Systems)	3
Industrial Technology 74 or Equivalent/Competency (Measurements and Calculations)	3

SOPHOMORE YEAR FALL SPRING

Automotive Technology 63A (Introduction to Engines and Machining Processes)	3
Welding Technology 70 (Introduction to Welding)	2
Emphasis options (Select from the emphasis option list below)	7–20
Total	30–43

General Education Courses
For specific General Education courses refer to catalog section on Graduation Requirements.
Total minimum units required 60

These courses are recommended as preparation for the following California State and BAR tests for
* Smog Check Technician License
*** Brake Adjusters License
**** Air Conditioning Refrigeration Recovery and Recycling Certification

AUTOMOTIVE MAINTENANCE TECHNOLOGY

CERTIFICATE OF ACHIEVEMENT

FRESHMAN YEAR **FALL** **SPRING**

Automotive Technology 50 (Automotive Fundamentals)	2½
Automotive Technology 60A* (Automotive Electrics/Electronics I)	4
Automotive Technology 61A (Fuel Induction Systems)	4
English 1A (Critical Reading and Composition), or English 52A (Essentials of Communication), or English 70 (Report Writing), or Equivalent/Competency	3
Automotive Technology 71 */** (Powertrain and Vehicle Performance) or Automotive Technology 71A (Powertrain and Vehicle Performance I) and Automotive Technology 71B (Powertrain and Vehicle Performance II)	8
Industrial Technology 74 or Equivalent/Competency (Measurements and Calculations)	3

SOPHOMORE YEAR **FALL** **SPRING**

Automotive Technology 65*** (Automotive Breaking Systems)	3
Welding Technology 70 (Introduction to Welding)	2
Automotive Technology 62**** (Automotive Air Conditioning Cooling and Heating Systems)	2½
Automotive Technology 66 (Automotive Steering, Suspension, and Alignment Systems)	3
Total	35

These courses are recommended as preparation for the following California State and BAR tests for

- * Smog Check Technician License
- ** Lamp Adjuster License
- *** Brake Adjusters License
- **** Air Conditioning Refrigeration Recovery and Recycling Certification

The above listing is a suggested sequence only. Some courses may have prerequisites. Students may take courses in any sequence except where a prerequisite applies.

AUTOMOTIVE CHASSIS TECHNOLOGY

CERTIFICATE OF ACHIEVEMENT

FALL **SPRING**

Automotive Technology 50 (Automotive Fundamentals)	2½
Automotive Technology 60A* (Automotive Electrics/Electronics I)	4
Automotive Technology 65*** (Automotive Breaking Systems)	3
English 1A (Critical Reading and Composition), or English 52A (Essentials of Communication), or English 70 (Report Writing), or Equivalent/ Competency	3
Automotive Technology 66 (Automotive Steering, Suspension, and Alignment Systems)	3

Industrial Technology 74 or Equivalent/Competency (Measurements and Calculations)	3
Welding Technology 70 (Introduction to Welding)	2
Total	20½

These courses are recommended as preparation for the following California State and BAR tests for

- * Smog Check Technician License
- *** Brake Adjusters License

The above listing is a suggested sequence only. Some courses may have prerequisites. Students may take courses in any sequence except where a prerequisite applies.

AUTOMOTIVE DRIVETRAIN TECHNOLOGY

CERTIFICATE OF ACHIEVEMENT

FALL **SPRING**

Automotive Technology 50 (Automotive Fundamentals)	2½
Automotive Technology 60A* (Automotive Electrics/Electronics I)	4
Automotive Technology 64A (Manual Drivetrain and Axle Assemblies)	3
English 1A (Critical Reading and Composition), or English 52A (Essentials of Communication), or English 70 (Report Writing), or Equivalent/Competency	3
Automotive Technology 64B (Automatic Transmission/Transaxle Assemblies)	3
Industrial Technology 74 or Equivalent/Competency (Measurements and Calculations)	3
Welding Technology 70 (Introduction to Welding)	2
Total	20½

This course is recommended as preparation for the following California State and BAR tests for

- * Smog Check Technician License

The above listing is a suggested sequence only. Some courses may have prerequisites. Students may take courses in any sequence except where a prerequisite applies.

AUTOMOTIVE ENGINE MACHINING

CERTIFICATE OF ACHIEVEMENT

FALL **SPRING**

Automotive Technology 50 (Automotive Fundamentals)	2½
Automotive Technology 63A (Introduction to Engines and Machining Processes)	3
English 1A (Critical Reading and Composition), or English 52A (Essentials of Communication), or English 70 (Report Writing), or Equivalent/Competency	3
Industrial Technology 74 or Equivalent/Competency (Measurements and Calculations)	3
Automotive Technology 63B (Engines, Machining and Assembly Processes)	3

Machine Tool Technology 60A (Machine Tool Technology I)	4
Welding Technology 70 (Introduction to Welding)	2
Total	20½

The above listing is a suggested sequence only. Some courses may have prerequisites. Students may take courses in any sequence except where a prerequisite applies.

AUTOMOTIVE ENGINE PERFORMANCE TECHNOLOGY CERTIFICATE OF ACHIEVEMENT

FRESHMAN YEAR FALL SPRING

Automotive Technology 50 (Automotive Fundamentals)	2½
Automotive Technology 60A*/*** (Automotive Electrics/Electronics I)	4
Automotive Technology 61A* (Fuel Induction Systems)	4
English 1A (Critical Reading and Composition), or English 52A (Essentials of Communication), or English 70 (Report Writing), or Equivalent/Competency	3
Automotive Technology 71 */** (Powertrain and Vehicle Performance) or Automotive Technology 71A (Powertrain and Vehicle Performance D) and Automotive Technology 71B (Powertrain and Vehicle Performance II)	8
Automotive Technology 62**** (Automotive Air Conditioning Cooling and Heating Systems)	2½
Industrial Technology 74 or Equivalent/Competency (Measurements and Calculations)	3

SOPHOMORE YEAR FALL SPRING

Automotive Technology 63A (Introduction to Engines and Machining Processes)	3
Automotive Technology 68 (California BAR Basic and Advanced Clean Air Car Course)	5
Automotive Technology 63B (Engines, Machining and Assembly Processes)	3
Welding Technology 70 (Introduction to Welding)	2
Total	40

These courses are recommended as preparation for the following California State and BAR tests for
 * Smog Check Technician License
 ** Lamp Adjuster License
 *** Brake Adjusters License
 **** Air Conditioning Refrigeration Recovery and Recycling Certification

The above listing is a suggested sequence only. Some courses may have prerequisites. Students may take courses in any sequence except where a prerequisite applies.

AUTOMOTIVE TECHNOLOGY (ATEC)

50 AUTOMOTIVE FUNDAMENTALS 2½ UNITS

(May be repeated 3 times)
 Automotive industry fundamentals including engine operating principles; engine teardown and diagnosis; fastener recognition, use and repair; hand tool identification and usage; electrical fundamentals; service information

access and use; automotive chemical and fluid applications; hazardous waste handling; general shop equipment usage, and shop safety. 1½ hours lecture, 3½ hours laboratory. Transfer: CSU.

60A AUTOMOTIVE ELECTRICS/ELECTRONICS I 4 UNITS

(May be repeated 3 times)
 Automotive electrical/electronic systems. Basic electrical circuits, components, battery, starting, charging, and basic wiring systems. Electrical components and the use of basic wiring diagrams for trouble shooting systems. Repair of wiring circuits and correct use of diagnostic equipment. Prerequisite: Automotive Technology 50 (may be taken concurrently). Strongly recommended: Automotive Technology 61A, Industrial Technology 74. 2½ hours lecture, 5½ hours laboratory.

60B AUTOMOTIVE ELECTRICS/ELECTRONICS II 3½ UNITS

(May be repeated 3 times)
 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. May not receive credit if Automotive Technology 71 has been completed. Prerequisite: Automotive Technology 60A*. 2 hours lecture, 5 hours laboratory.

61A FUEL INDUCTION, EMISSION AND COMPUTER CONTROL SYSTEMS I 4 UNITS

(May be repeated 3 times)
 Introduction to the principles of automotive fuel induction systems, including the inspection, diagnosis, and evaluation of fuel storage, fuel pumps, carburetion, intake manifolds, combustion theory, exhaust analysis, engine operation principles and introduction to fuel injection systems. Prerequisite: Automotive Technology 50 (maybe taken concurrently). Strongly recommended: Automotive Technology 60A. 2½ hours lecture, 5½ hours laboratory. Transfer: CSU.

61B FUEL INDUCTION, EMISSION AND COMPUTER CONTROL SYSTEMS II 3½ UNITS

(May be repeated 3 times)
 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. May not receive credit if Automotive Technology 71 has been completed. Prerequisite: Automotive Technology 61A*. 2 hours lecture, 5 hours laboratory. Transfer: CSU.

62 AUTOMOTIVE AIR CONDITIONING, COOLING AND HEATING SYSTEMS 2½ UNITS

(May be repeated 3 times)
 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). 1½ hours lecture, 4 hours laboratory.

63A INTRODUCTION TO ENGINES AND MACHINING PROCESSES 3 UNITS

(May be repeated 3 times)
 Diagnosis, inspection and repair of various engine types; machining operations, use of instruments and automotive machinist equipment in repairing engines, valve train assemblies and cylinder head reconditioning, cooling and lubrication system fundamentals. Prerequisite: Automotive Technology 50 (may be taken concurrently) or equivalent. Strongly recommended: Industrial Technology 74. 1½ hours lecture, 5 hours laboratory. Transfer: CSU.

*Or equivalent.

63B ENGINES, MACHINING AND ASSEMBLY PROCESSES

3 UNITS

(May be repeated 3 times)

Continuation of Automotive Technology 63A with emphasis on cylinder head assembly, camshaft design and servicing, inspection, machining operations, and reconditioning of engine blocks including final assembly and installation of engines. Prerequisite: Automotive Technology 63A* (completed with a grade of "C" or higher). 1½ hours lecture, 5 hours laboratory. Transfer: CSU.

64A MANUAL DRIVE TRAIN AND AXLE ASSEMBLIES

3 UNITS

(May be repeated 3 times)

Diagnosis, inspection, repair, and adjustment of automotive manual drive train and axle assemblies. Includes manual transmissions/transaxles, final drives, rear axle assemblies, clutches, viscous couplings, two, four and all-wheel drive assemblies. Prerequisite: Automotive Technology 50 (may be taken concurrently) or equivalent. Strongly Recommend: Industrial Technology 74. 1½ hours lecture, 5 hours laboratory. Transfer: CSU.

64B AUTOMATIC TRANSMISSION/TRANSAXLE ASSEMBLIES

3 UNITS

(May be repeated 3 times)

Diagnosis, inspection, repair, and adjustment of automatic transmission/transaxle assemblies. Includes the study of torque converters, friction materials, hydraulics, gear trains, manual and electronic controls. Prerequisite: Automotive Technology 50 (may be taken concurrently) or equivalent. Strongly Recommend: Industrial Technology 74 (may be taken concurrently). 1½ hours lecture, 5 hours laboratory. Transfer: CSU.

65 AUTOMOTIVE BRAKING SYSTEMS

3 UNITS

(May be repeated 3 times)

Diagnosis, inspection, repair, and adjustment of modern automotive brakes and anti-lock braking systems. Includes theory of operation, the study of ba-

sic laws of hydraulics, methods of repair, and diagnosis, brake service equipment. Prerequisite: Automotive Technology 50 (May be taken concurrently) or equivalent. Strongly Recommend: Industrial Technology 74 (may be taken concurrently). 1½ hours lecture, 5 hours laboratory. Transfer: CSU.

66 AUTOMOTIVE STEERING, SUSPENSION, AND ALIGNMENT SYSTEMS

3 UNITS

(May be repeated 3 times)

Diagnosis, inspection, repair, and adjustment of modern automotive steering, suspension and alignment systems. Includes theory of operation, the study of common automotive steering and suspension systems, wheel alignment principles, methods of diagnosis, adjustment and repair, suspension service equipment. Prerequisite: Automotive Technology 50 (may be taken concurrently) or equivalent. Strongly Recommend: Automotive Technology 65, Industrial Technology 74 (may be taken concurrently). 1½ hours lecture, 5 hours laboratory. Transfer: CSU.

67A ADVANCED DIAGNOSIS AND TROUBLE SHOOTING OF AUTOMOTIVE SYSTEMS

4 UNITS

(May be repeated 3 times)

Continuation of Automotive Technology 61B and 62B with emphasis on diagnosis of electronic problems including computer controlled circuits/systems using schematics, diagnostic procedures and equipment. Prerequisites: Automotive Technology 60B and 61B or industry training. 2 hours lecture, 6 hours laboratory.

67B SPECIAL ADVANCED DIAGNOSIS AND TROUBLE SHOOTING OF AUTOMOTIVE SYSTEMS

3 UNITS

(May be repeated 3 times)

Continuation of Automotive Technology 67A with emphasis on diagnosis of complex electronic problems in computer controlled systems. Prerequisite: Automotive Technology 67A. 1½ hours lecture, 5 hours laboratory.



68 CALIFORNIA BAR BASIC AND ADVANCED CLEAN AIR CAR COURSE 5 UNITS

(May be repeated 3 times)
 Motor vehicle emission inspection and maintenance. Includes the Bureau of Automotive Repair (BAR) requirements for the Basic Clean Air Car Course (BCACC) and the Advanced Clean Air Car Course (ACACC). The BCACC includes the current updates and OBDII requirements. The ACACC includes the Dyno Transition and Advanced Emissions Diagnosis requirements. Required for eligibility to take the State Licensing exam at completion of the course: one year trade experience in emissions/tune up, or nine semester units (13 quarter units) in Automotive Technology, or 180 hours at an accredited automotive school. Automotive Service Excellence (ASE) certification in the Electrical (A6), Engine Performance (A8), and Advanced Engine Performance (L1) also required in order to take the State Exam. The BAR A6, A8, and L1 ASE alternative courses are not included in this course. 4 hours lecture, 4 hours laboratory.

69 AUTOMOTIVE TESTING AND DIAGNOSIS 3 UNITS

(May be repeated 3 times)
 Inspection, diagnosis and repair of connected and related components, and malfunctioning parts; replacing and adjusting components for maximum efficiency and emission standards. Review Clean Air Car Course. Prerequisite: Automotive Technology 60B, 61B or equivalent. 1½ hours lecture, 5 hours laboratory.

70 INTRODUCTION TO AUTOMOTIVE SERVICE 2 UNITS

(May be repeated 3 times)
 Designed for non-majors, overview of major components and systems of the automobile, including the engine, fuel, electrical, drive train, brake, and suspension systems, basic service procedures discussed. 1 hour lecture, 3 hours laboratory. Transfer: CSU.

71 POWERTRAIN AND VEHICLE PERFORMANCE 8 UNITS

(May be repeated 3 times)
 Continued study of electrical/electronic and fuel control systems, including engine management systems, emission control systems, emissions testing, drivability and vehicle performance diagnosis and repair. May not receive credit if Automotive Technology 60B and 61B have been completed. Prerequisites: Automotive Technology 60A and 61A. 5 hours lecture, 11 hours laboratory.

71A POWERTRAIN AND VEHICLE PERFORMANCE I 4 UNITS

(May be repeated 3 times)
 Continued study of electrical and electronic systems, including computer management systems, drivability and vehicle performance diagnosis and repair related to electrical system problems. May not receive credit if Automotive Technology 71 has been completed. Prerequisites: Automotive Technology 60A and 61A. 2½ hours lecture, 5½ hours laboratory.

71B POWERTRAIN AND VEHICLE PERFORMANCE II 4 UNITS

(May be repeated 3 times)
 Continued study of electrical/electronic and fuel control systems, including engine management systems, emission control systems, emissions testing, drivability and vehicle performance diagnosis and repair. May not receive credit if Automotive Technology 71 has been completed. Prerequisites: Automotive Technology 71A. 2½ hours lecture, 5½ hours laboratory.

BEHAVIORAL SCIENCE

DEGREE: AA-BEHAVIORAL SCIENCE (GENERAL)

This major is highly recommended for transfer students because it provides a basic foundation for subsequent spe-

cialization in many liberal arts fields of study. It is strongly based in the international arena. The value of the degree is now recognized by business and industry as it requires a variety of skills demanded in business, education, health, law, and government, as well as the social services. The general studies student should market educational accomplishments as a collection of career transferable skills in communication, the global arena, public service, problem solving, production and personnel management.

BEHAVIORAL SCIENCE (GENERAL) ASSOCIATE IN ARTS DEGREE

FRESHMAN YEAR	FALL	SPRING
Anthropology 1 (Physical Anthropology)	3	
Psychology 1 (General Psychology)	3	
Sociology 1 (Principles of Sociology)	3	
SOPHOMORE YEAR	FALL	SPRING
Courses from the following list for a total of 9:	9	
Anthropology		
Psychology (with the exception of Psychology 50)		
Sociology		
Total		18

General Education Courses
 For specific General Education courses refer to catalog section on Graduation Requirements.
Total minimum units required 60

BIOLOGICAL SCIENCES

ANATOMY (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. Transfer: CSU, UC; CSU/GE: B2, B3; IGETC: 5B & Lab; AA/AS; (CAN BIOL 10).	

BIOLOGY

DEGREE: AA-BIOLOGY AA-BIOLOGY (EMPHASIS IN ALLIED HEALTH)

Biologists study the origin, development, anatomy, physiology, ecology and other basic principles of plants and animals. Various areas of specialization are available to biologists in research, manufacturing, teaching, natural resource management, consulting and administration. Biologists are usually classified according to specialty,

i.e., microbiologists, ecologists, physiologists, zoologists, botanists. Preparation for some entry level jobs in these and other areas generally requires a bachelor's degree. Students interested in a career in biology should plan to obtain a master's or doctorate degree.

In today's workplace, most allied health care professionals are expected to have a solid science foundation in basic chemistry, human structure and function, and the microbial world. With a strong science background, students develop a basic understanding of the physical and physiological interrelationships which exist between organs, tissues and cells and how microorganisms can be beneficial and sometimes harmful to humans.

BIOLOGY
ASSOCIATE IN ARTS DEGREE

FRESHMAN YEAR	FALL	SPRING	
Chemistry 1A (General College Chemistry)	5		
Chemistry 1B (General College Chemistry)		5	
Biology 2A (Principles of Biology)		5	
SOPHOMORE YEAR	FALL	SPRING	
Biology 2B (Principles of Biology)	5		
Physics 2A (Introduction to Physics I)		4	
Physics 2B (Introduction to Physics II)		4	
Total			28
General Education Courses			
For specific General Education courses refer to catalog section on Graduation Requirements.			
Total minimum units required			60

BIOLOGY
(EMPHASIS IN ALLIED HEALTH)
ASSOCIATE IN ARTS DEGREE

FRESHMAN YEAR	FALL	SPRING	
Anatomy 1 (General Human Anatomy)	4		
Chemistry 30A (Introductory and Applied Chemistry)	4		
Chemistry 30B (Introductory and Applied Chemistry)		4	
SOPHOMORE YEAR	FALL	SPRING	
Microbiology 1 (Microbiology)	5		
Physiology 1 (Human Physiology)		5	
Total			22
General Education Courses			
For specific General Education courses refer to catalog section on Graduation Requirements.			
Total minimum units required			60

BIOLOGY (BIOL)

2A PRINCIPLES OF BIOLOGY **5 UNITS**
Biological processes with emphasis upon the cellular level of organization. Course is for biology majors and pre-professional students, i.e., pre-medical, pre-dental, pre-physical therapy. Topics include organic chemistry; origin of life; structure and function of prokaryotic and eukaryotic cells; cell membrane dynamics, enzyme structure and function; DNA, RNA, protein synthesis; Operon model; respiration; photosynthesis; Darwinism; cell division; genetics; evolution, speciation. Prerequisite: Chemistry 1A* (completed with a grade of "C" or higher). Strongly recommended:

Biology 31* (completed with a grade of "C" or higher) and eligibility for English 1A or 52A. 3 hours lecture, 6 hours laboratory. Transfer: CSU, UC; C,SU/GE: B2, B3; IGETC: Area 5B & Lab; AA/AS; (CAN BIOL 2).

2B PRINCIPLES OF BIOLOGY **5 UNITS**

Biological process at the organismal level are studied with emphasis placed on the whole organism and higher levels of organization. Topics include taxonomy; anatomy and physiology of selected invertebrates and vertebrates; structure and function of representative protists, fungi, non-vascular and vascular plants with emphasis on green plants; development; ecological principles; contemporary environmental issues. Prerequisite: Biology 2A* (completed with a grade of "C" or higher). Strongly recommended: Eligibility for English 1A or 52A. 3 hours lecture, 6 hours laboratory. Transfer: CSU, UC; CSU/GE: B2, B3; IGETC: Area 5B & Lab; AA/AS.

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. Transfer: CSU, UC; CSU/GE: B2, B3; IGETC: Area 5B & Lab; AA/AS.

10 INTRODUCTION TO THE SCIENCE OF BIOLOGY **4 UNITS**

Basic principles of biology 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: CSU, UC; CSU/GE: B2, B3; IGETC: 5B & Lab; AA/AS.

20 CONTEMPORARY HUMAN BIOLOGY **3 UNITS**

Human organism, with emphasis placed on human's origin and evolutionary legacy, the relationship with the environment, and the ethical implications of biological discoveries in science. 3 hours. Transfer: CSU, UC; CSU/GE: B2; IGETC: SB; AA/AS.

25 HUMAN HEREDITY AND EVOLUTION **3 UNITS**

Current views regarding human genetics and evolution including the chemical basis of inheritance, gene action, genetic basis of evolution, and the social significance of this knowledge. 3 hours. Transfer: CSU, UC; CSU/GE: B2; IGETC: Area 5B.

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, utilizing statistics, operating a computer, and preparing for and taking laboratory practicals. Designed to prepare the necessary concepts and laboratory skills and experience that are needed to succeed in more advanced courses in biology. Strongly recommended: Mathematics 65 or 65L and eligibility for English 1A or 52A. 3 hours lecture, 3 hours laboratory. Transfer: CSU, UC; CSU/GE: B2, B3; IGETC: Area 5B & Lab; AA/AS.

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. Transfer: CSU; CSU/GE: B2.

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. May be offered in distance education delivery format. 3 hours lecture, 3 hours laboratory. Transfer: CSU, UC; CSU/GE: B2, B3; IGETC: Area 5B & Lab; AA/AS.

*Or equivalent

ECOLOGY (ECOL)

10 HUMANS AND THE ENVIRONMENT

3 UNITS

Identification of problems created by human's 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. Ecology 10, 11, and 12 may be combined for a maximum of 4 units. 3 hours lecture. Transfer: CSU, UC; CSU/GE: B2; IGETC: Area 5B; AA/AS.

11 HUMANS AND THE ENVIRONMENT WITH LABORATORY

4 UNITS

Identification of the problems created by human's 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. Ecology 10, 11, and 12 may be combined for a maximum of 4 units. 3 hours lecture, 3 hours laboratory. Transfer: CSU, UC; CSU/GE: B2, B3; IGETC: Area 5B & Lab; AA/AS.

12 CURRENT ISSUES IN ENVIRONMENTAL SCIENCE

3 UNITS

Identification of problems created by humans modification of their environment. Examination of human population growth through history, resource use, and pollution. Introduction of fundamental concepts of matter, energy, and ecology with emphasis on application of these concepts to a range of contemporary environmental issues. May be offered in Distance Education delivery format. Ecology 10, 11, and 12 may be combined for a maximum of 4 units. 3 hours. Transfer: CSU; CSU/GE: E, AA/AS.

MICROBIOLOGY (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, eligibility for English 1A or 52A. 3 hours lecture, 6 hours laboratory. Transfer: CSU, UC; CSU/GE: B2, B3; IGETC: Area 5B & Lab; AA/AS.

PHYSIOLOGY (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, eligibility for English 1A or 52A. May be offered in Distance Education delivery format. 3 hours lecture, 6 hours laboratory. Transfer: CSU, UC; CSU/GE: B2, B3; IGETC: Area 5B & Lab; AA/AS (CAN BIOL 12).

2 PATHOPHYSIOLOGY

3 UNITS

Pathophysiological processes in selected disease states in the following systems of the human body; endocrine, renal, circulatory, respiratory, gastrointestinal, musculoskeletal, integumentary, and neurological. Purpose and results of supporting laboratory, radiological, and other appropriate diagnostic studies used in confirming the presence or absence of the selected disease states. Critical thinking exercises. Prerequisites: Satisfactory completion of Physiology 1 and Microbiology 1 (or equivalent) and: (1) satisfactory completion of (or concurrent enrollment in)

Nursing 69 and Nursing 70 and possession of a valid California LVN license, or possession of a valid California RN license, or satisfactory completion (75% or higher) of all required nursing courses in the first year of the nursing curriculum and concurrent enrollment in the third semester of the nursing program. May be offered in Distance Education delivery format. 3 hours lecture.

2L PHYSICAL ASSESSMENTS

½–1 UNIT

Methodologies employed in physical assessment in the clinical setting Focus on breast and testicular examination, and advanced technique utilized in assessing the status of neurological cardiac, and peripheral vascular, thoracic, musculoskeletal, integumentary, and abdominal systems. Laboratory and diagnostic tests (such as techniques of respiratory arterial blood gas analyzes, pulse oximetry, and basic cardiac dysrhythmia interpretation). Health data base interviewing. Prerequisites: Satisfactory completion of Physiology 1 and Microbiology 1 (or equivalent) and: (1) satisfactory completion of (or concurrent enrollment in) Nursing 69 and Nursing 70, possession of a valid California LVN license, or satisfactory completion of all required nursing courses in the first year of the nursing curriculum, and concurrent enrollment in the third semester of the nursing program and Physiology 2, or possession of a valid California RN license. ½–3 hours laboratory. Transfer: CSU.

BUSINESS (BUS)

(Other Business-related programs appear under the headings of Computer Application Systems and Real Estate.)

DEGREE:

AS—ACCOUNTING

AA—BUSINESS ADMINISTRATION

AS—BUSINESS

AS—RETAIL MANAGEMENT

CERTIFICATE OF ACHIEVEMENT:

MARKETING

RETAIL MANAGEMENT

CERTIFICATE OF COMPLETION:

ACCOUNTING TECHNICIAN

MANAGEMENT

RETAILING

SMALL BUSINESS MANAGEMENT

The curriculum offers the student general business preparation for gainful employment in various business responsibilities and prepares for transfer to four-year institution. A broad foundation of basic principles in business operation and management is provided.

The accounting curriculum provides training for employment as accounting clerks, accounts payable clerks, accounts receivable clerks, accountants and bookkeepers in the accounting departments of business firms and as junior accountants in the public accounting field.

ACCOUNTING

ASSOCIATE IN SCIENCE DEGREE

FRESHMAN YEAR FALL SPRING

Business 1A (Principles of Accounting I)	4
Business 12 (Introduction to Business)	3
Business 16 (Business Mathematics)	3
Business 1B (Principles of Accounting II)	4
Computer Application Systems 54A (Microsoft Excel® I)	3

SOPHOMORE YEAR FALL SPRING

Business 10 (Business Law)	4
Business 14 (Business Communications)	3
Business 3 (Income Tax Accounting)	4
Business 6 (Computerized Accounting using Excel and QuickBooks)	2
Option*	9
Total	39

General Education Courses
For specific General Education courses refer to catalog section on Graduation Requirements
Total minimum units required 60

- * Select any nine units from the following options:
 Business 2 (Intermediate Accounting) 3 units
 Business 4 (Cost Accounting) 3 units
 Business 8 (Payroll Accounting) 3 units
 Business 81 (Introduction to Investments) 3 units

The above listing is a suggested sequence only. Some courses may have prerequisites. Students may take courses in any sequence except where a prerequisite applies.

BUSINESS

ASSOCIATE IN SCIENCE DEGREE

The core curriculum for the Business Associate in Science Degree involves completing the courses below and the general education requirements. Students may enroll in one of the four areas of emphasis: General Business, International Business, Management, or Marketing. Only one Associate in Science Degree in Business may be earned.

FRESHMAN YEAR FALL SPRING

Business 1A (Principles of Accounting I) or Business 7 (General Accounting)	3-4
Business 10 (Business Law)	4
Business 12 (Introduction to Business)	3
Business 14 (Business Communications)	3
Business 16 (Business Mathematics)	3
Business 22 (Introduction to Management)	3

SOPHOMORE YEAR FALL SPRING

Business 36 (Introduction to Marketing)	3
Business 40 (International Business)	3
Computer Application Systems 8 (Computer Literacy) or Computer Science 8 (Computer Literacy) or Computer Application Systems 50 (Introduction to Computer Application Systems) or Computer Application Systems 54A (Microsoft Excel I)	3
Emphasis (Select from the areas of emphasis below. Only one AS degree in Business may be earned.	9
Total	37-38

General Education Courses
For specific General Education courses refer to catalog section on Graduation Requirements
Total minimum units required 60

Emphasis 1 - General Business
Select a minimum of 9 units from any other business classes

Emphasis 2 - Management

Business 21 (Human Resource Management)	3 units
<i>Select a minimum of 6 units from the following options:</i>	
Business 26 (Small Business Management)	3 units
Business 28 (Human Relations in the Workplace)	3 units
Business 50A (Skills for Supervisors)	1 unit
Business 50B (Business Etiquette & Professionalism)	1 unit
Business 50C (Interviewing for Success)	1 unit
Business 50D (Resumes and Job Application Letters)	1 unit
Business 50E (Business Email)	1 unit
Business 50F (Developing a Business Plan)	1 unit
Business 95/Work Experience 95	1-3 units
(Work Experience)	
Business 96/Work Experience 96	1 unit
(Work Experience Seminar)	
Psychology 1 (General Psychology)	3 units

Emphasis 3 - Marketing
Select a minimum of 6 units from the following options:

Business 31 (Professional Selling)	3 units
Business 32 (Retail Store Management)	3 units
Business 34 (Introduction to Advertising)	3 units
<i>Select a minimum of 3 units from the following options:</i>	
Business 26 (Small Business Management)	3 units
Business 28 (Human Relations in the Workplace)	3 units
Business 50A (Skills for Supervisors)	1 unit
Business 50B (Business Etiquette & Professionalism)	1 unit
Business 50C (Interviewing for Success)	1 unit
Business 50D (Resumes and Job Application Letters)	1 unit
Business 50E (Business Email)	1 unit
Business 50F (Developing a Business Plan)	1 unit
Business 95/Work Experience 95	1-3 units
(Work Experience)	
Business 96/Work Experience 96	1 unit
(Work Experience Seminar)	
Computer Application Systems 82	3 units
(Designing Web Pages)	

The above listing is a suggested sequence only. Some courses may have prerequisites. Students may take courses in any sequence except where a prerequisite applies.

BUSINESS ADMINISTRATION

ASSOCIATE IN ARTS DEGREE

FRESHMAN YEAR FALL SPRING

Business 1A (Principles of Accounting I)	4
Business 12 (Introduction to Business)	3
Economics 1 (Principles of Microeconomics)	3
Business 1B (Principles of Accounting II)	4
Economics 2 (Principles of Macroeconomics)	3
Mathematics 32 (Calculus for Business and Social Sciences) or Mathematics 1 (Calculus I)	4-5

SOPHOMORE YEAR

Business 10 (Business Law)	4
Mathematics 35 (Statistics for Business Majors) or Mathematics 43 (Introduction to Probability And Statistics)	4-5

Computer Application Systems 50 (Introduction to Computer Application Systems) or Computer Application Systems 8 (Computer Literacy) or Computer Science 8 Computer Literacy 3

Total **32–34**

General Education Courses
For specific General Education courses refer to catalog section on Graduation Requirements.
Total minimum units required **60**

The above listing is a suggested sequence only. Some courses may have prerequisites. Students may take courses in any sequence except where a prerequisite applies.

Completion of this program satisfies lower division major preparation for Business at California State University, East Bay. Lower division requirements vary by transfer school. Please see a counselor for transfer requirements for specific institutions.

RETAIL MANAGEMENT ASSOCIATE IN SCIENCE DEGREE

FRESHMAN YEAR	FALL	SPRING
Business 1A (Principles of Accounting I) or Business 7 (General Accounting)	3–4	
Business 14 (Business Communications)	3	
English 70 (Report Writing)	3	
Business 16 (Business Mathematics)	3	

SOPHOMORE YEAR	FALL	SPRING
Business 21 (Human Resource Management)	3	
Business 28 (Human Relations in the Workplace)	3	
Business 36 (Introduction to Marketing)	3	
Business 22 (Introduction to Management)	3	
Business 32 (Retail Store Management)	3	
Computer Application Systems 8 (Computer Literacy) or Computer Science 8 (Computer Literacy) or Computer Application Systems 50 (Introduction to Computer Application Systems)	3	
Total	30–31	

General Education Courses
For specific General Education courses refer to catalog section on Graduation Requirements
Total minimum units required **60**

The above listing is a suggested sequence only. Some courses may have prerequisites. Students may take courses in any sequence except where a prerequisite applies.

ACCOUNTING TECHNICIAN CERTIFICATE OF COMPLETION

CORE COURSES	FALL	SPRING
Business 1A (Principles of Accounting I)	4	
Business 14 (Business Communications)	3	
Computer Application Systems 54A (Microsoft Excel® I)	3	
Business 1B (Principles of Accounting II)	4	
Business 3 (Income Tax Accounting) or Business 8 (Payroll Accounting)	3–4	
Business 6 (Computerized Accounting using Excel and QuickBooks)	2	
Total	19–20	

The above listing is a suggested sequence only. Some courses may have prerequisites. Students may take courses in any sequence except where a prerequisite applies.

MARKETING

CERTIFICATE OF ACHIEVEMENT

CORE COURSES	FALL	SPRING
Business 1A (Principles of Accounting I) or Business 7 (General Accounting)	3–4	
Business 12 (Introduction to Business)	3	
Business 36 (Introduction to Marketing)	3	
Business 31 (Professional Selling)	3	
Business 32 (Retail Store Management) or Business 34 (Introduction to Advertising)	3	
Option*	6–7	
Total	21–23	

- * Select a minimum of six units from the following*
- Business 14 (Business Communications) 3 units*
 - Business 16 (Business Mathematics) 3 units*
 - Business 22 (Introduction to Management) 3 units*
 - Business 40 (International Business) 3 units*
 - Business 50A (Skills for Supervisors) 1 unit*
 - Business 50B (Business Etiquette & Professionalism) 1 unit*
 - Business 50C (Interviewing for Success) 1 unit*
 - Business 50D (Resumes and Job Application Letters) 1 unit*
 - Business 50E (Business Email) 1 unit*
 - Business 50F (Developing a Business Plan) 1 unit*
 - Business 95/Work Experience 95 (Work Experience) 1–3 units*
 - Business 96/Work Experience 96 (Work Experience Seminar) 1 unit*

The above listing is a suggested sequence only. Some courses may have prerequisites. Students may take courses in any sequence except where a prerequisite applies.

RETAIL MANAGEMENT CERTIFICATE OF ACHIEVEMENT

This certificate is developed in accordance with the Western Association of Food Chains' new *W AFC Retail Management Certificate Program*, a program that has been fully endorsed by the Western Association of Food Chains and its member companies. The certificate's curriculum was developed out of a collaborative effort between several industry and college professionals and encompasses several business essentials, including the "soft skills" of management and communication required for career success in the retail industry.

CORE COURSES	FALL	SPRING
Business 1A (Principles of Accounting I) or Business 7 (General Accounting)	3–4	
Business 14 (Business Communications)	3	
Business 15 (Business Correspondence)	3	
Business 16 (Business Mathematics)	3	
Business 21 (Human Resource Management)	3	
Business 22 (Introduction to Management)	3	
Business 28 (Human Relations in the Workplace)	3	
Business 32 (Retail Store Management)	3	
Business 36 (Introduction to Marketing)	3	
Computer Application Systems 8 (Computer Literacy) or Computer Science 8 (Computer Literacy) or Computer Application Systems 50 (Introduction to Computer Application Systems)	3	
Total	30–31	

The above listing is a suggested sequence only. Some courses may have prerequisites. Students may take courses in any sequence except where a prerequisite applies.

MANAGEMENT CERTIFICATE OF COMPLETION

CORE COURSES	FALL	SPRING
Business 1A (Principles of Accounting) or Business 7 (General Accounting)		3-4
Business 12 (Introduction to Business)		3
Business 22 (Introduction to Management)		3
Business 21 (Human Resource Management)		3
Option*		6
Total		18-19

* Select any six units from the following options:

- Business 10 (Business Law) 4 units
- Business 14 (Business Communications) 3 units
- Business 16 (Business Mathematics) 3 units
- Business 28 (Human Relations in the Workplace) 3 units
- Business 36 (Introduction to Marketing) 3 units
- Business 40 (International Business) 3 units
- Business 50A (Skills for Supervisors) 1 unit
- Business 50B (Business Etiquette & Professionalism) 1 unit
- Business 50C (Interviewing for Success) 1 unit
- Business 50D (Resumes and Job Application Letters) 1 unit
- Business 50E (Business Email) 1 unit
- Business 50F (Developing a Business Plan) 1 unit
- Business 95/Work Experience 95 (Work Experience) 1-3 units
- Business 96/Work Experience 96 (Work Experience Seminar) 1 unit

The above listing is a suggested sequence only. Some courses may have prerequisites. Students may take courses in any sequence except where a prerequisite applies.

RETAILING CERTIFICATE OF COMPLETION

CORE COURSES	FALL	SPRING
Business 16 (Business Mathematics)		3
Business 36 (Introduction to Marketing)		3
Business 14 (Business Communications)		3
Business 22 (Introduction to Management)		3
Business 32 (Retail Store Management)		3
Total		15

The above listing is a suggested sequence only. Some courses may have prerequisites. Students may take courses in any sequence except where a prerequisite applies.

SMALL BUSINESS MANAGEMENT CERTIFICATE OF COMPLETION

CORE COURSES	FALL	SPRING
Business 7 (General Accounting)		3
Business 26 (Small Business Management)		3
Business 10 (Business Law)		4
Business 6 (Computerized Accounting using Excel and QuickBooks)		2
Option*		5
Total		17

* Option

Select a minimum of five units from the following options:

- Business 12 (Introduction to Business) 3 units
- Business 21 (Human Resource Management) 3 units
- Business 22 (Introduction to Management) 3 units
- Business 31 (Professional Selling) 3 units
- Business 32 (Retail Store Management) 3 units

- Business 34 (Introduction to Advertising) 3 units
- Business 36 (Introduction to Marketing) 3 units
- Business 40 (International Business) 3 units
- Business 50A (Skill for Supervisors) 1 unit
- Business 50B (Business Etiquette & Professionalism) 1 unit
- Business 50C (Interviewing for Success) 1 unit
- Business 50D (Resumes and Job Application Letters) 1 unit
- Business 50E (Business Email) 1 unit
- Business 50F (Developing a Business Plan) 1 unit
- Business 95/Work Experience 95 (Work Experience) 1-3 units
- Business 96/Work Experience 96 (Work Experience Seminar) 1 unit
- Computer Application Systems 82 (Designing Web Pages) 3 units

The above listing is a suggested sequence only. Some courses may have prerequisites. Students may take courses in any sequence except where a prerequisite applies.

BUSINESS (BUS)

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. Strongly recommended: Business 7. May be offered in Distance Education delivery format. 4 hours. Transfer: CSU, UC; (CAN BUS 2); with BUS 1B (CAN BUS SEQ A).

1B PRINCIPLES OF ACCOUNTING II 4 UNITS

Emphasis on analysis and use of accounting within the organization: corporations, long term liabilities, investments, funds and cash flow, financial statement analysis, managerial accounting, job order cost accounting, process cost accounting, cost-volume profit, break-even analysis, budgeting and standard costs. Prerequisite: Business 1A (completed with a grade of "C" or higher). May be offered in Distance Education delivery format. 4 hours. Transfer: CSU, UC; (CAN BUS 4); with BUS 1A (CAN BUS SEQ A).

2 INTERMEDIATE ACCOUNTING 3 UNITS

Fundamental accounting standards and concepts, environment, framework, procedure and reporting for assets, liabilities, expenditures, and net income. Prerequisite: Business 1B (completed with a grade of "C" or higher). May be offered in Distance Education delivery format. 3 hours. Transfer: CSU.

3 INCOME TAX ACCOUNTING 4 UNITS

Analysis of the current Federal regulations that affect the income tax liability of individuals. Emphasis on the Federal rules and differences in the California law. 4 hours. Transfer: CSU.

4 COST ACCOUNTING 3 UNITS

Principles of cost build up and techniques for gathering cost, cost control, job order, process costing, managerial use of cost data, emphasis on application of principles. Prerequisite: Business 1B (completed with a grade of "C" or higher). 3 hours. Transfer: CSU.

5 INTRODUCTION TO PEACHTREE ACCOUNTING 1 UNIT

Introduction to the use of Peachtree accounting to process the accounting cycle using the general journal and the general ledger for a service organization. Recording transactions, posting, making adjustments and preparing financial statements. Using Peachtree modules for a merchandising organization. Specific modules include accounts payable, accounts receivable, inventory and payroll. Strongly recommended: Business 7* (Combined credit for Computer Application Systems 60, Business 5, and/or Business 7 may not exceed 12 units.) 1 hour lecture, 1 hour laboratory. Transfer: CSU.

6 COMPUTERIZED ACCOUNTING USING EXCEL AND QUICKBOOKS 2 UNITS

Introduction to computerized accounting using Excel and QuickBooks. Using software to process the accounting cycle using the general journal and the general ledger for a service organization. Recording transactions, posting, making adjustments, and preparing financial statements. Using Excel spreadsheets and QuickBooks modules for a merchandising organization. Specific modules include accounts payable, accounts receivable, inventory, and payroll. Strongly recommended: Business 1A, Business 7 or equivalent. May be offered in Distance Education delivery format. 1 hour lecture, 3 hours laboratory. Transfer: CSU.

7 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 (Combined credit for Computer Application Systems 60, Business 5, and/or Business 7 may not exceed 12 units.) 3 hours lecture, 1 hour laboratory. Transfer: CSU.

8 PAYROLL ACCOUNTING 3 UNITS

The laws, principles and procedures of payroll accounting in both manual and computerized environments. Concepts covered include preparation of payroll records and reports; payroll law and practices; computation of taxes, including Social Security, federal income tax, state income taxes, and unemployment taxes and voluntary withholdings. May be offered in Distance Education delivery format. Strongly recommended: Business 1A or Business 7 or equivalent. 3 hours lecture.

10 BUSINESS LAW 4 UNITS

Legal setting in which business operates, with emphasis on legal reasoning and resolution, contracts, torts, intellectual property, agency and employment law, partnerships and corporations. May be offered in Distance Education delivery format. 4 hours. Transfer: CSU, UC; (CAN BUS 8).

12 INTRODUCTION TO BUSINESS 3 UNITS

Survey of the private enterprise system and basic business concepts, business economics, types of business ownership, organization and functions, the data and systems by which businesses are controlled. May be offered in Distance Education delivery format. 3 hours. Transfer: CSU, UC.

14 BUSINESS COMMUNICATIONS 3 UNITS

Theory and application of written and oral communications in a professional business environment: organization of messages, editing for tone and polish, presentation techniques, meeting management, job search communications. Strongly recommended: Eligibility for English 1A or 52A. May be offered in Distance Education delivery format. 3 hours lecture, 1 hour laboratory.

15 BUSINESS CORRESPONDENCE 3 UNITS

Development of skills in organizing and writing business letters, memoranda, reports, resumes, 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 101B. 3 hours lecture, 1 hour laboratory. Transfer: CSU.

16 BUSINESS MATHEMATICS 3 UNITS

Mathematics to solve typical business problems including simple interest, compound interest, installment sales, trade and cash discounts, markup percents, pricing, discounting notes and drafts, depreciation, taxes, insurance, statistics, stocks, bonds, and distribution of ownership and profits. Strongly recommended: Mathematics 105 or 105L (*completed with a grade of "C" or higher*). May be offered in Distance Education delivery format. 3 hours. Transfer: CSU; AA/AS.

17 BUSINESS ETHICS 3 UNITS

Past and current political, social and ethical behavior of big business in American society. Emphasis on the ethical 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. Transfer: CSU; CSU/GE; D7; AA/AS.

21 HUMAN RESOURCE 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, benefits, and employee rights. May be offered in Distance Education delivery format. 3 hours. Transfer: CSU

22 INTRODUCTION TO MANAGEMENT 3 UNITS

Principles and concepts of traditional management tasks, contemporary management challenges including human relations, diversity, quality, social responsibility and ethics, the global environment, human resource management, business communications, competitiveness, motivation, leadership and teamwork. May be offered in Distance Education delivery format. 3 hours. Transfer: CSU.

24 LEADERSHIP ACTIVITY 1 UNIT

(May be repeated 3 times)

Performance in marketing and management activities, including field trips, workshops, market research studies and projects designed to develop vocational competence and leadership abilities. 1 hour.

26 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 7. 3 hours. Transfer: CSU.

28 HUMAN RELATIONS IN THE WORKPLACE 3 UNITS

Business concepts of individual, group, and organization 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. 3 hours. Transfer: CSU.

31 PROFESSIONAL SELLING 3 UNITS

Principles and techniques involved in selling ideas, products and services. Includes buying behavior, suggestions, ethics and career opportunities in sales work. Emphasis on mastering the art of selling in retail stores. 3 hours. Transfer: CSU, AA/AS.

32 RETAIL STORE MANAGEMENT 3 UNITS

Principles and practices used in the management of retail stores, includes site selection, layout, organization, staffing, positioning, customer service, promotional techniques and all aspects of the critical buying function. 3 hours. Transfer: CSU.

34 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. Transfer: CSU.

35 E-BUSINESS AND E-COMMERCE

3 UNITS

An introduction to the fundamental concepts of electronic-business and electronic-commerce. Presentation of the business and technology framework for e-commerce. Value network analysis including disintermediation and reintermediation. Exploration of the hyper-competitive business environment. Application of electronic commerce in business-to-business and business-to consumer markets. Discussion of public policy issues surrounding electronic commerce. Presentation of technology infrastructure requirements of implementation of e-commerce and e-business. 3 hours. Transfer: CSU.

36 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. May be offered in Distance Education delivery format. 3 hours. Transfer: CSU; CSU/GE: D7; AA/AS.

40 INTERNATIONAL BUSINESS

3 UNITS

Exploration of major factors involved in developing international trade. A managerial overview of international law, monetary environment, foreign market analysis, sociocultural forces and international ethics. Emphasis on current events in international business. 3 hours. Transfer: CSU, AA/AS.

50A SKILLS FOR SUPERVISORS

1 UNIT

This course will provide survival skills for new supervisors and those who aspire to move to managerial positions. Necessary skills of time management, leadership, planning, motivation, conducting meetings, communication, handling stress, conflict, and performance appraisals will be discussed. Students will involve in a variety of management exercises, discussions, current trends in supervision, and real-world case studies. 1 hour.

50B BUSINESS ETIQUETTE AND PROFESSIONALISM

1 UNIT

Principles of American and international business etiquette for the business professional: introductions, conversational techniques, professional appearance, entertainment, telephone and computer etiquette and more. May be offered in Distance Education delivery format. 1 hour.

50C INTERVIEWING FOR SUCCESS

1 UNIT

Principles and techniques of successful employment interviews: interview preparation, selling your qualifications, managing difficult qualifications, following up on the interview. 1 hour.

50D RESUMES AND JOB APPLICATION LETTERS

1 UNIT

Research and preparation of persuasive employment search documents, including company research, self-assessment, document composition and format. Includes resumes, job application letters, and follow up communications. May be offered in Distance Education delivery format. 1 hour.

50E BUSINESS EMAIL

1 UNIT

Communication and technology principles for effective use of email in a business environment. Includes email text and subject line composition and editing, email technology and tools, inbox management, email etiquette, email as a job search tool, and email security. May be offered in Distance Education delivery format. 1 hour.

50F DEVELOPING A BUSINESS PLAN

1 UNIT

Research, analysis and outlining logical and persuasive business plans, including market and competitive analysis, financial plans, management and operational plans, and plan outlines and executive summaries. May be offered in Distance Education delivery format. 1 hour.

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. May be offered in Distance Education delivery format. 3 hours. Transfer: CSU.

95 WORK EXPERIENCE ◊

1-3 UNITS

(Business 95 and Work Experience 95 may be repeated for a combined total of 3 times.)

College supervised on-the-job training. Paid or volunteer work experience, including an internship, in an occupation related to student's major or classes at Chabot. Cooperative effort between student, supervisor, and instructor to accomplish new work objective and broaden experiences for each semester enrolled. Corequisite: Business 96. 5-15 hours of employment per week. Transfer: CSU.

96 WORK EXPERIENCE SEMINAR ◊

1 UNIT

(Business 96 and Work Experience 96 may be repeated for a combined total of 3 times.)

Provides the focal point for the coordination of the student's curriculum with college supervised employment/volunteering in the student's major field. Emphasis on building strong working relationships with supervisors, subordinates, co-workers. Issues pertaining to the modern workplace. Corequisite: Business 95. 1 hour.

200 COMPUTERS IN THE MODERN WORLD

NON-CREDIT

Basic introductory hands-on training in word processing, database spreadsheet and graphics. Introduction to the Internet. A working knowledge of the standard (typewriter) keyboard is required.

◊Refer to page 14 for program requirements.

CHEMISTRY (CHEM)

**DEGREE:
AS-CHEMISTRY**

The two-year program in chemistry provides the student with a broad background in inorganic chemistry and quantitative analysis. This program supports all physical and biological science majors in the allied health sciences and satisfies general education requirements.

CHEMISTRY

ASSOCIATE IN SCIENCE DEGREE

FRESHMAN YEAR FALL SPRING

Chemistry 1A (General College Chemistry)	5
Mathematics 1 (Calculus I)	5
Chemistry 1B (General College Chemistry)	5
Mathematics 2 (Calculus II)	5

SOPHOMORE YEAR FALL SPRING

Chemistry 12A (Organic Chemistry)	5
Physics 4A (General Physics I)	5
Chemistry 12B (Organic Chemistry)	5
Physics 4B (General Physics II)	5

Total: 40

General Education Courses

For specific General Education courses refer to catalog section on Graduation Requirements.

Total minimum units required 60

Recommended course:

- Mathematics 3 (Multivariable Calculus)
- OR** Mathematics 4 (Elementary Differential Equations)
- OR** Mathematics 6 (Elementary Linear Algebra)

CHEMISTRY (CHEM)

To remain in a chemistry class a student must demonstrate competency in chemistry laboratory safety procedures by receiving a satisfactory score on the safety quiz administered during the NGR period.

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. Laboratory includes both quantitative and qualitative experiments. Prerequisite: Mathematics 55 or 55B, Chemistry 31 (all courses completed with a grade of "C" or higher) or appropriate skill level demonstrated through the Chemistry Placement Process. 3 hours lecture, 6 hours laboratory. Transfer: CSU, UC; CSU/GE: B1, B3; IGETC: Area 5A & Lab; AA/AS; (CAN CHEM 2); with CHEM 1B (CAN CHEM SEQ A).

1B GENERAL COLLEGE CHEMISTRY 5 UNITS

Continuation of Chemistry 1A. 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 a grade of "C" or higher). 3 hours lecture, 6 hours laboratory. Transfer: CSU, UC; CSU/GE: B1, B3; IGETC: Area 5A & Lab; (CAN CHEM 4); with CHEM 1A (CAN CHEM SEQ A).

5 QUANTITATIVE OF ANALYSIS 4 UNITS

Principles and methods of volumetric and gravimetric analysis and an introduction to instrumental analysis. Prerequisite: Chemistry 1B (completed with a grade of "C" or higher). 2 hours lecture, 6 hours laboratory. Transfer: CSU, UC; IGETC: Area 5A & Lab; (CAN CHEM 12).

8 SURVEY OF ORGANIC CHEMISTRY 6 UNITS

Fundamental aspects of the structure, physical properties, chemical reactivity and synthesis of organic compounds with emphasis on materials of interest to students in the biological sciences. Laboratory experiments cover basic organic laboratory techniques using reactions or processes found in the biological sciences. Prerequisite: Chemistry 1B (completed with a grade of "C" or higher). 4 hours lecture, 1 hour discussion, 3 hours laboratory. Transfer: CSU, UC; CSU/GE: B1, B3; IGETC: Area 5A & Lab; AA/AS.

10 INTRODUCTION TO CHEMISTRY 4 UNITS

A non-mathematical survey of the basic concepts of chemistry that stresses a humanistic approach. Designed for non-science majors. Topics include basic structure, properties and reactivity of matter and energy as they relate to environmental issues, nutrition, medicine, material science and other current topics. May not be taken for credit if Chemistry 1A or Chemistry 31 has been completed. May be offered in Distance Education delivery format. 3 hours lecture, 3 hours laboratory. Transfer: CSU, UC; CSU/GE: B1, B3; IGETC: Area 5A & Lab; AA/AS.

12A ORGANIC CHEMISTRY 5 UNITS

The structure, nomenclature, bonding, stereochemistry, conformational analysis, and physical properties in relation to alkanes, alkyl halides, alkenes, alkynes, alcohols, and ethers. Emphasis on reactivity and reaction mechanisms. Multi-step synthesis is also introduced. Laboratory work includes microscale, semi-microscale, spectroscopic and chromatographic techniques. Chemistry 12A is the first semester in a year 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. Transfer: CSU, UC; CSU/GE: B1, B3; IGETC: Area 5A & Lab.

12B ORGANIC CHEMISTRY 5 UNITS

Continuation of Chemistry 12A with an introduction to the chemistry of dienes, aromatics, amines, carbanions, carboxylic acid derivatives, 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. Chemistry 12B is the second semester in a year course in Organic Chemistry designed for students majoring in Chemistry related disciplines. Prerequisite: Chemistry 12A (completed with a grade of "C" or higher). 3 hours lecture, 6 hours laboratory. Transfer: CSU, UC; CSU/GE: B1, B3; IGETC: Area 5A & Lab.

20 MOLECULAR MODELING FOR ORGANIC CHEMISTRY 1 UNIT

(May be repeated 1 time)

Computer generated molecular models of organic molecules will be used for the purpose of strengthening the connections between structure, stability and reactivity. Models will be used to explore and predict reactivity as well as properties such as dipole moments, conformations, and energy. Designed for students currently enrolled in an organic chemistry course or for those who have successfully completed one. May be offered in Distance Education delivery format. Strongly recommended: current enrollment in an Organic Chemistry Course. 1 hour lecture/discussion. Transfer: CSU.

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, 65B or 65L (completed with a grade of "C" or higher). 3 hours lecture, 3 hours laboratory. Transfer: CSU, UC; CSU/GE: B1, B3; IGETC: Area 5A & Lab; AA/AS; (CAN CHEM 6).

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 higher). 3 hours lecture, 3 hours laboratory. Transfer: CSU, UC; CSU/GE: B1, B3; IGETC: Area 5A & Lab; (CAN CHEM 8).

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. Prerequisite: Mathematics 55 or 55B (completed with a grade of "C" or higher). 3 hours lecture, 3 hours laboratory. Transfer: CSU, UC; CSU/GE: B1, B3; IGETC: Area 5A & Lab; AA/AS.

CHINESE

(See Foreign Languages)



COLLOQUIA

COLLOQUIA

1 UNIT

(May be repeated 3 times)

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 not on probation. 2 hours. Transfer: CSU, UC.

COMMUNITY INTEREST STUDIES

COMMUNITY INTEREST STUDIES

NON-CREDIT

Community interest courses include both full term and short term courses in a wide variety of course patterns, field studies, seminars, workshops, and any other such 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.

COMPUTER APPLICATION SYSTEMS (CAS)

DEGREE:

AS—COMPUTER APPLICATION SYSTEMS

(SOFTWARE SPECIALIST)

AS—ADMINISTRATIVE ASSISTANT

CERTIFICATE OF ACHIEVEMENT:

ADMINISTRATIVE ASSISTANT

OFFICE TECHNOLOGY

SOFTWARE SPECIALIST

CERTIFICATE OF COMPLETION:

OFFICE TECHNOLOGY

The Computer Application Systems program includes microcomputer applications, programming languages and computer support of business organizations. The program offers state-of-the-art training in the use of business application software and hardware to prepare students for professional careers, transfer study, and/or personal use. Students receive individual hands-on training in laboratory facilities. Faculty work closely with business and industry to ensure relevant training.

COMPUTER APPLICATION SYSTEMS—SOFTWARE SPECIALIST

ASSOCIATE IN SCIENCE DEGREE

FRESHMAN YEAR **FALL** **SPRING**

Computer Applications Systems 8 (Computer Literacy) or Computer Science 8 (Computer Literacy) or Computer Application Systems 50 (Introduction to Computer Application Systems) . . .	3
Computer Application Systems 72A (Elementary Computer Keyboarding I)	1
Computer Application Systems 54A (Microsoft Excel® I)	3
Business 14 (Business Communications)	3
Computer Application Systems 88A (Microsoft Word® I)	3
Computer Science 7 (Introduction to Computer Programming Concepts) or Computer Science 10 (Introduction to Programming Using Visual BASIC.NET)	3–4

SOPHOMORE YEAR **FALL** **SPRING**

Computer Application Systems 58 (Introduction to Microsoft Access®)	3
Computer Science 91 (Introduction to Hypertext Markup Language (HTML)) or Computer Application Systems 82 (Designing Web Pages) or Computer Application Systems 84 (Designing Business Graphics)	2–3
Business 95 (Work Experience) or Work Experience 95 (Work Experience)	1–3
Business 96 (Work Experience Seminar) or Work Experience 96 (Work Experience Seminar)	1
Electives*	3
Total	26–30

*Three units may be selected from the following:

- Computer Application Systems 54B (Microsoft Excel® II) 3 units
- Computer Application Systems 55 (Microsoft Office® Integration) 3 units
- Computer Application Systems 82 (Designing Web Pages) 3 units
- Computer Application Systems 84 (Designing Business Graphics) 3 units
- Computer Application Systems 88B (Microsoft Word® II) 3 units

General Education Courses

For specific General Education courses refer to catalog section on Graduation Requirements.

Total minimum units required **60**

ADMINISTRATIVE ASSISTANT

ASSOCIATE IN SCIENCE DEGREE

FRESHMAN YEAR **FALL** **SPRING**

Computer Applications Systems 8 (Computer Literacy) or Computer Science 8 (Computer Literacy) or Computer Application Systems 50 (Introduction to Computer Application Systems)	3
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Computer Application Systems 72A (Computer Keyboarding I) and Computer Application Systems 72B (Computer Keyboarding II) and Computer Application Systems 72C (Computer Keyboarding III)	3
Business 7 (General Accounting) or Business 1A (Principles of Accounting I)	3–4
Computer Application Systems 54A (Microsoft Excel® I)	3
Computer Application Systems 88A (Microsoft Word® I)	3

SOPHOMORE YEAR **FALL** **SPRING**

Business 22 (Introduction to Management) or Business 28 (Human Relations in the Workplace)	3
Computer Application Systems 58 (Introduction to Microsoft Access®)	3
English 52A (Essentials of Communications) or English 70 (Report Writing) or Computer Application Systems 72K (Business English Skills I) and Computer Application Systems 72L (Business English Skills II)	2–3
Computer Applications Systems 54B (Microsoft Excel® II) or Computer Application Systems 55 (Microsoft Office® Integration) or Computer Application Systems 82 (Designing Web Pages) or Computer Application Systems 84 (Designing Business Graphics) or Computer Application Systems 88B (Microsoft Word® II)	3
Business 95 (Work Experience) or Work Experience 95 (Work Experience)	1–3
Business 96 (Work Experience Seminar) or Work Experience 96 (Work Experience Seminar)	1
Total	28–32

General Education Courses

For specific General Education courses refer to catalog section on Graduation Requirements.

Total minimum units required **60**

ADMINISTRATIVE ASSISTANT

CERTIFICATE OF ACHIEVEMENT

CORE COURSES **FALL** **SPRING**

Computer Applications Systems 8 (Computer Literacy) or Computer Science 8 (Computer Literacy) or Computer Application Systems 50 (Introduction to Computer Application Systems)	3
Computer Application Systems 72A (Computer Keyboarding I) and Computer Application Systems 72B (Computer Keyboarding II) and Computer Application Systems 72C (Computer Keyboarding III)	3
Computer Application Systems 88A (Microsoft Word® I)	3
English 52A (Essentials of Communications) or English 70 (Report Writing) or Computer Application Systems 72K (Business English Skills I) and Computer Application Systems 72L (Business English Skills II)	2–3

Computer Application Systems 54A
 (Microsoft Excel® I) 3
 Computer Application Systems 58
 (Introduction to Microsoft Access®) 3
 Electives* 3
Total **20–21**

*Three units may be selected from the following:
 Computer Application Systems 54B (Microsoft Excel® II) 3 units
 Computer Application Systems 55 (Microsoft Office® Integration) 3 units
 Computer Application Systems 82 (Designing Web Pages) 3 units
 Computer Application Systems 84 (Designing Business Graphics) 3 units
 Computer Application Systems 88B (Microsoft Word® II) 3 units

OFFICE TECHNOLOGY
 CERTIFICATE OF ACHIEVEMENT

CORE COURSES FALL SPRING

Computer Applications Systems 8
 (Computer Literacy) or Computer Science 8
 (Computer Literacy) or Computer Application
 Systems 50 (Introduction to Computer
 Application Systems) 3
 Computer Application Systems 72A
 (Computer Keyboarding I) and
 Computer Application Systems 72B
 (Computer Keyboarding II) and
 Computer Application Systems 72C
 (Computer Keyboarding III) 3
 Computer Application Systems 88A
 (Microsoft Word® I) 3
 English 52A (Essentials of Communications) or
 English 70 (Report Writing) or Computer
 Application Systems 72K (Business English
 Skills I) and Computer Application Systems 72L
 (Business English Skills II) 2–3
 Computer Application Systems 54A
 (Microsoft Excel® I) 3
 Electives* 6
Total units required **20–21**

*Six units may be selected from the following:
 Computer Applications Systems 54B (Microsoft Excel® II) 3 units
 Computer Applications Systems 58 (Microsoft Access®) 3 units
 Computer Applications Systems 72H (Proofreading Skills) 1 unit
 Computer Applications Systems 72I (Filing and Records Management)
 1 unit
 Computer Applications Systems 72J (Ten Key) 1 unit
 Computer Applications Systems 82 (Designing Web Pages) 3 units
 Computer Applications Systems 88B (Microsoft Word®) 3 units

SOFTWARE SPECIALIST
 CERTIFICATE OF ACHIEVEMENT

CORE COURSES FALL SPRING

Business 14 (Business Communications) 3
 Computer Applications Systems 8
 (Computer Literacy) or
 Computer Science 8 (Computer Literacy) or
 Computer Application Systems 50
 (Introduction to Computer Application Systems) . . . 3
 Computer Application Systems 72A
 (Computer Keyboarding I) 1
 Computer Application Systems 54A
 (Microsoft Excel® I) 3

Computer Application Systems 58
 (Introduction to Microsoft Access®) 3
 Computer Application Systems 88A
 (Microsoft Word® I) 3
 Computer Science 7 (Introduction to
 Computer Programming Concepts) or
 Computer Science 10 (Introduction to
 Programming Using Visual BASIC.NET) 3–4
 Computer Science 91 (Intro Hypertext
 Markup Language (HTML) or
 Computer Application Systems 82
 (Designing Web Pages) or
 Computer Application Systems 84
 (Designing Business Graphics) 2–3
 Electives* 3
Total **24–26**

*Three units may be selected from the following:
 Computer Application Systems 54B (Microsoft Excel® II) 3 units
 Computer Application Systems 55 (Microsoft Office® Integration)
 3 units
 Computer Application Systems 82 (Designing Web Pages) 3 units
 Computer Application Systems 84 (Designing Business Graphics)
 3 units
 Computer Application Systems 88B (Microsoft Word® II) 3 units

OFFICE TECHNOLOGY
 CERTIFICATE OF COMPLETION

CORE COURSES FALL SPRING

Computer Application Systems 8
 (Computer Literacy) or
 Computer Application Systems 50
 (Introduction to Computer Application Systems)
 or Computer Science 8 (Computer Literacy) 3
 Computer Application Systems 54A
 (Microsoft Excel® I) 3
 Computer Application Systems 88A
 (Microsoft Word® I) 3
Select one course from the following:
 CAS 72A; 72B; 72C; 72F; 72G; 72H; 72I; 72J 1
Total **10**

**COMPUTER APPLICATION
 SYSTEMS (CAS)**

8 COMPUTER LITERACY **3 UNITS**

(See also Computer Science 8)
 Introduction to computers including: Microsoft Windows, Microsoft Office, Multimedia, the internet, browsers, World Wide Web, an awareness of types of computer software in use including programming languages, electronic mail, computer-based careers and trends, and other computing issues in today's society. No prior computer experience necessary. Course recommended for students of any major who want to learn about computers and how to use them. Hands-on laboratory experience reinforces lecture. Strongly recommended: eligibility for Mathematics 65 or Mathematics 65A (May not receive credit if Computer Science 8 has been completed.) May be offered in Distance Education delivery format. 2 hours lecture, 2 hours laboratory. Transfer: CSU, UC; AA/AS; (CAN CSCI 2).

50 INTRODUCTION TO COMPUTER APPLICATION SYSTEMS**3 UNITS**

Introduction to computer applications for business and home use. Includes hardware and common software applications such as Word, Excel, PowerPoint, and Access, plus an understanding of an Internet Browser for the World Wide Web, HTML, personal computer, and familiarization with its capabilities in a Windows environment. May be offered in Distance Education delivery format. 3 hours lecture, 1 hour laboratory. Transfer: CSU; CSU/GE: D7.

54A MICROSOFT EXCEL® I**3 UNITS**

Introduction to spreadsheet applications using Excel 2000 on the PC to create a variety of spreadsheets with emphasis on business application programs. Calculate date using function and formulas, create charts, link and consolidate worksheets. Includes Microsoft Office User Specialist (MOUS) Level I Core Certification preparation. Strongly recommended: Computer Science 8 or Computer Application Systems 8, or Computer Application Systems 50. May be offered in Distance Education delivery format. 2 hours lecture, 2 hours laboratory. Transfer: CSU.

54B MICROSOFT EXCEL® II**3 UNITS**

Advanced spreadsheet applications using Microsoft Excel on the PC to create a variety of advanced spreadsheets with emphasis on business application programs. Includes Microsoft Office User Specialist (MOUS) Expert Certification preparation. Strongly recommended: Computer Application Systems 54A. May be offered in Distance Education delivery format. 2 hours lecture, 2 hours laboratory. Transfer: CSU.

55 MICROSOFT OFFICE® INTEGRATION**3 UNITS**

Hands-on experience integrating data and graphics with Word, Excel, and PowerPoint. Emphasis on developing and creating a variety of business documents including databases, brochures, and newsletters. Prerequisites: Computer Application Systems 54A and Computer Application Systems 88A. (Combined credit for Computer Application systems 55, 61, and 88A may not exceed 12 units.) 2 hours lecture, 2 hours laboratory. Transfer: CSU

58 INTRODUCTION TO MICROSOFT ACCESS®**3 UNITS**

Introduction to database use and concepts using Microsoft Access® software. For students requiring an overview of data storage, data retrieval, and data maintenance using a WINDOWS based relational database. Strongly recommended: Computer Application Systems 8 or Computer Science 8 or Computer Application Systems 50. May be offered in Distance Education delivery format. 2 hours lecture, 2 hours laboratory. Transfer: CSU.

60 BUSINESS SOFTWARE APPLICATIONS/ GENERAL ACCOUNTING**12 UNITS***(May be repeated 1 time)*

Introduction to the principles of automated and manual accounting systems and computerized spreadsheets and databases typically required for employment. This self-paced, individualized course in general accounting, systematic record keeping and business transaction analysis emphasizes using personal computers to develop a fluent understanding and hands-on application of accounting and database principles and practices and related software applications such as Excel, Access and Peachtree. (Combined credit for Computer Application Systems 60, Business 5 and/or Business 7 may not exceed 12 units.) 30 hours laboratory for 21 weeks. Transfer: CSU.

61 BUSINESS SOFTWARE APPLICATIONS/ ADMINISTRATIVE SUPPORT**12 UNITS***(May be repeated 1 time)*

Introduction to the full range of office skills acquisition focusing on developing employable word processing skills as well as proofreading, business writing, filing, keyboarding and creating computer-based pre-

sentations. A self-paced, individualized approach is used to emphasize personal computers, and to develop a fluent understanding and hands-on use of word processing and presentation software concepts and applications such as Microsoft Word and PowerPoint. (Combined credit for Computer Application Systems 55, 61, and 88A may not exceed 12 units.) 30 hours laboratory for 21 weeks. Transfer: CSU

72 OFFICE TECHNOLOGY SKILLS MODULES

Individualized, self-paced office skills modules offering development, review, and improvement of office computer skills. Modules are not sequential and may be taken in any order. Credit is earned based on competency in each module.

72A ELEMENTARY COMPUTER KEYBOARDING I**1 UNIT***(May be repeated 1 time)*

Self-paced basic introduction to the computer keyboard for developing correct keyboarding skills. 3 hours laboratory. Transfer: CSU

72B ELEMENTARY COMPUTER KEYBOARDING II**1 UNIT***(May be repeated 1 time)*

Self-paced computer keyboard skill development for improving keyboarding accuracy and speed. Introductory word processing techniques will also be taught, including introduction to basic word processing techniques. Strongly recommended: Computer Application Systems 72A. 3 hours laboratory. Transfer: CSU

72C COMPUTER KEYBOARDING III**1 UNIT***(May be repeated 1 time)*

Self-paced computer keyboard review for improving keyboarding accuracy and speed. Strongly recommended: Computer Application Systems 72A or Computer Application Systems 72B. 3 hours laboratory. Transfer: CSU

72D INTRODUCTION TO MICROSOFT WORD**1 UNIT***(May be repeated 1 time)*

Self-paced introduction to word processing using Microsoft Word. Strongly recommended: Computer Application Systems 72A or Computer Application Systems 72B. 3 hours laboratory. Transfer: CSU

72E INTRODUCTION TO MICROSOFT EXCEL**1 UNIT***(May be repeated 1 time)*

Self-paced introduction to spreadsheets using Microsoft Excel. Strongly recommended: Computer Application Systems 72A or Computer Application Systems 72B. 3 hours laboratory. Transfer: CSU

72F INTRODUCTION TO MICROSOFT POWERPOINT**1 UNIT***(May be repeated 1 time)*

Self-paced introduction to presentations using Microsoft PowerPoint. Strongly recommended: Computer Application Systems 72A or Computer Application Systems 72B. 3 hours laboratory. Transfer: CSU

72G INTRODUCTION TO MICROSOFT ACCESS**1 UNIT***(May be repeated 1 time)*

Self-paced introduction to data bases using Microsoft Access. Strongly recommended: Computer Application Systems 72A or Computer Application Systems 72B. 3 hours laboratory. Transfer: CSU

72H PROOFREADING SKILLS**1 UNIT**

Self-paced techniques of proofreading and editing business documents. Strongly recommended: Computer Application Systems 72A or Computer Application Systems 72B. 3 hours laboratory. Transfer: CSU

72I FILING AND RECORDS MANAGEMENT**1 UNIT**

Self-paced theory and practice of alphabetic, numeric, geographic, and subject filing. 3 hours laboratory. Transfer: CSU

72J 10-KEY**1 UNIT***(May be repeated 1 time)*

Self-paced ten-key course using the computer numeric keypad. 3 hours laboratory. Transfer: CSU

72K BUSINESS ENGLISH SKILLS I**1 UNIT**

Self-paced business English course focusing on English fundamentals as applied to business documents. May be offered in Distance Education delivery format. 3 hours laboratory. Transfer: CSU

72L BUSINESS ENGLISH SKILLS II**1 UNIT**

Continuation of self-paced business English course focusing on English fundamentals as applied to business documents. Strongly recommended: Computer Application Systems 72K. May be offered in Distance Education delivery format. 3 hours laboratory. Transfer: CSU

72M INTRODUCTION TO COMPUTING**1 UNIT**

Introduction to computing concepts through the use of videos, animations, and hands-on activities. 3 hours laboratory. Transfer: CSU

72N INTRODUCTION TO THE INTERNET**1 UNIT***(May be repeated 1 time)*

Basic introduction to learning the internet through the use of videos, animations, and hands-on activities. 3 hours laboratory. Transfer: CSU

82 DESIGNING WEB PAGES**3 UNITS**

Design and enhance Web Pages using creative web site design principles, basic HTML formatting and Microsoft Office® Suite applications. Includes creating and editing links and using pictures, graphics, shared borders, themes and tables. Includes publishing a website. Strongly recommended: Computer Application Systems 50 or Computer Application Systems 8 or Computer Science 8. May be offered in Distance Education delivery format. 2 hours lecture, 2 hours laboratory. Transfer: CSU.

84 DESIGNING BUSINESS GRAPHICS**3 UNITS**

Design professional and customized business graphics, logos, business cards, letterheads, envelopes, mailing labels and brochures quickly and easily with Microsoft Publisher®. Use these publications to generate quality graphics for computer printers, commercial printing or web sites. Strongly recommended: Computer Application Systems 8 or Computer Science 8 or Computer Application Systems 50. May be offered in Distance Education delivery format. 2 hours lecture, 2 hours laboratory.

88A MICROSOFT WORD I**3 UNITS**

Basic word processing techniques using Microsoft Word to produce business letters, memos, reports, tables, and other documents. Includes Microsoft Office User Specialist (MOUS) Level I Core Certification preparation. Strongly recommended: Computer Application Systems 72A and 72B. (Combined credit for Computer Application Systems 55, 61, and 88A may not exceed 12 units.) May be offered in Distance Education delivery format. 2 hours lecture, 2 hours laboratory. Transfer: CSU.

88B MICROSOFT WORD II**3 UNITS**

Advanced word processing techniques using Microsoft Word to produce complex business letters, memos, reports, tables, and other documents. Includes Microsoft Office User Specialist (MOUS) Expert Certification preparation. Strongly recommended: Computer Application Systems 88A. May be offered in Distance Education delivery format. 2 hours laboratory. Transfer: CSU.

91 INTRODUCTION TO HYPERTEXT MARKUP LANGUAGE (HTML)**2 UNITS***(See also Computer Science 91)*

Design and development concepts and use of the standard HTML "tags" to develop web pages for use on the current standard World Wide Web latest

version browsers (i.e., Netscape Communicator and Microsoft Explorer). Coverage includes the differences between various tags that work only on Communicator and only on Explorer, use of various web editing tools such as an HTML editor, graphics image editor, special effects applications, design considerations for "intelligent and attractive" web page layout including horizontal and vertical spacing commands, introduction to the use of multimedia (audio and movie clip) capability in HTML, hypertext link presentation using both text and graphical presentation, introduction to dynamic HTML tags such as Cascading Style Sheets, frames, tables, image maps, meta tags. Strongly recommended: Electronics and Computer Technology 90 or equivalent (*completed with a grade of "C" or higher*). (May not receive credit if Computer Science 91 or Electronics and Computer Technology 91 has been completed.) May be offered in Distance Education delivery format. 2 hours lecture, 1 hour laboratory. Transfer: CSU; AA/AS

100 ADAPTED COMPUTER KEYBOARDING**3 UNITS***(May be repeated 3 times)*

Introduction to correct keyboarding techniques and familiarity with the entire computer keyboard, including the number pad with emphasis on adaptive, one handed, and ergonomic keyboarding skills. This course is designed for students with disabilities. 2 hours lecture, 3 hours laboratory.

101 ADAPTED WORD PROCESSING**3 UNITS***(May be repeated 3 times)*

Individualized adapted basic word processing techniques using specialized keyboarding commands, accessibility options, adapted keyboard and mouse hardware and software to produce letters, memos, reports, tables, and other documents. This course is designed for students with disabilities. 2 hours lecture, 3 hours laboratory.

102 INTRODUCTION TO ASSISTIVE TECHNOLOGY**1-3 UNITS***(May be repeated 3 times)*

Instructor led self-paced lab course in assistive technology using screen reader, scan and read, speech recognition, and screen enlargement software programs. Designed for students with disabilities, based on their individual needs. 3-9 hours laboratory.

103 ASSISTIVE TECHNOLOGY LABORATORY**1 UNIT***(May be repeated 3 times)*

Support and individualized instruction in access technology use and adaptive strategies while working on assignments and research projects. Major emphasis on the Personal Computer and its practical use. Designed for students with disabilities. 3 hours laboratory.

COMPUTER SCIENCE (CSCI)**DEGREE:****AA-COMPUTER SCIENCE
(GENERAL)****AS-COMPUTER SCIENCE
(GENERAL)****AA-COMPUTER SCIENCE
(EMPHASIS IN MATHEMATICS)*****AS-COMPUTER SCIENCE
(EMPHASIS IN MATHEMATICS)***

*This is a program oriented towards satisfying lower division requirements for the computer science major. Serves

as a source of courses for professional programmers to upgrade skills. Courses also provided for majors in mathematics, business, biology, physics, engineering, computer science, geology and related disciplines.

COMPUTER SCIENCE (GENERAL)

ASSOCIATE IN ARTS OR
ASSOCIATE IN SCIENCE DEGREE

FRESHMAN YEAR FALL SPRING

Computer Science 10 (Introduction to Programming Using Visual BASIC.NET)	4
Computer Science 14** (Introduction to Structured Programming In C++)	4
Computer Science 91 (Introduction to Hypertext Markup Language (HTML)	2
Computer Science 41 (Introduction to UNIX)	2
Mathematics 40 (Concepts of Mathematics) or Mathematics 43 (Introduction to Probability and Statistics) or Mathematics 36 (Trigonometry) or Mathematics 37 (Trigonometry with an Emphasis on its Geometric Foundations)	3-5

SOPHOMORE YEAR FALL SPRING

Computer Science 15 (Object-Oriented Programming Methods In C++)	4
Computer Science 19A (Java Programming I)	4

In addition take 8 units of Computer Science courses chosen from:

Computer Science 18A (C Programming in the UNIX/Linux Environment) 2 units	
Computer Science 20 (Introduction to Data Structures in C++) 4 units	
Computer Science 21 (Computer Organization and Assembly Language Programming) 4 units	
Computer Science 42 (UNIX Tools, Shell Programming and System Administration Concepts) 2 units	
Computer Science 44A (Perl Programming I) 2 units	
Computer Science 92 (Introduction to Dynamic Hypertext Markup Language (DHTML) 2 units	
Computer Science 94 (XML and XSL for the Web) 2 units	
Total	31-33

General Education Courses
For specific General Education courses refer to catalog section on Graduation requirements.
Total minimum units required 60

This program is not designed to satisfy core requirements for most Computer Science majors. The Computer Science transfer pattern requires more mathematics and includes more breath-based topics. Students should consult a counselor and especially the catalog of the intended transfer institution for specific transfer information.

**If a student is qualified to start at the Computer Science 15 level, the student may substitute any other 4 units of Computer Science courses. No mathematics or Computer Science course may be double counted except for General Education credit.

COMPUTER SCIENCE-EMPHASIS IN MATHEMATICS

ASSOCIATE IN ARTS OR
ASSOCIATE IN SCIENCE DEGREE

FRESHMAN YEAR FALL SPRING

Computer Science 14 (Introduction to Structured Programming in C++)	4
Computer Science 41 (Introduction to UNIX)	2
Mathematics 1 (Calculus I)	5
Mathematics 2 (Calculus II)	5

SOPHOMORE YEAR FALL SPRING

Computer Science 15 (Object-Oriented Programming Methods in C++) or Computer Science 19A (Object-Oriented Programming Methods in Java)*	4
Computer Science 20 (Introduction to Data Structures in C++) or Computer Science 20J (Introduction to Data Structures Using Java)*	4
Computer Science 21 (Computer Organization and Assembly Language Programming)	4
Mathematics 6 (Elementary Linear Algebra) or Mathematics 8 (Discrete Mathematics)**	3

Total 31

General Education Courses
For specific General Education courses refer to catalog section on Graduation Requirements.
Total minimum units required 60

*Computer Science 15/20 (Object-Oriented Programming Methods in C++/Introduction to Data Structures in C++) and Computer Science 19A/20J (Object-Oriented Programming Methods in Java/Introduction to Data Structures Using Java) are sequences, taught in C++ and Java respectively. If you opt for the C++ sequence, you must take Computer Science 15 (Object-Oriented Programming Methods in C++) followed by Computer Science 20 (Introduction to Data Structures in C++). If you opt for the Java sequence, then you must take Computer Science 19A (Object-Oriented Programming Methods in Java) followed by Computer Science 20J (Introduction to Data Structures Using Java). Transfer students are encouraged to take both Computer Science 15 (Object-Oriented Programming Methods in C++) and Computer Science 19A (Object-Oriented Programming Methods in Java).

**It is recommended that Computer Science majors take both Mathematics 6 (Elementary Linear Algebra) and Mathematics 8 (Discrete Mathematics). No Mathematics or Computer Science course may be double counted except for General Education credit.

This program is designed to satisfy core requirements for many Computer Science transfer patterns. However, students should consult a counselor and especially the catalog of the intended transfer institution for specific transfer requirements in the major. Some transfer institutions require Physics for example.

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 the A.S. degree.

COMPUTER SCIENCE (CSCI)

(See also *Computer Application Systems and Mathematics*)

7 INTRODUCTION TO COMPUTER PROGRAMMING CONCEPTS

3 UNITS

Introduction to computer programming for nonscience majors and for students requiring additional preparation before taking Computer Science 10 or Computer Science 14. Hardware, system software basics, the history of computing, basic computer operations, number systems, design of algorithms, and programming constructs such as variables, expressions, input/output, decision-making, loops, functions, and parameters. May be offered in Distance Education delivery format. 3 hours lecture. 1 hour laboratory. Transfer: CSU

8 COMPUTER LITERACY

3 UNITS

(See also *Computer Application Systems 8*)

Introduction to computers including: Microsoft Windows, Microsoft Office, Multimedia, the internet, browsers, World Wide Web, an awareness of types of computer software in use including programming languages, electronic mail, computer-based careers and trends, and other computing issues in today's society. No prior computer experience necessary. Course recommended for students of any major who want to learn about computers and how to use them. Hands-on laboratory experience reinforces lecture. Strongly recommended: eligibility for Mathematics 65 or Mathematics 65A (May not receive credit if Computer Application Systems 8 has been completed.) May be offered in Distance Education delivery format. 2 hours lecture, 2 hours laboratory. Transfer: CSU, UC; AA/AS; (CAN CSCI 2)

10 INTRODUCTION TO PROGRAMMING USING VISUAL BASIC.NET

4 UNITS

Introduction to computer programming using Microsoft's programming language Visual BASIC.NET for Windows. The course includes programming algorithm development, Visual Studio.NET's IDE, the language's basic syntax and grammar, object event procedures, input/output, looping techniques, decision logic, variable data types, functions and subroutines and text file and database manipulation. Intended for a general audience with little or no prior formal programming experience. Strongly recommended: Computer Science 7 or Computer Science 8 or Computer Application Systems 8 (*completed with a grade of "C" or higher*). May be offered in Distance Education delivery format, 3 hours lecture, 3 hours laboratory. Transfer: CSU, UC; AA/AS.

13 INTRODUCTION TO MICROSOFT C# PROGRAMMING

4 UNITS

Introduction to basic programming concepts and structures using Microsoft's C#. Net. Using the Microsoft.NET IDE. Variables and basic I/O, looping, Boolean structures, array concepts, creating basic windows forms using C# coding for events, methods. Introduction to classes and inheritance concepts, and exception handling and string processing using C#. Strongly recommended: Computer Application Systems 50 or Computer Science 8 or Computer Application Systems 8 or Computer Science 10 or Computer Science 14 or Computer Science 19A. May be offered in Distance Education delivery format. 3 hours lecture, 3 hours laboratory. Transfer: CSU.

14 INTRODUCTION TO STRUCTURED PROGRAMMING IN C++

4 UNITS

Introduction to structured programming and problem solving using the C++ language. Problem solving techniques, algorithm design, testing and debugging techniques, and documentation standards. C++ syntax: elementary operators, data types, control structures, user-defined and library functions, basic input/output, sequential files, arrays and structs. Appropriate for students with little or no programming experience, but comfortable using computers with modern GUI operating systems.

Strongly recommended: Computer Science 7 (*completed with a grade of "C" or higher*). May be offered in Distance Education delivery format. 3 hours lecture, 3 hours laboratory. Transfer: CSU, UC; AA/AS.

15 OBJECT-ORIENTED PROGRAMMING METHODS IN C++

4 UNITS

Object-oriented programming methods employed to design, program, test and document intermediate level problems in the C++ language. Includes strings and string objects, multidimensional arrays, pointers, dynamic allocation, classes, overloaded functions and operators, inheritance and polymorphism, introduction to linked lists. Designed to satisfy Association for Computing Machinery (ACM) guidelines for CS I as required for computer Science majors. Prerequisite: Computer Science 14 (*completed with a grade of "C" or higher*). Strongly recommended: Mathematics 20 (*completed with a grade of "C" or higher*). 3 hours lecture, 3 hours laboratory. Transfer: CSU, UC; AA/AS.

18A C PROGRAMMING IN THE UNIX/LINUX ENVIRONMENT

2 UNITS

Intended for students with knowledge of a high-level programming language, such as C++ or Java. Introduction to the C programming language, particularly the differences between C and C++ or Java. Programming in the UNIX/Linux environment. Variables, control structures, functions and parameter passing, strings, pointers, memory management, linked lists, recursion, the preprocessor (macros, libraries), command-line parameters, and use of the command-line compiler. Prerequisite: Computer Science 14 or equivalent and Computer Science 41 (*both completed with a grade of "C" or higher*). Strongly recommended: Eligibility for English 1A and Computer Science 15 or Computer Science 19A. 1½ hours lecture, 1½ hours laboratory. Transfer: CSU.

19A OBJECT-ORIENTED PROGRAMMING METHODS IN JAVA

4 UNITS

Object-oriented programming methods employed to design, program, test and document intermediate level problems in the Java language. Overview of Java syntax, control structures, methods, I/O, strings, single and multi-dimensional arrays, recursion and exception handling. Abstract Data Types and Object-Oriented Programming principles including classes, information hiding, aggregation, inheritance, method overriding and polymorphism. Introduction to graphical user interfaces (GUIs) and applets using the javax.swing package. Dynamic allocation and de-allocation of memory; comparison of Java references with pointers in C++. Implementation and use of linked lists. Designed to satisfy Association of Computing Machinery (ACM) guidelines for CSI as required for Computer Science majors. Strongly recommended: Computer Science 14 and Mathematics 20 (*completed with a grade of "C" or higher*). May be offered in Distance Education delivery format. 3 hours lecture, 3 hours laboratory.

19B JAVA PROGRAMMING II

4 UNITS

Stream input and output, threads, an introduction to Java collection classes: vectors, sets, lists, and maps, advanced graphical interfaces using Swing components, introduction to Java Beans. Includes multi-class applications. Prerequisite: Computer Science 19A (*completed with a grade of "C" or higher*). 3 hours lecture, 3 hours laboratory. Transfer: CSU.

20 INTRODUCTION TO DATA STRUCTURES IN C++

4 UNITS

Design and implementation of larger projects in C++ using software engineering principles. Emphasis on definition and use of data structures. Includes specification of Abstract Data Types, general recursion, stacks, linked lists, queues, binary trees, sorting and searching algorithms, hashing techniques. Intended to satisfy ACM guidelines for CS 2 as required for Computer Science majors. Prerequisite: Computer Science 15 (*completed with a grade of "C" or higher*). 3 hours lecture, 3 hours laboratory. Transfer: CSU, UC.

20J INTRODUCTION TO DATA STRUCTURES USING JAVA 4 UNITS

Design and implementation of larger projects as Java applications using software engineering principles. Emphasis on definition and use of data structures. Includes specification of Abstract Data Types, general recursion, stacks, linked lists, queues, binary trees, sorting and searching algorithms, hashing techniques. Intended to satisfy ACM guidelines for Computer Science 2 as required for Computer Science majors. Prerequisite: Computer Science 19A, (*completed with a grade of "C" or higher*). 3 hours lecture, 3 hours laboratory. Transfer: CSU, UC.

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 number conversion and use of system interrupts. Interrupt processing and interrupt handlers. Procedures including parameter passing and linkage to higher level languages. Prerequisite: Computer Science 14 (*completed with a grade of "C" or higher*). 3 hours lecture, 3 hours laboratory. Transfer: CSU, UC; (CAN CSCI 10)

41 INTRODUCTION TO UNIX 2 UNITS

UNIX operating system capabilities, history, evolution and major variants. Components of a UNIX system, common commands, directory and file management, UNIX editors, shells, electronic mail and user communication, the C language development environment, Internet resources. Strongly recommended: Completion of or concurrent enrollment in Computer Science 14 or equivalent programming course in the C or C++ programming languages (*completed with a grade of "C" or higher*). May be offered in Distance Education delivery format. 1½ hours lecture, 1½ hours laboratory. Transfer: CSU.

42 UNIX TOOLS, SHELL PROGRAMMING AND SYSTEM ADMINISTRATION CONCEPTS 2 UNITS

Further experience with UNIX tools. Enhanced shells. Emphasis on Linux variant of UNIX. Basic networking concepts. Writing and testing shell scripts. Processes and scheduling. Security issues. Basic System administration. Prerequisite: Computer Science 41 (*completed with a grade of "C" or higher*). 1½ hours lecture, 1½ hours laboratory. Transfer: CSU.

44A PERL PROGRAMMING I 2 UNITS

Introduction to the Perl programming language—data types, operators, variables, lists, arrays, hashes, control structures, regular expressions, files and data, pipes, references, subroutines, running and debugging Perl Introduction to using Perl with the World Wide Web. Prerequisite: Computer Science 14 and Computer Science 41 or equivalent (*both completed with a grade of "C" or higher*). Strongly recommended: Computer Science 42 and Computer Science 91 or Computer Applications Systems 91 or Electronics and Computer Technology 91 (*all may be taken concurrently*). 1½ hours lecture, 1½ hours laboratory. Transfer: CSU.

44B PERL PROGRAMMING II 2 UNITS

Using Perl Modules, Object-oriented Perl, and Perl with the World Wide Web. Perl with sockets, CGI, databases, HTTP/HTML, mail, forms, Web servers and other internet resources. Prerequisite: Computer Science 44A, Computer Science 91 or Computer Application Systems 91 or Electronics and Computer Technology 91 and Computer Science 40A or Computer Science 47A (*all completed with a grade "C" or higher*). 1½ hours lecture, 1½ hours laboratory. Transfer: CSU.

89 WEB PAGE PROGRAMMING USING PHP 2 UNITS

Introduction to using the non-Microsoft alternative to Microsoft's Active Server Pages to develop web pages. Programming web page objects using PHP. Use of PHP capabilities to access data from sequential data files and

databases over the web. Designed for both Microsoft Internet Explorer and Netscape Communicator web page authors with a moderate background in programming concepts. Strongly recommended: Computer Science 91 or Computer Application Systems 91 or Electronics and Computer Technology 91 and Computer Science 14 or Computer Science 44A. May be offered in Distance Education delivery format. 2 hours lecture, 1 hour laboratory.

91 INTRODUCTION TO HYPERTEXT MARKUP LANGUAGE (HTML) 2 UNITS

(*See also Computer Application Systems 91*)

Design and development concepts and use of the standard HTML "tags" to develop web pages for use on the current standard World Wide Web latest version browsers (i.e., Netscape Communicator and Microsoft Explorer). Coverage includes the differences between various tags that work only on Communicator and only on Explorer, use of various web editing tools such as an HTML editor, graphics image editor, special effects applications, design considerations for "intelligent" and "attractive" web page layout including horizontal and vertical spacing commands, introduction to the use of multimedia (audio and movie clip) capability in HTML, hypertext link presentation using both text and graphical presentation, introduction to dynamic HTML tags such as Cascading Style Sheet, frames, tables, image maps, meta tags. Strongly recommended: Electronics and Computer Technology 90 or equivalent (*completed with a grade of "C" or higher*). (May not receive credit if Computer Application Systems 91 or Electronics and Computer Technology 91 has been completed.) May be offered in Distance Education delivery format. 2 hours lecture, 1 hour laboratory. Transfer: CSU; AA/AS.

92 INTRODUCTION TO DYNAMIC HYPERTEXT MARKUP LANGUAGE (DHTML) 2 UNITS

An expansion of HTML web authoring capabilities to cover Dynamic HTML as available in Java, JavaScript and VBScript. Use of third party software plug ins, Microsofts Active X, changing the "static" appearance of your HTML web page, user input forms and scripts to enhance web page capabilities. Basic programming in VBScript and JavaScript. Designed for web authors with a limited programming background who would like to use some of the basic capabilities of DHTML in their web pages. Prerequisite: Computer Science 91 or Computer Application Systems 91 or Electronics and Computer Technology 91 and Computer Science 10 or 14 (*all completed with a grade of "C" or higher*). May be offered in Distance Education delivery format. 2 hours lecture, 1 hour laboratory. Transfer: CSU; AA/AS.

94 XML AND XSL FOR THE WEB 2 UNITS

An introductory course in the grammar, syntax, capabilities and uses of eXtensible Markup Language (XML) on web applications and its layout use under eXtensible Style Language (XSL) for sorting and filtering capabilities. Prerequisite: Computer Science 19A and Computer Science 92 (*all completed with a grade of "C" or higher*). 2 hours lecture, 1 hour laboratory. Transfer: CSU; AA/AS.

CONTEMPORARY STUDIES**CONTEMPORARY STUDIES ½–4 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 two semesters under this course number. 1–6 hours.



CONTINUING EDUCATION STUDIES

CONTINUING EDUCATION STUDIES

½–4 UNITS

Continuing education courses include both full term and short term courses in a wide variety of course patterns, field studies, seminars, workshops, and any other such educational activities that will meet the educational needs of those students pursuing a community college program. May be offered under any course title contained in the Catalog, using the numbers 150 through 199. Continuing Education Studies may be repeated. 1–12 hours.

DANCE (DANC)

1 DANCE TECHNIQUE

½ UNIT

(May be repeated 3 times)

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. Transfer: CSU, UC, CSU/GE: CI; 1GETC: Area 3A; AA/AS.

5 DANCE WORKSHOP

1 ½ UNITS

(May be repeated 3 times)

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. Transfer: CSU, UC.

6 DANCE PRODUCTION—CHOREOGRAPHY

1–3 UNITS

(May be repeated 3 times)

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. Prerequisite: Dance 5. 3–9 hours laboratory. Transfer: CSU, UC.

DENTAL HYGIENE (DHYG)

DEGREE:

AA—DENTAL HYGIENE

The Dental Hygiene Program is accredited by the Commission on Dental Accreditation of the American Dental Association, a specialized accrediting body recognized by the Council on Post-secondary Accreditation and by the United States Department of Education. Completion of the two-year program qualifies the student to take the National Dental Hygiene Board examination and the California Dental Hygiene State Board Licensure examination for licensure as a Registered Dental Hygienist. The program includes courses such as Clinical Dental Hygiene, Dental Radiology, General and Oral Pathology, Expanded Functions for the Dental Hygienist, Educational Theories in Dental Hygiene Education, Community Dental Health. These are but a few of the courses in the program. The program admits 18 students per year. Students interested in dental hygiene need a

background in the basic sciences, English, psychology and speech. Dental Hygienists are primary health care providers, including areas of clinical practice, research, educational theory, adult learning concepts and communication. This is a special admission program. For information contact the Dental Hygiene office at (510-723-6900).

SPECIAL APPLICATION REQUIRED

Prerequisites for admission to this program include: (1) Completion of Dental Hygiene application; (2) Anatomy 1, Chemistry 30A, Chemistry 30B, Physiology 1, Microbiology 1 or equivalents completed with a grade of "C" or higher prior to February 1 of the year of application; (3) Speech 1, Psychology 1, Sociology 1 or equivalents (*completed with a grade of "C" or higher*) by June 30th of the year of application. Basic Nutrition is required prior to completion of the Dental Hygiene Program. Completion of Nutrition 1 is strongly recommended prior to entrance into the Dental Hygiene Program.

**DENTAL HYGIENE
ASSOCIATE IN ARTS DEGREE**

FRESHMAN YEAR **FALL** **SPRING**

Dental Hygiene 60—Dental Anatomy and Morphology	1½
Dental Hygiene 60L—Dental Anatomy and Morphology Lab	1
Dental Hygiene 61—Head and Neck Anatomy	2
Dental Hygiene 61L—Head and Neck Anatomy Lab	1
Dental Hygiene 69A—Oral Health Education	2
Dental Hygiene 71A—Pre-Clinical Dental Hygiene	4
Dental Hygiene 71L—Pre-Clinical Dental Hygiene Lab	1
Dental Hygiene 74A—Dental Radiography I	3
Health 60*—Responding to Emergencies	1
Health 70B**—Basic Life Support for Health Care Providers	½
Dental Hygiene 51—General and Oral Pathology	4
Dental Hygiene 55A—Dental Materials	1
Dental Hygiene 69B—Treatment and Evaluation in Dental Hygiene	1
Dental Hygiene 71B—Clinical Dental Hygiene	4
Dental Hygiene 73—Educational Theories in Dental Hygiene Care	1½
Dental Hygiene 74B—Dental Radiography II	1½
Dental Hygiene 75—Medical Emergencies	1

SOPHOMORE YEAR **FALL** **SPRING**

Dental Hygiene 52A—Periodontics	2
Dental Hygiene 54—Pharmacology	2
Dental Hygiene 56A—Community Dental Health I	1
Dental Hygiene 57—Expanded Functions for the Dental Hygienist	2
Dental Hygiene 80A—Patient Management	1
Dental Hygiene 81A—Clinical Practice I	4
Dental Hygiene 82A—Clinical Experience Seminar I	1
Dental Hygiene 52B—Advanced Periodontics	1
Dental Hygiene 56B—Community Dental Health II	1
Dental Hygiene 58—Dental Office Practice	1

Dental Hygiene 80B—Advanced Clinical Topics	1
Dental Hygiene 81B—Clinical Practice II	5
Dental Hygiene 82B—Clinical Experience Seminar II	2
Dental Hygiene 83—Patients with Special Needs	1
Total	56

General Education Courses
For specific General Education courses refer to catalog section on Graduation Requirements.
Total minimum units required 60***

*A student who presents a current Responding to Emergencies Card may request a waiver of Health 60

**A student who presents a current Professional Rescuer Cardiopulmonary Resuscitation Card may request a waiver of Health 70B

***The Dental Hygiene Program units combined with the Associate in Arts Degree requirements will be in excess of the minimum 60 units

Note: To progress in the Dental Hygiene Program and to graduate from the program, students must earn a minimum grade of "C" in each course.

DENTAL HYGIENE (DHYG)

50A DENTAL HYGIENE ORIENTATION I **½ UNIT**

Orientation to the dental hygiene program to include information regarding scheduling, course requirements, financial aid considerations, program policies and procedures as well as core competencies. Prerequisite: Acceptance into the dental hygiene program. 9 hours.

50B DENTAL HYGIENE ORIENTATION II **½ UNIT**

Orientation for second year dental hygiene students focusing on patient management and scheduling as well as policies and procedures for treating periodontally involved patients. Prerequisite: Dental Hygiene 71B. 9 hours.

50C DENTAL HYGIENE ORIENTATION III **½ UNIT**

Orientation for second year dental students providing information regarding scheduling for complex cases, course requirements, program policies and procedures as well as patient/clinical competencies. Prerequisite: DH 81A. 9 hours.

51 GENERAL AND ORAL PATHOLOGY **4 UNITS**

Oral pathology and dysfunctions of systems of the body which directly affect the oral cavity. Significance of oral and general pathology in relationship to treatment by the dental hygienist. Corequisite: Concurrent enrollment in the Dental Hygiene Program. 4 hours. Transfer: CSU.

52A PERIODONTICS **2 UNITS**

Normal periodontium and the deviations from health, with emphasis on the hygienist's responsibility in examination, data collection and recognition of disease. Dental Hygiene therapy for periodontal disease prevention, active case management and maintenance programs. Contributing factors to disease process and case management. Decision-making for patient referral to the periodontal specialist. Prerequisite: Dental Hygiene 51 (*completed with a grade of "C" or higher*). 2 hours. Transfer: CSU.

52B ADVANCED PERIODONTICS **1 UNIT**

Continuation of 52A. Research-based comprehensive periodontal therapy. Focus on systemic diseases and their relationship to periodontal disease and adjunct periodontal treatment modalities through the use of evidence-based research and case studies. Prerequisite: Dental Hygiene 52A (*completed with a grade of "C" or higher*). 1 hour. Transfer: CSU.

54 PHARMACOLOGY**2 UNITS**

Sources, dosages, therapeutic action, and side effects of drugs used in dentistry and dental hygiene. Includes legal and ethical aspects of drug usage. Corequisite: Dental Hygiene 57. 2 hours. Transfer: CSU.

55A DENTAL MATERIALS**1 UNIT**

General and specialty practice materials and techniques. Prerequisite: Dental Hygiene 69A (*completed with a grade of "C" or higher*). ½ hour lecture, 1½ hours laboratory. Total weeks—9. Transfer: CSU.

56A COMMUNITY DENTAL HEALTH I**1 UNIT**

Study of individual and community oral health problems, relative to personal, family, and public health needs. Corequisite: Dental Hygiene 80A. Strongly recommended: Speech 1, or 10, or 30. 1 hour. Transfer: CSU.

56B COMMUNITY DENTAL HEALTH II**1 UNIT**

Continuation of Dental Hygiene 56A. Individual and community oral health problems, with emphasis on the dental hygienist as a resource person. Prerequisite: Dental Hygiene 56A (*completed with a grade of "C" or higher*). 1 hour. Transfer: CSU.

57 EXPANDED FUNCTIONS FOR THE DENTAL HYGIENIST**2 UNITS**

Dental hygiene advanced clinical functions including clinical practice in administration of local anesthetics, topical anesthetic agents, nitrous oxide/oxygen analgesia and soft tissue curettage. Corequisite: Dental Hygiene 54 and 81A. 1 hour lecture, 3 hours clinical. Transfer: CSU.

58 DENTAL OFFICE PRACTICE**1 UNIT**

Dental office practices based on sound dental economics, legal and ethical framework of the State Dental Practice Act, and patient needs and services. Opportunities in the dental hygiene profession. Corequisite: Dental Hygiene 81B. 1 hour. Transfer: CSU.

60 DENTAL ANATOMY AND MORPHOLOGY**1½ UNITS**

Development, eruption, and structures of the intraoral cavity and extraoral structures; structures of the teeth, tooth numbering systems, occlusion and anomalies. Identification of teeth and oral structures. Prerequisite: Admission into the Dental Hygiene Program. Corequisite: Dental Hygiene 60L, 69A and 71A. 1½ hours. Transfer: CSU.

60L DENTAL ANATOMY AND MORPHOLOGY LAB**½ UNIT**

Supplemental instruction on the development, eruption, and structures of the intraoral cavity and extraoral structures: structures of the teeth, tooth numbering systems, occlusion and anomalies. Identification of teeth and oral structures. Corequisite: DH 60. 1½ hours laboratory.

61 HEAD AND NECK ANATOMY**2 UNITS**

Embryology of the head, neck and oral cavity, structure and function of the oral cavity and adjacent structures. Emphasis on clinical recognition of normal structures, the anatomical relationships between structures their vascular supply and the regional osteology. Corequisite: Dental Hygiene 61L, 69A and 71A. 2 hours. Transfer: CSU.

61L HEAD AND NECK ANATOMY LAB**1 UNIT**

Supplemental instruction on the embryology of the head, neck and oral cavity, structure and function of the oral cavity and adjacent structures. Emphasis on the recognition of normal structures, the anatomical relationships between structures and regional osteology. Corequisite: concurrent enrollment in DH 61. 3 hours laboratory.

69A ORAL HEALTH CARE EDUCATION**2 UNITS**

Educational techniques and technical skills used to assist individuals and groups in becoming integrally involved in their dental/oral health care. Information and application of information related to oral health care oral health promotion and disease prevention. Corequisite: Current enrollment in the Dental Hygiene Program. 2 hours. Transfer: CSU.

69B TREATMENT AND EVALUATION IN DENTAL HYGIENE**1 UNIT**

Continued development of the principles of assessment in dental hygiene care. Prevention, non-surgical periodontal therapy and maintenance through application of the Dental Hygiene process, including assessment, planning, goal setting, implementing and evaluation used in providing dental hygiene care. Emphasis on evaluation of dental hygiene care as an essential component of the dental hygiene process. Prerequisite: Dental Hygiene 69A and 71A (*both completed with a grade of "C" or higher*). Corequisite: Dental Hygiene 75. 1 hour. Transfer: CSU.

71A PRE-CLINICAL DENTAL HYGIENE**4 UNITS**

Laboratory and clinical experiences in patient assessment, dental hygiene care planning, goal setting and implementation of instrumentation techniques for providing prevention-oriented dental care and non-surgical periodontal therapy. Emphasis on post-treatment evaluation. Application of theory to the treatment of clinical patients. Corequisite: Dental Hygiene 60, 69A and 71L. 2 hours lecture, 6 hours clinical. Transfer: CSU.

71B CLINICAL DENTAL HYGIENE**4 UNITS**

Continuation of laboratory and clinical experiences in patient assessment with emphasis on dental hygiene care planning, goal setting and implementation of instrumentation techniques for providing prevention-oriented dental care and non-surgical periodontal therapy. Emphasis on post-treatment evaluation. Introduction to the technical skills and procedures used in the clinical practice of dental hygiene. Prerequisite: Dental Hygiene 71A (*completed with a grade of "C" or higher*). Corequisite: Dental Hygiene 69B and 75. 1 hour lecture, 9 hours clinical. Transfer: CSU.

71L PRE-CLINICAL DENTAL HYGIENE LAB**1 UNIT**

Supplemental instruction in the use of dental hygiene instruments. Emphasis on instrumentation technique including the use of fulcrum options, modified pen grasp, direct and indirect vision. Corequisite: DH 71A. 3 hours laboratory.

73 EDUCATIONAL THEORIES IN DENTAL HYGIENE CARE**1½ UNITS**

Basics of research processes associated with clinical dental hygiene practice. Teaching, learning, and research processes. Application of principles for patient education. Identification of effective environments for teaching and learning. Prerequisites: Dental Hygiene 69A and 71A. Corequisites: Dental Hygiene 69B and 71B. 1½ hours. Transfer: CSU.

74A DENTAL RADIOGRAPHY I**3 UNITS**

Introduction to principles of radiography, x-radiation protection, operation of x-ray equipment, infection control procedures and hazardous waste maintenance. Practice in film exposure, processing, mounting and interpretation. Prerequisite: Concurrent enrollment in the Dental Hygiene Program. 2 hours lecture, 3 hours laboratory.

74B DENTAL RADIOGRAPHY II**1½ UNITS**

Continuation of clinical experience in exposing films, group and individualized criticism of mounted films; principles of Panographic radiology; special patient needs; occlusal and pedodontic surveys; emphasis on radiographic interpretative skills. Prerequisite: Dental Hygiene 74A (*completed with a grade of "C" or higher*). ½ hour lecture, 3 hours clinical.

74L DENTAL RADIOGRAPHY OPEN LAB $\frac{1}{2}$ UNIT

Application of radiographic principles, x-radiation protection, operation of x-ray equipment, infection control procedures and hazardous waste maintenance. Practice in film exposure, processing, mounting and interpretation. Prerequisite: current enrollment in the Dental Hygiene Program. $\frac{1}{2}$ hours laboratory.

75 MEDICAL EMERGENCIES 1 UNIT

Prevention, recognition and management of medical emergencies that occur in the dental setting. Corequisite: Dental Hygiene 69B and Dental Hygiene 71B. 1 hour. Transfer: CSU.

80A PATIENT MANAGEMENT 1 UNIT

Dental Hygiene therapy with emphasis on the child patient and periodontal patients, education in prevention and control of dental disease, and case documentation. Prerequisite: Dental Hygiene 71B. Corequisite: Dental Hygiene 56A and 81A. 1 hour. Transfer: CSU.

80B ADVANCED CLINICAL TOPICS 1 UNIT

Development of skills and knowledge in dental hygiene therapy and disease control with emphasis on comprehensive patient care. Prerequisite: Dental Hygiene 80A (completed with a grade of "C" or higher). Corequisite: Dental Hygiene 81B, 82B and 83. 1 hour. Transfer: CSU.

81A CLINICAL PRACTICE I 4 UNITS

Continuation of clinical experience in performing dental hygiene therapy with emphasis on the young child and periodontal patient; patient education in prevention and control of dental disease and emergency procedures. Prerequisite: Dental Hygiene 69B and Dental Hygiene 71B (both completed with a grade of "C" or higher). Corequisite: Dental Hygiene 56A, 57, 80A and 83. 12 hours clinical. Transfer: CSU.

81B CLINICAL PRACTICE II 5 UNITS

Continuation of clinical experience with a variety of clinical cases of adults and children to include a broad spectrum of clinical applications. Prerequisite: Dental Hygiene 81A (completed with a grade of "C" or higher). Corequisites: Dental Hygiene 58, 80B, 82B, and 83. 15 hours clinical. Transfer: CSU.

82A CLINICAL EXPERIENCE SEMINAR I 1 UNIT

Discussion and analysis of case-based clinical situations. Case studies addressing client care, protocol and advanced clinical techniques. Corequisite: Dental Hygiene 80A. 1 hour. Transfer: CSU.

82B CLINICAL EXPERIENCE SEMINAR II 2 UNITS

Discussion and analysis of complex case-based clinical situations. Ethical, legal decision making, occupational standards and incident reporting in the clinical setting. Review of materials pertaining to the National Dental Hygiene Board and the Clinical State Dental Hygiene Board exams. Corequisite: Dental Hygiene 58A and 80B. 2 hours. Transfer: CSU.

83 PATIENTS WITH SPECIAL NEEDS 1 UNIT

Dental Hygiene therapy with emphasis on patients with special needs. Prerequisite: Dental Hygiene 80A (completed with a grade of "C" or higher). Corequisite: Dental Hygiene 80B and 81B. 1 hour. Transfer: CSU.

DESIGN TECHNOLOGY (DSGN)

The Design Technology Program is currently suspended until further notice.

DIGITAL MEDIA (DIGM)**34A FLASH I** 1 $\frac{1}{2}$ UNITS

Introduction to Flash, Macromedia's authoring application for bringing motion, sound, and interactivity to Web pages. Creating images with Flash's vector-based drawing tools; importing and modifying images, sounds, and video clips; animating those elements; embedding the resulting animation in a Web page; optimizing animation for low-bandwidth Internet connections. 1 hour lecture, 2 hours laboratory. Transfer: CSU.

34B FLASH II 1 $\frac{1}{2}$ UNITS

Continuation of the content and skills introduced in Digital Media 34A (Flash I), with emphasis on using the ActionScript scripting language to add interactivity to Flash movies. Use of interface elements such as menus, button groups, sliding controls, and text-input fields to control animation, sound, and other multimedia elements. Prerequisite: Digital Media 34A (completed with a grade of "C" or higher). 1 hour lecture, 2 hours laboratory. Transfer: CSU.

35A DREAMWEAVER I 1 $\frac{1}{2}$ UNITS

Introduction to the basic skills required for designing and producing Web pages and multi-page Web sites, providing a foundation for eventual creation of interactive, multimedia Web sites. Hand-coding HTML and Cascading Style Sheets; using Macromedia Dreamweaver as a site design and management tool. 1 hour lecture, 2 hours laboratory. Transfer: CSU.

35B DREAMWEAVER II 1 $\frac{1}{2}$ UNITS

Continuation of the content and skills introduced in Digital Media 35A (Dreamweaver I), with emphasis on using Dreamweaver in collaboration with other multimedia applications (such as Photoshop, Illustrator, and Flash) to create media-rich Web sites. Devising intuitive navigation schemes; incorporating sound and motion into a Web page. Prerequisites: Digital Media 34A (completed with a grade of "C" or higher); Digital Media 35A (completed with a grade of "C" or higher); Art 31A, Architecture 31A, Interior Design 31A or Photography 31A (completed with a grade of "C" or higher); Art 32A, Architecture 32A, Interior Design 32A or Photography 32A (completed with a grade of C or higher). 1 hour lecture, 2 hours laboratory. Transfer: CSU.

36A FINAL CUT EXPRESS I 1 $\frac{1}{2}$ UNITS

Introduction to video editing using Final Cut Express software. Capturing digital video; combining video clips by means of cuts and transitions; adding titles and audio; outputting the finished product to disk. 1 hour lecture, 2 hours laboratory. Transfer: CSU.

36B FINAL CUT EXPRESS II 1 $\frac{1}{2}$ UNITS

Continuation of the content and skills introduced in Digital Media 36A (Final Cut Express I), with emphasis on creative imagery through use of video and audio filters, motion and speed effects, and compositing. Prerequisite: Digital Media 36A (completed with a grade of "C" or higher). 1 hour lecture, 2 hours laboratory. Transfer: CSU.

DISTANCE EDUCATION

Distance Education offers students a flexible schedule of courses through various modes of technology, such as television, video, CD-ROMs, and the internet. Current types of courses include Telecourses (television/videobased), Online courses (web-based), and CD-ROM-based courses, most of which fulfill General Education requirements. Students will find the complete list of Distance Education courses at www.chabotcollege.edu (select "Distance Education" or in the back pages of the current class schedule. Courses may also be found individually under each subject heading. For questions please call the Instructional Technology Center at (510) 723-7016.

DRAMA

(See Theater Arts)

EARLY CHILDHOOD DEVELOPMENT (ECD)

**DEGREE:
AA—EARLY CHILDHOOD
DEVELOPMENT**

**CERTIFICATE OF ACHIEVEMENT:
EARLY CHILDHOOD DEVELOPMENT
(BASIC TEACHER)**

**CERTIFICATE OF COMPLETION:
EARLY CHILDHOOD DEVELOPMENT
(ASSOCIATE TEACHER)**

This two-year diploma program leads to an Associate in Arts Degree in Early Childhood Development and two Certificates: Early Childhood Development (Basic Teacher), and Early Childhood Development (Associate Teacher). 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.

The Child 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, parents and potential parents.

**EARLY CHILDHOOD
DEVELOPMENT**

ASSOCIATE IN ARTS DEGREE

FRESHMAN YEAR FALL SPRING

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

SOPHOMORE YEAR FALL SPRING

Early Childhood Development 55 (The 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)	1
Early Childhood Development 96 (Work Experience Seminar)	1
Option*	2-3
Total	26-27

Note: Students should review with Early Childhood Development instructors the requirements of the California Child Development Permit Matrix.

General Education Courses
For specific General Education courses refer to catalog section on Graduation Requirements.
Total minimum units required 60

- *One course to be selected from the following:
- Early Childhood Development 40 (Social and Emotional Foundation for Early Learning) (3 units)
 - Early Childhood Development 52 (Childhood and Adolescence) (3 units)
 - Early Childhood Development 59 (Literacy in Early Childhood) (3 units)
 - Early Childhood Development 61 (Literature for the Young Child) (3 units)
 - Early Childhood Development 64 (Play: Materials and Environments) (3 units)
 - Early Childhood Development 65 (Administration) (3 units)
 - Early Childhood Development 67 (Infant and Toddler Development and Care Giving) (3 units)
 - Early Childhood Development 68 (Program Supervision) (3 units)
 - Early Childhood Development 80 (Advanced Topics in Childhood Development) (3 units)
 - Early Childhood Development 83 (Adult Supervision) (2 units)
 - Early Childhood Development 69 (Observing and Recording Behavior) (3 units)
 - Early Childhood Development 76 (Methods and Materials for Special Needs Children) (3 units)
 - Early Childhood Development 77 (Introduction to Social Services and Community Resources) (3 units)
 - Early Childhood Development 78 (Language Development) (3 units)
 - Early Childhood Development 79 (Anti-Bias Curriculum for Young Children) (3 units)

EARLY CHILDHOOD DEVELOPMENT (BASIC TEACHER)

CERTIFICATE OF ACHIEVEMENT

CORE COURSES	FALL	SPRING
Early Childhood Development 50 (Early Childhood Education and Care)	3	
Early Childhood Development 51 (Prenatal to Early Childhood)	3	
Early Childhood Development 55 (The Professional Care-Giver)	2	
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)	1	
Early Childhood Development 96 (Work Experience Seminar)	1	
Early Childhood Development 52 (Childhood and Adolescence) or Early Childhood Development 60 (Teaching Special Needs Infants and Preschoolers)	3	
Total		24

EARLY CHILDHOOD DEVELOPMENT (ASSOCIATE TEACHER)

CERTIFICATE OF COMPLETION

CORE COURSES	FALL	SPRING
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		13

EARLY CHILDHOOD DEVELOPMENT (ECD)

(These courses are designed to satisfy the recommendations of the State. Board of Social Welfare regarding nursery school personnel.)

40 SOCIAL AND EMOTIONAL FOUNDATIONS FOR EARLY LEARNING 3 UNITS

Focus on the healthy social and emotional development of young children as the foundation for children's early learning. Students will become aware of the role of the teacher in establishing an environment that promotes the healthy social and emotional development of young children. Strongly recommended: Early Childhood Development 51 and 62. 3 hours.

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. Transfer: CSU.

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. Transfer: CSU.

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. Transfer: CSU.

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. Transfer: CSU.

59 LITERACY IN EARLY CHILDHOOD 3 UNITS

Enhance the early literacy outcomes of young children by improving teachers' knowledge of early literacy development and their skills in teaching early literacy to young children from birth through school age. Strongly recommended: Early Childhood Development 51. 3 hours.

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. Transfer: CSU.

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. Transfer: CSU.

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. Transfer: CSU.

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 51 (*both completed with a grade of "C" or higher*). 3 hours lecture, 3 hours laboratory. Transfer: CSU.

64 PLAY: MATERIALS AND ENVIRONMENTS**3 UNITS**

Application of principles of human growth and development in the consideration of play materials and environments for young children. Development and selection of age-appropriate play materials, and environments which foster play. Prerequisite: Early Childhood Development 51 (*completed with a grade of "C" or higher*). 3 hours. Transfer: CSU.

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 and food purchasing; relationships with families, community, and regulatory agencies; requirements of State and Federal programs; legal and ethical aspects. Prerequisite: Early Childhood Development 62 and 63 (*completed with a grade of "C" or higher*). 3 hours. Transfer: CSU.

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 51 (*completed with a grade of "C" or higher*). 3 hours. Transfer: CSU; CSU/GE: D7.

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 skills, 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 63 (*completed with a grade of "C" or higher*). 3 hours. Transfer: CSU.

69 OBSERVING AND RECORDING BEHAVIOR**3 UNITS**

Training in observational techniques, analysis, and use of observational data for purpose of understanding children's developmental needs and appropriate curriculum development. Special emphasis on infant-toddler, preschool or special needs children. Prerequisite: Early Childhood Development 51 (*completed with a grade of "C" or higher*). 2 hours lecture, 3 hours laboratory. Transfer: CSU.

77 INTRODUCTION TO SOCIAL SERVICES AND COMMUNITY RESOURCES**2-4 UNITS**

Introduction to social services and community resources available to children and families through various human service agencies. Methods of effective volunteer participation in community service; including assessing community needs, role of the volunteer, and relationships with families and public agencies. Field placements. 1 hour lecture, 3-9 hours laboratory. Transfer: CSU.

78 LANGUAGE DEVELOPMENT**3 UNITS**

Principles of language development of young children. Skills involved in communication. Facilitating acquisition and use of communication skills. Prerequisite: Early Childhood Development 51 (*completed with grade of "C" or higher*). 3 hours. Transfer: CSU.

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. Transfer: CSU.

80 ADVANCED TOPICS IN CHILDHOOD DEVELOPMENT**1-3 UNITS***(May be repeated 3 times)*

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.

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 63 (*completed with a grade of "C" or higher*). 2 hours. Transfer: CSU.

85 MENTOR SEMINAR A**1/2 UNIT**

Assigned for mentor teachers in the statewide California Early Childhood Mentor Teacher program. Monthly seminars to explore issues related to mentor teacher's new role as supervisors of early childhood student teachers. Content individualized to meet the needs of each Mentor. 9 hours total. Transfer: CSU.

86 MENTOR SEMINAR B**1/2 UNIT**

Seminar is part of the statewide California Early Childhood Mentor Teacher program. Continuing monthly seminars to further explore issues begun in Mentor Seminar A mentor teacher's role as supervisors of early childhood student teachers. Emphasis on their role as early childhood professionals. Content individualized to meet the needs of each Mentor. 9 hours total. Transfer: CSU.

87 QUALITY ENVIRONMENTS FOR INFANTS/TODDLERS**3 UNITS**

Observation and analysis of infant/toddler classrooms. Design of interior and exterior learning environment to meet the developmental needs of children birth to 36 months. Using observations and developmental charts, students will plan appropriate learning experiences for infants and toddlers. Influence of responsive and culturally sensitive relationships with children and their parents on children's development. Strongly recommended: Early Childhood Development 67. 3 hours. Transfer: CSU.

88 EARLY CHILDHOOD ENVIRONMENTS**1/2 UNIT**

Assessing the early childhood learning environment and analyzing the outcomes helps early childhood professionals to improve the quality of their programs. Students will understand and use the Early Childhood Environment Rating Scale (ECERS) to assess the physical environment, basic care, curriculum, schedule, program, child teacher interaction and parent and staff education of a child care setting. 9 total hours.

90 SUPERVISED EXPERIENCE**4 UNITS***(May be repeated 1 time)*

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 and discussion of on-site experiences. Developing individual educational plans. Planning and conducting parent conferences. Prerequisite: Early Childhood Development 55 (*completed with a grade of "C" or higher*; may be taken concurrently) and 63 (*completed with a grade of "C" or higher*). 2 hours lecture, 6 hours laboratory. Transfer: CSU.

95 WORK EXPERIENCE**1-3 UNITS***(May be repeated 3 times)*

Application of principles and skills through participation in on-the-job training. Corequisite: Early Childhood Development 96. 5-15 hours experience per week. Transfer: CSU.

96 WORK EXPERIENCE SEMINAR **1 UNIT**

Discussion and analysis of problems encountered on the job. Case studies on the job problems often encountered by employees. Application of quality standards to the job site. Corequisite: Early Childhood Development 95. 1 hour. Transfer: CSU.

◊Refer to page 14 for program requirements.

ECOLOGY

(See Biological Sciences)

ECONOMICS (ECON)

1 PRINCIPLES OF MICROECONOMICS **3 UNITS**

Economic analysis of market systems price theory, including supply and demand analysis, marginal utility, elasticity, cost and revenue concepts, perfect and imperfect competition, international trade, pricing of the factors of production, poverty and income inequalities. Strongly recommended: English 1A eligibility and Mathematics 65 and 65L. May be offered in Distance Education delivery format. 3 hours. Transfer: CSU, UC; CSU/GE: D2; IGETC: Area 4; AA/AS; (CAN ECON 4).

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: English 1A eligibility and Mathematics 65 or an appropriate skill level demonstrated through the Mathematics assessment process. 3 hours. Transfer: CSU, UC; CSU/GE: D2; IGETC: Area 4; AA/AS; (CAN ECON 2).

5 ECONOMIC HISTORY OF THE UNITED STATES **3 UNITS**

Origins and historical development of the major economic forces, institutions, and philosophies that have shaped the U.S. market economy. 3 hours. Transfer: CSU, UC; CSU/GE: D2; IGETC: Area 4; AA/AS.

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, and money and banking. May be offered in Distance Education delivery format. 3 hours. Transfer: CSU, UC; CSU/GE: D2; IGETC: Area 4; AA/AS.

12 CONSUMER ECONOMICS IN THE UNITED STATES **3 UNITS**

Historical theoretical, and practical description and analysis of problems in the consumer sector of the U.S. economy. Emphasis on practical aspects of consumer behavior within the modern market. 3 hours. Transfer: CSU; CSU/GE: D2; AA/AS.

ELECTRONICS AND COMPUTER TECHNOLOGY (ELEC)

DEGREE:
AS—ELECTRONICS AND COMPUTER TECHNOLOGY

CERTIFICATE OF ACHIEVEMENT:
ELECTRONICS AND COMPUTER TECHNOLOGY

CERTIFICATE OF COMPLETION:
ELECTRONICS ASSEMBLY

Electronics technology is a two-year program, which may be applied toward a four-year degree in engineering technology. Employment opportunities are available in many areas including research and development, industrial maintenance, field service, aerospace and commercial systems testing. Upon completion of the Electronics Technician Certificate the student is prepared to take the examination for a first class commercial license from the Federal Communications Commission and can be employed as an electronics technician.

ELECTRONICS AND COMPUTER TECHNOLOGY
ASSOCIATE IN SCIENCE DEGREE

FRESHMAN YEAR	FALL	SPRING
Electronics and Computer Technology 60 (Fundamentals of Electronics)	4	
Electronics and Computer Technology 61 (Fabrication Techniques)	4	
Electronics and Computer Technology 65* (Circuit Analysis)	4	
Electronics and Computer Technology 62A (Semiconductor Devices)	4	
Electronics and Computer Technology 64A (Digital Electronics)	4	
SOPHOMORE YEAR FALL SPRING		
Electronics and Computer Technology 62B (Circuits and Systems)	4	
Electronics and Computer Technology 64B (Microprocessor Technology)	4	
Electronics and Computer Technology 62C (Electronic Communication Systems)	4	
Electronics and Computer Technology 63 (Project Management)	4	
Electronics and Computer Technology 64C (Computer Systems and Industrial Controls)	4	
Total	40	
General Education Courses		
For specific General Education courses refer to catalog section on Graduation Requirements.		
Total minimum units required.	60	

*Other equivalent courses may be substituted.

ELECTRONICS AND COMPUTER TECHNOLOGY

CERTIFICATE OF ACHIEVEMENT

FRESHMAN YEAR FALL SPRING

Electronics and Computer Technology 60 (Fundamentals of Electronics)	4
Electronics and Computer Technology 61 (Fabrication Techniques)	4
Electronics and Computer Technology 65* (Circuit Analysis)	4
Electronics and Computer Technology 62A (Semiconductor Devices)	4
Electronics and Computer Technology 64A (Digital Electronics)	4

SOPHOMORE YEAR FALL SPRING

Electronics and Computer Technology 62B (Circuits and Systems)	4
Electronics and Computer Technology 64B (Microprocessor Technology)	4
Electronics and Computer Technology 62C (Electronic Communication Systems)	4
Electronics and Computer Technology 63 (Project Management)	4
Electronics and Computer Technology 64C (Computer Systems and Industrial Controls)	4
Total	40

*Other equivalent courses may be substituted.

ELECTRONICS ASSEMBLY

CERTIFICATE OF COMPLETION

CORE COURSES FALL SPRING

Electronics and Computer Technology 61 (Fabrication Techniques)	4
Electronics and Computer Technology 70 (Introduction to Electronics)	2½
English 52A (Essentials of Communication)	3
Mathematics 65 (Elementary Algebra)	5
Electives	3
Total	17½

ELECTRONICS AND COMPUTER TECHNOLOGY (ELEC)

60 FUNDAMENTALS OF ELECTRONICS 4 UNITS

Direct current and alternating current circuits including Ohm's Law, Kirchhoff's Laws, and Network theorems. Includes resistance, capacitance, and inductance and semi-conductor devices. Laboratory practice includes the proper use of standard test instruments. May be offered in Distance Education delivery format. 3 hours lecture, 3 hours laboratory. Transfer: CSU.

61 FABRICATION TECHNIQUES 4 UNITS

(May be repeated 3 times)

Prototype development includes sheet metal, printed circuit board layout and fabrication, connection and soldering techniques, use of hand tools, and machines in electronic fabrication. Use of computer software tools as

applied to electronic fabrication. May be offered in Distance Education delivery format. 3 hours lecture, 3 hours laboratory. Transfer: CSU.

62A SEMICONDUCTOR DEVICES 4 UNITS

Semiconductor physics, diode and transistor fundamentals, junction devices in large and small signal applications. Field effect transistors. Transistor biasing and configuration with AC and DC load lines. Fundamentals of amplification and cascaded amplifiers. Introduction to operational amplifiers. Power supply regulation and filtering. Prerequisite: Electronics and Computer Technology 60. May be offered in Distance Education delivery format. 3 hours lecture, 3 hours laboratory. Transfer: CSU.

62B CIRCUITS AND SYSTEMS 4 UNITS

Analysis and troubleshooting of linear and non-linear analog circuits and systems. Power supply circuits. Active filter circuits. Timers, oscillators and waveform generators. Data conversion circuits. Application of software simulation tools. Laboratory construction of actual circuits and systems with an emphasis on troubleshooting methods. Prerequisite: Electronics and Computer Technology 62A. May be offered in Distance Education delivery format. 3 hours lecture, 3 hours laboratory. Transfer: CSU.

62C ELECTRONIC COMMUNICATION SYSTEMS 4 UNITS

Electronic Communication systems, including modulation techniques, receiver and transmitter circuits, antenna and wave propagation. Data communication fundamentals, Fiber optic and laser technology. Prerequisite: Electronics and Computer Technology 62B. May be offered in Distance Education delivery format. 3 hours lecture, 3 hours laboratory. Transfer: CSU.

63 PROJECT MANAGEMENT 4 UNITS

(May be repeated 3 times)

Planning, tracking, and completing individual and/or group electronics prototype projects; includes sheet metal, printed circuit board layout and fabrication, connection and soldering techniques, use of hand tools, and machines in electronic fabrication. Use of computer software tools as applied to project management and electronic fabrication. Prerequisite: Electronics and Computer Technology 61. Strongly recommended: Electronics and Computer Technology 62A. May be offered in Distance Education delivery format. 3 hours lecture, 3 hours laboratory. Transfer: CSU.

64A DIGITAL ELECTRONICS 4 UNITS

Digital building blocks, number systems, boolean algebra, combinational and sequential logic, integrated logic families, digital circuit design, troubleshooting technique. Prerequisite: Electronics and Computer Technology 60. May be offered in Distance Education delivery format. 3 hours lecture, 3 hours laboratory. Transfer: CSU.

64B MICROPROCESSOR TECHNOLOGY 4 UNITS

Architecture, programming, and application of microprocessor-based electronic systems. Includes instruction types, external and internal timing and control functions, memory management, interrupt processing, LSI peripheral devices; troubleshooting of microprocessor-based systems. Prerequisite: Electronics and Computer Technology 64A. May be offered in Distance Education delivery format. 3 hours lecture, 3 hours laboratory. Transfer: CSU.

64C COMPUTER SYSTEMS AND INDUSTRIAL CONTROLS 4 UNITS

Computer systems architecture, peripheral devices, embedded systems, networking technology fundamentals. Industrial Control Electronics including Programmable Logic Controls. Troubleshooting techniques. Prerequisite: Electronics and Computer Technology 64B. May be offered in Distance Education delivery format. 3 hours lecture, 3 hours laboratory. Transfer: CSU.

65 CIRCUIT ANALYSIS 4 UNITS

Mathematic skills required in the analysis of both DC and AC circuits. Includes basic math, algebraic manipulation of formulas, scientific notation, units, and prefixes as applied to electric circuits, graphing, trigonometric functions, phasor algebra, logarithms used in time constants, decibel and

other calculations. May be offered in Distance Education delivery format. 3 hours lecture, 3 hours laboratory. Transfer: CSU, AA/AS.

67 ELECTRONIC EQUIPMENT TROUBLESHOOTING 1 UNIT

(May be repeated 3 times)

Electronic equipment troubleshooting methods, procedures, and applications. Servicing and maintenance of all types of electronic devices and equipment. Emphasis on the four main step approach to modern troubleshooting; analyze, localize, isolate, and determine specific location. Prerequisite: Electronics and Computer Technology 62A and 64A. 1 hour.

68 ELECTRONIC TEST EQUIPMENT 1 UNIT

(May be repeated 3 times)

Applications of electronic test equipment. Emphasis on oscilloscope and the logic analyzer. Discussion of other types of instruments available and their performance trade-offs. Troubleshooting applications and limitations of electronic test instruments. Prerequisite: Electronics and Computer Technology 60. 1 hour. Transfer: CSU.

69 PROGRAMMING FOR ELECTRONIC AND COMPUTER TECHNICIANS 4 UNITS

(May be repeated 3 times)

Introduction to programming in assembly language and/or compiler languages. Emphasis is on hardware and software interfacing and diagnostic techniques. Includes software as a diagnostic tool in the troubleshooting of computer systems. Introduction to operating system interfacing. 3 hours lecture, 3 hours laboratory. Transfer: CSU.

70 INTRODUCTION TO ELECTRONICS 2½ UNITS

(May be repeated 3 times)

A survey course in electronic technology. Ohm's law and fundamental DC and AC circuit analysis. Magnetism and capacitance. Overview of semiconductor technology with applications. Digital building blocks with application to computer technology. Survey of the electronic technology fields. Use of basic electronic test equipment. Designed for non-Electronics majors. 2 hours lecture, 2 hours laboratory. Transfer: CSU.

74A CISCO NETWORKING ACADEMY CCNA 1 AND 2 5 UNITS

Fundamental principles and practices of computer network design, implementation, and operation, with emphasis on the TCP/IP protocol and its use in internetworking. The OSI model provides the principles and practices of routing in a TCP/IP network, including routing protocols, IP addressing, and router configuration and commands. The course includes the Cisco Networking Academy Semester 1 and 2 curriculum. 4 hours lecture, 3 hours laboratory.

74B CISCO NETWORKING ACADEMY CCNA 3 AND 4 5 UNITS

Intermediate principles and practices of switching, routing, and network design in TCP/IP networks, including NAT, PAT, VLAN switching, EIGRP, OSPF and RIPv2 routing, router access control lists, and principles of local network design and management. Principles and practices of wide-area network design and implementation, including PPP, ISDN, frame relay, and principles of wide-area network management. The course includes the Cisco Networking Academy Semesters 3 and 4 curriculum. Prerequisite: Electronics and Computer Technology 74A (*completed with a grade of "C" or higher*). 4 hours lecture, 3 hours laboratory.

75 NETWORKING LABORATORY ½–1 UNIT

Networking configuration and troubleshooting laboratory. Emphasis is on Cisco hardware and software. Prerequisite: Electronics and Computer Technology 74A. 1½ to 3 hours laboratory.

76 INTRODUCTION TO COMPUTER NETWORKING 2½ UNITS

Basics of local area networks Local Area Network (LAN). LAN usage. Introduction to major networking components: hardware, software, net-

working topologies. LAN cabling. Benefits of LANs. Introduction to data communications. History of Networking. Review of LAN administration, setup and installation. The laboratory portion of the course presents numerous exercises for gaining familiarity with a LAN. Strongly recommended: Electronics and Computer Technology 73*. 2 hours lecture, 2 hours laboratory. Transfer: CSU.

77 COMPUTER NETWORK ADMINISTRATION 2½ UNITS

Computer Network Administration using Netware 3.X and Netware 4.X. Introduction to Netware Directory Services and directory services security. Netware File System and file system security. Customizing the user environment. Network configuration and management of servers. Network printing administration. Network fault tolerance and backup solutions. Using Networking utilities. Hardware and software troubleshooting in the networking environment. Use of electronic test equipment. Prerequisite: Electronics and Computer Technology 76*. 2 hours lecture, 2 hours laboratory. Transfer: CSU.

ENGINEERING (ENGR)

ENGINEERING TRANSFER PREPARATION RECOMMENDED COURSES

This program is designed to satisfy core requirements for many engineering transfer majors. However, students should consult a counselor, and especially the catalog of the intended transfer institution for specific transfer requirements in the selected major. For example, many transfer institutions require Engineering Graphics for mechanical, civil, and industrial engineering majors.

FRESHMAN YEAR FALL SPRING

Engineering 25 (Computational Methods for Engineers and Scientists)	3
Chemistry 1A (General College Chemistry)	5
Mathematics 1 (Calculus I)	5
Mathematics 2 (Calculus II)	5
Physics 4A (General Physics I)	5

SOPHOMORE YEAR FALL SPRING

Engineering 36* (Engineering Mechanics - Statics)	3
Engineering 43 (Engineering Circuit Analysis)	4
Engineering 45* (Materials of Engineering)	3
Mathematics 3 (Multivariable Calculus)	5
Mathematics 4 (Elementary Differential Equations)	3
Physics 4B (General Physics II)	5
Physics 4C (General Physics III)	5
Total	51

*Students planning to transfer as Electrical or Computer Engineering majors may substitute a Computer Science computer-programming course for either, but not both, Engineering 36 or Engineering 45.

The above listing is a suggested sequence only. Some courses have prerequisites. Students may take courses in any sequence except where a prerequisite applies.

ENGINEERING (ENGR)

Students interested in majoring in engineering should discuss their course planning with a member of the Engineering faculty to ensure they are following the guidelines for transferring to a four year college. This will ensure no loss of transfer credit and that courses are taken in the most economical transfer sequence.

10 INTRODUCTION TO ENGINEERING 2 UNITS

Introduction to careers, activities, and topics related to the field of engineering, including computer applications design and problem solving. Strongly recommended: eligibility for English 1A. 2 hours. Transfer: CSU, UC.

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 of AutoCAD Computer-Assisted Drawing software as a design tool. Basic CAD 3-dimensional solid-modeling. Strongly recommended: Mathematics 36 or 37, and English 1A or 52A. 2 hours lecture, 3 hours laboratory.

25 COMPUTATIONAL METHODS FOR ENGINEERS AND SCIENTISTS 3 UNITS

(See also Mathematics 25 and Physics 25)
Methodology and techniques for solving engineering/science problems using numerical-analysis computer-application programs MATLAB and EXCEL. Technical computing and visualization using MATLAB software. Examples and applications from applied-mathematics, physical-mechanics, electrical circuits, biology, thermal systems, fluid systems, and other branches of science and engineering. Prerequisite: Mathematics 1. Strongly recommended: Computer Application Systems 8 or Computer Science 8. May not receive credit if Mathematics 25 or Physics 25 has been completed. 2 hours lecture, 3 hours laboratory.

32 PLANE SURVEYING 3 UNITS

Use of surveying instruments: tape EDM, level, transit, theodolite measurement and errors. Computations for traverse, horizontal and vertical curves, earthwork. Topographic surveys, boundary surveys. Prerequisite: Engineering 22, Mathematics 36 or Mathematics 37 (both completed with a grade of "C" or higher). 2 hours lecture, 3 hours laboratory. Transfer: CSU, UC; (CAN ENGR 10).

36 ENGINEERING MECHANICS - STATICS 3 UNITS

Force systems under equilibrium conditions; vector properties of forces, moments, couples, and resultants; rigid body structures; hydrostatics; shear and bending-moment diagrams; friction; centroids; area/mass moments of inertia. Graphical, algebraic, and numerical (computer) solutions of vector mechanics problems. Prerequisite: Physics 4A, and Engineering 25 (both completed with a grade of "C" or higher). Strongly recommended: Mathematics 2 (concurrent enrollment encouraged.) 2 hours lecture, 3 hours laboratory. Transfer: CSU, UC; (CAN ENGR 8).

43 ENGINEERING CIRCUIT ANALYSIS 4 UNITS

Introduction to basic electrical circuit analysis. DC and AC circuit analysis methods, network theorems, voltage and current sources, resistors, operational amplifiers, capacitors and inductors. Natural and complete response of first and second order circuits. Steady-state sinusoidal circuit analysis, and power calculations. Basic instruments, and experimental techniques in Electrical Engineering: DC current/voltage supplies, analog/digital multiple-use meters, oscilloscopes, AC function generators. Measurements of resistance, inductance, capacitance, voltage, current, and frequency response. Prerequisite: Physics 4A and Engineering 25 (both completed with a grade of "C" or higher). Strongly recommended: Physics 4B (concurrent enrollment encouraged.) 3 hours lecture, 3 hours laboratory. Transfer: CSU, UC; (CAN ENGR 6), (CAN ENGR 12).

45 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 optical properties of metals. Solid material phase equilibria and transformation. The physical, chemical, mechanical and optical properties of ceramics, composites, and polymers. Operation and use of materials characterization instruments and methods. Prerequisite: Physics 4A, Chemistry 1A, and Engineering 25 (all completed with a grade of "C" or higher). 2 hours lecture, 3 hours laboratory. Transfer: CSU, UC; (CAN ENGR 4).

ENGINEERING TECHNOLOGY (ENGT)

DEGREE: AS-ENGINEERING TECHNOLOGY-ELECTRONICS AS-ENGINEERING TECHNOLOGY-MANUFACTURING

The Engineering Technology program offers an Associate of Science degree and prepares students to transfer to four-year college and university programs. The program is for students interested in learning the more pragmatic and applications aspect of engineering, and is directed to the application of established scientific and engineering knowledge and methods. Including the core, a minimum of 30 units must be completed from required mathematics, science, and core option courses to earn an Associate in Science degree.

ENGINEERING TECHNOLOGY-ELECTRONICS ASSOCIATE IN SCIENCE DEGREE

FRESHMAN YEAR	FALL	SPRING
Electronics and Computer Technology 60 (Fundamentals of Electronics)		4
Electronics and Computer Technology 61 (Fabrication Techniques)		4
Mathematics 36* (Trigonometry)		3
Electronics and Computer Technology 62A (Semiconductor Devices)		4
Electronics and Computer Technology 64A (Digital Electronics)		4
SOPHOMORE YEAR		
	FALL	SPRING
Electronics and Computer Technology 62B (Circuits and Systems I)		4
Electronics and Computer Technology 64B (Microprocessor Technology)		4
Physics 2A (Introduction to Physics I)		4
Electronics and Computer Technology 62C (Circuits and Systems II)		4
Electronics and Computer Technology 64C (Computer Systems)		4
Electronics and Computer Technology 69 (Programming for Electronics Technicians)		4
Physics 2B (Introduction to Physics II)		4
Total		47

General Education Courses

For specific General Education courses refer to catalog section on Graduation Requirements.

Total minimum units required 60

**Other equivalent courses may be substituted*

**ENGINEERING TECHNOLOGY—
MANUFACTURING
ASSOCIATE IN SCIENCE DEGREE**

FRESHMAN YEAR FALL SPRING

- Engineering 20 (Engineering Graphics) 2
- Machine Tool Technology 70
(Introduction to Machine Shop) 2
- Machine Tool Technology 60A
(Machine Tool Technology I) 4
- Machine Tool Technology 71A
(Numerical Control Programming 1) 4
- Engineering 21 (Descriptive Geometry) 3
- Machine Tool Technology 60B
(Machine Tool Technology II) 4
- Machine Tool Technology 71 B
(Numerical Control Programming II) 4
- Mathematics 36 (Trigonometry) 3

SOPHOMORE YEAR FALL SPRING

- Engineering Technology 52
(Engineering Systems Analysis) 3
- Machine Tool Technology 65 (Production Practices) . . 4
- Physics 2A (Introduction to Physics I) 4
- Machine Tool Technology 66 (Basic Toolmaking) 4
- Physics 2B (Introduction to Physics II) 4
- Total 45**

General Education Courses

For specific General Education courses refer to catalog section on Graduation Requirements.

Total minimum units required 60

**ENGINEERING TECHNOLOGY
(ENGT)**

57 ELECTRICAL SYSTEMS 2 UNITS

Introduction to electrical systems, components for electrical systems and circuits; basic electrical theorem, magnetism, electrostatics. Strongly recommended: Industrial Technology 74 (may be taken concurrently). 1 hour lecture, 3 hours laboratory.

60 ENGINEERING MATERIALS TECHNOLOGY 2 UNITS

Introduction to physical and mechanical characteristics of material used in engineering applications. Includes metals, ceramics and polymers; basics of metallurgy, tension testing, hardness testing and heat treatment. Strongly recommended: Industrial Technology 74 and Mathematics 36 or Mathematics 37. 1 hour lecture, 3 hours laboratory. Transfer: CSU.

66 GRAPHICAL KINEMATICS 2 UNITS

Elementary mechanisms; emphasis on fundamentals of displacement, velocity and acceleration, and on the application of these to the analysis and design of mechanisms such as linkages, sliders, cams, cranks, gears and gear-trains. Strongly recommended: Engineering 20 or Design Technology 66A. 1 hour lecture, 3 hours laboratory. Transfer: CSU.

ENGLISH (ENGL)

**CERTIFICATE:
CREATIVE WRITING
WRITING**

The English Associate in Arts degree will allow students to fulfill the first two years of coursework towards a bachelors degree in English while also fulfilling general education requirements. In addition this degree is useful preparation for other liberal arts degrees and will offer students an enriched background towards professional preparation in fields from education to law. All of the courses for the degree transfer to universities and colleges.

**CREATIVE WRITING
CERTIFICATE**

CORE COURSES FALL SPRING

Select two courses from the following for a total of 6 units:

- English 11 (Introduction to Creative Writing)* 3
- English 12 (The Craft of Writing-Fiction)* 3
- English 13 (The Craft of Writing-Poetry)* 3

Select from the following for additional 9 units:

- English 4 (Critical Thinking and Writing
about Literature)* 3
- English 11 (Introduction to Creative Writing)* 3
- English 12 (The Craft of Writing-Fiction)* 3
- English 13 (The Craft of Writing-Poetry)* 3
- English 19 (Literary Magazine Workshop)*** 1
- English 21 (The Evolution of the Black Writer)*** 3
- English 22 (Mexican American/Latino
Literature of the U.S.)* 3
- English 32 (U.S. Women's Literature)*** 3
- English 33 (Women's Autobiographical Writing
in Multicultural America)** 3
- Theater Arts 16 (Introduction to Playwriting for
Film, Television and Theater)* 3
- Mass Communications 3 (Journalism:
Magazine and Newspaper Feature Writing)*** 3
- Total 15**

**offered fall & spring semester*

***offered in fall only*

****offered in spring only*

**WRITING
CERTIFICATE**

CORE COURSES FALL SPRING

- English 1A (Critical Reading and Composition)* 3
- English 4 (Critical Thinking and Writing
About Literature) or English 7 (Critical
Thinking and Writing Across Disciplines)* 3

SELECT FROM THE FOLLOWING FOR ADDITIONAL 9 UNITS

Select one course from:

English 70 (Report Writing)*	3
English 4 (Critical Thinking and Writing About Literature) or English 7 (Critical Thinking and Writing Across Disciplines)*	3
Theater Arts 16 (Dramatic Writing I)	3

Select one course from:

Mass Communications 35 (Writing for Broadcasting)**	3
Mass Communications 1 (Journalism: Newswriting and Information Gathering)***	3
Business 15 (Business Correspondence)**	3

Select one course from:

English 11 (Introduction to Creative Writing)*	3
English 12 (The Craft of Writing-Fiction)*	3
English 13 (The Craft of Writing-Poetry)*	3

Total 15

*offered fall & spring semester

**offered in spring only

***offered in fall only

COMPOSITION & LITERATURE

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 101B, 102, or appropriate skill level demonstrated through English assessment process. May be offered in Distance Education delivery format. 3 hours. Transfer: CSU, UC; CSU/GE: A2, IGETC: Area 1 group A; AA/AS; (CAN ENGL 2).

4 CRITICAL THINKING AND WRITING ABOUT LITERATURE 3 UNITS

Develops critical thinking, reading, and writing skills as they apply to the analysis of fiction (short stories and novel), poetry and drama. Prerequisite: English 1A (completed with a grade of "C" or higher.) May be offered in Distance Education delivery format. 6 hours. Transfer: CSU, UC; CSU/GE: A3; IGETC: Area 1B group B; AA/AS.

7 CRITICAL THINKING AND WRITING ACROSS DISCIPLINES 3 UNITS

Develops critical thinking, reading, and writing skills as they apply to the analysis of primary and secondary nonfiction books, articles, and essays from a range of academic and cultural contexts. Theme based. 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. Transfer: CSU, UC; CSU/GE: A3; IGETC: Area 1 group B; AA/AS.

10 UNDERGRADUATE TEACHING ASSISTANT IN ENGLISH 1–2 UNITS

Provides the opportunity for students interested in a teaching career to assist an instructor in one target course. Practice in presenting lessons, responding to students' written work, creating assignments, and facilitating group discussions. Recommendation of target course instructor required. Prerequisite: English 1A (completed with a grade of "C" or higher). 2–4 hours. Transfer: CSU.

11 INTRODUCTION TO CREATIVE WRITING 3 UNITS

(May be repeated 3 times)

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. Transfer: CSU.

12 THE CRAFT OF WRITING—FICTION 3 UNITS

(May be repeated 3 times)

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. Transfer: CSU; CSU/GE: C2; AA/AS.

13 THE CRAFT OF WRITING—POETRY 3 UNITS

(May be repeated 3 times)

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; CSU/GE: C2; AA/AS.

15 TUTORING IN LANGUAGE ARTS 1–2 UNITS

(May be repeated 3 times)

Focus on acquiring specific skills and techniques for tutoring in Language Arts courses. Strongly recommended: completion of English 1A or 52A and completion of Tutoring 15 experience. 1 hour lecture, 2–5 hours tutoring. Transfer: CSU.

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 4 (completed with a grade of "C" or higher). 3 hours. Transfer: CSU, UC; CSU/GE: C2; IGETC: Area 3; AA/AS.

21 THE EVOLUTION OF THE BLACK WRITER 3 UNITS

Introduction to Black writers in fiction, poetry, drama and the essay, beginning with the "Slave Narratives" and continuing to the present. Emphasis on the 20th century writers' growth and development in relation to their historical and cultural context. Strongly recommended: Eligibility for English 1A. 3 hours. Transfer: CSU, UC; CSU/GE: C2, D3; IGETC: Area 3; AA/AS.

22 MEXICAN AMERICAN/LATINO LITERATURE OF THE U.S. 3 UNITS

Introduction to literary works in fiction, poetry, drama and the essay which are concerned with the Mexican-American/Latino cultural experience. Analysis of literature in the context of the historical growth of Mexican American/Latino identity in the United States in the 19th and 20th centuries. Strongly recommended: Eligibility for English 1A. 3 hours. Transfer: CSU, UC; CSU/GE: C2, D3; IGETC: Area 3; AA/AS.

30 SURVEY OF U.S. LITERATURE 3 UNITS

Survey of U.S. Literature from 1600 to 1950, including poetry, drama, prose fiction, and essays. Explores each work in relation to its social, cultural and historical contexts, and emphasizes the analysis of defining moments of the times as they are reflected in literature. Includes some research. Strongly recommended: English 4 (completed with a grade of "C" or higher). 3 hours. Transfer: CSU, UC; CSU/GE: C2; IGETC: Area 3.

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. Transfer: CSU, UC; CSU/GE: C2; IGETC: Area 3; AA/AS.

33 HERSTORY: WOMEN'S AUTOBIOGRAPHICAL WRITING IN MULTICULTURAL AMERICA 3 UNITS

Chronicles the experience of U.S. women through readings in diaries, journals, and other autobiographical writing from at least three of the following groups: African Americans, Asian Americans, European Americans, Native Americans, and Latinas. Explores work by writers of diverse backgrounds and experiences in an effort to understand the diversity of women's voices, especially in the 20th century. Strongly recommended: Eligibility for English 1A. 3 hours. Transfer: CSU, UC; CSU/GE: D4; AA/AS.

34 INTERNATIONAL POETRY 3 UNITS

Introduction to classical, modern and contemporary international poetics in their original languages and in translations. Examination of modes of reading and writing poetry in relation to students' cultural and language backgrounds. 3 hours. Transfer: CSU.

38 SURVEY OF MODERN BRITISH LITERATURE 3 UNITS

Survey of British poetry, drama and prose fiction studied in the context of the important historical and cultural events of the last two centuries, including but not limited to the rise of science, the impact of industrialism and colonialism, the consequences of the two world wars and the collapse of the British Empire. Strongly recommended: Eligibility for English 1A. 3 hours. Transfer: CSU, UC; CSU/GE: C2; AA/AS.

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. Transfer: CSU, UC; CSU/GE: C2; IGETC: Area 3; AA/AS.

47 THE BIBLE AS LITERATURE 3 UNITS

Literature of the Old and New Testaments, their styles, genres, background, authors, events, and language. Strongly recommended: Eligibility for English 1A. 3 hours. Transfer: CSU, UC; CSU/GE: C2; IGETC: Area 3; AA/AS.

48 THE LITERATURE OF THE HOLOCAUST 3 UNITS

Explores the literatures of the Holocaust through readings in a variety of genres including the memoir, the diary, the essay, as well as fiction and poetry. Historically and culturally contextualizes the literature and examines the implications of writing which attempts to represent the Nazi genocide against the Jews. Strongly recommended: Eligibility for English 1A. 3 hours. Transfer: CSU, UC; CSU/GE: C2; AA/AS.

52A ESSENTIALS OF COMMUNICATION 3 UNITS

Development of reading and writing skills with a focus on academic as well as career oriented materials. Strongly recommended: English 101B or 102 or appropriate skill level demonstrated through the English assessment process. 3 hours. Transfer: CSU; AA/AS.

52B RESPONDING TO LITERATURE 3 UNITS

Introduction to literature from the works of important authors in prose fiction, drama and poetry; examination of the universal human issues brought to life through literature. Emphasis on works that celebrate human experience and cultural diversity. Focus on writing in response to reading. Prerequisite: English 52A or 1A (*completed with a grade of "C" or higher*). 3 hours. Transfer: CSU; AA/AS.

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. Transfer: CSU; AA/AS.

PREPARATORY READING AND WRITING**101A 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 placement process. 3 hours lecture, 2 hours individualized instruction.

101B 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 101A. 3 hours lecture, 2 hours individualized instruction.

102 READING, REASONING, AND WRITING—ACCELERATED COURSE 4 UNITS

Emphasis in the development of thinking, reading, organizing, and writing skills, particularly those required for successful execution of college level papers in all subject areas. Designed for those requiring minimal preparation for entering English 1A. Strongly recommended: Appropriate skill level demonstrated through the English placement process. 3 hours lecture, 2 hours individualized instruction.

106 SPELLING AND PRONUNCIATION 2 UNITS

Spelling and pronunciation of commonly used words in standard English. Based on an understanding of the English spelling-sound system with emphasis on dictionary use and memory skills to fit individual learning styles. 2 hours.

107 INTRODUCTION TO ENGLISH GRAMMAR 3 UNITS

Basic components and rules of English grammar, syntax, and punctuation. Includes parts of speech, sentence patterns, sentence purpose, sentence construction, and sentence level errors in conjunction with writing. 3 hours.

115 ENGLISH SKILLS-FACULTY-STUDENT TUTORIAL: WRITING AND READING ACROSS THE CURRICULUM ½–4 UNITS

(English 115 and General Studies 115 may be repeated for a combined total of 3 times May enroll through tenth week of instruction)

Preparation in English for success in college or career. Self-paced, individualized instruction in reading comprehension and writing effectiveness. 2–8 hours.

LEARNING SKILLS**116 LEARNING SKILLS—DIAGNOSTIC CLINIC AND STUDY SKILLS 1 UNIT**

Determination of eligibility for learning disabilities services through diagnostic testing. Includes state mandated tests. Focus on compensatory methods as derived from test results. 1 hour lecture, 1 hour laboratory.

117 LEARNING SKILLS—READING 4 UNITS

(May be repeated 1 time)

Reading to develop decoding, vocabulary and comprehension skills. Use of specialized techniques developed especially for students with learning disabilities. Includes reading comprehension strategies and vocabulary development, and other compensatory strategies. Designed for students with learning disabilities. Recommendation of instructor advisable. Strongly recommended: English 116. 4 hours.

118A LEARNING SKILLS: READING/WRITING**3 UNITS***(May be repeated 1 time)*

Strategies to develop college writing skills with an emphasis on developing reading comprehension strategies, summarizing and writing responses to readings. Includes compensatory strategies. Designed for students with learning disabilities to improve reading and writing skills. Strongly recommended: English 116. 3 hours.

118B LEARNING SKILLS: READING/WRITING**3 UNITS***(May be repeated 1 time)*

Elements of the writing process including presenting, organizing, writing and revising, and review of basic grammar. Includes reading comprehension strategies and review of compensatory strategies. Designed for students with learning disabilities to improve reading and writing skills. Strongly recommended: English 11 8A. 3 hours.

119 LEARNING SKILLS—PROBLEM SOLVING**3 UNITS***(May be repeated 1 time)*

Preparation for problem solving success in college for those with learning disabilities. Emphasis on quantitative reasoning abilities needed to process and integrate word problems and related problem solving tasks. Designed for students with identified learning disabilities. Strongly recommended: English 116. 3 hours.

120 LEARNING SKILLS—STUDY STRATEGIES**2 UNITS***(May be repeated 3 times)*

Guided practice in specific compensatory and study strategies for those with learning disabilities. Designed for Learning Skills students actively enrolled in an academic course. Focus on utilizing skills and strategies in conjunction with academic course materials. Designed for students with identified learning disabilities. Strongly recommended: English 116. 2 hours lecture.

121 LEARNING SKILLS: QUANTITATIVE STRATEGIES THROUGH LANGUAGE SKILLS**2 UNITS**

Guided practice in specific compensatory and study strategies for students with learning disabilities in language based quantitative reasoning skills (dyscalculia). Focus on utilizing skills and strategies in conjunction with academic course materials. Development of math and language skills. Designed for Learning Skills students enrolled in math. Strongly recommended: English 116. 2 hours.

ENGLISH AS A SECOND LANGUAGE (ESL)

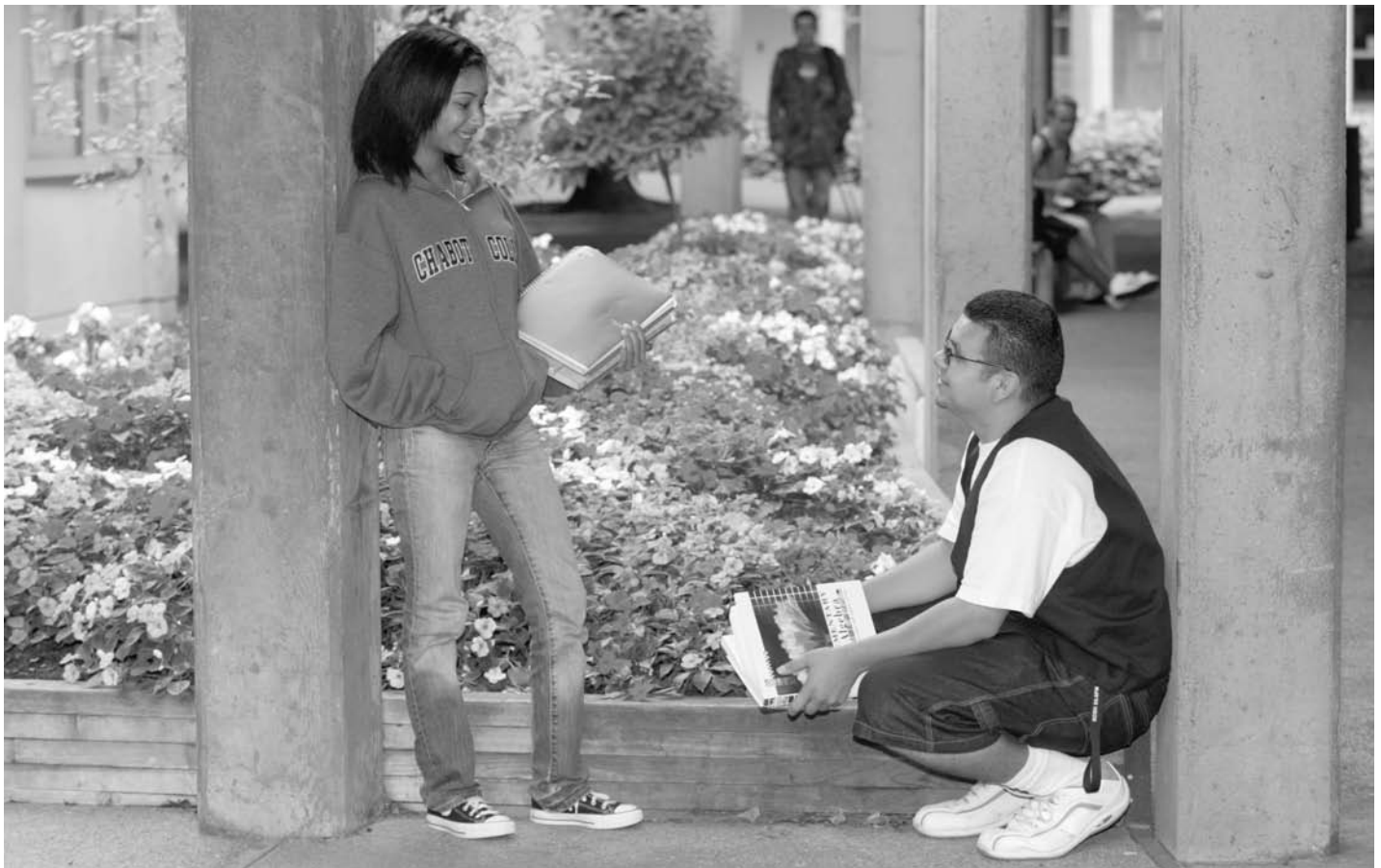
Chabot College does not offer beginning or “survival” ESL courses. ESL classes at Chabot College are at intermediate and advanced levels only.

108 BASIC SPELLING FOR ENGLISH AS A SECOND LANGUAGE**1 UNIT**

Basic sound/spelling patterns of English. Develops an understanding of the sounds and symbols of English, including open/closed syllables, short and long vowel sounds, consonant and consonant cluster sounds, spelling of homophones and other problem words in everyday English. Includes basic dictionary use. 1 hour

109 VOCABULARY SKILLS**1 UNIT**

Build language proficiency by learning new vocabulary and developing vocabulary building skills. 1 hour lecture, 1 hour laboratory.



110A REVIEW OF BASIC ENGLISH FOR ESL 6 UNITS

A comprehensive review of the structure of the simple English sentence; short writing assignments; reading fiction; reinforces fluency in reading and writing. 6 hours.

110B READING AND WRITING: THE PARAGRAPH 6 UNITS

Logical paragraph development; reading both fiction and nonfiction; emphasis on the development of vocabulary and grammatical structures of written English. Prerequisite: ESL 110A*. 6 hours.

110C READING AND WRITING: FROM PARAGRAPH TO ESSAY 6 UNITS

Expository paragraphs and short essays; fiction and non-fiction reading; emphasis on the development of vocabulary and grammatical structures of written English. Prerequisite: ESL 110B*. 6 hours.

110D READING AND WRITING: THE ESSAY 6 UNITS

Expository essays; critical reading; emphasis on the development of vocabulary and grammatical structures of written English. Prerequisite: ESL 110C*. 6 hours.

111A PRONUNCIATION 2 UNITS

Oral English with emphasis on strategies for clear pronunciation. 2 hours lecture, 1 hour laboratory.

111B ACADEMIC LISTENING AND SPEAKING 2 UNITS

Group and individual practice producing and responding to oral English in the academic environment. 3 hours.

112 ENGLISH GRAMMAR: A RAPID REVIEW FOR ESL 3 UNITS

Intermediate-level overview of the structures of English grammar. Important grammatical forms including verb tenses, articles, modal auxiliaries, the passive voice, reported speech, adjustive clauses, gerunds, infinitives, and conditional sentences. Strongly recommended: Eligibility for ESL 100C. 3 hours.

113 INTRODUCTION TO COMPUTER ASSISTED LANGUAGE LEARNING 1 UNIT

Basic computer vocabulary and operating skills to enhance acquisition of English vocabulary, reading and writing. 3 hours laboratory.

114 EDITING FOR THE ADVANCED ESL WRITER 2 UNITS

Use of standard written English to develop personal strategies for self-editing. Designed to ease the transition between explicit ESL instruction and the fluency demands of mainstream English curriculum. Prerequisite: ESL 110D or eligibility for English 101A demonstrated through the English Placement Process. 4 hours. Total weeks—9.

*Or equivalent.

ETHNIC STUDIES

**DEGREE:
AA-ETHNIC STUDIES**

The Cross Cultural Studies Program, interdisciplinary in scope, will begin with a focus on the history, literature and cultures of African-Americans, Asian Americans, Chicano-Latinos, and Native Americans. Courses explore the relations of these cultures to each other and to the dominant American culture in order to foster understanding about such topics as ethnicity, race, gender, sexuality/sexual orientation, class and religion.

**ETHNIC STUDIES
ASSOCIATE IN ARTS DEGREE**

FRESHMAN YEAR FALL SPRING

Sociology 3 (American Cultural and Racial Minorities)	3
Anthropology 5 (Cultural Pluralism)	3
<i>Twelve (12) units from the following:</i>	
English 21 (African American Literature)	3
English 22 (Mexican American/Latino Literature)	3
History 20 (The African-American Experience in U.S. History Through Reconstruction)	3
History 22 (Mexican American History and Culture)	3
History 25 (American Indian History and Culture)	3
Psychology 18 (Psychology of the African American Experience)	3

SOPHOMORE YEAR FALL SPRING

Political Science 40 (Contemporary Issues in American Politics)	3
Total	24
General Education Courses	
For specific General Education courses refer to catalog section on Graduation Requirements.	
Total minimum units required	60

ETHNIC STUDIES

ENGLISH 21 THE EVOLUTION OF THE BLACK WRITER	3 UNITS
ENGLISH 22 MEXICAN-AMERICAN/LATINO LITERATURE OF THE U.S.	3 UNITS
HISTORY 20 THE AFRICAN-AMERICAN EXPERIENCE IN U.S. HISTORY THROUGH RECONSTRUCTION	3 UNITS
HISTORY 21 THE AFRICAN-AMERICAN EXPERIENCE IN U.S. HISTORY SINCE RECONSTRUCTION	3 UNITS
HISTORY 22 MEXICAN-AMERICAN HISTORY AND CULTURE	3 UNITS
HISTORY 25 AMERICAN INDIAN HISTORY AND CULTURE	3 UNITS
PSYCHOLOGY 18 PSYCHOLOGY OF THE AFRICAN-AMERICAN EXPERIENCE	3 UNITS
PSYCHOLOGY—COUNSELING 17 INTERCULTURAL STUDIES	2 UNITS
PSYCHOLOGY—COUNSELING 26 COLLEGE SUCCESS AND THE CHICANO EXPERIENCE	1 UNIT
SOCIOLOGY 3 AMERICAN CULTURAL AND RACIAL MINORITIES	3 UNITS

FILM

11 STAGE TO FILM
(See Theater Arts 11)

12 FILM AS ART AND COMMUNICATION

(See Theater Arts 12)

16 DRAMATIC WRITING I

(See Theater Arts 16)

FIRE TECHNOLOGY (FT)

DEGREE:

AA—FIRE TECHNOLOGY

**CERTIFICATE OF ACHIEVEMENT:
FIRE TECHNOLOGY**

This two-year diploma program is designed for students who wish to pursue careers in fire protection, primarily for the inspection of industrial, commercial and institutional properties, environmental safety and accident prevention, and for people presently in those areas wishing to improve their academic and technical skills and abilities.

FIRE TECHNOLOGY

The Fire Technology program is based on the Uniform Fire Technology curriculum as approved by the State Board of Fire Services and the California Fire Chiefs Association. Successful completion of the program qualifies the pre-service student for State Firefighter-1 Certification. Classes are also offered for Fire Service Personnel leading to State Fire Officer Certification.

**FIRE TECHNOLOGY
ASSOCIATE IN ARTS DEGREE**

FRESHMAN YEAR **FALL** **SPRING**

Fire Technology 50 (Fire Protection Organization)	3
Fire Technology 51 (Fire Service Operations)	3
Fire Technology 52 (Firefighter Safety and Public Education)	3
Health 61 (First Responder)	2½
PE 2FSC (Fire Science Conditioning)	1
Firefighter-1 (Academy Evaluation)	½
Fire Technology 90A* (Firefighter-1 Certification Preparation)	2
Fire Technology 90B* (Firefighter-1 Certification Preparation)	2
Fire Technology 90C* (Firefighter-1 Certification Preparation)	2
Fire Technology 91 A (Wildland Firefighting)	2
Fire Technology 91 B (Hazardous Materials First Responder-Operational Level)	1½
Fire Technology 91C (I-200 Basic ICS Incident Command System)	1½
Health 81 (Emergency Medical Technician Basic)	6½

SOPHOMORE YEAR **FALL** **SPRING**

Fire Technology 54 (Fire Prevention Technology)	3
Fire Technology 56 (Building Construction for Fire Protection)	3
Fire Technology 53 (Fire Behavior and Combustion)	3
Fire Technology 55 (Fire Protection Equipment and Systems)	3
Total	42½

General Education Courses
For specific General Education courses refer to catalog section on Graduation Requirements.
Total minimum units required **60**

**Fire Technology 50, 51, 52 and Health 61 must be completed with a "C" or higher grade before acceptance to the Firefighter I Academy (Fire Technology 90A, 90B, 90C). A current EMT certificate will be accepted in lieu of Health 61.*

**FIRE TECHNOLOGY
CERTIFICATE OF ACHIEVEMENT**

FRESHMAN YEAR **FALL** **SPRING**

Fire Technology 50 (Fire Protection Organization)	3
Fire Technology 51 (Fire Service Operations)	3
Fire Technology 52 (Firefighter Safety and Public Education)	3
Health 61 (First Responder)	2½
PE 2FSC (Fire Science Conditioning)	1
Firefighter-1 (Academy Evaluation)	½
Fire Technology 90A* (Firefighter-1 Certification Preparation)	2
Fire Technology 90B* (Firefighter-1 Certification Preparation)	2
Fire Technology 90C* (Firefighter-1 Certification Preparation)	2
Fire Technology 91A (Wildland Firefighting)	2
Fire Technology 91B (Hazardous Materials First Responder-Operational Level)	1½
Fire Technology 91C (I-200 Basic ICS Incident Command System)	1½
Health 81 (Emergency Medical Technician-Basic)	6½

SOPHOMORE YEAR **FALL** **SPRING**

Fire Technology 54 (Fire Prevention Technology)	3
Fire Technology 56 (Building Construction for Fire Protection)	3
Fire Technology 53 (Fire Behavior and Combustion)	3
Fire Technology 55 (Fire Protection Equipment and Systems)	3
Total	42½

**Fire Technology 50, 51, 52 and Health 61 must be completed with a "C" or higher grade before acceptance to the Firefighter I Academy (Fire Technology 90A, 90B, 90C). A current EMT certificate will be accepted in lieu of Health 61.*

FIRE TECHNOLOGY (FT)

Fire Technology courses may be scheduled alternating years. Students may be required to take day and evening classes to complete the A.A. Degree.

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. 3 hours lecture, plus a total of 12 hours laboratory for the semester. Transfer: CSU.

51 FIRE SERVICE OPERATIONS 3 UNITS

Fundamentals of fire department organization, management and resources; fire company organization; resources to control various emergencies; multiagency 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. 3 hours lecture, plus a total of 12 hours laboratory for the semester. Transfer: CSU.

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.

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.

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 relationship 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 1 and Fire Inspector I. 3 hours. Transfer: CSU.



55 FIRE PROTECTION EQUIPMENT 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. Transfer: CSU.

56 BUILDING CONSTRUCTION FOR FIRE PROTECTION 3 UNITS

Components of building construction that relate to fire/life safety. Elements of construction and design of structures as key factors when inspecting buildings, preplanning fire operations, and operating at fires/collapse emergencies. The development and evolution of building and fire codes in relationship to past fires/collapses in residential, commercial, and industrial occupancies. 3 hours. Transfer: CSU.

64A HAZARDOUS MATERIALS I 2 UNITS

Storage, handling laws, standards, and fire fighting practices pertaining to hazardous solids, liquids and gases. Includes review of chemistry of hazardous materials. Prerequisite: Fire Service Technology 50. 2 hours. Transfer: CSU.

64B HAZARDOUS MATERIALS II 2 UNITS

Knowledge of organic and inorganic materials, proper techniques to safeguard personnel and public. Emphasis on radioactive hazards. Prerequisite: Fire Service Technology 64A. 2 hours. Transfer: CSU.

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 90 B (Firefighter-1) or active member of paid or volunteer fire department. 2 hours. Transfer: CSU.

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. 1 hour lecture, 3 hours laboratory. Transfer: CSU.

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 Board of Fire Services Fire Officer Certification. 40 total hours. Transfer: CSU.

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 Board of Fire Services Fire Officer Certification. 40 total hours. Transfer: CSU.

72 FIRE MANAGEMENT I 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 Board of Fire Services Fire Officer Certification. 40 total hours. Transfer: CSU.

73A FIRE PREVENTION 1A 2 UNITS

Principles of fire prevention. Preparation for Fire Prevention Officer I Certification. 40 total hours. Transfer: CSU.

73B FIRE PREVENTION 1B 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. 40 total hours. Transfer: CSU.

73C FIRE PREVENTION 1C 2 UNITS

Storage, handling laws and standards pertaining to hazardous flammable liquids and gases. Review chemistry of hazardous materials. Principles of Fire Prevention to be applied. Preparation for Fire Prevention Officer I Certification. Code requirements reviewed and life safety factors. Prerequisite: Fire Technology 73B. 40 hours. Transfer: CSU.

74A FIRE INVESTIGATION 1A 2 UNITS

Application of fire investigation techniques relating to different types of fires. 40 total hours. Transfer: CSU.

75A FIRE INSTRUCTOR 1A 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. 32 total hours lecture, 8 total hours demonstration lab. 40 total hours. Transfer: CSU.

75B FIRE INSTRUCTOR 1B 2 UNITS

A continuation of Fire Service Technology 75A. Practice in the development, implementation, and evaluation of inservice training programs. Prerequisite: Fire Technology 75A. 32 total hours lecture, 8 total hours demonstration lab. 40 total hours. Transfer: CSU.

89 FIREFIGHTER-1 ACADEMY EVALUATION ½ UNIT

Orientation and evaluation of the necessary knowledge, skills, and abilities to succeed in the Firefighter 1 Academy (Fire Technology 90A, 90B and 90C). Physical fitness and hand-eye coordination skills evaluation. Prerequisites: Fire Technology 50, 51, 52; Health 61 and Health 81 (or proof of enrollment in an EMT program at another institution—All courses completed with a grade of "C" or higher). Proof of a current Candidate Physical Ability Test (CPAT) certificate (no older than six months from the first day of this class) may allow the candidate to waive certain physical ability evaluations. 4 hours total lecture, 12 hours total laboratory.

90A FIREFIGHTER 1—CERTIFICATION PREPARATION 2 UNITS

Development of individual skills and basic knowledge necessary to perform the functions of a firefighter. Practice in donning breathing apparatus, knot tying, placing ladders, pulling hose, making water supply connections and using the incident command system. Prerequisite: Fire Technology 50, 51, 52, and 89; Health 61 and Health 81, or proof of current completion of an Emergency Medical Technician Program from another institution. (*all courses completed with a grade of "C" or higher*). 24 total hours lecture, 40 total hours laboratory. Transfer: CSU.

90B FIREFIGHTER 1—CERTIFICATION PREPARATION 2 UNITS

Continuation of skills and basic knowledge necessary to perform the functions of a firefighter, 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 Technology 90A (*completed with a grade of "C" or higher*). 24 total hours lecture, 40 total hours laboratory. Transfer: CSU.

90C FIREFIGHTER 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. Firefighter 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 Technology 90B (*completed with a grade of "C" or higher*). 24 total hours lecture, 40 total hours laboratory. Transfer: CSU.

91A WILDLAND FIREFIGHTING 2 UNITS

Factors affecting wildland fire, prevention, fire behavior, and control techniques; emphasis on organization, weather patterns, and equipment usage, safety and wildland fire behavior. Course complies with the State Board of Fire Services requirements for Firefighter 1 Certification (1999). 28 hours lecture total, 12 hours lab total. Transfer: CSU.

91B HAZARDOUS MATERIALS FIRST RESPONDER-OPERATIONAL LEVEL 1 ½ UNIT

Hazard recognition and identification; incident response safety procedures; response to hazardous materials emergencies, emphasis on skills and knowledge necessary to protect lives, property, and the environment. Defensive tactics to contain the release from a safe distance and keep it from spreading, and to prevent exposures without trying to stop the release. Meets and exceeds the requirements of CFR 29 1910.120 and CCR Title 8. Course complies with the State Board of Fire Services requirements for Firefighter 1 certification (1999). 1½ hours. Transfer: CSU

91C 1—200 BASIC ICS (INCIDENT COMMAND SYSTEM) 1 ½ UNIT

Consists of modules 2 through 6 and meets the training needs of wildland fire personnel by introducing principles associated with the Incident Command System (ICS). Topics include: Organization, facilities, resource terminology, and the common responsibilities associated with incident or even assignments. Course complies with the State Board of Fire Services requirements for Firefighter 1 Certification (1999). 1½ hours. Transfer: CSU

95 WORK EXPERIENCE 1—3 UNITS

(May be repeated 3 times)
College supervised on-the-job training while working in a fire service related occupation. Prerequisite: Fire Technology 90C and Fire Technology 91C. (State Fire Fighter I Academy Certificate course), and Health 81 (EMT Certificate course). Corequisite: Fire Technology 96. 5–15 hours. Transfer: CSU.

96 WORK EXPERIENCE SEMINARS 1 UNIT

(May be repeated 3 times)
Focal point for the coordination of the curriculum with college supervised part-time or full-time employment, or volunteer work in the fire service field. Case studies, job related problems, student cases and presentations, and material related to employment, organization and management; emphasis on building strong working relationships with supervisors, subordinates, and co-workers. Prerequisite: Fire Technology 90C and Health 81 (EMT Certificate course). Corequisite: Fire Technology 95. 1 hour. Transfer: CSU.

FOREIGN LANGUAGES (FORE)

1L FOREIGN LANGUAGE LAB ½—1 UNIT

(May be repeated 3 times)
Foreign language grammar, pronunciation, conversation. Exploration of cultural components related to the target language. Co-requisite: concurrent enrollment in Foreign Language 1A, 1B, 2A, or 2B. 1½–3 laboratory hours.

CHINESE (CHIN)

50A CONVERSATIONAL CHINESE 2 UNITS

Development of an understanding of spoken Chinese through pronunciation, vocabulary, and applied grammar. Introduction to the everyday culture of Chinese-speaking people. 3 hours.

50B CONVERSATIONAL CHINESE 2 UNITS

Development of skills learned in Chinese 50A. Understanding of spoken Chinese through pronunciation, vocabulary, and applied grammar. Introduction to everyday life of Chinese-speaking people and the skills needed to successfully function in the culture. Prerequisite: Chinese 50A (*completed with a grade of "C" or higher*). 3 hours.

FRENCH (FREN)

DEGREE AA - FRENCH

This program consists of four semesters of thorough linguistic and cultural training in French. French is one of the world's most influential languages and there are opportunities for working in many industries where knowledge of French is considered valuable. Many majors at four-year universities have foreign language requirements that would be satisfied with the language courses in this degree program. Courses offered in this program meet general education and transfer requirements.

FRENCH

ASSOCIATE IN ARTS DEGREE

FRESHMAN YEAR FALL SPRING

French 1A (Beginning French) 5
French 1B (Elementary French) 5

SOPHOMORE YEAR FALL SPRING

French 2A (Intermediate French) 4
French 2B (Advanced French) 4

Total 18

General Education Courses
For specific General Education courses refer to catalog section on Graduation Requirements.
Total minimum units required 60

FRENCH (FREN)

1A BEGINNING FRENCH 5 UNITS

Beginning study and practice in the four Foreign Language skills: listening, speaking, reading and composition in French. Strongly recommended: Eligibility for English 1A or 52A. 5 hours. Transfer: CSU, UC; CSU/GE: C2; AA/AS; with FREN 1B (CAN FREN SEQA).

1B ELEMENTARY FRENCH 5 UNITS

Continuation of skills developed in French 1A. Beginning study and practice in the four Foreign Language skills: listening, speaking, reading and composition in French. Prerequisite: French 1A (*completed with a grade of "C" or higher*)*. 5 hours. Transfer: CSU, UC; CSU/GE: C2; IGETC: Language; AA/AS; with FREN 1A (CAN FREN SEQA).

2A INTERMEDIATE FRENCH**4 UNITS**

Review of grammar; reading of works of modern authors; practice in conversation and composition. Prerequisite: French 1B (*completed with a grade of "C" or higher*). 4 hours. Transfer: CSU, UC; CSU/GE: C2; IGETC: Area 3; AA/AS; (CAN FREN 8), with FREN 2B (CAN FREN SEQ B).

2B ADVANCED FRENCH**4 UNITS**

Reading of French authors; advanced review of grammar; emphasis on speaking and composition. Prerequisite: French 2A (*completed with a grade of "C" or higher*). 4 hours. Transfer: CSU, UC; CSU/GE: C2; IGETC: Area 3; (CAN FREN 10); with FREN 2A (CAN FREN SEQ B).

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.

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.

GERMAN (GERM)**1A BEGINNING GERMAN****5 UNITS**

Beginning study and practice in the basic Foreign Language skills: listening, speaking, reading, composition and culture in German. Strongly recommended: Eligibility for English 1A or 52A. 5 hours. Transfer: CSU, UC; AA/AS; with GERM 1B (CAN GERM SEQ A).

1B ELEMENTARY GERMAN**5 UNITS**

Continuation of skills developed in German 1A-Beginning study and practice in the basic Foreign Language skills: listening, speaking, reading, composition and culture in German. Prerequisite: German 1A (*completed with a grade of "C" or higher*). 5 hours. Transfer: CSU, UC; IGETC: Language; AA/AS; with GERM 1A (CAN GERM SEQ A).

50A CONVERSATIONAL GERMAN**2 UNITS**

Development of a basic understanding of spoken German through pronunciation, vocabulary, and applied grammar, and an introduction to the everyday culture of German-speaking people. 3 hours.

50B CONVERSATIONAL GERMAN**2 UNITS**

Development of skills learned in German 50A. Understanding of spoken German through pronunciation, vocabulary, and applied grammar. Introduction to everyday life of German-speaking people and the skills needed to successfully function in culture. Prerequisite: German 50A (*completed with a grade of "C" or higher*). 3 hours.

ITALIAN (ITAL)**1A BEGINNING ITALIAN****5 UNITS**

Beginning study and practice in the basic foreign language skills: listening, speaking, reading, composition, and culture in Italian. Strongly recommended: Eligibility for English 1A or 52A. 5 hours. Transfer: CSU, UC; AA/AS; with ITAL 1B (CAN ITAL SEQ A).

1B ELEMENTARY ITALIAN**5 UNITS**

Continuation of skills developed in Italian 1A. Beginning study and practice in the basic foreign language skills; listening, speaking, reading, composition, and culture in Italian. Prerequisite: Italian 1A (*completed with a grade of "C" or higher*). 5 hours. Transfer: CSU, UC; CSU/GE: C2; IGETC: Language; AA/AS; with ITAL 1A (CAN ITAL SEQ A).

50A CONVERSATIONAL ITALIAN**2 UNITS**

Development of a basic understanding of spoken Italian through pronunciation, vocabulary, and applied grammar, and an introduction to the everyday culture of Italian-speaking people. 3 hours.

50B CONVERSATIONAL ITALIAN**2 UNITS**

Development of skills learned in Italian 50A. Understanding of spoken Italian through pronunciation, vocabulary, and applied grammar. Introduction to everyday life of Italian-speaking people and the skills needed to successfully function in culture. Prerequisite: Italian 50A (*completed with a grade of "C" or higher*). 3 hours.

JAPANESE (JAPN)**1A BEGINNING JAPANESE****5 UNITS**

Beginning study and practice in the the basic foreign language skills: listening, speaking, reading, composition, and culture in Japanese. Strongly recommended: eligibility for English 1A or 52A. 5 hours. Transfer: CSU, UC; AA/AS.

1B ELEMENTARY JAPANESE**5 UNITS**

Continuation of skills developed in Japanese 1A. Beginning study and practice in the basic foreign language skills: listening, speaking, reading, composition, and culture in Japanese. Prerequisite: Japanese 1A (*completed with a grade of "C" or higher*). 5 hours. Transfer: CSU, UC; IGETC: Language; AA/AS.

50A CONVERSATIONAL JAPANESE**2 UNITS**

Development of a basic understanding of spoken Japanese through pronunciation, vocabulary, and applied grammar, and an introduction to the everyday culture of Japanese speaking people. 3 hours.

50B CONVERSATIONAL JAPANESE**2 UNITS**

Development of skills learned in Japanese 50A. Understanding of spoken Japanese through a study of pronunciation, vocabulary, and applied grammar. Introduction to everyday life of Japanese-speaking people and the skills needed to successfully function in that culture. Prerequisite: Japanese 50A (*completed with a grade of "C" or higher*). 3 hours.

PORTUGUESE (PORT)**50A CONVERSATIONAL PORTUGUESE****2 UNITS**

Development of a basic understanding of spoken Portuguese through pronunciation, vocabulary, and applied grammar, and an introduction to the everyday culture of Portuguese-speaking people. 3 hours.

50B CONVERSATIONAL PORTUGUESE**2 UNITS**

Development of skills learned in Portuguese 50A. Understanding of spoken Portuguese through pronunciation, vocabulary, and applied grammar. Introduction to everyday life of Portuguese-speaking people and the skills needed to successfully function in that culture. Prerequisite: Portuguese 50A (*completed with a grade of "C" or higher*). 3 hours.

SPANISH (SPAN)

DEGREE: AA—SPANISH

This program includes four semesters of thorough linguistic and cultural training in Spanish, along with courses that shed light on Mexico's and the Spanish-speaking world's role in history, art, the humanities, and our own contemporary society. Spanish is one of the world's most influential languages and there are opportunities for working in many industries where knowledge of Spanish is considered valuable. Many majors at four-year universities have foreign language requirements that would be satisfied with the language courses in this degree program. Courses offered in this program meet general education and transfer requirements.

SPANISH ASSOCIATE IN ARTS DEGREE

FRESHMAN YEAR	FALL	SPRING
Spanish 1A (Beginning Spanish)	5	
English 22 (Mexican American/ Latino Literature of the U.S.)	3	
Spanish 1B (Elementary Spanish)	5	
Sociology 3 (American Cultural and Racial Minorities) or Psychology Counseling 13 (Multicultural Issues in Contemporary America)	3	
SOPHOMORE YEAR	FALL	SPRING
Spanish 2A (Intermediate Spanish)	4	
History 22 (Mexican American History and Culture)	3	
Spanish 2B (Advanced Spanish)	4	
Spanish 5 (Field Work Relations)	1	
Total	28	
General Education Courses For specific General Education courses refer to catalog section on Graduation Requirements.		
Total units required	60	

SPANISH (SPAN)

- | | |
|--|----------------|
| 1A BEGINNING SPANISH | 5 UNITS |
| Beginning study and practice in the basic Foreign Language learning skills: listening, speaking, reading, composition, and culture in Spanish. Strongly recommended: eligibility for English 1A or 52A. 5 hours. Transfer: CSU, UC; CSU/GE: Area C; AA/AS; with SPAN 1B: (CAN SPAN SEQA). | |
| 1B ELEMENTARY SPANISH | 5 UNITS |
| Continuation of the skills developed in Spanish 1A. Continued study and practice in the basic foreign language skills: listening, speaking, composition, and culture in Spanish. Prerequisite Spanish 1A (<i>completed with a grade of "C" or higher</i>). 5 hours. Transfer: CSU, UC; CSU/GE: Area C2; IGETC: Language; AA/AS; with SPAN 1A: (CAN SPAN SEQA). | |

2A INTERMEDIATE SPANISH **4 UNITS**
Review of grammar; reading of works of modern authors; practice in conversation and composition. Prerequisite: Spanish 1B (*completed with a grade of "C" or higher*). 4 hours. Transfer: CSU, UC; CSU/GE: Area C2; IGETC: Area 3; AA/AS; (CAN SPAN 8); with SPAN 2B: (CAN SPAN SEQ B).

2B ADVANCED SPANISH **4 UNITS**
Reading of Spanish authors; advanced review of grammar; emphasis on speaking and composition. Prerequisite: Spanish 2A (*completed with a grade of "C" or higher*). 4 hours. Transfer: CSU, UC; CSU/GE: Area C2; IGETC: Area 3; AA/AS; (CAN SPAN 10); with SPAN 2A: (CAN SPAN SEQB).

5 FIELD WORK RELATIONS **1 UNIT**
(May be repeated 3 times)
Practice of Spanish language in real setting and involvement in local Hispanic culture through field work in a local Hispanic community organization. Strongly recommended: completion of or concurrent enrollment in Spanish 2A. 4 hours laboratory. Transfer: CSU; CSU/GE: C2.

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.

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 that culture. Prerequisite: Spanish 50A (*completed with a grade of "C" or higher*). 3 hours.

52 MEDICAL SPANISH **2 UNITS**
Skills for communicating in spoken Spanish with Spanish speaking patients. Practice in dialogues leading to free conversations about health related topics. 3 hours.

FRENCH

(See Foreign Languages)

GENERAL STUDIES (GNST)

10 FACULTY ASSISTANT EXPERIENCE FOR POTENTIAL TEACHERS **1–2 UNITS**
(May be repeated 3 times)
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. 2½–5 hours. Transfer: CSU.

11 EXPLORING EDUCATION **3 UNITS**
Introduction to the field of teaching and education. Directed observations of elementary, middle, and secondary classrooms. Examination of changing issues in education and their implications on teaching practice and theory. 3 hours lecture, 2 hours laboratory. Transfer: CSU.

30 INTRODUCTION TO WOMEN'S STUDIES 3 UNITS

Interdisciplinary readings on the struggles and contributions of women in education, government and politics, religion, social science and the arts. Study of patterns of resistance and triumph through the study of particular historical situations as well as of individual women. Topics examined from both international and national perspectives, including current events. Consideration of ethnicity, race, language, immigration, colonialism, and post-colonialism. Strongly recommended: Eligibility for English 1A. 3 hours. Transfer: CSU; UC.

31 WOMEN'S SPIRITUALITY: AN EXAMINATION OF ANCIENT AND EMERGING TRADITIONS 3 UNITS

A cross-cultural look at the women's spirituality movement in the U.S. and abroad. Examination of reformist aspects of this movement as they impact religions such as Christianity, Islam, Judaism, Buddhism and/or Hinduism. Also focus on the reclamation of pre-Christian and indigenous spiritual systems of Europe and the Americas. Explores text, ritual, music, and film. Strongly recommended: Eligibility for English 1A. 3 hours. Transfer: CSU; UC; CSU/GE: C2, D4; IGETC: Area 3; AA/AS.

39 MULTICULTURAL FOUNDATIONS OF MATHEMATICS AND SCIENCE 3 UNITS

A chronological survey of the development of math in Africa, Latin America and Asia, and its relation to science, technology, and economics there and in the modern world; an alternative to the prevalent theory of a purely European origin of mathematics. Strongly recommended: Mathematics 105 or 105L (may be taken concurrently). 3 hours. Transfer: CSU.

115 FACULTY-STUDENT TUTORIAL: WRITING AND READING ACROSS THE CURRICULUM 1/2-3 UNITS

(General Studies 115 and English 115 may be repeated for a combined total of 3 times.)
Self-paced, individualized instruction in reading and writing effectiveness. 2-6 hours.

116 GATEWAY TO SUCCESS PROGRAM—FACULTY-STUDENT TUTORIAL 1/2-3 UNITS

(May be repeated 3 times)
Self-paced instruction in effective reading, writing, and problem strategies in English, mathematics, and science. Tailored to individual student's needs and goals. Corequisite: enrollment in any Gateway to Success English, Mathematics, or Physics course. 2-6 hours.

GEOGRAPHY (GEOG)

**DEGREE:
AA—GEOGRAPHY**

Chabot College offers an Associate in Arts Degree in Geography to introduce students to principles, theory, and applied methods of spatial analysis in studying both the natural and human environment. The program in Geography is designed to develop the student's awareness of human-environment relationships and changes in the landscape induced by human activities. Geographers pursue careers in many diverse fields, including environmental conservation, land use planning, global change research, teaching, and applications of geographic information systems.

**GEOGRAPHY
ASSOCIATE IN ARTS DEGREE**

FRESHMAN YEAR	FALL	SPRING
Geography 1 (Introduction to Physical Geography)		3
Geography 1L (Introduction to Physical Geography Laboratory)		1
Geography 5 (World Regional Geography)		3

SOPHOMORE YEAR	FALL	SPRING
Geography 2 (Cultural Geography)		3
Geography 8 (Introduction to Weather and Climate)		3
Geography 20 (Introduction to Geographic Information Systems)		3
Elective		3-4
Total		19-20

General Education Courses
For specific General Education courses refer to catalog section on General Requirements
Total minimum units required 60

- *Select from the following for an additional 3-4 units*
Anthropology 3 (Social and Cultural Anthropology) 3 units
Economics 1 (Principles of Microeconomics) 3 units
Geography 3 (Economic Geography) 3 units
Geography 12 (Geography of California) 3 units
Geology 1A (Physical Geology) 4 units
Geology 10 (Introduction to Geology) 3 units

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. Affect of natural environments on human activities and how humans modify environments. Field trips may be included. 3 hours. Transfer: CSU, UC; CSU/GE: B1; IGETC: Area 5A; AA/AS; (CAN GEOG 2).

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. Transfer: CSU, UC; CSU/GE: B3; IGETC: Area 5A & Lab; AA/AS.

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. Transfer: CSU, UC; CSU/GE: D5; IGETC: Area 4; AA/AS; (CAN GEOG 4).

3 ECONOMIC GEOGRAPHY**3 UNITS**

An introduction to the world's major economic systems; their spatial distribution and characteristics; their relative contributions to regional development and global change; and related movements of people, goods, and ideas. Techniques and tools of spatial analysis applied to human-environment interactions, with emphasis on ecological problems associated with specific economic activities. Field trips may be included. 3 hours. Transfer: CSU, UC; CSU/GE: D5; IGETC: Area 4; AA/AS.

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. May be offered in Distance Education delivery format. 3 hours. Transfer: CSU, UC; CSU/GE: SD; IGETC: Area 4; AA/AS.

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 Nino, deforestation, desertification, and other topics related to everyday experience and global climate change. Field trips and observational activities may be included. 3 hours. Transfer: CSU, UC; CSU/GE: Ba; IGETC: SA; AA/AS.

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 the course. Field trips may be included. 3 hours. Transfer: CSU, UC; CSU/GE: D5; IGETC: Area 4; AA/AS.

20 INTRODUCTION TO GEOGRAPHIC INFORMATION SYSTEMS**3 UNITS**

Computer-based information technology tools and techniques that analyze spatial relationships between locations and attributes of physical, cultural, and economic features. Visualization of geographic relationships to support decision-making through interactive linkages of maps, data-bases, images, and charts. Introduction to GIS theory, principles, concepts, applications, and operations. Field trips may be required. (Strongly recommended: previous PC experience). 3 hours. Transfer: CSU; UC; AA/AS.

GEOLOGY (GEOL)**1A PHYSICAL GEOLOGY****4 UNITS**

Introduction to the forces and materials that shape the Earth. Emphasis on plate tectonics, volcanoes, earthquakes, hydrology, erosion, beach systems, environmental geology, rocks, minerals and geologic maps. 3 hours lecture, 3 hours laboratory. Transfer: CSU, UC; CSU/GE: B1, B3; IGETC: 5A & Lab; AA/AS; (CAN GEOL 2).

1B HISTORICAL GEOLOGY**4 UNITS**

Evolutionary geology of earth. Emphasis on sedimentary processes, sedimentary rocks, their fossils and structures. Prerequisite: Geology 1A or 10. 3 hours lecture, 3 hours laboratory. Transfer: CSU, UC; CSU/GE: B1, B3; IGETC: Area 5A & Lab; (CAN GEOL 4).

10 INTRODUCTION TO GEOLOGY**3 UNITS**

Earthquakes, volcanism, and plate tectonics as shapers of the earth's surface. Formation and use of energy and material resources. Origin and history of prehistoric life. May not be taken for credit if Geology 1A or 1B have been completed. May be offered in Distance Education delivery format. 3 hours. Transfer: CSU, UC; CSU/GE: B1; IGETC: Area 5A; AA/AS.

10L INTRODUCTION TO GEOLOGY LAB**1 UNIT**

Introduction to the materials and techniques of geology. Includes maps, minerals, rocks, and fossils. Prerequisite: Geology 10 (may be taken concurrently). May be offered in Distance Education delivery format. 3 hours laboratory. Transfer: CSU, UC; CSU/GE: B3; IGETC: Area 5A & Lab; AA/AS.

21 GEOLOGY OF THE WEST**3 UNITS**

Geological features of the West. Examples drawn from the Grand Canyon, Sierras, Rocky Mountains, and the western National parks to illustrate the processes of geology. Prerequisite: Geology 10 (*completed with a grade of "C" or higher*). 3 hours. Transfer: CSU, UC; CSU/GE: B1; IGETC: Area 5A.

205 FITNESS AFTER FIFTY**NON-CREDIT**

Low impact aerobics: Benefits of and techniques for a regular exercise routine for elders. Student discovers special needs for fitness to maintain health and vigor throughout a lifetime. Students are encouraged to develop their individual capabilities.

GERMAN

(See Foreign Languages)

GRAPHIC DESIGN

(See Art)

HEALTH (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. May be offered in Distance Education delivery format. 3 hours. Transfer: CSU, UC; CSU/GE: E; AA/AS.

4 WOMEN AND HEALTH**3 UNITS**

Health issues that affect women in contemporary American society. Exploration of current health concerns, legislation, medical practices, attitudes and behaviors that promote health and wellness. 3 hours. Transfer: CSU, UC; CSU/GE: E; AA/AS.

8 HUMAN SEXUALITY**3 UNITS***(See also Psychology 8 or Sociology 8)*

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. May not receive credit if Psychology 8 or Sociology 8 has been completed. 3 hours. Transfer: CSU, UC; CSU/GE: E; AA/AS.

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. May be offered in Distance Education delivery format. 2 hours. Transfer: CSU.

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. May be offered in Distance Education delivery format. 4 hours. Transfer: CSU.

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. Prerequisites: Health 51A *(completed with a grade of "C" or higher)*. 4 hours. Transfer: CSU.

53 QUALITY AND CONTINUOUS QUALITY IMPROVEMENT IN HEALTH CARE**1 UNIT**

Evaluate the history and methodology of quality assurance in the health care setting. The continuous quality improvement process, methodologies and tools will be discussed and utilized to understand the relationship to providing high quality health care in an efficient, customer oriented environment. Strongly recommended: Health Information Technology 50 or equivalent. 1 hour. Transfer: CSU.

54 UTILIZATION MANAGEMENT, RISK MANAGEMENT AND MEDICAL STAFF CREDENTIALING**1 UNIT**

Study of utilization management in the health care environment, with emphasis on clinical pathways, regulatory requirements, reimbursement issues and case management. Risk management is the process of evaluating potentially compensable events that could result in an injury or financial loss. Credentialing is the process which medical practitioners are evaluated for quality and control of services provided. Each topic will investigate the history, regulatory requirements and methodologies associated with each of these quality assurance activities. Strongly recommended: Health Information Technology 50 or equivalent. 1 hour. Transfer: CSU.

56 INTRODUCTORY PHARMACOLOGY/LAB TESTS AND VALUES FOR THE HEALTH OCCUPATIONS**2 UNITS**

Introduction to the study of drugs and drug therapy as they relate to the health occupations, i.e., coding of diagnoses and procedures. Includes a study of the preparation, use and actions of chemicals having an affect on biological function. Study of laboratory tests, diagnostic tests and known normal ranges to interpret findings on common diagnostic tests, pathological findings and vital signs. 2 hours.

58 INTRODUCTION TO MEDICAL TRANSCRIPTION AND DOCUMENT FORMAT**1 ½ UNITS**

Introduction to the process of dictating, equipment of transcription, formatting of medical documentation, medical report requirements and current issues in medical transcription. Prerequisite: Health 51A *(completed*

with a grade of "C" or higher). Strongly recommended: ability to type 35 wpm and Computer Science 8, Health 51B. 24 total lecture hours, 12 total laboratory hours.

59 MEDICAL TRANSCRIPTION MODULES

This is a self-paced program with learning at a distance opportunities providing mastery learning modules in transcription of medical reports. Credit earned based on competency of each module. Modules must be completed in sequence. Modules include:

59A PHYSICIAN OFFICE NOTES**1 UNIT**

Prerequisite: Health 51A and Health 58 or equivalent experience. May be offered in Distance Education delivery format. 3 hours laboratory.

59B RADIOLOGY**1 UNIT**

Prerequisite: Health 51A, Health 58, and Health 59A or equivalent experience. May be offered in Distance Education delivery format. 3 hours laboratory.

59C EMERGENCY ROOM NOTES**1 UNIT**

Prerequisite: Health 51A, Health 58, and Health 59A, Health 59B or equivalent experience. May be offered in Distance Education delivery format. 3 hours laboratory.

59D PATHOLOGY/EKG**1 UNIT**

Prerequisite: Health 51A, Health 58, and Health 59C or equivalent experience. May be offered in Distance Education delivery format. 3 hours laboratory.

59E HISTORY AND PHYSICAL EXAMINATIONS**1 UNIT**

Prerequisite: Health 51A, Health 58, and Health 59D or equivalent experience. May be offered in Distance Education delivery format. 3 hours laboratory.

59F CONSULTATIONS**1 UNIT**

Prerequisite: Health 51A, Health 58, and Health 59E or equivalent experience. May be offered in Distance Education delivery format. 3 hours laboratory.

59G DISCHARGE SUMMARIES**1 UNIT**

Prerequisite: Health 51A, Health 58, and Health 59F or equivalent experience. May be offered in Distance Education delivery format. 3 hours laboratory.

59H OPERATIVES-GENERAL**1 UNIT**

Prerequisite: Health 51A, Health 58, and Health 59G or equivalent experience. May be offered in Distance Education delivery format. 3 hours laboratory.

59I OPERATIVES-UROLOGY AND REPRODUCTIVE**1 UNIT**

Prerequisite: Health 51A, Health 58, and Health 59H or equivalent experience. May be offered in Distance Education delivery format. 3 hours laboratory.

59J OPERATIVES—CARDIOVASCULAR**1 UNIT**

Prerequisite: Health 51A, Health 58, and Health 59I or equivalent experience. May be offered in Distance Education delivery format. 3 hours laboratory.

59K OPERATIVES-ORTHOPEDICS AND ONCOLOGY**1 UNIT**

Prerequisite: Health 51A, Health 58, and Health J or equivalent experience. May be offered in Distance Education delivery format. 3 hours laboratory.

59L SPECIAL REPORTS**1 UNIT**

Prerequisite: Health 51A, Health 58, and Health 59K or equivalent experience. May be offered in Distance Education delivery format. 3 hours laboratory.

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 a National Safety Council First Aid and Adult CPR card. 1 hour lecture, 1 hour laboratory. Transfer: CSU.

61 EMERGENCY RESPONSE**2½ 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 test qualifies for a National Safety Council First Responder Certificate and Professional Rescuer CPR card. 2 hours lecture, 2 hours laboratory.

70A HEARTSAVER CPR & AED**½ UNIT**

(May be repeated 3 times)

A comprehensive course for the First responder, this course is designed to teach Cardiopulmonary Resuscitation (CPR), use of an Automatic External Defibrillator (AED) and relief of foreign body airway obstruction (FBAO) to all lay rescuers, particularly those expected to respond to emergencies in the workplace. Responders such as police, airline personnel, security personnel, corporate employees, family members of patients at high risk for sudden cardiac death, other rescuers, and those who need or want to learn CPR and how to operate an AED. Successful completion on the final exam and skills performance will qualify the participant for an American Heart Association Heartsaver AED course completion card. The mission of the American Heart Association's Emergency Cardiovascular Care Programs is to reduce disability and death from cardiac and respiratory emergencies and stroke by improving the Chain of Survival in every community. 6 hours lecture, 6 hours laboratory, 12 hours total.

70B HEALTHCARE PROVIDER CPR**0.2 UNIT**

(May be repeated 3 times)

The BLS Healthcare Provider Course teaches CPR skills for helping victims of all ages (including performing ventilation with a barrier device, a bag-mask device, and oxygen); use of an automated external defibrillator (AED); and relief of foreign-body airway obstruction (FBAO). It's intended for participants who provide health care to patients in a wide variety of settings, including in-hospital and out-of-hospital. For Healthcare providers, such as physicians, nurses, paramedics, emergency medical technicians, respiratory therapists, physical and occupational therapists, physician's assistants, residents or fellows, or medical or nursing students in training, aides, medical or nursing assistants, police officers, and other allied health personnel. The mission of the American Heart Association's Emergency Cardiovascular Care Programs is to reduce disability and death from cardiac and respiratory emergencies and stroke by improving the Chain of Survival in every community. Successful completion of final exam and skills performance qualifies participant for American Heart Association Healthcare Provider course card. Prerequisite: Health 70A or Health 60 (either within the last 2 years) or current Healthcare Provider CPR card for renewal. 2 hours lecture, 4 hours laboratory, 6 hours total. Transfer: CSU.

81 EMERGENCY MEDICAL TECHNICIAN-BASIC**6½ 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 Agency. Corequisite: Health 83. Prerequisite: Health 61 (*completed with a grade of "C" or higher*). 5 hours lecture, 4½ hours laboratory. Transfer: CSU.

83 PATIENT STABILIZATION, EXTRICATION AND TRIAGE ½ UNIT

Patient stabilization techniques to include safe patient extrication from a simulated motor vehicle accident. Includes triage for multi-casualty incident/disaster management. Corequisite: Health 81. 3 total hours lecture, 4 total hours laboratory. Transfer: CSU.

85 EMT REFRESHER**1 ½ UNITS**

(May be repeated.)

Designed for EMTs who need to recertify. Appropriate for those comfortable with their emergency medicine knowledge and skills. Provides a refresher in the foundation skills and knowledge required of the EMT-Basic scope of practice. EMT-Basic certification is the minimum requirement for ambulance attendants, many emergency department technicians and most entry-level firefighter positions. EMT-Basic certification is also required for entry into paramedic training. This refresher program is accredited by the Alameda County Emergency Medical Services Agency. This course provides 24 hours of continuing education units and skills verification testing that EMTs must complete every two years. Students must have current EMT certification.

205 FITNESS AFTER 50**NON-CREDIT**

Benefits and techniques for a regular exercise routine for elders, geared to residents of skilled-nursing facilities. Students will discover special needs for fitness to maintain health and vigor throughout a lifetime. 1 hour

HEALTH INFORMATION TECHNOLOGY (HIT)

The Health Information Technology Program is currently suspended until further notice.

HISTORY (HIS)

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 and the Middle Ages, Renaissance and the Reformation. May be offered in Distance Education delivery format. 3 hours. Transfer: CSU, UC; CSU/GE: C2, D6; IGETC: Area 3, 4; AA/AS; (CAN HIST 2); with HIST 2: (CAN HIST SEQ A).

2 HISTORY OF WESTERN CIVILIZATION SINCE 1600 3 UNITS

History of the Modern Western World; Romanticism and the Industrial Revolution to the present. May be offered in Distance Education delivery format. 3 hours. Transfer: CSU, UC; CSU/GE: C2, D6; IGETC: Area 3, 4; AA/AS; (CAN HIST 4); with HIST 1: (CAN HIST SEQ A).

5 CRITICAL THINKING IN HISTORY 3 UNITS

Introduction to critical thinking, reading, writing skills and practical logic and reasoning through study of historical method. Emphasis on the techniques and principles of effective written and oral argument in case studies and historical problems. Includes the perspective of Middle Eastern and Arab Americans, European Americans, Asian Americans, African Americans and Mexican Americans. 3 hours. Transfer: CSU, UC; CSU/GE: A3; AA/AS.

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, eth-

nic 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 relationships between state/local government and the federal government. May be offered in Distance Education delivery format. 3 hours. Transfer: CSU, UC; CSU/GE: C2, D6; AI, Group A; IGETC: Area 4, AI, Group A; AA/AS; (CAN HIST 8) with HIST 8: (CAN HIST SEQ B).

8 U.S. HISTORY SINCE RECONSTRUCTION 3 UNITS

A survey of United States history from 1877 to the present with a special emphasis on the interaction amongst and the experiences of diverse racial/ethnic (African Americans, European Americans, Native Americans, Chicano/Latino Americans, Asian Americans, and Middle Eastern Americans), gender and socioeconomic groups in American History. Includes analysis of (1) the U.S. Constitution as a living document in the context of historical change, and (2) significant issues related to California state and local governments. May be offered in Distance Education delivery format. 3 hours. Transfer: CSU, UC; CSU/GE: D6, AI, Group B; IGETC: Area 4, AI, Group B, AI; AA/AS; (CAN HIST 10); with HIST 7: (CAN HIST SEQ B).

12 HISTORY OF CALIFORNIA 3 UNITS

Historical development of California, including Spanish exploration and settlement and the Mexican Revolution. Transformation of California under United States control: the American conquest, the Gold Rush, and dynamic expansion to the present day. Includes Native Americans, Mexican Americans, European Americans, Asian Americans and African Americans groups. Emphasis on political, economic, and social factors which transformed American California from a relatively simple rural society to a highly complex ethnically diversified agricultural-industrial system. Analysis of historical issues and current problems. 3 hours. Transfer: CSU, UC; CSU/GE: D6, AI, Group B; IGETC: Area 4, AI, Group B; AA/AS.

19 HISTORY OF MODERN CHINA AND JAPAN FROM LATE 19TH TO EARLY 20TH CENTURY 3 UNITS

History and culture of modern China and Japan. Social, political, economic and cultural structures and processes; ideologies and leadership modernization and development; and selected aspects of regional and international interactions. 3 hours. Transfer: CSU, UC; CSU/GE: D3, D6, IGETC: Area 4, AA/AS.

20 THE AFRICAN-AMERICAN EXPERIENCE IN U.S. HISTORY THROUGH RECONSTRUCTION 3 UNITS

Survey of major themes and issues of the history of the United States with a particular focus upon African Americans and the gendered racial, ethnic, and socioeconomic diversity within the nation. Contacts between European peoples, African peoples and the indigenous peoples of the New World to the establishment of the British colonies in North America, the formation of the nation, its expansion westward and the social, political and economic factors which lead to division. Examination of the role of race and slavery as evolving concepts and practices affecting the nation's development. Analysis of the role of local, state and federal governments and the constitution as institutions of both consistency and change. 3 hours. Transfer: CSU, UC; CSU/GE: D3, D6, AI, Group A; IGETC: Area 4, AI, Group B; AA/AS.

21 THE AFRICAN-AMERICAN EXPERIENCE IN U.S. HISTORY SINCE RECONSTRUCTION 3 UNITS

Survey of major themes and issues in of the history of the United States, focusing upon African Americans and the gendered racial, ethnic, and socioeconomic diversity within the nation. Emergence of the country from the Civil War and Reconstruction, tracing such themes as industrialization, immigration and migration, Progressivism, the nation at economic crisis and at war, the rise of social movements and the social and political backlash against them, and the evolving diversity of the nation. Analysis of the role of the local, state, and federal governments and the Constitution as institutions of both consistency and change. 3 hours. Transfer: CSU, UC; CSU/GE: D3, D6, AI, Group B; IGETC: Area 4, AI, Group B; AA/AS.

22 MEXICAN AMERICAN HISTORY AND CULTURE 3 UNITS

A survey of Mexican American history from pre-Columbian period through the present. Special emphasis on Mexican Americans' role in the political, economic, social and geographic development in the United States. Major topics include European colonization, native cultures and slavery, the U.S.—Mexican War, World War I and World War II, industrialization, immigration and labor, and the Civil Rights Movement. This course includes analysis of the U.S. Constitution, Supreme Court Rulings, and California state and local government issues related to the rights of Mexican Americans. 3 hours. Transfer: CSU, UC; CSU/GE: D3, D6, AI, Group B; IGETC: Area 4, AI, Group B; AA/AS.

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. Transfer: CSU, UC; CSU/GE: D3, D6, AI, Group B; IGETC: Area 4, AI, Group B; AA/AS.

27 U.S. WOMEN'S HISTORY 3 UNITS

A survey of United States women's history from its indigenous origins through the present. 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, Native Americans, and Middle Eastern Americans. Special areas of focus include women's role in the political, economic, social, and geographic development of the United States. This course includes an analysis of the U.S. Constitution and pertinent amendments as a living document. California State Constitution is compared to the U.S. Constitution with regard to women's rights. 3 hours. Transfer: CSU, UC; CSU/GE: D4, D6, AI, Group B; IGETC: Area 4, AI, Group B; AA/AS.

44 HISTORY OF ENGLAND 3 UNITS

Interpretation and analysis of the development of English institutions emphasis on constitutional and economic developments. 3 hours. Transfer: CSU, UC; CSU/GE: D6; IGETC: Area 4; AA/AS.

HUMAN SERVICES

(See Psychology-Counseling)

HUMANITIES (HUMN)

DEGREE:

AA—HUMANITIES (GENERAL)

The humanities seek to render an integrative and critical examination of the human achievements in art, literature, philosophy and music. This approach will broaden and enrich the students' appreciation of human values derived from the creative forces as expressed in the arts. Courses offered in this curriculum meet general education and transfer requirements and may be applied to a major in humanities for an Associate in Arts degree.

HUMANITIES (GENERAL)

ASSOCIATE IN ARTS DEGREE

FRESHMAN YEAR FALL SPRING

Arts 4 (Art History, Ancient)	3
History I (History of Western Civilization to 1600)	3
Humanities 50 (The Artful Life)	3
Philosophy 50 (God, Nature, Human Nature)	3
Religious Studies 50 (Religions of the World)	3

SOPHOMORE YEAR

Art 5 (Art History, Renaissance to Modern)	3
History 2 (History of Western Civilization Since 1600)	3
Humanities 65 (American Style) or Humanities 28 (The Classic Myths) or Humanities 72 (Contemporary Humanities)	3
Philosophy 2 (Introduction to Philosophy: Ethics) or Philosophy 4 (Introduction to Philosophy: Theory of Knowledge)	3

Total 27

General Education Course
For specific General Education courses refer to catalog section on
Graduation Requirements.

Total minimum units required 60

Recommended: minimum one year of a foreign language.

HUMANITIES (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. Transfer: CSU, UC; CSU/GE: Arts C2; IGETC: Area 3; AA/AS.

50 THE ARTFUL LIFE 3 UNITS

The arts will be examined as expression and integration of self. Explore creativity as process, product, and attitude toward life. Study the artist as seeker of authenticity and the relationship between art and artist. 3 hours.

65 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 specifically the crisscrossing dynamics of race, ethnicity, gender, religion and class in American society. (Formerly HUMN 10) 3 hours.

72 CONTEMPORARY HUMANITIES 3 UNITS

Visual, literary, and/or musical works of art that reflect the issues and concepts of their time. A perspective through exploration of chosen works. (Formerly HUMN 7) 3 hours.

75 RELIGION IN CONTEMPORARY CULTURE 3 UNITS

Attitudes and beliefs about religion evidenced in contemporary culture through contemporary social life, politics, art, music, literature, drama, and film. Place, function, and role of religion in contemporary life against the backdrop of traditional and contemporary theories about religion. (Formerly HUMN 30) 3 hours.

INDEPENDENT STUDY

INDEPENDENT STUDY 1/2-2 UNITS

Independent study may be contracted through an instructor for research, field experience or skill development. Students must make arrangements with the instructor, as well as complete the Independent Study Contract (available from instructors or academic departments). The instructor monitors academic progress as the student completes the coursework within the guidelines of the agreement. Independent study may be offered under any subject area contained in the Catalog using the number 29.

INDUSTRIAL TECHNOLOGY (INDT)

DEGREE: AS-INDUSTRIAL TECHNOLOGY

INDUSTRIAL TECHNOLOGY

ASSOCIATE IN SCIENCE DEGREE

FRESHMAN YEAR FALL SPRING

Business 12 (Introduction to Business)	3
Computer Application Systems 50 (Introduction to Computer Application Systems)	3
Machine Tool Technology 50 (Blueprint Reading, Sketching, and CAD)	3
Industrial Technology 61 (Manufacturing Processes)	2
Mathematics 36 (Trigonometry) or Mathematics 37 (Trigonometry with an Emphasis on its Geometric Foundations)	3-5
Welding Technology 70 (Introduction to Welding)	2

SOPHOMORE YEAR FALL SPRING

Business 1A (Principles of Accounting I)	4
Computer Science 10 (Introduction to Programming Using Visual BASIC.NET)	4
Electronics and Computer Technology 70 (Introduction to Electronics)	2½
Business 1B (Principles of Accounting II)	4
Business 10 (Business Law)	4
Total	34½-36½

General Education Courses
For specific General Education courses refer to catalog section on
Graduation Requirements.
Total minimum units required 60

General Education Suggestions: Chemistry 30A-30B, Economics 1, Mathematics 1, Physics 2A-2B. This program is intended for technical career majors and is not designed for transfer to four-year institution.

This course listing is a suggested sequence only. Some courses may have prerequisites. Students may take courses in any sequence except where a prerequisite applies.

INDUSTRIAL TECHNOLOGY (INDT)

61 MANUFACTURING PROCESSES 2 UNITS

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. Transfer: CSU.

74 MEASUREMENTS AND CALCULATIONS 3 UNITS

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. Transfer: CSU; AA/AS.

INTERDISCIPLINARY STUDIES IN LETTERS AND SCIENCE (ISLS)

The Interdisciplinary Studies in Letters and Science (ISLS) program is currently suspended until further notice.

INTERIOR DESIGN (INTD)

DEGREE: AS-INTERIOR DESIGN

CERTIFICATE OF ACHIEVEMENT: INTERIOR DESIGN

This two-year diploma program prepares students to design commercial, office, retail, institutional and residential solutions to real design problems. The program emphasizes space planning, creative problem-solving, communication skills, knowledge of building materials and construction, furnishings, presentation, conventional and computer-aided drafting, and the history of design.

INTERIOR DESIGN ASSOCIATE IN SCIENCE DEGREE

FRESHMAN YEAR FALL SPRING

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	

SOPHOMORE YEAR FALL SPRING

Interior Design 56 (Professional Practice)	3	
Interior Design 58 (Fundamentals of Lighting)	3	
Interior Design 60 (Materials and Resources)	3	
Interior Design 62 (Kitchen and Bathroom Design)	3	
Interior Design 66 (Special Needs Design)	3	
Interior Design 68 or Architecture 68 (AutoCAD for Architecture and Interior Design)	3	

Total **33**

General Education Courses

For specific General Education courses refer to catalog section on Graduation Requirements.

Total minimum units required **60**

INTERIOR DESIGN CERTIFICATE OF ACHIEVEMENT

CORE COURSES FALL SPRING

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 56 (Professional Practices)	3	
Interior Design 58 (Fundamentals of Lighting)	3	
Interior Design 55 (Introduction to Textiles)	3	
Interior Design 60 (Materials and Resources)	3	
Interior Design 68 (AutoCAD for Architecture and Interior Design) or Architecture 68 (AutoCAD for Architecture and Interior Design)	3	
Art 10 (Design and Materials)	3	
Art 11 (Design, Materials, and Color)	3	
Electives*	3	
Total		33

*Interior Design 62 (Kitchen and Bathroom Design)

Interior Design 66 (Special Needs Design)

INTERIOR DESIGN (INTD)

31A PHOTOSHOP I 1 ½ UNITS

(See also Architecture 31A, Art 31A, Photography 31A)

Introduction to the use of PhotoShop, the premiere imaging software. Overview of the PhotoShop interface, tools and menus. Projects will focus on using basic tools to compose images. Topics include file management, selections and paths, layers, masks, alpha channels, color management and mapping, digital painting and brushes. Apple Mac platform. May not receive credit if Architecture 31A, Art 31A, or Photography 31A has been completed. 1 hour lecture, 2 hours studio. Transfer: CSU.

31B PHOTOSHOP II 1 ½ UNITS

(See also Architecture 31B, Art 31B, Photography 31B)

Continuation of the content and skills introduced in Interior Design 31A, PhotoShop I. Topics include advanced layer controls, filters, distortion and effects, drawing path tools, alpha channels, and applying text to images. Color management and Mapping. Printing fundamentals. Prerequisite: Interior Design 31A (completed with a grade of "C" or higher). May not receive credit if Architecture 31B, Art 31B, or Photography 31B has been completed. 1 hour lecture, 2 hours studio. Transfer: CSU.

32A ILLUSTRATOR I 1 ½ UNITS

(See also Architecture 32A, Art 32A, Photography 32A)

Introduction to the use of Illustrator, Adobe's powerful vector-based software for digital illustration. Emphasis on the basics of drawing with the shapes, pen and pencil, transformation and liquefy tools. Palettes for the control of layers, colors, patterns and gradients. Methods for the creative application of text to images. May not receive credit if Architecture 32A, Art 32A, or Photography 32A has been completed. 1 hour lecture, 2 hours studio. Transfer: CSU.

32B ILLUSTRATOR II 1 ½ UNITS

(See also Architecture 32B, Art 32B, Photography 32B)

Continuation of the content and skills introduced in Interior Design 32A, Illustrator I. Paintbrush and pattern tools and palettes, gradient mesh tools,

creating and modifying clipping masks will be covered. Exploration of the powerful morphing blends and transparency tools use of symbol tools and palettes, filters and effects, and related appearance and styles palettes. Process of importing and manipulating images as elements of digital compositions. Prerequisite: Interior Design 32A (completed with a grade of "C" or higher). May not receive credit if Architecture 32B, Art 32B, or Photography 32B has been completed. 1 hour lecture, 2 hours studio. Transfer: CSU.

33 3-D MODELING WITH FORM*Z 3 UNITS

(See also Architecture 33, Art 33, Photography 33)
Introduction to 3-dimensional digital modeling using Form*Z software. Emphasis on learning basic commands to create 3-dimensional objects including building interiors and exteriors, and defining photo-realistic views with appropriate light sources. May not receive credit if Architecture 33, Art 33 or Photography 33 has been completed. 2 hours lecture, 4 hours studio. Transfer: CSU.

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. Transfer: CSU.

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.

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. Transfer: CSU.

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.

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.

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.

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. 2 hours lecture, 3 hours laboratory.

64 VISUAL MERCHANDISING 3 UNITS

Introduction to modern display techniques, equipment and materials. Basics of design and decoration for windows and interior displays in department and specialty stores. Analysis of current display methods as they apply to creating a store's image. 2 hours lecture, 3 hours laboratory.

66 SPECIAL NEEDS DESIGN 3 UNITS

Design of interior space which encourages self-esteem and independence for the elderly or physically impaired. American Disabilities Act and its requirements for commercial buildings. Residential housing that satisfies the special needs of its inhabitants and improvement of existing interiors through barrier-free retrofitting. 3 hours.

68 AUTOCAD FOR ARCHITECTURE AND INTERIOR DESIGN 3 UNITS

(May be repeated 3 times) (See also Architecture 68)
Introduction to computer-aided drafting using AutoCAD. Topics include command basics including drawing entity creation and modification, industry layering standards, text and dimensioning systems appropriate to architecture, creating symbol libraries, external reference techniques, model and paper space commands, and plotting techniques. (May not receive credit if Architecture 68 has been completed.) 2 hours lecture, 4 hours studio. Transfer: CSU.

INTERNATIONAL STUDIES

DEGREE: AA-INTERNATIONAL STUDIES

INTERNATIONAL STUDIES ASSOCIATE IN ARTS DEGREE

FRESHMAN YEAR	FALL	SPRING
Anthropology 3		
(Social and Cultural Anthropology)	3	
Foreign Language*	5	2-5
Option Courses**	2-5	2-5
SOPHOMORE YEAR	FALL	SPRING
Geography 2 (Cultural Geography)	3	
Political Science 30 (International Relations)	3	
Option Courses**	2-5	2-5
Electives	3-4	3-4
Total	43-45	

General Education Courses
For specific General Education courses refer to catalog section on Graduation Requirements.
Total minimum units required 60

* Select from foreign languages listed on pages 81-83.
** Select one of the following option areas. Complete 18 units from the courses listed for the option selected.

- (1) **Asian Studies Option:** History 19 (History of Modern China and Japan from Late 19th to Early 20th Century), Japanese 50A, B, (Conversational Japanese: Note—May be taken only to complete the option requirement, not the foreign language requirement), Anthropology 5 (Cultures of the U.S.: Anthropological Perspectives on Race, Class, Gender and Ethnicity), Political Science 20 (Comparative Government) Religious Studies 50 (Religions of the World), Economics 1 and/or 2 (Principles of Microeconomics/Macroeconomics), Speech 1 (Fundamentals of Speech Communication).
- (2) **Latin American Studies Option:** History 22 (Mexican American History and Culture), Spanish 2A, B (Intermediate and Advanced Spanish), Anthropology 5 (Cultures of the U.S.: Anthropological Perspectives on Race, Class, Gender and Ethnicity), Economics 1 and/or 2 (Principles of Microeconomics/Macroeconomics), Political Science 20 (Comparative Government), Speech 1 (Fundamentals of Speech Communication), Portuguese 50A, B, (Conversational Portuguese Note—May be taken only to complete the option requirement, not the foreign language requirement).
- (3) **Business Option:** Business 1A/1B (Principles of Accounting), Business 10 (Business Law), Computer Application Systems 8 or Computer Science 8 (Computer literacy) or Computer Application Systems 50 (Introduction to Computer Application Systems), Business 12 (Introduction to Business), Business 17 (Business Ethics), Business 40 (International Business), Economics 1 and/or

2 (Principles of Microeconomics/Macroeconomics), Speech 1 (Fundamentals of Speech Communication).

(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 and/or 2 (Principles of Microeconomics/Macroeconomics), Religious Studies 50 (Religions of the World) Business 12 (Introduction to Business), Business 40 (International Business), Political Science 20 (Comparative Government), Speech 1 (Fundamentals of Speech Communication).

This program is intended to prepare students for direct job entry. While units in the program are transferable to many institutions, students should consult a counselor for specific transfer information.

INTERNATIONAL STUDIES

7 TRAVEL STUDY: (SITE) 1–5 UNITS

(May be repeated 3 times)

Study and research of the culture, mores, history and unique characteristics of selected locales. Visits to specific sites nationally or internationally. May be offered under any catalog heading 1–15 hours. Transfer: CSU.

ITALIAN

(See Foreign Languages)

JAPANESE

(See Foreign Languages)

JOURNALISM

DEGREE: AA–JOURNALISM

Students who complete this degree will be able to transfer to a university or enter the local job market. Many new jobs in electronic information management are being created. These supplement existing jobs in newspapers and magazines as well as public relations and media. In this program, students will gain hands-on experience with all aspects of gathering, organizing and disseminating information.

JOURNALISM ASSOCIATE IN ARTS DEGREE

FRESHMAN YEAR FALL SPRING

Art 40 (Graphic Design Principles)	3
Mass Communications 1 (Journalism: News Writing and Information Gathering)	3
Mass Communications 5 (Introduction to Mass Communications)	3
Mass Communications 2 (Journalism: Investigative News Writing)	3

Mass Communications 14 (Writing and Photography for a Weekly Publication)	1
Photography 50 (Introduction to Photography)	3

SOPHOMORE YEAR FALL SPRING

English 7 (Critical Thinking and Writing Across Disciplines)	3
Mass Communications 3 (Journalism: Magazine and Newspaper Feature Writing)	3
Mass Communications 15 (Publications: Editorial Leadership and Production)	3
Mass Communications 71 (Beginning Photojournalism)	2
Photography 65 (Graphic Techniques)	3
Total	30

General Education Courses
For specific General Education courses refer to catalog section on Graduation Requirements.
Total minimum units required 60

LIBERAL STUDIES

DEGREE: AA–LIBERAL STUDIES

The Associate of Arts in Liberal Studies is designed for students who desire the benefits of a general college education. Many employers and professional schools prefer graduates who possess the diverse background provided by this major.

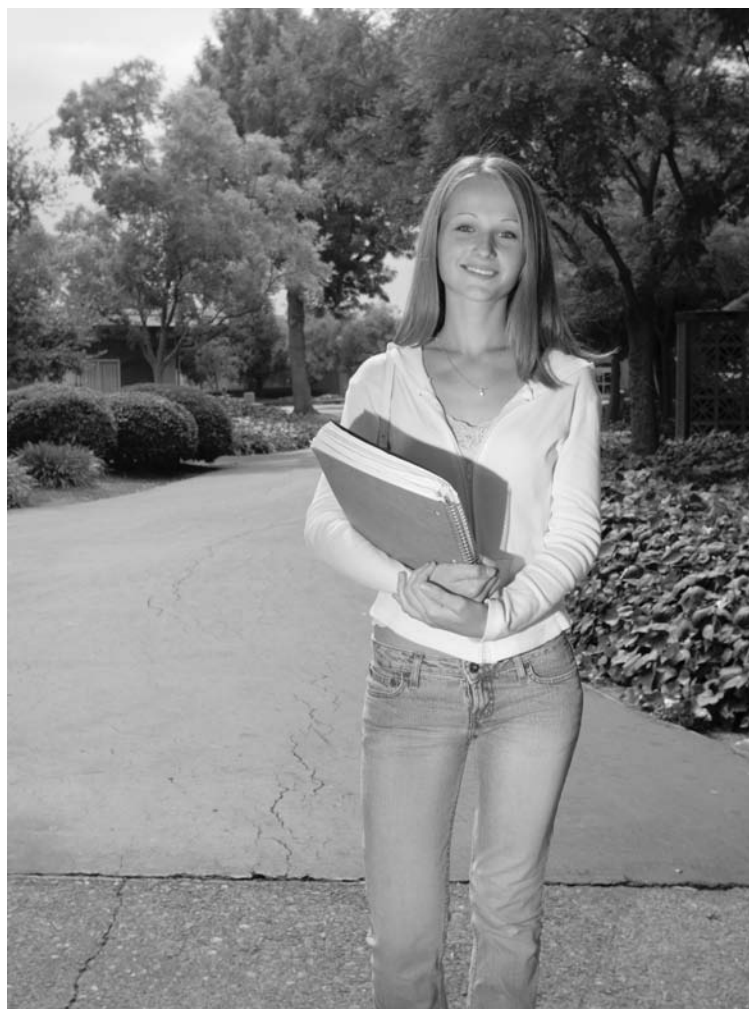
There are three options associated with this degree: Option I leads to an Associate Degree and the opportunity to pursue a “major” of at least 18 units that is designed to meet personal, vocational, or other academic needs. Option II is designed for students who plan to transfer to the California State University system and want to complete the CSU General Education requirements for Certification. Option III is designed for students who are unsure if they will transfer to a UC or CSU institution and wish to complete the Intersegmental General Education Transfer Curriculum (IGETC).

LIBERAL STUDIES ASSOCIATE IN ARTS DEGREE

The Associate in Arts in Liberal Studies 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 plan to transfer.

CORE COURSES UNITS

Choose ONE option below:	
OPTION I—SELECTED STUDIES* Minimum Units Required for the Major	18
OPTION II—(CSU/GEB)** Minimum Units Required for the Major	33–39
Complete all CSU/GEB Certification requirements.	



OPTION III—IGETC (UC or CSU)***
 Minimum Units Required for the Major 34–37
 Complete all IGETC (UC or CSU
 Certification requirements).

General Education Courses
 For specific General Education courses refer to catalog section on
 Graduation Requirements.
Total minimum units required 60

* *OPTION I*—is designed especially for those students who desire the benefits of a general college education and the opportunity to pursue a “major” of at least 18 units that is designed to meet personal, vocational or other academic needs.

** *OPTION II*—(CSU/GEB) is designed for students who plan to transfer to the California State University system and want to complete the CSU General Education Breadth requirements for Certification. The student will select courses that conform to the CSU General Education Breadth requirements, A-E and American Institutions.

*** *OPTION III*—(IGETC/UC or CSU) is designed for students who are unsure if they will transfer to a UC or CSU institution. Students who complete Option III will satisfy Certification requirements for the Intersegmental General Education Transfer Curriculum (IGETC). (Exceptions: IGETC is NOT advisable for all transfer students to the UC system. See a counselor for assistance in determining if IGETC (Option III) is right for you.)

Note: There are important differences between the three OPTIONS. The student is strongly advised to consult with a counselor for assistance.

LIBRARY STUDIES (LIBS)

1 LIBRARY SKILLS 1 UNIT

Introduction to techniques of library research including development of a search strategy, location and evaluation of material in a variety of sources and formats, including the Internet, and preparation of a Works Cited list. Self-paced or Classroom-based. 1 hour Transfer: CSU, UC.

3 INTERNET SKILLS 1 UNIT

Retrieval and evaluation of information on the Internet. Exploration of Web browsers and search tools, and use of e-mail. Strongly recommended: Computer Application Systems 70 or 72A or 72B or 72C or equivalent. 1 hour. Transfer: CSU; AA/AS.

MACHINE TOOL TECHNOLOGY (MTT)

DEGREE:

AS—MACHINE TOOL TECHNOLOGY AS—NUMERICAL CONTROL

CERTIFICATE OF ACHIEVEMENT: MACHINIST NUMERICAL CONTROL PROGRAMMER (MACHINIST) TOOL MAKER

The Machinist one-year certificate program is designed to train students in the operation of a variety of precision metal removal tools, from small hand tools to machine tools such as: drill presses, lathes, milling machines, and grinders. Graduates acquire basic skills to setup and operate all standard machine tools and machine parts from blueprint specifications. Graduates are also introduced to computerized numerical control (CNC) machines. In addition, students learn basic hand skills including general machining techniques required to setup and operate all standard machine tools for the manufacture of parts from blueprint specifications.

The Tool Maker two-year program is designed to train students for a tool and die making career. Graduates are trained in tool and die making, computerized numerical control (CNC) machining, computer-aided manufacturing, computer-aided drafting and design, and are capable of learning new skills with minimum instruction. Students are expected to have an appreciation of precise work and a desire to observe the progression of complex parts.

Students use a variety of computer software applications to draw, design, and program CNC machines, and application work focuses on jigs, fixtures, and punch and die work.

Numerical Control is a system (sometimes referred to as CAM—Computer-Aided Manufacturing) using specially prepared instructions, developed by the N/C Programmer, to control the operation of various manufacturing equipment such as machine tools, inspection machines, wood-working machines, laser machines, and robots.

MACHINE TOOL TECHNOLOGY ASSOCIATE IN SCIENCE DEGREE

FRESHMAN YEAR FALL SPRING

Machine Tool Technology 50 (Blueprint Reading, Sketching, and CAD)	3
Industrial Technology 74* (Measurements and Calculations)	3
Machine Tool Technology 60A (Machine Tool Technology I)	4
Machine Tool Technology 60B (Machine Tool Technology II)	4
Welding Technology 70 (Introduction to Welding)	2

SOPHOMORE YEAR FALL SPRING

Machine Tool Technology 65 (Production Practices) . . .	4
Machine Tool Technology 66 (Basic Toolmaking)	4
Machine Tool Technology 71A (Numerical Control Programming I)	4
Machine Tool Technology 71B (Numerical Control Programming II)	4
Total	32

General Education Courses
For specific General Education courses refer to catalog section on Graduation Requirements.
Total minimum units required **60**

**Satisfies Mathematics requirement for graduation.*

The above listing is a suggested sequence only. Some courses may have prerequisites. Students may take courses in any sequence except where a prerequisite applies.

NUMERICAL CONTROL ASSOCIATE IN SCIENCE DEGREE

FRESHMAN YEAR FALL SPRING

Machine Tool Technology 50 (Blueprint Reading, Sketching, and CAD)	3
Industrial Technology 74* (Measurements and Calculations)	3
Machine Tool Technology 60A (Machine Tool Technology I)	4
Machine Tool Technology 60B (Machine Tool Technology II)	4
Machine Tool Technology 71A (Numerical Control Programming I)	4
Machine Tool Technology 71B (Numerical Control Programming II)	4

SOPHOMORE YEAR FALL SPRING

Machine Tool Technology 65 (Production Practices)	4
Machine Tool Technology 66 (Basic Toolmaking)	4
Machine Tool Technology 81A (Computer Part Programming I)	3
Machine Tool Technology 81B (Computer Part Programming II)	3
Total	36

General Education Courses
For specific General Education courses refer to catalog section on Graduation Requirements.
Total minimum units required **60**

**Satisfies Mathematics requirement for graduation.*

The above listing is a suggested sequence only. Some courses may have prerequisites. Students may take courses in any sequence except where a prerequisite applies.

MACHINIST CERTIFICATE OF ACHIEVEMENT

CORE COURSES FALL SPRING

Machine Tool Technology 60A (Machine Tool Technology I)	4
Machine Tool Technology 66B (Machine Tool Technology II)	4

Machine Tool Technology 63A
 (Individual Projects) 2
 Machine Tool Technology 63B
 (Advanced Individual Projects) 2
 Machine Tool Technology 71A
 (Numerical Control Programming I) 4
 Machine Tool Technology 71B
 (Numerical Control Programming II) 4
 Welding Technology 70
 (Introduction to Welding) 2
 Machine Tool Technology 50
 (Blueprint Reading, Sketching, and CAD) 3
 Industrial Technology 74
 (Measurements and Calculations) 3
Total 28

The above listing is a suggested sequence only. Some courses may have prerequisites. Students may take courses in any sequence except where a prerequisite applies.

NUMERICAL CONTROL PROGRAMMER (MACHINIST) CERTIFICATE OF ACHIEVEMENT

FRESHMAN YEAR	FALL	SPRING
Machine Tool Technology 50 (Blueprint Reading, Sketching, and CAD)	3	
Industrial Technology 74 (Measurements and Calculations)	3	
Machine Tool Technology 60A (Machine Tool Technology I)	4	
Machine Tool Technology 60B (Machine Tool Technology II)	4	
Machine Tool Technology 71A (Numerical Control Programming I)	4	
Machine Tool Technology 71B (Numerical Control Programming II)	4	

SOPHOMORE YEAR	FALL	SPRING
Machine Tool Technology 65 (Production Practices)	4	
Machine Tool Technology 66 (Basic Toolmaking)	4	
Machine Tool Technology 81A (Computer Part Programming I)	3	
Machine Tool Technology 81B (Computer Part Programming II)	3	
Total		36

The above listing is a suggested sequence only. Some courses may have prerequisites. Students may take courses in any sequence except where a prerequisite applies.

TOOL MAKER CERTIFICATE OF ACHIEVEMENT

CORE COURSES	FALL	SPRING
Machine Tool Technology 60A (Machine Tool Technology I)	4	
Machine Tool Technology 60B (Machine Tool Technology II)	4	
Machine Tool Technology 65 (Production Practices)	4	
Machine Tool Technology 66 (Basic Toolmaking)	4	
Industrial Technology 74 (Measurements and Calculations)	3	
Machine Tool Technology 71A (Numerical Control Programming I)	4	

Machine Tool Technology 71B (Numerical Control Programming II)	4
Welding Technology 70 (Introduction to Welding)	2
Machine Tool Technology 50 (Blueprint Reading, Sketching, and CAD)	3
Total	32

The above listing is a suggested sequence only. Some courses may have prerequisites. Students may take courses in any sequence except where a prerequisite applies.

MACHINE TOOL TECHNOLOGY (MTT)

50 BLUEPRINT READING, SKETCHING, AND CAD 3 UNITS
 Fundamentals of freehand sketching, reading of blueprints, interpreting of commonly used symbols, pictorial drawings, orthographic projection, geometric construction, dimensioning, and sectioning. Includes a general approach to Computer Aided Drafting (CAD). Designed to provide a working knowledge of methods of graphical communication. 2 hours lecture, 3 hours laboratory.

60A MACHINE TOOL TECHNOLOGY I 4 UNITS
(May be repeated 3 times)
 Introduction to machine tool operations relating to precision measuring tools, layout methods, screw threads, benchwork, drill presses, bandsaws, basic lathe and vertical milling operations, and evaluation of job opportunities. Emphasis on safe and correct use of hand and machine tools. 2 hours lecture, 6 hours laboratory. Transfer: CSU.

60B MACHINE TOOL TECHNOLOGY II 4 UNITS
(May be repeated 3 times)
 Continuation of Machine Tool Technology 60A. Theory and laboratory practice relating to advanced lathe and milling machine operations, gear cutting, steel and heat treating, basic surface and cylindrical grinding, and introduction to metric measurement. Emphasis on correct machine tool setups and quality of project work are stressed. Prerequisite: Machine Tool Technology 60A. Strongly recommended: Industrial Technology 74. 2 hours lecture, 6 hours laboratory. Transfer: CSU.

63A INDIVIDUAL PROJECTS 2 UNITS
(May be repeated 3 times)
 Design, development, and fabrication of selected projects for the machine tool technology major to develop special entry level job skills. Corequisite: Machine Tool Technology course. 6 hours laboratory.

63B ADVANCED INDIVIDUAL PROJECTS 2 UNITS
(May be repeated 3 times)
 Continuation of Machine Tool Technology 63A. Selected projects to provide certain specialized skills required for job updating, job advancement, or skill specialization. Corequisite: Machine Tool Technology course. 6 hours laboratory.

65 PRODUCTION PRACTICES 4 UNITS
(May be repeated 3 times)
 Introduction to design and fabrication of production-type toolings such as jigs, fixtures, and gauges as applied in industry. Emphasis on tool design practices, fabrication techniques, set-up procedures, and inspection of production parts. Prerequisite: Machine Tool Technology 60B. 2 hours lecture, 6 hours laboratory. Transfer: CSU.

66 BASIC TOOLMAKING 4 UNITS
 Toolroom grinding, precision measurement, jig boring, steels and heat treating, carbide cutting tools, job estimating, and basic die-making theory. Prerequisite: Machine Tool Technology 65. 2 hours lecture, 6 hours laboratory. Transfer: CSU.

70 INTRODUCTION TO MACHINE SHOP

2 UNITS

Introduction to machine shop practice. Includes measuring tools, bench-work screw threads, drill presses, lathes, and vertical milling machine operations. Safe and correct use of machine tools. 1 hour lecture, 3 hours laboratory. Transfer: CSU.

71A NUMERICAL CONTROL PROGRAMMING I

4 UNITS

(May be repeated 3 times)

Introduction to programming and operating three-axis computer numerical controlled drilling and milling machines. Instruction includes the standard X-Y-Z Cartesian coordinate system, manual and automatic milling machine operation, absolute and incremental positioning, tape coding and preparation, and fabrication of basic and intermediate three-axis drill and mill parts. Prerequisite: Computer Science 8 or Computer Application Systems 8. Strongly recommended: Industrial Technology 74 (may be taken concurrently). 2 hours lecture, 6 hours laboratory. Transfer: CSU.

71B NUMERICAL CONTROL PROGRAMMING II

4 UNITS

(May be repeated 3 times)

Continuation of Machine Tool Technology 71A. Advanced programming of three-axis computer numerical controlled drilling and milling machines and basic programming and operation of numerical controlled lathes. Includes advanced contour milling, and basic lathe programming involving constant surface speeds, tool selection, work surface programming, internal and external turning, and threading. Prerequisite: Machine Tool Technology 71A. 2 hours lecture, 6 hours laboratory. Transfer: CSU.

81A COMPUTER PART PROGRAMMING I

3 UNITS

(May be repeated 3 times)

Introduction to computer-assisted part programming numerical controlled drilling and milling machines. Includes theory and laboratory practice on the use of computer terminals, graphic plotters, tape punches, and high speed printers for processing and debugging computer-assisted part programs. Prerequisite: Machine Tool Technology 71B. 2 hours lecture, 3 hours laboratory.

81B COMPUTER PART PROGRAMMING II

3 UNITS

(May be repeated 3 times)

Continuation of Machine Tool Technology 81A. Writing computer-assisted part programs for advanced milling applications and basic turning center (lathes) operations. Includes computer terminals, graphic plotters, tape punches, and high speed printers for processing and debugging computer assisted part programs. Prerequisite: Machine Tool Technology 81A. 2 hours lecture, 3 hours laboratory.

MASS COMMUNICATIONS (MCOM)

AA—MASS COMMUNICATIONS

In pursuing this degree, students will gain knowledge and hands-on experience in radio, television, and print journalism. They will be able to transfer to a university program using their knowledge and experience or seek job entry in one of the media fields.

MASS COMMUNICATIONS

ASSOCIATE IN ARTS DEGREE

FRESHMAN YEAR

FALL SPRING

Mass Communications 5 (Introduction to Mass Communications)	3
Mass Communications 31 (Introduction to Broadcasting)	3

Mass Communications 1 (Journalism: Newswriting and Information Gathering)	3
Mass Communications 3 (Journalism: Magazine and Newspaper Feature Writing)	3
Mass Communications 35 (Writing for Broadcasting)	3
Photography 50 (Introduction to Photography)	3

SOPHOMORE YEAR

FALL SPRING

Business 34 (Introduction to Advertising)	3
Mass Communications 15 (Publications: Editorial Leadership and Production)	3
Mass Communications 33A (Introduction to Television Studio Techniques)	3
Mass Communications 32 (Radio and Television Announcing/Performance)	3
Mass Communications 33B (Intermediate Television Studio Techniques)	3
Art 60 (Advertising Production)	3
Mass Communications Option*	3
Total	39

General Education Courses

For specific General Education courses refer to catalog section on Graduation Requirements.

Total minimum units required **60**

**Any course in Mass Communications.*

MASS COMMUNICATIONS (MCOM)

1 JOURNALISM: NEWSWRITING AND INFORMATION GATHERING

3 UNITS

Fundamentals of reporting and newswriting 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. 3 hours. Transfer: CSU; (CAN JOUR 2).

3 JOURNALISM: MAGAZINE AND NEWSPAPER FEATURE WRITING

3 UNITS

Feature writing, freelance journalism and how to get published in newspapers and magazines. 3 hours. Transfer: CSU.

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. Transfer: CSU, UC; CSU/GE: D7; (CAN JOUR 4).

8 ADVERTISING SALES AND MEDIA MANAGEMENT

4 UNITS

Introduction to broadcast advertising sales from research through the sales presentation to the airing of the commercial campaign. Broadcast and cable station managerial objectives, procedures and problems pertaining to daily operations; and the managerial perspective of individual departments within the broadcast and cable station. 4 hours. Transfer: CSU; AA/AS.

14 WRITING AND PHOTOGRAPHY FOR A WEEKLY PUBLICATION

1 UNIT

(May be repeated 3 times)

Journalism and photojournalism, content development/production for the weekly college newspaper. 3 hours laboratory.

15 PUBLICATIONS—EDITORIAL LEADERSHIP AND PRODUCTION 3 UNITS

(May be repeated 3 times)
 Production of the college newspaper, including instruction and experience in writing, business management, graphic arts, leadership and editing. Strongly recommended: Eligibility for English 1A. 1 hour lecture, 6 hours production. Transfer: CSU.

31 INTRODUCTION TO BROADCASTING 3 UNITS

Radio and television from the earliest years to the present as well as the public's role in broadcasting. Social, ethical, regulatory, and economic facets of the industry. 3 hours. Transfer: CSU; AA/AS.

32 RADIO AND TELEVISION ANNOUNCING/ PERFORMANCE 3 UNITS

Projection of personality, voice control and pronunciation necessary for communication of ideas in broadcasting under simulated studio circumstances. 3 hours. Transfer: CSU; AA/AS.

33A INTRODUCTION TO TELEVISION STUDIO TECHNIQUES 3 UNITS

Introduction to studio practices. Hands-on experience in television studio operations, control room procedures, and basic program production. 2 hours lecture, 3 hours laboratory. Transfer: CSU.

33B INTERMEDIATE TELEVISION STUDIO TECHNIQUES 3 UNITS

(May be repeated 3 times)
 Further experience in television studio operations, control room procedures, and program production. Designed to improve skills in operating television equipment, and producing and directing TV programs. Strongly recommended: Mass Communications 33A. 2 hours lecture, 3 hours laboratory. Transfer: CSU.

34 RADIO STUDIO TECHNIQUES 3 UNITS

Operational procedures and practices in a modern radio broadcast studio. Emphasis on production aspects including editing and announcing, station operations and commercial radio programming. Strongly recommended: Mass Communications 31. (May be taken concurrently.) 3 hours lecture, 1 hour laboratory. Transfer: CSU.

35 WRITING FOR BROADCASTING 3 UNITS

Techniques of writing for radio and television; including script writing and discussion of professional and student scripts, with emphasis on commercials; and underwriting announcements, public service announcements, news and program introductions. Strongly recommended: Eligibility for English 1A or 52A, and completion of Mass Communications 31. 3 hours. Transfer: CSU.

38 SPECIAL PROJECTS IN RADIO 2 UNITS

(May be repeated 3 times)
 Practical experience in radio programming including music, audio production techniques, promotions, news, live sports, and underwriting sales. Experience in broadcast operation of KCRH-FM. Prerequisite: Mass Communications 34 (completed with a grade of "C" or higher). 1 hour lecture, 3 hours laboratory. Transfer: CSU.

39 SPECIAL PROJECTS IN TELEVISION 3 UNITS

(May be repeated 3 times)
 Practical experience in television production and programming. Strongly recommended: Mass Communications 33A. 2 hours lecture, 3 hours laboratory. Transfer: CSU.

MATHEMATICS (MTH)

DEGREE: AA—MATHEMATICS

Mathematics and related subjects play important dual roles in our culture. On the one hand, mathematics is a study in its own right; on the other hand it is an indispensable tool for expressing and understanding ideas in the sciences, engineering, and an increasing number of other fields.

MATHEMATICS ASSOCIATE IN ARTS OR ASSOCIATE IN SCIENCE DEGREE

FRESHMAN YEAR FALL SPRING

Mathematics I (Calculus I)	5
Mathematics 2 (Calculus II)	5
<i>Choose at least one other course from the following</i>	<i>3–5</i>
Computer Science 14 (Introduction to Structured Programming In C++)	
Computer Science 15 (Object-Oriented Programming Methods in C++)	
Computer Science 20 (Introduction to Data Structures in C++)	
Computer Science 21 (Computer Organization and Assembly Language Programming)	
Engineering 25 (Computational Methods for Engineers And Scientists)	
Engineering 36 (Engineering Mechanics—Statics)	
Engineering 43 (Engineering Circuit Analysis)	
Engineering 45 (Materials of Engineering)	
Math 25 (Computational Methods for Engineers And Scientists)	
Physics 4A (General Physics I)	
Physics 25 (Computational Methods for Engineers And Scientists)	

SOPHOMORE YEAR FALL SPRING

Mathematics 3 (Multivariable Calculus)	5
<i>Choose two Mathematics courses from the following:</i>	<i>6</i>
Mathematics 4 (Elementary Differential Equations)	
Mathematics 6 (Elementary Linear Algebra)	
Mathematics 8 (Discrete Mathematics)	
Total	24–26
General Education Courses	
For specific General Education courses refer to catalog section on Graduation Requirements.	
Total minimum units required	60

MATHEMATICS (MTH)

1 CALCULUS I 5 UNITS

Elements of analytic geometry, derivatives, limits and continuity, differentiation of algebraic and trigonometric functions, the definite integral. Prerequisite: Mathematics 20 (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: CSU, UC; CSU/GE: B4; IGETC: Area 2; AA/AS, (CAN MATH 18); with MATH 2: (CAN MATH SEQ B); with MATH 2 and MATH 3: (CAN MATH SEQ C).

1W CALCULUS I WORKSHOP

$\frac{1}{4}$ – $\frac{1}{2}$ UNIT

Laboratory, study group, collaborative workshop or computer laboratory time for Calculus I. Corequisite: Mathematics 1. 1–2 hours laboratory.

2 CALCULUS II

5 UNITS

Continuation of differential and integral calculus, including transcendental, inverse, and hyperbolic functions. Techniques of integration, parametric equations, polar coordinates, sequences, 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*). 5 hours lecture, 0–1 hours laboratory. Transfer: CSU, UC; CSU/GE: B4; IGETC: Area 2; AA/AS, (CAN MATH 20); with MATH 1: (CAN MATH SEQ B); with MATH 1 and MATH 3: (CAN MATH SEQ C).

2W CALCULUS II WORKSHOP

$\frac{1}{4}$ – $\frac{1}{2}$ UNIT

Laboratory, study group, collaborative workshop or computer laboratory time for Calculus II. Corequisite: Mathematics 2. 1–2 hours laboratory.

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. Transfer: CSU, UC; CSU/GE: B4; IGETC: Area 2; (CAN MATH 22); with MATH 1 and MATH 2: (CAN MATH SEQ C).

3W MULTIVARIABLE CALCULUS WORKSHOP

$\frac{1}{4}$ – $\frac{1}{2}$ UNIT

Laboratory, study group, collaborative workshop or computer laboratory time for Multivariable Calculus. Corequisite: Mathematics 3. 1–2 hours laboratory.

4 ELEMENTARY DIFFERENTIAL EQUATIONS

3 UNITS

Introduction to elementary differential equations, including first and second order equations, series solutions, Laplace transforms, applications. Prerequisite: Mathematics 2 (*completed with a grade of "C" or higher*). 3 hours. Transfer: CSU, UC; CSU/GE: B4; IGETC: Area 2; (CAN MATH 24).

4W ELEMENTARY DIFFERENTIAL EQUATIONS WORKSHOP

$\frac{1}{4}$ – $\frac{1}{2}$ UNIT

Laboratory, study group, collaborative workshop or computer laboratory time for Elementary Differential Equations. Corequisite: Mathematics 4. 1–2 hours laboratory.

6 ELEMENTARY LINEAR ALGEBRA

3 UNITS

Introduction to linear algebra: matrices, determinants, systems of equations, vector spaces, linear transformations eigenvalue, eigenvectors, applications. Prerequisite: Mathematics 2 (*completed with a grade of "C" or higher*). 3 hours. Transfer: CSU, UC; CSU/GE: B4; IGETC: Area 2; (CAN MATH 26).

6W ELEMENTARY LINEAR ALGEBRA WORKSHOP

$\frac{1}{4}$ – $\frac{1}{2}$ UNIT

Laboratory, study group, collaborative workshop or computer laboratory time for Elementary Linear Algebra. Corequisite: Mathematics 6. 1–2 hours laboratory.

8 DISCRETE MATHEMATICS

3 UNITS

Counting techniques, sets and logic, Boolean algebra, analysis of algorithms, graph theory, trees, combinatorics, recurrence relations, introduction to automata. Designed for majors in mathematics and computer science. Prerequisite: Mathematics 1 (*completed with a grade of "C" or higher*). 3 hours. Transfer: CSU, UC; CSU/GE: B4; IGETC: Area 2; (CAN CSCI 26).

8W DISCRETE MATHEMATICS WORKSHOP

$\frac{1}{4}$ – $\frac{1}{2}$ UNIT

Laboratory, study group, collaborative workshop or computer laboratory time for Discrete Mathematics. Corequisite: Mathematics 8. 1–2 hours laboratory.

12 INTRODUCTION TO LOGIC

3 UNITS

(*See also Philosophy 12.*)

Introduction to formal deductive logic with emphasis on developing the basic concepts of modern symbolic logic; includes deductive validity, relation of ordinary languages to symbolic logic, distinction between inductive and deductive arguments, relation of truth to validity, uses of truth tables, role of logic in the disciplines of mathematics, philosophy and sciences, rules of inference for propositional logic and first order predicate logic. (May not receive credit if Philosophy 12 has been completed.) 3 hours. Transfer: CSU, UC; CSU/GE: A3; AA/AS; (CAN PHIL 6).

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 37 (*both 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: CSU, UC; CSU/GE: B4; IGETC: Area 2; AA/AS, (CAN MATH 16).

20W PRE-CALCULUS WORKSHOP

$\frac{1}{4}$ – $\frac{1}{2}$ UNIT

Laboratory, study group, collaborative workshop or computer laboratory time for Pre-calculus Mathematics. Corequisite: Mathematics 20. 1–2 hours laboratory.

25 COMPUTATIONAL METHODS FOR ENGINEERS AND SCIENTISTS

3 UNITS

(*See also Engineering 25, Physics 25*)

Methodology and techniques for solving engineering/science problems using numerical-analysis computer-application programs MATLAB and EXCEL. Technical computing and visualization using MATLAB software. Examples and applications from applied-mathematics, physical-mechanics, electrical circuits, biology, thermal systems, fluid systems, and other branches of science and engineering. Prerequisite: Mathematics 1. Strongly recommended: Computer Application System 8 or Computer Science 8. May not receive credit if Engineering 25 or Physics 25 has been completed. 2 hours lecture, 3 hours laboratory.

31 COLLEGE ALGEBRA

3 UNITS

Functions and graphs; polynomials, rational functions, exponential and logarithmic functions; circles, parabolas, binomial theorem, sequences and series. Solving rational, radical, quadratic in form, exponential and logarithmic equations. Preparation for Calculus for Business and Social Science students. Prerequisite: Mathematics 54, 54L, 55 or 55B (*completed with a grade of "C" or higher*) or an appropriate skill level demonstrated through the mathematics assessment process. 3 hours. Transfer: CSU, UC; CSU/GE: B4; IGETC: Area 2; AA/AS.

31W COLLEGE ALGEBRA WORKSHOP

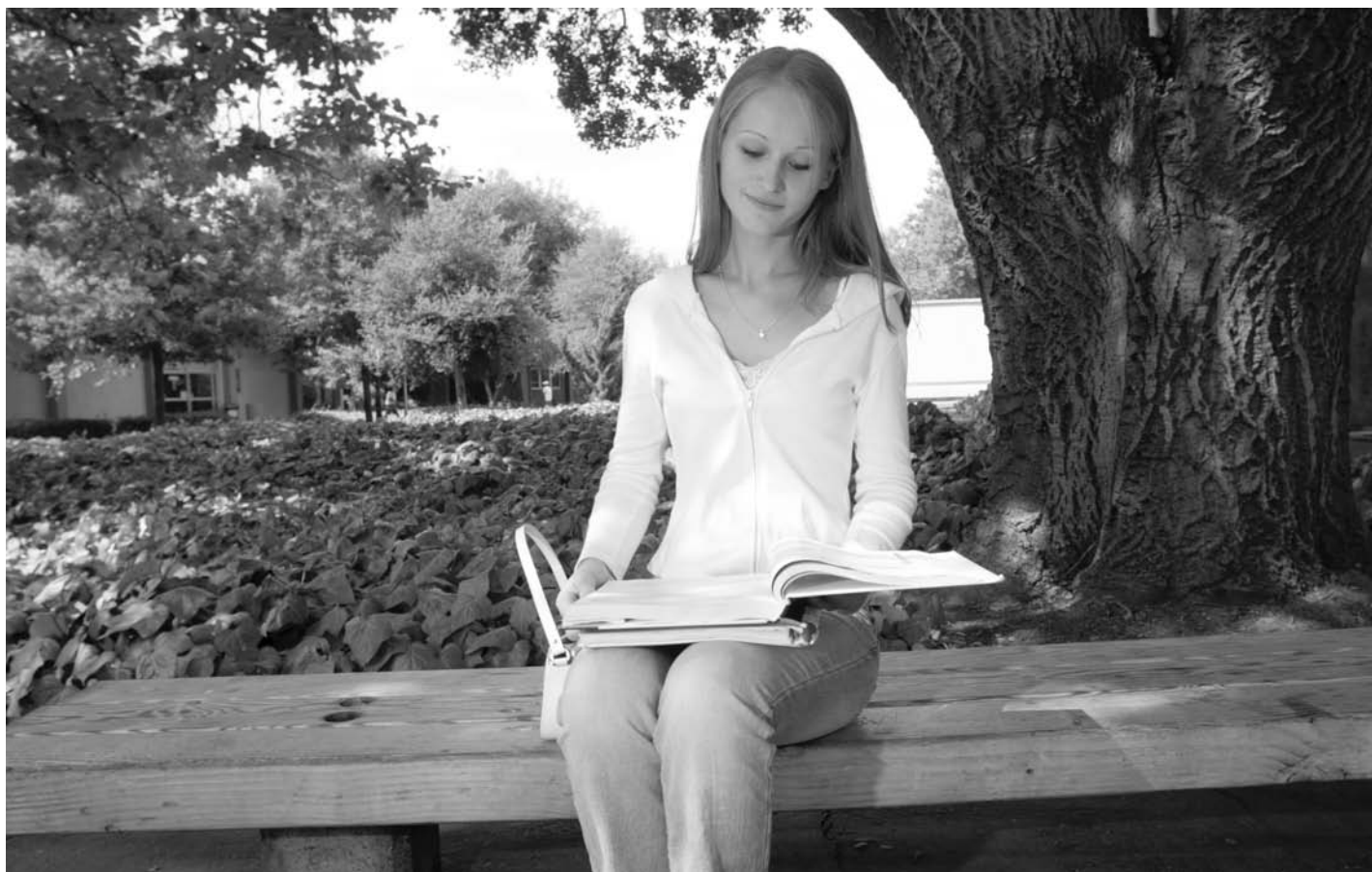
$\frac{1}{4}$ – $\frac{1}{2}$ UNIT

Laboratory, study group, collaborative workshop or computer laboratory time for College Algebra. Corequisite: Mathematics 31. 1–2 hours laboratory.

32 CALCULUS FOR BUSINESS AND SOCIAL SCIENCES

5 UNITS

Functions and their graphs; differential and integral calculus of polynomial, rational, exponential and logarithmic functions; partial derivatives. Applications in business, economics, and the life and social sciences. Prerequisite: Mathematics 55 or 55B (*completed with a grade*



of “C” or higher) or an appropriate skill level demonstrated through the mathematics assessment process. 5 hours lecture, 0–1 hours laboratory. Transfer: CSU, UC; CSU/GE: B4; IGETC: Area 2; AA/AS; (CAN MATH 34).

32W CALCULUS FOR BUSINESS AND SOCIAL SCIENCE WORKSHOP **¼–½ UNIT**

Laboratory, study group, collaborative workshop or computer laboratory time for Calculus for Business and Social Science. Corequisite: Mathematics 32. 1–2 hours laboratory.

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 (completed with a grade of “C” or higher) or an appropriate skill level demonstrated through the Mathematics assessment process. 4 hours lecture, 0–1 hour laboratory. Transfer: CSU, UC; CSU/GE: B4; IGETC: Area 2; AA/AS; (CAN MATH 12)

33W FINITE MATHEMATICS WORKSHOP **¼–½ UNIT**

Laboratory, study group, collaborative workshop or computer laboratory time for Finite Mathematics. Corequisite: Mathematics 33. 1–2 hours laboratory.

35 STATISTICS FOR BUSINESS MAJORS **4 UNITS**

Introduction to modern probability, descriptive statistics, estimation, hypothesis testing (one and two sample) and linear regression. Applications to business and economics. Introduction to the use of a computer soft-

ware package to complete both descriptive and inferential statistics problems. Prerequisite: Mathematics 1 or 32 (completed with a grade of “C” or higher, may be taken concurrently.) Strongly recommended: Eligibility for English 1A. 4 hours lecture, 1 hour laboratory. Transfer: CSU, UC; CSU/GE: B4; IGETC: Area 2; AA/AS.

35W STATISTICS FOR BUSINESS MAJORS WORKSHOP **¼–½ UNIT**

Laboratory, study group, collaborative workshop or computer laboratory time for Statistics for Business Majors. Corequisite: Mathematics 35. 1–2 hours laboratory.

36 TRIGONOMETRY **3 UNITS**

Plane trigonometry. Includes circular and right triangle trigonometric functions; trigonometric equations, graphs and identities; triangle solutions. Polar coordinates. Prerequisite: Mathematics 57 and Mathematics 55 or Mathematics 55B (all completed with a grade of “C” or higher) or an appropriate skill level demonstrated through the Mathematics Assessment process. May not receive credit if Math 37 has been completed. 3 hours. Transfer: CSU; CSU/GE: B4; AA/AS.

36W TRIGONOMETRY WORKSHOP **¼–½ UNIT**

Laboratory, study group, collaborative workshop or computer laboratory time for Trigonometry. Corequisite: Mathematics 36. 1–2 hours laboratory.

37 TRIGONOMETRY WITH AN EMPHASIS ON ITS GEOMETRIC FOUNDATIONS **5 UNITS**

Plane trigonometry, with topics from plane geometry. Contains the entire subject content of Mathematics 36. Includes circular and right triangle trigonometric functions; trigonometric equations, graphs and identities;

triangle solutions. Polar coordinates. Also includes congruence, properties of polygons, parallel lines, similarity, areas, volumes, and coordinate geometry. Prerequisite: Mathematics 55 or Mathematics 55B (*both 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 36 has been completed. 5 hours. Transfer: CSU; CSU/GE: B4; M/AS.

37W TRIGONOMETRY WITH AN EMPHASIS ON ITS GEOMETRIC FOUNDATIONS WORKSHOP $\frac{1}{4}$ – $\frac{1}{2}$ UNIT

Laboratory, study group, collaborative workshop or computer laboratory time for Trigonometry with an Emphasis on its Geometric Foundation. Corequisite: Mathematics 37. 1–2 hours laboratory.

40 CONCEPTS OF MATHEMATICS **3 UNITS**

Investigation of the nature of mathematics as a human endeavor and an examination of important concepts of mathematics. Prerequisite: Mathematics 54, 54L, 55 or 55 B (*completed with a grade of "C" or higher*) or an appropriate skill level demonstrated through the Mathematics assessment process. 3 hours. Transfer: CSU; UC; CSU/GE: B4; IGETC: Area 2; AA/AS.

40W CONCEPTS OF MATHEMATICS WORKSHOP $\frac{1}{4}$ – $\frac{1}{2}$ UNIT

Laboratory, study group, collaborative workshop or computer laboratory time for Concepts of Mathematics. Corequisite: Mathematics 40. 1–2 hours laboratory.

43 INTRODUCTION TO PROBABILITY AND STATISTICS **4 UNITS**

Descriptive statistics, including measures of central tendency and dispersion; elements of probability; tests of statistical hypotheses (one and two populations); 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 54, 54L, 55 or 55B (*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 35 has been completed. Strongly recommended: Eligibility for English 1A. May be offered in Distance Education delivery format. 4 hours lecture, 1 hour laboratory. Transfer: CSU, UC; CSU/GE: B4; IGETC: Area 2; AA/AS; (CAN STAT 2).

43W INTRODUCTION TO PROBABILITY AND STATISTICS WORKSHOP $\frac{1}{4}$ – $\frac{1}{2}$ UNIT

Laboratory, study group, collaborative workshop or computer laboratory time for Introduction to Probability and Statistics. Corequisite: Mathematics 43. 1–2 hours laboratory.

54 APPLIED INTERMEDIATE ALGEBRA **5 UNITS**

Functions in the context of real data; rates of change of linear functions; linear systems; laws of rational exponents; mathematical models (including graphs) using exponential, logarithmic, power, and linear, quadratic and other polynomial functions; solution of exponential and logarithmic equations. Prerequisites: Mathematics 65, 65B or 65L (*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 54L has been completed. 5 hours lecture, 0–1 hour laboratory.

54L APPLIED INTERMEDIATE ALGEBRA WITH LAB **5½ UNITS**

Functions in the context of real data; rates of change of linear functions; linear systems; laws of rational exponents; mathematical models (including graphs) using exponential, logarithmic, power, and linear, quadratic and other polynomial functions; solution of exponential and logarithmic equations. Includes laboratory and study group time to reinforce and enhance the learning of applied intermediate algebra skills.

Prerequisites: Mathematics 65, 65B or 65L (*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 54 has been completed. 5 hours lecture, 1½ hours laboratory.

55 INTERMEDIATE ALGEBRA **5½**

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. Prerequisites: Mathematics 65 or Mathematics 65B or Mathematics 65L (*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 55A and 55B have been completed. May be offered in Distance Education delivery format. 5 hours lecture, 0–1 hour laboratory. AA/AS.

55W INTERMEDIATE ALGEBRA WORKSHOP $\frac{1}{4}$ – $\frac{1}{2}$ UNIT

Laboratory, study group, collaborative workshop or computer laboratory time for Intermediate Algebra. Corequisite: Mathematics 55. 1–2 hours laboratory.

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 Mathematics 65B or Mathematics 65L (*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 has been completed. 3 hours lecture, 0–1 hour laboratory. AA/AS.

55AW INTERMEDIATE ALGEBRA A WORKSHOP $\frac{1}{4}$ – $\frac{1}{2}$ UNIT

Laboratory, study group, collaborative workshop or computer laboratory time for Intermediate Algebra A. Corequisite: Mathematics 55A. 1–2 hours laboratory.

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 (*completed with a grade of "C" or higher*). May not receive credit if Mathematics 55 has been completed. 3 hours lecture, 0–1 hour laboratory. AA/AS.

55BW INTERMEDIATE ALGEBRA B WORKSHOP $\frac{1}{4}$ – $\frac{1}{2}$ UNIT

Laboratory, study group, collaborative workshop or computer laboratory time for Intermediate Algebra B. Corequisite: Mathematics 55B. 1–2 hours laboratory.

57 PLANE GEOMETRY **3 UNITS**

Topics in plane geometry. Includes congruence, similarity, parallel lines, and properties of polygons and circles. Prerequisite: Mathematics 65, 65B or 65L (*completed with a grade of "C" or higher*) or an appropriate skill level demonstrated through the Mathematics assessment process. 3 hours.

57WPLANE GEOMETRY WORKSHOP $\frac{1}{4}$ – $\frac{1}{2}$ UNIT

Laboratory, study group, collaborative workshop or computer laboratory time for Plane Geometry. Corequisite: Mathematics 57. 1–2 hours laboratory.

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 equa-

tions. Prerequisite: Mathematics 105 or 105L (*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 65L or 65A and 65B have been completed. May be offered in Distance Education delivery format. 5 hours lecture, 0–1 hour laboratory. AA/AS.

65W ELEMENTARY ALGEBRA WORKSHOP **¼–½ UNIT**

Laboratory, study group, collaborative workshop or computer laboratory time for Elementary Algebra. Corequisite: Mathematics 65. 1–2 hours laboratory.

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 105 or 105L (*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 65L has been completed. May be offered in Distance Education delivery format. 3 hours lecture, 0–1 hour laboratory.

65AW ELEMENTARY ALGEBRA A WORKSHOP **¼–½ UNIT**

Laboratory, study group, collaborative workshop or computer laboratory time for Elementary Algebra A. Corequisite: Mathematics 65A. 1–2 hours laboratory.

65B ELEMENTARY ALGEBRA B **3 UNITS**

Concepts covered in the second half of Mathematics 65, including factoring, rational expressions and complex fractions; system of linear equations; quadratic and rational equations; graphing. Prerequisite: Mathematics 65A (*completed with a grade of "C" or higher*). May not receive credit if Mathematics 65 or 65L has been completed. 3 hours lecture, 0–1 hour laboratory. AA/AS.

65BW ELEMENTARY ALGEBRA B WORKSHOP **¼–½ UNIT**

Laboratory, study group, collaborative workshop or computer laboratory time for Elementary Algebra B. Corequisite: Mathematics 65B. 1–2 hours laboratory.

65L ELEMENTARY ALGEBRA WITH LABORATORY **5½ 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. Includes laboratory time designed to reinforce concepts and enhance problem-solving skills. Prerequisite: Mathematics 105 or 105L (*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 Mathematics 65A and Mathematics 65B have been completed. 5 hours lecture. ½ hours laboratory. AA/AS.

105 BASIC MATHEMATICS **3 UNITS**

Fundamental concepts in arithmetic, including fractions, ratios, proportions, percents; order of operations, measurement, geometric formulas. Introduction to algebraic concepts, including signed numbers, properties of real numbers, algebraic expressions, linear equations, and graphs. May be offered in Distance Education delivery format. 3 hours lecture, 0–1 hour laboratory.

105L BASIC MATHEMATICS WITH LAB **4 UNITS**

Fundamental concepts in arithmetic, including fractions, ratios, proportions, percents; order of operations, measurement, geometric formulas. Introduction to algebraic concepts, including signed numbers, properties of real numbers, algebraic expressions, linear equations, and graphs. Includes laboratory and study group time designed to reinforce and enhance the learning of basic mathematics. 3 hours lecture, 2 hours laboratory.

105W BASIC MATHEMATICS WORKSHOP **¼–½ UNIT**

Laboratory, study group, collaborative workshop or computer laboratory time for Basic Mathematics. Corequisite: Mathematics 105. 1–2 hours laboratory.

122 MATH LABORATORY **½–1 UNIT**

(*May be repeated 3 times.*)
Provides mathematics students currently enrolled in any mathematics course with tutorial assistance from an instructor, student tutors, and fellow classmates. 1½–3 hours laboratory.

MEDICAL ASSISTING (MEDA)

**DEGREE:
AA–MEDICAL ASSISTING**

**CERTIFICATE OF ACHIEVEMENT:
MEDICAL ASSISTING**

These programs in Medical Assisting are accredited by the Commission on Accreditation of Allied Health Education Programs (CAAHEP), on recommendation of the Committee on Accreditation for Medical Assistant Education of the American Association of Medical Assistants' Endowment (AAMAE). Completion of this program qualifies the student to take the National Certification examination (CMA-Certified Medical Assistant Exam).

Graduates of the Medical Assisting programs at Chabot College will have an opportunity to apply for employment as Medical Assistants in an ambulatory care setting. Medical Assistants are multi-skilled allied health professionals who can perform a variety of administrative and clinical skills.

Students completing in sequence the 31 units for the accredited Medical Assisting Certificate program are eligible to sit the American Association of Medical Assistants (AAMA) Certified Medical Assistant (CMA) exam.

**MEDICAL ASSISTING
ASSOCIATE IN ARTS DEGREE**

FRESHMAN YEAR **FALL** **SPRING**

Health 50 (Orientation to	
Health Care Delivery Systems)	2
Health 51A (Basic Medical Terminology)	4
Psychology 1 (General Psychology)	3
Health 60 (Responding to Emergencies)	1
Biology 50 (Anatomy and Physiology)	4
Business 7 (General Accounting)	3
Computer Application Systems 50 (Introduction to Computer Application Systems) or Computer Application Systems 88A (Microsoft Word™ I) or Computer Science 8 (Computer Literacy) or Computer Application Systems 8 (Computer Literacy)	3

SOPHOMORE YEAR	FALL	SPRING
Health 51 B (Disease Process & Advanced Medical Terminology)	4	
Health 70A (Community Cardiopulmonary Resuscitation)	½	
Health 70B (Professional Cardiopulmonary Resuscitation)	½	
Medical Assisting 70A* (Clinical Skills for the Medical Assistant I)	3	
Medical Assisting 71A (Medical Administrative Skills I)	2	
Medical Assisting 75 (Administration of Medications for the Medical Assistant)	2	
Medical Assisting 70B* (Clinical Skills for the Medical Assistant II)	3	
Medical Assisting 71B (Medical Administrative Skills II)	2	
Medical Assistant 73A (Clinical Experience I)	1	
Medical Assistant 73B (Clinical Experience II)	3	
Medical Assistant 74 (Clinical Experience Seminar)	1	
Total		42
General Education courses		
For specific General Education courses refer to catalog section on Graduation Requirements		
Total minimum units required		60

Prior to placement at Clinical Sites (MA 73A, 73B), the student should submit medical, dental and immunization records. Forms will be distributed in Meda 70A.

To progress in the Medical Assisting Associate in Arts Degree program and to graduate from the program, all courses must be passed with a grade of C or better

** An American Heart Association Health Care Provider Card is required for MEDA 73A.*

MEDICAL ASSISTING CERTIFICATE OF ACHIEVEMENT

This program in Medical Assisting is accredited by the Commission on Accreditation of Allied Health Education Programs (CAAHEP), on recommendation of the Committee on Accreditation for Medical Assistant Education of the American Association of Medical Assistants' Endowment (AAMAE). Completion of this program qualifies the student to take the National Certification examination. (CMA-Certified Medical Assistant Exam). The student would benefit from taking Health 50, Health 51A, CAS 50 or CAS 88A or CAS 8 or CAS 8 before entering the program in the Fall.

The Reading requirements for the program tests are at college level. Students must have a strong mastery of reading, comprehension and oral language skills. It is highly recommended that students take the English placement test to determine their level of English skills. English 102 is highly recommended. The Medical Assisting Certificate Program is offered in **two semesters**.

All courses for the Medical Assisting Certificate of Achievement must be completed with a "C" or better

	FALL	SPRING
Health 50 (Orientation to Health Care Delivery System)	2	
Health 51A (Basic Medical Terminology)	4	
Health 70A (Community Cardiopulmonary Resuscitation)	½	
Health 70B (Professional Cardiopulmonary Resuscitation)	½	
Computer Application Systems 50 (Introduction to Computer Application Systems) or Computer Application Systems 88A (Microsoft Word® I) or Computer Science 8 (Computer Literacy) or Computer Application Systems 8 (Computer Literacy)	3	
Medical Assisting 70A* (Clinical Skills for the Medical Assistant I)	3	
Medical Assisting 71A (Administrative Skills I)	2	
Medical Assisting 75 (Administration of Medications for the Medical Assistant)	2	
Health 51B (Disease Process & Advanced Medical Terminology)	4	
Medical Assisting 70B* (Clinical Skills for the Medical Assistant II)	3	
Medical Assisting 71B (Administrative Skills II)	2	
Medical Assisting 73A (Clinical Experience I)	1	
Medical Assisting 73B (Clinical Experience II)	3	
Medical Assisting 74 (Clinical Experience Seminar)	1	
Total		31

Prior to placement at Clinical Sites (MA 73A, 73B), the student should submit medical, dental and immunization records. Forms will be distributed in Meda 70A.

To progress in the Medical Assisting Certificate Program and to graduate from the program, students must earn a minimum grade of C in each course.

** An American Heart Association Health Care Provider Card is required for MEDA 73A.*

MEDICAL ASSISTING (MEDA)

70A CLINICAL SKILLS FOR THE MEDICAL ASSISTANT I 3 UNITS

Introduction to the clinical role of the Medical Assistant. Includes basic and advanced skills which are utilized when assisting the physician and performing direct patient care. Corequisite: Health 51A (may be taken concurrently). 2 hours lecture, 3 hours laboratory. Transfer: CSU.

70B CLINICAL SKILLS FOR THE MEDICAL ASSISTANT II 3 UNITS

Continuation of Medical Assisting 70A. Basic and advanced clinical skills common to medical offices and clinics. Use of advanced clinical skills while assisting the physician and performing direct patient care. Prerequisite: Health 51A (may be taken concurrently), Medical Assisting 70A and Medical Assisting 75 (completed with a grade of "C" or higher). 2 hours lecture, 3 hours laboratory. Transfer: CSU.

71A ADMINISTRATIVE SKILLS I 2 UNITS

Administrative Medical Assisting skills which include office management, composing and preparing correspondence, appointment procedures and receptionist techniques. Corequisite: Health 51A. 1 hour lecture, 3 hours laboratory. Transfer: CSU.

71B ADMINISTRATIVE SKILLS II 2 UNITS

Administrative Medical Assisting skills which include medical economics, banking, billing, medical insurance and coding. Prerequisite: Medical Assisting 71A (completed with a grade of "C" or higher) 1 hour lecture, 3 hours laboratory. Transfer: CSU.

73A CLINICAL EXPERIENCE I 1 UNIT

Application of principles and skills through participation in a simulated employment experience. Assisting the physician under close supervision. Prerequisite: Medical Assisting 70A, 71A. Corequisite: Medical Assisting 74. 7½ hours clinical practice. Total weeks—6. Transfer: CSU.

73B CLINICAL EXPERIENCE II 3 UNITS

Application of principles and skills through participation in a simulated employment experience. Assisting the physician under close supervision in a clinic or office setting. 15 hours clinical practice. Total weeks—12. Transfer: CSU.

74 CLINICAL EXPERIENCE SEMINAR 1 UNIT

Discussion and analysis of clinical situations in the hospital clinic setting and private physician's office. Corequisite: Medical Assisting 73A and 73B. 1 hour. Transfer: CSU.

75 ADMINISTRATION OF MEDICATIONS FOR THE MEDICAL ASSISTANT 2 UNITS

Medication administration including study of drugs, drug research, drug therapy, immunizations and skin tests. Safe preparation, administration, and documentation of medication given by oral, sublingual, inhalation, topical, vaginal, rectal, transdermal, intramuscular, subcutaneous and intradermal routes. Corequisite: Medical Assisting 70A and Medical Assisting 71A, or Medical Assisting work experience, or graduate of Medical Assisting Program, or equivalent. 2 hours lecture, 3 hours laboratory, 12 weeks. Transfer: CSU.

MICROBIOLOGY

(See Biological Sciences)

MUSIC

DEGREE: AA—MUSIC

The Music Department offers an Associate in Arts Degree with three emphases: performance, composition, history/literature. The core sequence is comprised of a two-year course integrating theory, literature, and composition, the development of music in the context of western society, and a performance component comprised of both solo and ensemble experiences. The student then specializes in one of the three emphases listed above. At the end of the sophomore year, all majors will be required to pass a piano proficiency examination.

MUSIC

ASSOCIATE IN ARTS DEGREE

FRESHMAN YEAR FALL SPRING

Music 2A (Harmony and Musicianship I)	5
Music 21A (Piano I)	1
Applied Option*	1
Performance Option**	1
Music 2B (Harmony and Musicianship II)	5
Music 21B (Piano II)	1
Applied Option*	1
Performance Option**	1

SOPHOMORE YEAR

Music 2C (Harmony and Musicianship III)	5
Applied Option*	1
Performance Option**	1
Music 2D (Harmony and Musicianship IV)	5
Applied Option*	1
Performance Option**	1

***Applied Option**

Select course(s) from the following for a total of 4 units:

- Music 31 (Study of Piano) 1 unit
- Music 32 (Study of Jazz Piano) 1 unit
- Music 33 (Study of Voice) 1 unit
- Music 34 (Study of Woodwinds) 1 unit
- Music 35 (Study of Brass) 1 unit
- Music 36 (Study of Strings) 1 unit
- Music 37 (Study of Percussion) 1 unit
- Music 38 (Individual Study) 1 unit

****Performance Option**

Select course(s) from the following for a total of 4 units:

- Music 12A, 12B (Symphonic Band) 1 unit
- Music 14A, 14B (Jazz Lab) 1 unit
- Music 15A, 15B (Jazz Band) 1 unit
- Music 44 (Concert Choir) 1 1/2–2 1/2 units
- Music 45 (Chamber Choir) 1 1/2–2 1/2 units

Total 30

General Education Course

For specific General Education courses refer to catalog section on Graduation Requirements.

Total minimum units required 60

All music majors will be expected to pass a piano proficiency examination. Consult the Arts and Humanities Division Office for specific requirements.

MUSIC

LITERATURE, THEORY AND MUSICIANSHIP (MUSL)

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. May be offered in Distance Education delivery format. 3 hours. Transfer: CSU, UC; CSU/GE: C1; IGETC: Area 3; AA/AS.

2A HARMONY AND MUSICIANSHIP I 5 UNITS

Elements of diatonic harmony through part writing and ear training exercises as typical by musical practice from 1600 to the present. Includes keys, modes, scales, tonality, intervals, solfeggio, consonance/dissonance, rhythmic organization, chord structures, 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

figures bass realization. Strongly recommended: Music 6 or equivalent skills. 5 hours. Transfer: CSU, UC.

2B HARMONY AND MUSICIANSHIP II **5 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 2A (*completed with a grade of "C" or higher*). 5 hours. Transfer: CSU, UC.

2C HARMONY AND MUSICIANSHIP III **5 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 2B (*completed with a grade of "C" or higher*). 5 hours. Transfer: CSU, UC.

2D HARMONY AND MUSICIANSHIP IV **5 UNITS**

Continues chromatic harmony through part writing and ear training exercises as typified by musical practice from 1600 to the present. Further study in solfeggio; melodic, rhythmic, and choral dictation; chromatic four-part voice leading; figured bass realization; and chord succession and progression techniques. Introduces secondary dominantes; diatonic modulation extend chords; Neapolitan, augmented sixth, augmented, and altered dominant chords; chromatic embellishing chords; and chromaticism in larger contexts. Prerequisite: Music 2C (*completed with a grade of "C" or higher*). 5 hours. Transfer: CSU, UC.

3 WORLD MUSIC **3 UNITS**

The study of the folk and art music of world cultures. Includes the traditional music of Sub-Saharan Africa, Middle East, China, Japan, Indonesia, India, Latin America, Europe, and Native America. Attendance at four concerts in the San Francisco Bay Area required. Strongly recommended: Music I or Music 6 or comparable music knowledge. Offered in Distance Education format only. 3 hours. Transfer: CSU; CSU/GE: C1; AA/AS.

4 JAZZ STYLES **3 UNITS**

History, trends, and influences of the phenomenon of jazz beginning with preDixieland early 1900's covering the various eras including Swing, Be-Bop and post Be-Bop to present day. 3 hours. Transfer: CSU, UC; CSU/GE: C1; AA/AS.

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. Transfer: CSU, UC.

6 BASIC MUSIC SKILLS **2 UNITS**

Essentials of music through notation, time elements, melody, harmony, and tonality, texture, dynamics and knowledge of the keyboard. Sight singing and ear training. 2 hours. Transfer: CSU, UC; CSU/GE: C1.

7 ELECTRONIC MUSIC **2 UNITS**

(May be repeated 1 time.)

Electronic music production techniques and performance practices; survey of electronic instruments and their development; fundamentals of acoustics and synthesizer programming, digital control, and recording. Prerequisite: Music 6* (*completed with a grade of "C" or higher*). 2 hours lecture, 1 hour laboratory. Transfer: CSU, UC.

11A INTRODUCTION TO JAZZ IMPROVISATION **2 UNITS**

Major scales, chord construction, and development of melodic lines used in contemporary styles of Jazz Improvisation. Jazz literature for small groups of the post Bop era. Corequisite: Music 12, 14, 15, or 45*. 3 hours. Transfer: CSU, UC.

11B JAZZ IMPROVISATION AND ARRANGING FOR SMALL GROUPS **2 UNITS**

(May be repeated 2 times.)

Exotic scales, altered chord construction, and development of modal and intervallic concepts used in avant garde jazz improvisation. Techniques used in composing and arranging for the small Jazz Combo. Musical scores written by professional composers and arrangers. Prerequisite: Music 11A (*completed with a grade of "C" or higher*). 3 hours. Transfer: CSU, UC.

MUSIC

PERFORMANCE (MUSP)

12A SYMPHONIC BAND I **1 UNIT**

(May be repeated 3 times.)

Band repertoire of all styles and periods. Emphasis on group participation and public performance. Attendance at all scheduled performances required. Enrollment subject to a standardized audition demonstrating musical ability and technical proficiency at a level suitable to the course level. 4 hours laboratory. Transfer: CSU, UC; CSU/GE: C1; AA/AS.

12B SYMPHONIC BAND II **1 UNIT**

(May be repeated 3 times.)

For continuing instrumentalists who want experience in performing and interpreting concert band literature. The music literature will cover all important aspects of the wind band development including original band works, transcriptions, marches and large works of all styles and periods. Emphasis will be on articulations, stylistic differences, and common performance practices of the various periods of music. Enrollment subject to a standardized audition demonstrating musical ability and technical proficiency at a level suitable to the course level. Prerequisite: Music 12A (*completed with a grade of "C" or higher*) or equivalent. 4 hours laboratory. Transfer: CSU, UC; CSU/GE: C1; AA/AS.

13A WIND SYMPHONY I **1 UNIT**

(May be repeated 3 times.)

Select and limited ensemble designed for advanced musicians seeking continued study in advanced band repertoire from all periods. Enrollment subject to a standardized audition demonstrating musical ability and technical proficiency at a level suitable to the course level. 4 hours laboratory.

13B WIND SYMPHONY II **1 UNIT**

(May be repeated 3 times.)

For continuing advanced musicians who want experience in performing and interpreting wind band literature. The music literature will cover all important aspects wind ensemble development including original band works, transcriptions, marches and large works of all styles and periods. Emphasis will also be on articulations, stylistic differences, and common performance practices of the different eras of music. Enrollment subject to a standardized audition demonstrating musical ability and technical proficiency at a level suitable to the course level. Prerequisite: Music 13A (*completed with a grade of "C" or higher*) or equivalent. 4 hours laboratory.

13C WIND SYMPHONY III **1 UNIT**

(May be repeated 3 times.)

For continued development of advanced instrumentalists who seek a learning laboratory in which direct application of instrumental technique is acquired. Student learning goals and objectives include the preparation and performance of wind repertoire and the continued development of technical skills. Enrollment subject to a standardized audition demonstrat-

ing musical ability and technical proficiency at a level suitable to the course level. Prerequisite: Music 13B (*completed with a grade of "C" or higher*) or equivalent. 4 hours laboratory.

14A JAZZ LAB I **1 UNIT**

(*May be repeated 3 times.*)

Reading, preparation and performance of contemporary jazz music. Opportunity to apply improvisation techniques in a small group setting. Enrollment subject to a standardized audition demonstrating musical ability and technical proficiency at a level suitable to the course level. Enrollment by audition only. 4 hours laboratory. Transfer: CSU, UC; AA/AS.

14B JAZZ LAB II **1 UNIT**

(*May be repeated 3 times.*)

For continuing instrumentalists who want experience in performing and interpreting small group literature. The music literature will cover important aspects of Jazz band development and works of all styles and periods. Emphasis will be on articulations, stylistic differences, and common performance practices of the various periods of music. Enrollment by audition only. Prerequisite: Music 14A (*completed with a grade of "C" or higher*) or equivalent. 4 hours laboratory. Transfer: CSU, UC; AA/AS.

15A JAZZ BAND I **1 UNIT**

(*May be repeated 3 times.*)

Reading, preparation and performance of contemporary jazz music arranged for standard Big Band. The band plays various concerts and festivals. Students develop ability to play various jazz styles, sight read, improvise, and play both as members of a section and as soloists. Enrollment by audition only. 4 hours laboratory. Transfer: CSU, UC.

15B JAZZ BAND II **1 UNIT**

(*May be repeated 3 times.*)

For continuing instrumentalists who want experience in performing and interpreting standard Big Band literature. Students develop ability to play various jazz styles, sight read, improvise, and play both as members of a section and as soloists. Enrollment by audition only. Prerequisite: Music 15A (*completed with a grade of "C" or higher*) or equivalent. 4 hours laboratory. Transfer: CSU, UC.

16A JAZZ ENSEMBLE I **1 UNIT**

(*May be repeated 3 times.*)

Jazz Ensemble I is a performance organization that rehearses and performs a variety of contemporary jazz literature. Students develop ability to play various jazz styles, sight read, improvise, and play both as members of a section and as soloists. The band plays various concerts and festivals. Opportunities to rehearse the ensemble as well as conduct. Enrollment by audition only. 4 hours laboratory.

16B JAZZ ENSEMBLE II **1 UNIT**

(*May be repeated 3 times.*)

Jazz Ensemble II is a performance organization that rehearses and performs a variety of contemporary jazz literature. Students develop ability to play various jazz styles, sight read, improvise, and play both as members of a section and as soloists. The band plays various concerts and festivals. Opportunities to arrange and compose for the band as well as to conduct. Enrollment by audition only. Prerequisite: Music 16A (*completed with a grade of "C" or higher*) or equivalent. 4 hours laboratory.

17 BRASS ENSEMBLE **1 UNIT**

(*May be repeated 3 times*)

Literature for brass ensemble. Emphasis on rehearsal and performance. Strongly recommended: Music 6. 2 hours. Transfer: UC.

18 PERCUSSION ENSEMBLE **1 UNIT**

(*May be repeated 3 times*)

Literature for percussion ensemble. Emphasis on rehearsal and performance. Strongly recommended: Music 6. 2 hours. Transfer: CSU, UC.

19 STEEL DRUM BAND **1 UNIT**

(*May be repeated 3 times*)

Music from the Caribbean played on steel drums. Emphasis on rehearsal and performance. Strongly recommended: Music 6. 2 hours. Transfer: CSU, UC.

43 VOCAL ENSEMBLE **1 UNIT**

(*May be repeated 3 times*)

Instruction for the advanced singer; an opportunity to explore and perform vocal chamber music. 2 hours. Transfer: CSU, UC.

44 CONCERT CHOIR **1½–2½ UNITS**

(*May be repeated 3 times*)

Development of vocal and musical ability to interpret and perform the highest calibre of choral literature. 3–5 hours. Transfer: CSU, UC; CSU/GE: C1; AA/AS.

45 CHAMBER CHOIR **½–2½ UNITS**

(*May be repeated 3 times*)

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. Transfer: CSU, UC; CSU/GE: C1; AA/AS.

46 JAZZ CHOIR **2 UNITS**

(*May be repeated 3 times*)

Vocal jazz ensemble performing. Emphasis on developing and performing a variety of vocal jazz. 4 hours. Transfer: CSU, UC.

47 COLLEGE PRODUCTIONS—MUSIC **1–5 UNITS**

(*May be repeated 3 times*)

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. Transfer: CSU, UC.

50 COLLEGIATE CHORALE **1 UNIT**

(*May be repeated 3 times*)

Study and performance ensemble. Development of vocal and musical ability to interpret and perform choral literature. 3 hours laboratory. Transfer: CSU.

MUSIC APPLIED (MUSA)

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: CSU, UC.

21A PIANO I **1 UNIT**

(*May be repeated 3 times*)

Beginning piano. Contemporary and classic approaches to playing piano using basic scales, chords and music notation. Prerequisite: Music 6 (*completed with a grade of "C" or higher*) or equivalent. 4 hours laboratory. Transfer: CSU, UC.

- 21B PIANO II** 1 UNIT
(May be repeated 3 times)
Development of skills in piano performance, notation, literature. Emphasis on further development of technique and performance. Prerequisite: Music 21A (completed with a grade of "C" or higher) or equivalent. 4 hours laboratory. Transfer: CSU, UC.
- 22A JAZZ PIANO I** 1 UNIT
Voicings, chords, and guidelines for improvisation in the contemporary styles of the jazz pianist. Post bop era, through modern to avant garde piano playing in the jazz idiom. Strongly recommended, Music 6. 4 hours laboratory. Transfer: CSU, UC.
- 22B JAZZ PIANO II** 1 UNIT
(May be repeated 3 times)
Development of skills in jazz piano performance, notation, literature. Emphasis on further development of technique and performance. Prerequisite: Music 22A (completed with a grade of "C" or higher) or equivalent. 4 hours laboratory. Transfer: CSU, UC.
- 23A VOICE I** 1 UNIT
(May be repeated 3 times)
Group singing with emphasis on solo performance, tone production, breathing, diction, sight singing and interpretation of vocal literature. Strongly recommended: Music 6. 4 hours laboratory. Transfer: CSU, UC.
- 23B VOICE II** 1 UNIT
(May be repeated 3 times)
Development of skills in vocal performance, notation, literature. Emphasis on further development of technique and performance. Prerequisite: Music 23A (completed with a grade of "C" or higher). 4 hours laboratory. Transfer: CSU, UC.
- 30 STUDY OF GUITAR** 1 UNIT
(May be repeated 3 times)
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). 2 hours. Transfer: CSU, UC.
- 31 STUDY OF PIANO** 1 UNIT
(May be repeated 3 times)
Development of advanced knowledge and performing skills at the piano. Required of piano majors and minors. Prerequisite: Music 21B completed with a grade of "C" or higher, or equivalent. 2 hours. Transfer: CSU, UC.
- 32 STUDY OF JAZZ PIANO** 2 UNITS
(May be repeated 3 times)
Techniques, patterns, and modal concepts used by avant-garde jazz performers in the field today. Includes "comping" techniques in jazz and Latin jazz performance. Development of self-style through in-depth research of modern jazz performers and literature of same. Designed for knowledge and skill of intermediate or advanced level. Prerequisite: Music 22 (completed with a grade of "C" or higher). 3 hours. Transfer: CSU, UC.
- 33 STUDY OF VOICE** 1 UNIT
(May be repeated 3 times)
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). 2 hours. Transfer: CSU, UC.

- 34 STUDY OF WOODWINDS** 1 UNIT
(May be repeated 3 times)
Designed to improve the technical facility, musicianship and performance level of the woodwind instrumentalist. Required of woodwind majors and minors. Strongly recommended: Music 6. 2 hours. Transfer: CSU, UC.
- 35 STUDY OF BRASS** 1 UNIT
(May be repeated 3 times)
Designed to improve the technical facility, musicianship and performance level of the brass instrumentalist. Required of brass majors and minors. Strongly recommended: Music 6. 2 hours. Transfer: CSU, UC.
- 36 STUDY OF STRINGS** 1 UNIT
(May be repeated 3 times)
Designed to improve the technical facility, musicianship and performance level of the string instrumentalist. Required of string majors and minors. Strongly recommended: Music 6. 2 hours. Transfer: CSU, UC.
- 37 STUDY OF PERCUSSION** 1 UNIT
(May be repeated 3 times)
Designed to improve the technical facility, musicianship and performance level of the percussion instrumentalist. Required of percussion majors and minors. Strongly recommended: Music 6. 2 hours. Transfer: CSU, UC.
- 38 INDIVIDUAL STUDY** 1 UNIT
(May be repeated 3 times)
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: CSU, UC.

NURSING (NURS)

DEGREE:

AA–NURSING

AA–NURSING PROGRAM FOR LVN

The Nursing Program is approved by the California Board of Registered Nursing. An accelerated program has offered Licensed Vocational Nurses admission into the 2nd year of the major. Upon completion of the major, students are eligible for the Registered Nurse License Examination. The program prepares graduates who can contribute to the advancement of nursing science and influence changes in a variety of settings within the health care system. The graduate possesses a repertoire of knowledge, skills, and attributes that serve as the foundation for safe, competent practice and lifelong learning.

NURSING

ASSOCIATE IN ARTS DEGREE

This program in nursing is approved by the California Board of Registered Nursing. Completion of this program qualifies the student to take the National Council Licensing Examination for Registered Nursing (NCLEX).

FRESHMAN YEAR **FALL** **SPRING**

Nursing 55 (Fundamentals of Nursing Practice)	8½
Nursing 56 (Essentials of Human Growth and Development)	½
Nursing 57 (Legal-Ethical Issues in Nursing)	½
Nursing 61 (Clinical Nutrition)	1½
Nursing 59* (Nursing Care of the Childbearing Family)	8½
Nursing 64 (Pharmalogical Basis of Therapeutics)	2½
Nursing 69 (Gerontological Nursing)	1
Nursing 74 (Nursing Care Plans)	1
Nursing 75 (Fluids and Electrolytes)	1
Nursing 58 (Nursing Care for Patients with Infectious Blood-Borne Diseases)	½

SOPHOMORE YEAR **FALL** **SPRING**

Nursing 60A* (Adult Health I: Biopsychosocial: Perspectives in the Care of the Adult Client in the Hospital and the Community)	8½
Nursing 60B (Adult Health II)	6
Nursing 60C (Adult Health III)	3½
Nursing 66 (Advanced Clinical Topics)	½
Nursing 73* (Intravenous Therapy)	1
Sociology**	3
Physiology 2 (Pathophysiology)	3
Physiology 2L (Physical Assessments)	½-1
Speech 1 (Fundamentals of Speech Communication) or Speech 30+ (Elements of Speech)	3
Total	54½

General Education Courses

For specific General Education courses refer to catalog section on Graduation Requirements.

Total minimum units required 60*

*Offered each semester

**Nursing major Sociology may be selected from Sociology 1 or 31 + must be completed by the end of the third semester. Before second year clinical sequence, Psychology 1 or 50 (3 units) and Nursing 64 (21/2 units) must be completed.

To progress in the Nursing Program and to graduate from the program, students must earn a minimum grade of “C” in each course of the nursing major.

California Board of Registered Nursing Requirements for licensure: 72 units including 45 units in nursing.

SPECIAL APPLICATION REQUIRED:

Prerequisites for admission to this program include: (1) completion of special application; (2) 2.7 overall college grade point average; (3) completion of Human Anatomy 1, Human Physiology 1, and Microbiology 1 (each of which includes a lab). Student must have received a “B” or higher in at least one of the science prerequisites and a “C” or higher in the remaining two.

Students who have completed two of the three prerequisite science courses prior to January 1 may submit an application prior to February 1. However, the following stipulations are in effect:

- a. Evidence of current enrollment in the third prerequisite science course must be submitted with the application;
- b. The third course must be verified as having been completed by the end of Spring Semester with a grade of “C” or higher and must meet the grade criteria for acceptance into the nursing program as outlined in item 3 of **prerequisites**. Selection of students is made by random selection of those who are qualified and is limited to the number of spaces available in the program.

Advanced standing status may be granted to students who have previously completed any portion of the defined nursing curriculum or its equivalent as determined by the Counselor/Coordinator for Applied Health or the Nursing Program Coordinator.

GRADUATES OF THIS PROGRAM RECEIVE AN ASSOCIATE IN ARTS DEGREE IN NURSING, AND ARE ELIGIBLE TO TAKE THE NATIONAL COUNCIL LICENSING EXAMINATION FOR REGISTERED NURSING (NCLEX-RN) IN ALL FIFTY STATES.

Note: The Board of Registered Nursing requirements supersede catalog rights for graduation.

**REGISTERED NURSING
PROGRAM FOR LICENSED
VOCATIONAL NURSING
ASSOCIATE IN ARTS DEGREE**

THIRTY UNIT OPTION FOR LVNS WHO ENTER IN THE SECOND YEAR.

LVNs who enter into the second year of the nursing program are eligible for the 30 unit option. This option is offered and accepted only in the State of California. GRADUATES OF THIS PROGRAM ARE ELIGIBLE TO TAKE THE NATIONAL COUNCIL LICENSING EXAMINATION FOR REGISTERED NURSING (NCLEX-RN) IN THE STATE OF CALIFORNIA. Please see the Nursing Program Coordinator regarding this option.

This program meets the requirements of Section 2736.6 of the Nurse Practice Act and Section 1429 of the Regulations.

Open only to Licensed Vocational Nurses holding a current California license as an LVN.

The program of study listed below is required for the LVN choosing the 30 unit Option at Chabot College.

CORE COURSES	UNITS
Microbiology I (Microbiology)	5
Physiology I (Human Physiology)	5
Nursing 70 (Nursing Theory: LVN-RN Transitions)	1½

The above courses must be completed before enrolling in the clinical sequence, as well as theoretical and clinical validation.

SOPHOMORE YEAR **FALL** **SPRING**

Nursing 62X (Psychiatric Nursing)	4
Nursing 69 (Gerontological Nursing)	1
Physiology 2 (Pathophysiology)	3
Physiology 2L (Physical Assessments)	½-1
Nursing 60B (Adult Health II)	6
Nursing 60C (Adult Health III)	3½
Nursing 66 (Advanced Clinical Topics)	½
Total	30-30½

General Education Courses

For specific General Education courses refer to catalog section on Graduation Requirements.

Total minimum units required 60

Prerequisites for admission to the program include:

- (1) Completion of special application
- (2) Validation of previous nursing knowledge is required for counseling/assessment purposes.

For A.A. degree in Nursing, general education requirements and specific requirements in Psychology, Sociology, Speech, Anatomy and English must also be completed to a combined total of at least 60 semester units.

Advanced standing status is granted to students who have previously completed any portion of the defined nursing curriculum or its equivalent as determined by the Health Sciences Counselor Coordinator or the Nursing Program Director.

Note: The Board of Registered Nursing requirements override the Chabot College requirements for graduation as stated in the Chabot College catalog.

NURSING (NURS)

50 FUNDAMENTALS OF NURSING PRACTICE: REVIEW 5 UNITS

Introduction to fundamental concepts and practices in nursing care across the life span with emphasis on later-life issues. Application of the nursing process to the care of adult clients with the following chronic disorders: hypertension, cancer, diabetes mellitus, coronary artery disease, and cerebrovascular accidents. Beginning nursing skills include: principles of medical asepsis, body mechanics, standard precautions, hygienic and nutritional care, and administration of medications. Theoretical content provides information on the care of clients with diverse cultural backgrounds and spiritual needs as well as principles of therapeutic communication and mental health. Prerequisite: Formal referral by the California Board of Registered Nursing for the purpose of meeting requirements for eligibility to take the licensing examination for registered nursing (NCLEX-RN) or possession of a valid California LVN license, or inactive California registered nursing license, or transfer from another nursing program who has completed the equivalent of Nursing 55 with a C or better. May not receive credit if Nursing 55 has been completed with a "C" or better. 4 hours lecture, 2 hours laboratory.

51 NURSING OF THE CHILDBEARING FAMILY (OBSTETRICAL NURSING) 4 UNITS

Emphasis placed on the use of the nursing process in promoting adaptive processes necessary for coping with the health issues of the childbearing family; theory and clinical highlight the coping mechanisms for childbearing families. Focus is on cultural diversity and growth and development as they affect the physiological and psychological adaptation of families experiencing pregnancy, labor and birth, postpartum, and the newborn infant. Theory and clinical practice includes integration of assessment skills, growth and development, violence against women, nutrition, pharmacological concepts, ethical issues, and teaching strategies unique to childbearing families. Clinical focuses on care of clients in community and acute care settings. Prerequisite: Formal referral by the California Board of Registered Nursing for the purpose of meeting requirements for eligibility to take the licensing examination for registered nursing (NCLEX-RN). May not receive credit if Nursing 59 has been completed. 2 hours lecture, 6.75 hours laboratory.

52 NURSING OF THE CHILDBEARING FAMILY (PEDIATRICS NURSING) 4 UNITS

Emphasis placed on the use of the nursing process in promoting adaptive processes necessary for coping with the health issues of the childbearing family; theory and clinical highlight the coping mechanisms for childbearing families. Focus on cultural diversity and growth and development as they affect the physiological and psychological adaptation of families experiencing common health issues and problems of infants, children and adolescents. Theory and clinical practice includes integration of assessment skills, growth and development, family abuse issues, nutrition, pharmacological concepts, ethical issues, and teaching strategies unique to childbearing families. Clinical focuses on care of clients in community and acute care settings. Prerequisite: Formal referral by the California Board of Registered Nursing for the purpose of meeting the requirements for eligibility to take the licensing examination for registered nursing (NCLEX-RN). May not receive credit if Nursing 59 has been completed. 2 hours lecture, 6.75 hours clinical.

53 PSYCHIATRIC NURSING 4 UNITS

Emphasis is on the application of the nursing process in the care of adults experiencing selected conditions requiring treatment in psychiatric care settings. Theory and clinical practice highlight the role of the nurse as a therapeutic agent (in both individual and group settings) in facilitating the client's mind/body adaptation and return to as healthy a state as is possible. Effects on cultural diversity, growth and development, and the importance of support systems in assisting the patient's response to illness in acute and community care agencies incorporated into health care strategies used by the nurse. Theory and clinical practice includes integration of biopsychosocial assessment skills, nutrition, pharmacological and crisis intervention concepts, legal-ethical issues, and anger management (directed inward or towards the environment) into the care of these patients. Prerequisites: Nursing 70 (completed with a grade of C or higher) or formal referral by the California Board of Registered Nursing for the purpose of meeting requirements for eligibility to take the licensing examination for registered nursing (NCLEX-RN). May not receive credit if Nursing 60A has been completed. 2 hours lecture, 6.75 hours laboratory.

54 CLINICAL TOPICS ½ UNIT

Study of selected clinical topics and associated nursing process related to nursing practice. Prerequisite: Completion of Nursing 59 or Nursing 60A (or the equivalent) with a "C" or better, or possession of a valid California LVN or RN license. 9 hours lecture.

55 FUNDAMENTALS OF NURSING PRACTICE 8½ UNITS

Introduction to fundamental concepts and practices in nursing care across the life span with emphasis on later-life issues. Application of the nursing process to the care of adult clients with the following chronic disorders: Hypertension, Cancer, Diabetes Mellitus, Coronary Artery Disease, Cerebrovascular Accidents and Congestive Heart Failure. Beginning nursing skills include: principles of medical asepsis, body mechanics, standard precautions, hygienic and nutritional care, and administration of medications and beginning IV skills. Theoretical content provides overview of the care of clients with diverse cultural backgrounds and spiritual needs as well as principles of therapeutic communication and mental health. Prerequisite: Acceptance into the Nursing Program. Theory may be offered in Distance Education delivery format. 4 hours lecture, 13½ hours clinical practice. Transfer: CSU.

56 ESSENTIALS OF NURSING CARE RELATED TO HUMAN GROWTH AND DEVELOPMENT ½ UNIT

Overview of human growth and development from infancy to late adulthood with continuation throughout the nursing program. Prerequisite: Acceptance into the Nursing Program, or concurrent enrollment in another nursing program, or with consent of instructor. May be offered in Distance Education delivery format. 1 hour. Total weeks: 9. Transfer: CSU.

57 LEGAL-ETHICAL ISSUES IN NURSING ½ UNIT

Basic distinctions between law and ethics as they impact the nurse, with special attention to the California Nursing Practice Act and the law of negligence in professional malpractice; emphasis on standards of care, client rights, informed consent, and charting. Prerequisite: Acceptance into the Nursing Program, or concurrent enrollment in another nursing program, or if taken for Continuing Education, valid California RN or LVN license. May be offered in Distance Education delivery format. 1 hour. Total weeks: 9. Transfer: CSU.

58 NURSING CARE FOR PATIENTS WITH BLOOD-BORNE INFECTIOUS DISEASE ½ UNIT

Emphasis is on the use of the nursing process in the care of clients with HIV, Hepatitis B and C, including pathophysiology, psychosocial and pharmacological issues, and preventive measures. The significance of specific nursing care measures, therapeutic health care giver attitudes and behaviors, and community resources available for caregivers and patients will be

included. Prerequisites: Completion of Nursing 55, 56, 61, 69, 74, with a "C" or better. Satisfactory completion of or concurrent enrollment in Nursing 57, 64, and 75, or consent of instructor. May be offered in Distance Education delivery format. Lecture: 9 hours; Total weeks: 9. Transfer: CSU.

59 NURSING CARE OF THE CHILDBEARING FAMILY

8½ UNITS

Emphasis is placed on the use of the nursing process in promoting adaptive processes necessary for coping with family health issues; theory and clinical highlight the coping mechanisms for childbearing and childbearing families. The focus is on cultural diversity and growth and development as they affect the physiological and psychological adaptation of families experiencing pregnancy, labor and birth, postpartum, newborn, and common health issues and problems of infants, children, and adolescents. Theory and clinical practice includes integration of assessment skills, growth and development, family abuse issues, nutrition, pharmacological concepts, ethical issues, and teaching strategies unique to childbearing and childbearing families. Clinical focuses on care of clients in community and acute care settings. Prerequisites: Completion of Nursing 55, 56, 61, 69, 74, with a "C" or better. Satisfactory completion of or concurrent enrollment in Nursing 57, 58, 64 and 75. Theory may be offered in Distance Education delivery format. 4 hours lecture; 13½ hours/week clinical.

60A ADULT HEALTH 1—BIOPSYCHOSOCIAL PERSPECTIVES IN THE CARE OF THE ADULT CLIENT IN THE HOSPITAL AND THE COMMUNITY

8½ UNITS

Emphasis is on the use of the nursing process in the care of adults experiencing selected conditions requiring treatment in medical-surgical and psychiatric care settings. Theory and clinical practice highlight the role of the nurse as a therapeutic agent (in both individual and group settings) in facilitating the client's mind/body adaptation and return to as healthy a state as is possible. Effects on cultural diversity, growth and development, and the importance of support systems in assisting the patient's response to illness in acute and community care agencies incorporated into health care strategies used by the nurse. Theory and clinical practice includes integration of biopsychosocial assessment skills, nutrition, pharmacological and crisis intervention concepts, legal-ethical issues, and anger management (directed inward or towards the environment) into the care of these patients. Prerequisites: Completion of Nursing 55, 56, 61, 69, 74, with a "C" or better. Satisfactory completion of or concurrent enrollment in Nursing 57, 58, 64, 75. Theory may be offered in Distance Education delivery format. 4 hours lecture; 13 hours clinical. Transfer: CSU.

60B ADULT HEALTH II

6 UNITS

Nursing interventions that assist the adult client in adaptation to stressors of acute and chronic illnesses with unpredictable outcomes. Focus on caring for groups of clients in the medical-surgical setting. Prerequisites: Physiology 2, Physiology 2L, Nursing 60A, and all prior nursing courses in the Associate Degree Nursing program (all completed with a grade of C or higher). Theory may be offered in Distance Education delivery format. 4 hours lecture, 15½ hours clinical practice. Total weeks—12. Transfer: CSU.

60C ADULT HEALTH III

3½ UNITS

Transitional skills needed by the nursing student who is completing the nursing program. Includes skills that facilitate entry into today's nursing practice arena: leadership styles, delivery of nursing care to groups of clients in the acute and chronic health care setting, supervision of unlicensed assistive personnel, case management, delegation of assignments, prioritization of client care, and the health care organization. Prerequisites: Physiology 2, Physiology 2L, (or equivalent) and all required nursing courses (or equivalent) in semesters one through three, and concurrent or prior enrollment in Nursing 73 (completed with a grade of CR, C or higher). Theory may be offered in Distance Education delivery format. 2 hours lecture, 24 hours/week clinical. Total weeks—6. Transfer: CSU.

61 CLINICAL NUTRITION

1½ UNITS

Introduction to principles of clinical nutrition. Assessment of nutritional status; application of nutritional principles across the life span in the hospital and community; diet therapy in the treatment of selected diseases; nutritional supplements; weight gain and weight loss; impact of culture and spiritual beliefs on diet. Corequisite: nursing 55, 69, 74 (or satisfactory completion of equivalent). May be offered in Distance Education delivery format. 1½ hours. Transfer: CSU.

64 PHARMACOLOGICAL BASIS OF THERAPEUTICS

2½ UNITS

Introduction to the principles of drug therapy, clinical pharmacology, and toxicology; therapeutic agents and dosage forms in current use with the application of the nursing process. Prerequisites: Completion of Nursing 55, 56, 61, 69 and 74, (or the equivalent) with a "C" or higher. Satisfactory completion of or concurrent enrollment in Nursing 57, 58, 64, and 75 or possession of a valid California LVN license. May be offered in Distance Education delivery format. 2½ hours. Transfer: CSU.

66 ADVANCED CLINICAL TOPICS

½ UNIT

Introduction to advanced clinical topics confronting the registered nurse in today's health care setting. Prerequisite: Satisfactory completion of Physiology 2 and 2L (or equivalent) and all required nursing courses (or equivalent) in semesters one through three, and concurrent or prior enrollment in Nursing 60B and Nursing 73 (both completed with a grade of "C" or "CR" or better). May be offered in Distance Education delivery format. (1½ hour, 6 weeks. Transfer: CSU

69 GERONTOLOGICAL NURSING

1 UNIT

Nursing care of the aging client. Physical and psychosocial changes which occur with the aging process. Focus on successful adaptation to aging with emphasis on maintaining or regaining optimal health. Strategies for caring for the client who is coping with altered life styles as a result of problems associated with aging. Theories of aging and cultural influences on the aging process. Corequisite: Nursing 55 and 61 or 71 or possession of valid California LVN license. May be offered in Distance Education delivery format. 1 hour. Transfer: CSU.

70 NURSING THEORY: LVN-RN TRANSITIONS

1½ UNITS

A review of nursing topics for the LVN who wishes to upgrade to Registered Nurse. Includes the nursing care plan used in Chabot College's nursing program with clinical applications of the modified Roy Adaptation Model to the steps of the nursing process, principles of therapeutic communication, introduction to the functions of the Board of Registered Nursing, legal-ethical concepts common to the role of the registered nurse, and review of selected psychomotor skills utilized by the nurse in the delivery of health care. Prerequisite: Valid California LVN license and completion of Physiology 1 and Microbiology 1 with a grade of "C" or higher. May be offered in Distance Education delivery format. 1½ hours laboratory. Transfer: CSU.

72 WORK-STUDY CLINICAL PRACTICUM

2–6 UNITS

Application of theory and nursing skills in the health care setting, under the supervision of a licensed registered nurse and nursing faculty member while being employed by a cooperating hospital. The student will perform nursing skills mastered in previous nursing program courses, under the supervision of the staff registered nurse mentor/facilitator. Additional clinical practice in: communicating with the client, family and health care team; developing time management skills with a group of clients; prioritizing problems; and developing and implementing nursing care plans. Course will be conducted in a cooperative work environment in which the student, the registered nurse mentor/preceptor and the nurse faculty member collaborate to enhance the student's experience, while promoting quality client care. Prerequisites: Completion of Nursing 55, with a "C" or better. Satisfactory completion of or concurrent enrollment in Nursing 59 or 60A. 1½ to 6 hours laboratory

73 INTRAVENOUS THERAPY**1 UNIT**

Safe administration and maintenance of intravenous therapy as a treatment modality. Includes differentiation of commonly used solutions, dosage calculation, vein selection and venipuncture techniques, recognition of and response to complications. Includes laboratory practice. Prerequisite: concurrent enrollment in the nursing program with eligibility for third or fourth semester of nursing curriculum or a valid LVN license. May be offered in Distance Education delivery format. 1 hour. Transfer: CSU.

74 THE NURSING CARE PLAN**1 UNIT**

Introduction to the components of the nursing process: assessment, nursing diagnosis, planning, implementation, and evaluation with clinical applications of Roy's adaptation framework for nursing as modified by Chabot College nursing facility. Prerequisite: concurrent enrollment in nursing program. May be offered in Distance Education delivery format. 2 hours, 9 weeks. Transfer: CSU.

75 FLUID AND ELECTROLYTES**1 UNIT**

Introduction to principles of fluid and electrolyte balance. Assessment and treatment of imbalances; parenteral therapy; acid-base balance; interpretation and application of laboratory results. Prerequisite: All nursing courses in the first semester of the nursing curriculum (or equivalent) completed with a grade of "C" or higher and concurrent enrollment in Nursing 57, 58 and 59 (or 60A) and 64 or possession of valid California RN or LVN license. May be offered in Distance Education delivery format. 1 hour lecture.

80 CRITICAL THINKING AND TEST TAKING FOR NURSING**½ UNIT**

Preparation for National Council Licensing Exam for Registered Nursing (NCLEX-RN). Strategies for successful test taking. Practice in taking multiple-choice tests with time limits. Application of critical thinking and problem solving techniques in clinical situations. Prerequisites: completion of first year in Nursing Program with a grade point average of "C" or better, and concurrent enrollment in the Nursing program. 9 hours lecture.

NUTRITION (NUTR)**1 NUTRITION****3 UNITS**

Basics of nutrition, including nutrients, nutritional needs, digestion/absorption, and the role of nutrition in the maintenance of health. Designed to meet the necessary nutrition requirements for majors in the fields of allied health. Strongly recommended: Chemistry 30A (*completed with a grade of "C" or higher*). 3 hours. Transfer: CSU, UC; (CAN FCS 2).

57 NUTRITION FOR FITNESS AND FAT LOSS**3 UNITS**

(See also *Physical Education 57*)

Study the role that nutrition and activity play in developing fitness and lowering body fat. Major concepts of fitness and nutrition. Assessment of current fitness level, designing a personal fitness and nutritional plan. May be offered in Distance Education delivery format. (May not receive credit if Physical Education 57 has been completed.) 3 hours. Transfer: CSU; CSU/GE:E

58 NUTRITION FOR SPORTS AND HUMAN PERFORMANCE**3 UNITS**

(See also *Physical Education 58*)

An investigation into the role nutrition plays in sports and human achievement. Determination of optimum hydration and nutrient intake in relation to activity. May be offered in Distance Education delivery format. (May not receive credit if Physical Education 58 has been completed.) 3 hours. Transfer: CSU; CSU/GE:E.

OFFICE TECHNOLOGY

(See Computer Application Systems)

PHILOSOPHY (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. Transfer: CSU; CSU/GE: C2; IGETC: Area 3; AA/AS; (CAN PHIL 4)

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. Transfer: CSU, UC; CSU/GE: C2; AA/AS; IGETC: Area 3.

12 LOGIC I**3 UNITS**

(See also *Mathematics 12*)

Introduction to formal deductive logic with emphasis on developing the basic concepts of modern symbolic logic; includes deductive validity, relation of ordinary languages to symbolic logic, distinction between inductive and deductive arguments, relation of truth to validity, uses of truth tables, role of logic in the disciplines of mathematics, philosophy and sciences, rules of inference for propositional logic and first order predicate logic. (May not receive credit if Mathematics 12 has been completed.) 3 hours. Transfer: CSU, UC; CSU/GE: A3; AA/AS; (CAN PHIL 6).

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. Transfer: CSU, UC; CSU/GE: C2; IGETC: Area 3; AA/AS.

50 GOD, NATURE, HUMAN NATURE**3 UNITS**

Nature and range of philosophical inquiry in relation to everyday problems of humans as individuals, as citizen, as existing in nature, and as a creator of works of the arts and of the spirit. Analysis of primary philosophical documents that concentrate on these broad areas of a human's concerns. 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 60, 65, and 70 are also introductory courses and may be taken before Philosophy 50 if a more detailed examination of ethical problems, the theory of knowledge, or political philosophy is desired. (Formerly PHIL 1) 3 hours. Transfer: CSU, UC; GSU/GE: C2; IGETC: Area 3; AA/AS; (CAN PHIL 2).

PHOTOGRAPHY (PHOT)

DEGREE:

AA—PHOTOGRAPHY

CERTIFICATE OF COMPLETION:

PHOTOGRAPHY

This two-year diploma program provides students with a thorough technical knowledge of contemporary photographic applications. Students also become familiar with digital imagery involving scanning and manipulation; and multimedia technology combining sound, text and images.

Time is spent doing practical hands-on work in studios, darkrooms, and computer laboratories. Students gain on-the-job experience working as photographers, photographers' assistants, and electronic imagers.

PHOTOGRAPHY ASSOCIATE IN ARTS DEGREE

FRESHMAN YEAR **FALL** **SPRING**

Art I (Introduction to Art)	3
Art 10 (Design and Material)	3
Photography 50 (Introduction to Photography)	3
Photography 55 (Careers in Photography) or Art 55 (Introduction to Graphic Design Careers)	1–2
Photography 60 (Intermediate Black and White Photography)	3
Photography 61 (Color Materials and Processes)	3

SOPHOMORE YEAR **FALL** **SPRING**

Photography 64A (Artificial Light Photography)	3
Photography 62 (Portfolio Workshop)	3
Photography 66 (Digital Imaging)	3
Any studio art course	3
Total	28–29

General Education Courses

For specific General Education courses refer to catalog section on Graduation Requirements.

Total minimum units required **60**

PHOTOGRAPHY CERTIFICATE OF COMPLETION

CORE COURSES **FALL** **SPRING**

Art 10 (Design and Materials)	3
Photography 50 (Introduction to Photography)	3
Photography 60 (Intermediate Black and White Photography)	3
Photography 61 (Color Materials and Processes)	3
Electives	3
Total	15

PHOTOGRAPHY (PHOT)

31A PHOTOSHOP I **1 ½ UNITS**

(See also Architecture 31A, Art 31A, Interior Design 31A)
Introduction to the use of PhotoShop, the premiere imaging software. Overview of the PhotoShop interface, tools and menus. Projects will focus on using basic tools to compose images. Topics include file management, selections and paths, layers, masks, alpha channels, color management and mapping, digital painting and brushes. Apple Mac platform. May not receive credit if Architecture 31A, Art 31A, or Interior Design 31A has been completed. 1 hour lecture, 2 hours studio. Transfer: CSU.

31B PHOTOSHOP II **1 ½ UNITS**

(See also Architecture 31B, Art 31B, Interior Design 31B)
Continuation of the content and skills introduced in Photography 31A, PhotoShop 1. Topics include advanced layer controls, filters, distortion and effects, drawing path tools, alpha channels, and applying text to images. Color management and Mapping. Printing fundamentals. Prerequisite: Photography 31A (*completed with a grade of "C" or higher*). May not receive credit if Architecture 31B, Art 31B, or Interior Design 31B has been completed. 1 hour lecture, 2 hours studio. Transfer: CSU.

32A ILLUSTRATOR I **1 ½ UNITS**

(See also Architecture 32A, Art 32A, Interior Design 32A)
Introduction to the use of Illustrator, Adobe's powerful vector-based software for digital illustration. Emphasis on the basics of drawing with the shapes, pen and pencil, transformation and liquefy tools. Palettes for the control of layers, colors, patterns and gradients. Methods for the creative application of text to images. May not receive credit if Architecture 32A, Art 32A, or Interior Design 32A has been completed. 1 hour lecture, 2 hours studio. Transfer: CSU.

32B ILLUSTRATOR II **1 ½ UNITS**

(See also Architecture 32B, Art 32B, Interior Design 32B)
Continuation of the content and skills introduced in Photography 32A, Illustrator I. Paintbrush and pattern tools and palettes, gradient mesh tools, creating and modifying clipping masks will be covered. Exploration of the powerful morphing blends and transparency tools use of symbol tools and palettes, filters and effects, and related appearance and styles palettes. Process of importing and manipulating images as elements of digital compositions. Prerequisite: Photography 32A (*completed with a grade of "C" or higher*). May not receive credit if Architecture 32B, Art 32B, or Interior Design 32B has been completed. 1 hour lecture, 2 hours studio. Transfer: CSU.

33 3-D MODELING WITH FORM•Z **3 UNITS**

(See also Architecture 33, Art 33, Interior Design 33)
Introduction to 3-dimensional digital modeling using Form•Z software. Emphasis on learning basic commands to create 3-dimensional objects including building interiors and exteriors, and defining photo-realistic views with appropriate light sources. May not receive credit if Architecture 33, Art 33, or Interior Design 33 has been completed. 2 hours lecture, 4 hours studio. Transfer: CSU.

50 INTRODUCTION TO PHOTOGRAPHY **3 UNITS**

Introduction to photographic processes and light sensitive materials. Camera controls and their use in making pictures. Developing black and white negatives and prints. Print finishing, presentation, and critique. 2 hours lecture, 4 hours laboratory. Transfer: CSU, UC; AA/AS; (CAN ART 18).

51 INDIVIDUAL PROJECTS**1 UNIT***(May be repeated 3 times)*

Individual projects in photography or graphic communications at the intermediate to advanced level. Development of knowledge and skills acquired in previous or current work with emphasis on current projects. Prerequisite: Photography 50 (*completed with a grade of "C" or higher*) and permission of instructor. 4 hours laboratory. Transfer: CSU.

52 BEGINNING CAMERA USE**2 UNITS**

Camera handling techniques, basic exposure principles, camera accessories, photographic composition, and slide presentation. May be offered in Distance Education delivery format. 2 hours. Transfer: CSU.

53A BEGINNING DIGITAL CAMERA USE**1 ½ UNITS**

Camera handling techniques, basic exposure principles, camera accessories, photographic composition. Survey of photography's multiple genres and its changing role in society and culture. 1½ hours.

53B DIGITAL DARKROOM**1 ½ UNITS**

Introduction to darkroom concepts and techniques common to both traditional and digital photography. Digital darkroom components such as CPUs, monitors, scanners, and printers. Digital darkroom techniques including calibration, and output. Survey of photography's multiple genres and its changing role in society and culture. Strongly recommended: Photography 53A. 1 hour lecture, 2 hours laboratory.

55 CAREERS IN PHOTOGRAPHY**1 UNIT**

Opportunities in various areas of photography including commercial, industrial, portraiture, sales, photofinishing; and the investigation of photography as an art form. 1 hour. Transfer: CSU.

60 INTERMEDIATE BLACK AND WHITE PHOTOGRAPHY**3 UNITS***(May be repeated 1 time)*

Using exposure/development controls related to black and white negative materials. Development of competent 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. Transfer: CSU, UC.

61 COLOR MATERIALS AND PROCESSES**3 UNITS***(May be repeated 1 time)*

Understanding theories of exposure, printing, and processing of various color materials. Emphasis on visual problems related to color photography. Prerequisite: Photography 50 (*completed with a grade of "C" or higher*). 2 hours lecture, 4 hours laboratory. Transfer: CSU.

62 PORTFOLIO WORKSHOP**3 UNITS***(May be repeated 3 times)*

Visual and technical problems of assembling a portfolio. Emphasis on individual projects and the production of a finished portfolio of black and white and/or color images. Prerequisite: Photography 50. Strongly recommended: Photography 60 or 61. 2 hours lecture, 4 hours laboratory. Transfer: CSU.

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*). Strongly recommended: Photography 60 and 61. 2 hours lecture, 4 hours studio/laboratory. Transfer: CSU.

64B COMMERCIAL ILLUSTRATION PHOTOGRAPHY**3 UNITS**

Photography as a tool for illustrating ideas and concepts relating to advertising and promotion. Studio and location photography with emphasis on client-photographer relationships. Product and publicity photography; use of medium and large format cameras. Prerequisite: Photography 64A (*completed with a grade of "C" or higher*). 2 hours lecture, 4 hours studio/laboratory. Transfer: CSU.

65 HANDCOLORING, TONING AND BEYOND**3 UNITS***(May be repeated 1 time.)*

Creative explorations of the traditional black and white image. Handcoloring of prints using oils, pencils, and other media. Various toning techniques, including masking for multitone images. Solarization and line breakdown. Consideration of other means of manipulating the conventional print. Prerequisite: Photography 50 or equivalent. 2 hours lecture, 4 hours laboratory.

66 DIGITAL IMAGING**3 UNITS**

Desktop digital imaging systems and software. Overview of computer operating systems, local area networks, and file management. 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. May be offered in Distance Education delivery format. Strongly recommended: Photography 50. 2 hours lecture, 4 hours laboratory. Transfer: CSU.

67 HISTORY OF PHOTOGRAPHY**3 UNITS***(See also Art 67)*

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. May not receive credit if Art 67 has been completed. 3 hours. Transfer: CSU; UC; CSU/GE: CI; IGETC: Area 3; AA/AS.

68 COLOR SLIDE PHOTOGRAPHY**2 UNITS***(May be repeated 3 times)*

Use of color slides to explore the solution of special technical and visual problems encountered in field shooting. Strongly Recommended: Photography 50. 2 hours. Transfer: CSU.

71 BEGINNING PHOTOJOURNALISM**2 UNITS***(See also Mass Communications 71)*

Survey of photojournalism as a medium of mass communications. Understanding and applying basic technical and visual skills in the making of successful reportage photographs. Consideration of the work of major twentieth century photojournalists. Strongly recommended: Photography 50 (*completed with a grade of "C" or higher*) or Mass Communications 14 (*completed with a grade of "C" or higher*) with emphasis in photography. (May not receive credit if Mass Communications 71 has been completed.) 1 hour lecture, 3 hours laboratory. Transfer: CSU.

PHYSICAL EDUCATION (PHED)

DEGREE:

- AA—PHYSICAL EDUCATION**
- AS—PHYSICAL EDUCATION**

CERTIFICATE OF ACHIEVEMENT:

- AQUATICS**
- COACHING**
- FITNESS INSTRUCTOR**
- SPORTS INJURY CARE**

CERTIFICATE OF COMPLETION:

- AQUATICS**
- COACHING**
- FITNESS INSTRUCTOR**
- SPORTS INJURY CARE**

The Physical Education AA degree program is designed for students who want to transfer to a CSU or UC. It provides a rigorous curriculum that will ensure students have met the science and math requirements to enter the CSU and UC Physical Education/Kinesiology and Exercise Physiology Bachelor of Arts programs. The AS degree and certificate programs help prepare students for physical education careers as well as community based programs.

**PHYSICAL EDUCATION
ASSOCIATE IN ARTS DEGREE**

FRESHMAN YEAR **FALL** **SPRING**

- *Physical Education 1, 2, 3
(Physical Education Activity) or
Physical Education 4 (Basic Heart
Rate Training) or Physical Education 6
(Physical Fitness Assessments) 1-2 1-2
- Biology 31 (Introduction to College Biology) 4
- Physical Education 20
(Introduction to Physical Education) 3
- Anatomy I (General Human Anatomy) 4
- Physical Education 17
(Introduction to Athletic Training) 4

SOPHOMORE YEAR **FALL** **SPRING**

- *Physical Education 1, 2, 3
(Physical Education Activity) or
Physical Education 4 (Basic Heart
Rate Training) or Physical Education 6
(Physical Fitness Assessments) 1-2 1-2
- Chemistry 30A
(Introduction & Applied Chemistry) 4
- Physiology I (Human Physiology) 5
- Physical Education 8
(Sport in Contemporary Society) or
Physical Education 15 (Peak Performance
through Mental Training) 3
- Total** **31-35**

General Education Courses
For specific General Education courses refer to catalog section on
Graduation Requirements.
Total minimum units required **60**

** Students must take a minimum of one course in each of the four physical education activity areas. 1) Recreation Skills; 2) Aquatics; 3) Body Mechanics; 4) Team Sports. A minimum of 4 units needs to be completed.*

**PHYSICAL EDUCATION
ASSOCIATE IN SCIENCE DEGREE**

FRESHMAN YEAR **FALL** **SPRING**

- Biology 50 (Anatomy and Physiology) 4
- Physical Education 20
(Introduction to Physical Education) 3
- *Physical Education 1, 2, 3
(Physical Education Activity) or
Physical Education 4 (Basic Heart
Rate Training) or Physical Education 6
(Physical Fitness Assessments) 1-2 1-2
- Health 1 (Introduction to Health) or
Physical Education 18
(Health/Fitness for Your Disability) 3
- Physical Education 17
(Introduction to Athletic Training) 4

SOPHOMORE YEAR **FALL** **SPRING**

- Nutrition 1 (Basic Nutrition) 3
- *Physical Education 1, 2, 3
(Physical Education Activity) or
Physical Education 4 (Basic Heart
Rate Training) or Physical Education 6
(Physical Fitness Assessments) 1-2 1-2
- Physical Education 22
(Health & Fitness Assessments) or
Physical Education 28 (Components of
Physical Fitness-the Human Body) 3
- Physical Education 8 (Sport in Contemporary
Society) or Physical Education 15
(Peak Performance through Mental Training) 3
- Physical Education 27 (Principles of Coaching
Interscholastic Sports) 2
- Total** **29-33**

General Education Courses
For specific General Education courses refer to catalog section on
Graduation Requirements.
Total minimum units required **60**

**Students should take a minimum of one course in each of the four physical education activity areas. 1) Recreation Skills; 2) Aquatics; 3) Body Mechanics; 4) Team Sports. A minimum of 4 units needs to be completed.*

The above listing is a suggested sequence only. Some courses may have prerequisites. Students may take courses in any sequence except when a prerequisite applies.

**AQUATICS
CERTIFICATE OF ACHIEVEMENT**

FRESHMAN YEAR **FALL** **SPRING**

- Physical Education 17
(Introduction to Athletic Training) 4
- Physical Education 20
(Introduction to Physical Education) 3

Physical Education 8 (Sport in Society) or Physical Education 15 (Peak Performance through Mental Training)	3
Physical Education 22 (Health & Fitness Assessments) or Physical Education 28 (Components of Physical Fitness—the Human Body)	3
Physical Education 13 (American Red Cross Lifeguard Training Course)	2
Physical Education 14 (Water Safety Instructor)	2
*Physical Education 1, 2, 3 (Physical Education Activity) or Physical Education 4 (Basic Heart Rate Training) or Physical Education 6 (Physical Fitness Assessments)	5
Health 60 (Responding to Emergencies) or Health 70B (Professional Cardiopulmonary Resuscitation)	½-1
Total	22½-23

COACHING
CERTIFICATE OF ACHIEVEMENT
FALL SPRING

Physical Education 17 (Introduction to Athletic Training)	4
Physical Education 20 (Introduction to Physical Education)	3
Physical Education 8 (Sport in Society) or Physical Education 15 (Peak Performance through Mental Training)	3
Physical Education 61 (Principles of Coaching Interscholastic Sports: Beyond the Basics) or Physical Education 28 (Components of Physical Fitness-the Human Body) or Physical Education 60 (Sports Management)	3
Physical Education 23 (Sports Officiating) or Physical Education 16 (College Success for Athletes)	1-2
Physical Education 27 (Principles of Coaching Interscholastic Sports)	2
*Physical Education 1, 2, 3 (Physical Education Activity) or Physical Education 4 (Basic Heart Rate Training) or Physical Education 6 (Physical Fitness Assessments)	3 2
Health 60 (Responding to Emergencies) or Health 70B (Professional Cardiopulmonary Resuscitation)	½-1
Total	22½-23

FITNESS INSTRUCTOR
CERTIFICATE OF ACHIEVEMENT
FALL SPRING

Physical Education 20 (Introduction to Physical Education)	3
Physical Education 8 (Sport in Contemporary Society) or Physical Education 15 (Peak Performance through Mental Training)	3
Health 1 (Introduction to Health) or Physical Education 18 (Health & Fitness for Your Disability)	3
Physical Education 22 (Health & Fitness Assessments) or Physical Education 28 (Components of Physical Fitness-the Human Body)	3

*Physical Education 1, 2, 3 (Physical Education Activity) or Physical Education 4 (Basic Heart Rate Training) or Physical Education 6 (Physical Fitness Assessments)	2 2
Health 60 (Responding to Emergencies) or Health 70B (Professional Cardiopulmonary Resuscitation)	½-1
Nutrition 1 (Nutrition)	3
Biology 50 (Anatomy and Physiology)	4
Physical Education 17 (Introduction to Athletic Training)	4
Total	27½-28

SPORTS INJURY CARE
CERTIFICATE OF ACHIEVEMENT
FALL SPRING

Biology 50 (Anatomy and Physiology) or Physiology 1 (Human Physiology)	4-5
Physical Education 17 (Introduction to Athletic Training)	4
Physical Education 22 (Health & Fitness Assessments) or Physical Education 28 (Components of Physical Fitness-the Human Body)	3
Health 60 (Responding to Emergencies) or Health 70B (Professional Cardiopulmonary Resuscitation)	½-1
Health 1 (Introduction to Health) or Physical Education 18 (Health & Fitness for Your Disability)	3
Nutrition I (Nutrition)	
Nutrition 58 (Nutrition for Sports and Athletic Performance) or Physical Education 58 (Nutrition for Sports and Athletic Performance)	3
*Physical Education 1, 2, 3 (Physical Education Activity) or Physical Education 4 (Basic Heart Rate Training) or Physical Education 6 (Physical Fitness Assessments)	2 2
Total	21½-23

**Students must take a minimum of one course in each of the four physical education activity areas. 1) Recreation Skills; 2) Aquatics; 3) Body Mechanics; 4) Team Sports.*

The above listing is a suggested sequence only Some courses may have prerequisites. Students may take courses in any sequence except when a prerequisite applies.

AQUATICS
CERTIFICATE OF COMPLETION
FALL SPRING

Physical Education 17 (Introduction to Athletic Training)	4
Physical Education 20 (Introduction to Physical Education) or Physical Education 8 (Sport in Society) or Physical Education 15 (Peak Performance through Mental Training)	3
Physical Education 22 (Health & Fitness Assessments) or Physical Education 28 (Components of Physical Fitness-the Human Body)	3
Physical Education 13 (American Red Cross Lifeguard Training Course)	2

Physical Education 14 (Water Safety Instructor)	2
Physical Education 1,2,3 (Physical Education Activity)	2
Health 60 (Responding to Emergencies) or Health 70B (Professional Cardiopulmonary Resuscitation)	½-1
Total	16½-17½

COACHING
CERTIFICATE OF COMPLETION
FALL SPRING

Physical Education 17 (Introduction to Athletic Training)	4
Physical Education 20 (Introduction to Physical Education) or Physical Education 8 (Sport in Society) or Physical Education 15 (Peak Performance through Mental Training)	3
Physical Education 61 (Principles of Coaching Interscholastic Sports: Beyond the Basics) or Physical Education 28 (Components of Physical Fitness-the Human Body) or Physical Education 60 (Sports Management)	3
Physical Education 23 (Sports Officiating) or Physical Education 16 (College Success for Athletes)	1-2
Physical Education 27 (Principles of Coaching Interscholastic Sports)	2
Physical Education 1,2,3 (Physical Education Activity)	2
Health 60 (Responding to Emergencies) or Health 70B (Professional Cardiopulmonary Resuscitation)	½-1
Total	15½-17

FITNESS INSTRUCTOR
CERTIFICATE OF COMPLETION
FALL SPRING

Physical Education 20 (Introduction to Physical Education) or Physical Education 8 (Sport in Contemporary Society) or Physical Education 15 (Peak Performance through Mental Training)	3
Health 1 (Introduction to Health) or Physical Education 18 (Health & Fitness for Your Disability)	3
Physical Education 22 (Health & Fitness Assessments) or Physical Education 28 (Components of Physical Fitness-the Human Body)	3
*Physical Education 1,2,3 (Physical Education Activity)	2
Health 60 (Responding to Emergencies) or Health 70B (Professional Cardiopulmonary Resuscitation)	½-1
Nutrition 1 (Nutrition)	3
Total	16½-17

SPORTS INJURY CARE
CERTIFICATE OF COMPLETION

FALL SPRING

Biology 50 (Anatomy and Physiology) or Physiology 1 (Human Physiology)	4-5
Physical Education 17 (Introduction to Athletic Training)	4
Physical Education 22 (Health & Fitness Assessments) or Physical Education 28 (Components of Physical Fitness-the Human Body)	3
Health 70B (Professional Cardiopulmonary Resuscitation)	½
Health I (Introduction to Health) or Physical Education 18 (Health & Fitness for Your Disability)	3
Physical Education 1,2,3 (Physical Education Activity)	2
Total	16½-17½

**Students should take a minimum of one course in each of the four physical education activity areas. 1) Recreation Skills 2) Aquatics 3) Body Mechanics 4) Team Sports (a minimum of four units needs to be completed)*

The above listing is a suggested sequence only. Some courses may have prerequisites. Students may take courses in any sequence except when a prerequisite applies.

PHYSICAL EDUCATION (PHED)

1 PHYSICAL EDUCATION ACTIVITY ½ UNIT

(Any Physical Education 1, 2 or 3 course may be repeated 3 times)
Physical Education sections are organized to include activities in four areas: (1) Recreation Skills: archery, badminton, bowling, golf-range, golf-course, adv. golf, handball, racquetball, table tennis, tennis, adv. tennis, wallyball; (2) Aquatics: aquatic aerobics, aqua-conditioning, swimming, disabled swimming; (3) Body Mechanics: aerobic fitness, aerobic super circuit, dance aerobics, disabled aerobics, low-impact aerobics, ballet, circuit fitness training, conditioning, dance exercise, dance workshop, disabled P.E., fitness-self defense, disabled flexibility, jazz dance, adv. jazz dance; modern jazz dance, modern dance, nautilus fitness, outdoor aerobics, par-course fitness, power lifting, run/stride fitness, run/walk fitness, self-defense tactics, disabled self-defense, strength fitness, tai chi, tap dance, disabled weight training, weight training, yoga; (4) Team Sports: basketball, adv. basketball, disc sports, flag football, soccer, indoor soccer, softball, sport conditioning, volleyball, adv. volleyball, ultimate field sports. 2 hours. Transfer: CSU, UC; CSU/GE: Area E; AA/AS.

2 PHYSICAL EDUCATION ACTIVITY 1 UNIT

(Any Physical Education 1, 2 or 3 may be repeated 3 times)
Physical Education sections are organized to include activities in four areas: (1) Recreation Skills: archery, badminton, bowling, golf course, golf range, advanced golf, handball, racquetball, table tennis, tennis, advanced tennis, wallyball; (2) Aquatics: aquacalistenics, aqua-conditioning, aquatic aerobics, swimming, disabled swimming; (3) Body Mechanics: aerobic fitness, aerobic super circuit, athletic performance training, dance aerobics, disabled aerobics, low impact aerobics, ballet, conditioning, disabled conditioning, dance workshop, disabled P.E., fitness self defense, disabled flexibility, jazz dance, modern jazz dance, judo, power lifting, run/walk fitness, self-defense tactics, disabled self-defense, strength fitness, tai chi, weight training, disabled weight training; (4) Team Sports: baseball, basketball, adv. basketball, adv. touch football, soccer, indoor soccer, softball, sport conditioning, ultimate field sports, volleyball, adv. volleyball. 3 hours laboratory, or 2 hours lab, 1 hour lecture for 9 weeks. Transfer: CSU, UC; CSU/GE: Area E; AA/AS.

**3 PHYSICAL EDUCATION ACTIVITY****1–2 UNITS**

(Any Physical Education 1, 2 or 3 course may be repeated 3 times)

Physical Education sections are organized to include activities in four areas: (1) Recreation Skills: archery, badminton, bowling, golf-range, golf-course, adv. golf, handball, racquetball, racquetina, table tennis, tennis, adv. tennis, wallyball; (2) Aquatics: aquatic aerobics, aqua-conditioning, competitive swimming, disabled swimming; (3) Body Mechanics: aerobic fitness, aerobic super circuit, dance aerobics, disabled aerobics, low-impact aerobics, ballet, circuit fitness training, conditioning, dance exercise, dance workshop, disabled P.E., disc sports, fitness-self defense, disabled flexibility, jazz dance, adv. jazz dance, modern jazz dance, modern dance, nautilus fitness, outdoor aerobics, par-course fitness, power lifting, run/stride fitness, run/walk fitness, self-defense tactics, disabled self-defense, strength fitness, tai chi, tap dance, weight training, wrestling, yoga; (4) Team Sports: basketball, adv. basketball, disc sports, flag football, soccer, indoor soccer, softball, sport conditioning, volleyball, adv. volleyball, ultimate field sports. 4–8 hours laboratory, or 3–5 hours lab, 1 hour lecture for 9 weeks. Transfer: CSU, UC; AA/AS.

4 BASIC HEART RATE TRAINING: FITNESS AND TRAINING USING A HEART RATE MONITOR**1 UNIT**

(May be repeated 3 times)

Students learn how to improve fitness utilizing pulse and a heart rate monitor. They will learn how to create a balanced life long exercise program using heart rate as a guide. May be offered in distance education delivery format. 3 hours. Transfer: CSU, UC; AA/AS.

5 FAT BURNING CIRCUIT TRAINING**2 UNITS**

(May be repeated 3 times)

Develop cardiovascular efficiency, strength, muscular endurance and flexibility through the use of Cybex selector weight machines, Monark stationary bikes and other state-of-the-art equipment. Includes individual fitness prescriptions through assessments. Goal achievement through the use of circuit training. ½ hour lecture, 4½ hours laboratory. Transfer: CSU, UC; CSU/GE: E; AA/AS.

6 PHYSICAL FITNESS ASSESSMENTS**½ UNIT**

(May be repeated 3 times)

Physical Fitness Assessments will measure body composition, flexibility, muscular strength and endurance. Students will develop and understand a summary of their fitness status, as well as an exercise prescription to maintain or increase their physical fitness level. 9 one-hour lectures. Transfer: CSU, UC; AA/AS.

7 AEROBIC SUPER CIRCUIT**2 UNITS**

(May be repeated 3 times)

Developing cardiovascular efficiency, strength, muscular endurance and flexibility through the use of circuit training. Polar heart rate monitors help students train safely and efficiently in their target heart rate zone. Physical fitness assessment testing and re-testing assist students in establishing appropriate training volumes and intensities. One-hour lectures (9 weeks), 4½ hours of laboratory (18 weeks). Transfer: CSU, UC; AA/AS.

8 SPORT IN CONTEMPORARY SOCIETY 3 UNITS

History of sport; the political, social and economic impact of sport on public opinion. An investigation into the phenomenon of sport including cultural stratification, race, gender, education, economic, politics and the mass media. May be offered in Distance Education delivery format. 3 hours lecture. Transfer: CSU.

13 AMERICAN RED CROSS LIFEGUARD TRAINING 2 UNITS

(May be repeated 3 times)

Skills and knowledge needed to prevent and respond to aquatic emergencies. Upon successful completion of this course students will receive American Red Cross certification in Lifeguard Training, CPR for the Professional Rescuer, and First Aid. 1½ hours lecture, 1½ hours laboratory. Transfer: CSU, UC; AA/AS.

13R AMERICAN RED CROSS LIFEGUARD TRAINING REVIEW ½ UNIT

(May be repeated 3 times)

To review the skills and knowledge needed by lifeguards to prevent and respond to aquatic emergencies. Upon successful completion of this course students will receive American Red Cross certification in Lifeguard Training, CPR for Professional Rescuer, and First Aid. 6 hours lecture, 10 hours laboratory total. Transfer: CSU, UC; AA/AS

14 AMERICAN RED CROSS WATER SAFETY INSTRUCTOR 2 UNITS

(May be repeated 3 times)

To train instructor candidates to teach American Red Cross Swimming and Water Safety courses. Provide water safety certificate. 1½ hours lecture, 1½ hours laboratory. Transfer: CSU, UC; AA/AS

15 PEAK PERFORMANCE THROUGH MENTAL TRAINING 3 UNITS

The study and development of the concepts and theories associated with maximizing performance, from the perspective of sport as well as life, emphasizing the mental skills and strategies for stress control, visualization, goal setting and concentration. 3 hours. Transfer: CSU; CSU/ GE: Area E.

16 COLLEGE SUCCESS FOR ATHLETES 1 UNIT

Aiding the student-athlete in developing realistic expectations of college, explore academic programs, and understand what is necessary to succeed in college while competing in an intercollegiate sport. Rules and regulations of the Commission on Athletics (COA), National Collegiate Athletic Association (NCAA), and National Association of Intercollegiate Athletics (NAIA) will be defined. Eligibility and transferring to a four-year institution will be explored. May be offered in Distance Education delivery format. 1 hour. Transfer: CSU.

17 INTRODUCTION TO ATHLETIC TRAINING 4 UNITS

This course introduces the student to basic taping skills, therapeutic modalities, and rehabilitation principles associated with the field of athletic training. There is a strong emphasis on injury prevention recognition and management. Designed to be preparatory for a career in athletic training. 3 hours lecture, 3 hours laboratory. Transfer: CSU, UC; CSU/GE: E; AA/AS.

18 HEALTH AND FITNESS FOR YOUR DISABILITY 3 UNITS

Application of current health teachings to individuals and life. Physiological, psychological, and social perspectives of health will be covered. Emphasis on knowledge, attitudes and behaviors that will contribute to a healthy individual. Combination of text based curriculum with Internet research. Students will learn how to integrate current health teachings in relation to their disability and their lives. May be offered in Distance Education delivery format. 3 hours. Transfer: CSU, UC; CSU/ GE: E; AA/AS.

20 INTRODUCTION TO PHYSICAL EDUCATION 3 UNITS

Survey of physical education with emphasis on basic elements, foundations career opportunities, and the relationship of physical education to other fields. 3 hours. Transfer: CSU, UC; CSU/GE: E.

22 HEALTH AND FITNESS ASSESSMENTS 3 UNITS

Discuss and analyze various health and fitness assessment tools including those used to evaluate aerobic fitness, muscular strength and endurance, flexibility, stress and nutrition. Emphasis will be on developing baseline assessments for use in fitness program development. Students will apply their learning to the creation of a well-rounded fitness program and reevaluate fitness variables after developing a healthy fitness program. Class is appropriate to those working in the fitness field as well as individuals interested in improving their own health and fitness. 3 hours. Transfer: CSU, UC; CSU/GE: E.

23 SPORTS OFFICIATING 2 UNITS

(May be repeated 3 times)

Theory and practical application of sports officiating with emphasis on the rules, techniques and mechanics of officiating. 1 hour lecture, 3 hours laboratory. Transfer: CSU, UC.

25 THEORY & TECHNIQUES OF OFFENSIVE FOOTBALL 2 UNITS

(May be repeated 2 times)

Analysis and examination of various approaches to offensive intercollegiate football. Includes all aspects of offensive football; punt return, point after touchdown and field goal kicking. 2 hours. Transfer: CSU, UC; CSU/GE: E.

26 THEORY & TECHNIQUES OF DEFENSIVE FOOTBALL 2 UNITS

(May be repeated 2 times)

Analysis and examination of various approaches to defensive intercollegiate football. Includes all aspects of defensive football; kick off, punt rush, punt return and P.A.T./FG rush. 2 hours. Transfer: CSU, UC; CSU/GE: E.

27 PRINCIPLES OF COACHING INTERSCHOLASTIC SPORTS 2 UNITS

(May be repeated 3 times)

Theory, principles, and ethics of coaching interscholastic sports with emphasis on the fundamentals and techniques of coaching. Course completion certificate available upon completion (*with a grade of "C" or higher*). May be offered in Distance Education delivery format. 2 hours lecture, 1 hour laboratory. Transfer: CSU, UC; CSU/GE: E.

28 COMPONENTS OF PHYSICAL FITNESS-THE HUMAN BODY 3 UNITS

Impact of physical activity, nutrition, and dietary principles upon the body. Includes basic exercise physiology and kinesiology, body mechanics, and body composition testing. May be offered in Distance Education delivery format. 3 hours. Transfer: CSU.

28L COMPONENTS OF PHYSICAL FITNESS-LABORATORY 1 UNIT

Implementation of the fundamentals of physical fitness and basic strength training principles as an intern in the Chabot College Fitness and/or Chabot Strength Training Center. Prerequisite or Corequisite: Physical Education 28. 3 hours laboratory.

30 INTERCOLLEGIATE ATHLETICS-FOOTBALL 2 UNITS

(May be repeated 2 times)

Training for intercollegiate competition. Daily practice, 10 hours weekly. Transfer: CSU, UC; CSU/GE: E; AA/AS.

- 31 INTERCOLLEGIATE ATHLETICS-BASKETBALL 1 UNIT**
(May be repeated 3 times)
 Training for intercollegiate competition. Daily practice, 5 hours weekly.
 Transfer: CSU, UC; CSU/GE: Area E; AA/AS.
- 32 INTERCOLLEGIATE ATHLETICS-BASEBALL 2 UNITS**
(May be repeated 2 times)
 Training for intercollegiate competition. Daily practice, 10 hours weekly.
 Transfer: CSU, UC; CSU/GE: E; AA/AS.
- 33 INTERCOLLEGIATE ATHLETICS-GOLF 2 UNITS**
(May be repeated 2 times)
 Training for intercollegiate competition. Practice three days per week, 10 hours weekly. Transfer: CSU, UC; CSU/GE: Area E; AA/AS.
- 34 INTERCOLLEGIATE ATHLETICS-TENNIS 2 UNITS**
(May be repeated 2 times)
 Training for intercollegiate competition. Daily practice, 10 hours weekly.
 Transfer: CSU, UC; CSU/GE: E; AA/AS.
- 35 INTERCOLLEGIATE ATHLETICS-TRACK AND FIELD 2 UNITS**
(May be repeated 2 times)
 Training for intercollegiate competition. Daily practice, 10 hours weekly.
 Transfer: CSU, UC; CSU/GE: E; AA/AS.
- 36 INTERCOLLEGIATE ATHLETICS-CROSS COUNTRY 2 UNITS**
(May be repeated 2 times)
 Training for intercollegiate competition. Daily practice, 10 hours weekly.
 Transfer: CSU, UC; CSU/GE: E; AA/AS.
- 37 INTERCOLLEGIATE ATHLETICS-SWIMMING AND DIVING 2 UNITS**
(May be repeated 2 times)
 Training for intercollegiate competition. Daily practice, 10 hours weekly.
 Transfer: CSU, UC; CSU/GE: E; AA/AS.
- 38 INTERCOLLEGIATE ATHLETICS-SOCCER 2 UNITS**
(May be repeated 2 times)
 Training for intercollegiate competition. Daily practice, 10 hours weekly.
 Transfer: CSU, UC; CSU/GE: E; AA/AS.
- 39 INTERCOLLEGIATE ATHLETICS-WRESTLING 2 UNITS**
(May be repeated 2 times)
 Training for intercollegiate competition. Daily practice, 10 hours weekly.
 Transfer: CSU, UC; CSU/GE: E; AA/AS.
- 41 INTERCOLLEGIATE ATHLETICS-WOMEN'S BASKETBALL 1 UNIT**
(May be repeated 3 times)
 Training for intercollegiate competition. Daily practice, 5 hours weekly.
 Transfer: CSU, UC; CSU/GE: E; M/AS.
- 42 INTERCOLLEGIATE ATHLETICS-WOMEN'S SOFTBALL 2 UNITS**
(May be repeated 2 times)
 Training for intercollegiate competition. Daily practice, 10 hours weekly.
 Transfer: CSU, UC; CSU/GE: E; AA/AS.
- 43 INTERCOLLEGIATE ATHLETICS-WOMEN'S VOLLEYBALL 2 UNITS**
(May be repeated 2 times)
 Training for intercollegiate competition. Daily practice, 10 hours weekly.
 Transfer: CSU, UC; CSU/GE: E; AA/AS.

- 44 INTERCOLLEGIATE ATHLETICS-WOMEN'S TENNIS 2 UNITS**
(May be repeated 2 times)
 Training for intercollegiate competition. Daily practice, 10 hours weekly.
 Transfer: CSU, UC; CSU/GE: E; AA/AS.
- 45 INTERCOLLEGIATE ATHLETICS-WOMEN'S TRACK & FIELD 2 UNITS**
(May be repeated 2 times)
 Training for intercollegiate competition. Daily practice, 10 hours weekly.
 Transfer: CSU, UC; CSU/GE: E; AA/AS.
- 46 INTERCOLLEGIATE ATHLETICS-WOMEN'S CROSS COUNTRY 2 UNITS**
(May be repeated 2 times)
 Training for intercollegiate competition. Daily practice, 10 hours weekly.
 Transfer: CSU, UC; CSU/GE: E; AA/AS.
- 47 INTERCOLLEGIATE ATHLETICS-WOMEN'S SWIMMING & DIVING 2 UNITS**
(May be repeated 2 times)
 Training for intercollegiate competition. Daily practice, 10 hours weekly.
 Transfer: CSU, UC; CSU/GE: E; AA/AS.
- 48 INTERCOLLEGIATE ATHLETICS-WOMEN'S SOCCER 2 UNITS**
(May be repeated 2 times)
 Training for intercollegiate competition. Daily practice, 10 hours weekly.
 Transfer: CSU, UC; CSU/GE: E; AA/AS.
- 50 INTERCOLLEGIATE ATHLETICS-WOMEN'S WATER POLO 2 UNITS**
(May be repeated 2 times)
 Training for intercollegiate competition. Daily practice, 10 hours weekly.
 Transfer: CSU, UC; CSU/GE: E; AA/AS.
- 57 NUTRITION FOR FITNESS AND FAT LOSS 3 UNITS**
(See also Nutrition 57)
 Study the role that nutrition and activity play in developing fitness and lowering body fat. Major concepts of fitness and nutrition. Assessment of current fitness level, designing a personal fitness and nutritional plan. May be offered in Distance Education delivery format. (May not receive credit if Nutrition 57 has been completed.) 3 hours. Transfer: CSU; CSU/GE: E.
- 58 NUTRITION FOR SPORTS AND HUMAN PERFORMANCE 3 UNITS**
(See also Nutrition 58)
 An investigation into the role nutrition plays in sports and human achievement. Determination of optimum hydration and nutrient intake in relation to activity. May be offered in Distance Education delivery format. (May not receive credit if Nutrition 58 has been completed.) 3 hours. Transfer: CSU; CSU/GE: E.
- 60 SPORTS MANAGEMENT 3 UNITS**
 Introduction into the field of sports management. Career opportunities, human resource management, leadership, strategic planning, teamwork, ethics and values, marketing and advertising, finance, managing facilities, sports and the law, economics of sport and community impact. May be offered in Distance Education format. 3 hours. Transfer: CSU.
- 61 PRINCIPLES OF COACHING INTERSCHOLASTIC SPORTS: BEYOND THE BASICS 3 UNITS**
 Coaching beyond the basics: ethics, physical training theories and management principles. Research into successful leadership principles, skills and philosophies. Coaching effectiveness and team building dynamics. May be offered in Distance Education delivery format. 3 hours.

PHYSICAL EDUCATION FOR THE DISABLED

The division will offer classes in aquatics, body mechanics and fitness. Please check the class schedule for the activity of your choice.

PHYSICAL SCIENCE (PSCI)

15 DESCRIPTIVE PHYSICAL SCIENCE: INTRODUCTION TO PRINCIPLES OF PHYSICAL SCIENCE 5 UNITS

An introduction to the physical universe from atomic particles to the stars, with emphasis on the basic principles of physics, astronomy, chemistry, and the geo-sciences (meteorology and geology). Designed for non-majors in physical science. Includes an introduction to laboratory, principles and techniques with emphasis on the basic concepts discussed in the class. May not receive credit if Physics 11 has been completed. Strongly recommended: Mathematics 65, English 101A or 102. 4 hours lecture, 3 hours laboratory. Transfer: CSU; CSU/GE: B1 only; AA/AS.

PHYSICS (PHYS)

DEGREE AS—PHYSICS

Physics, the fundamental science, conceptualizes the basic principles of the universe and establishes the foundation for astronomy, chemistry and geology. The beauty of physics lies in a small number of powerful concepts which expand our view of the world around us and which lead to many engineering applications from which we derive many benefits.

PHYSICS ASSOCIATE IN SCIENCE DEGREE

FRESHMAN YEAR FALL SPRING

Mathematics 1 (Calculus I)	5
Mathematics 2 (Calculus II)	5
Physics 4A (General Physics I)	5

SOPHOMORE YEAR FALL SPRING

Mathematics 3 (Multivariable Calculus)	5
Physics 4B (General Physics II)	5
Mathematics 4 (Elementary Differential Equation)	3
Physics 4C (General Physics III)	5
Physics 5 (Modern Physics)	3
Total	36

General Education Courses
 For specific General Education courses refer to catalog section on Graduation Requirements.
Total minimum units required **60**

If the A.S. degree is meant to encourage and prepare students for further study in their chosen field, we believe that we should include the mathematics requirement as well as the complete physics plan. Students majoring in physics will be expected to take at least Mathematics 1–4 and also recommended Mathematics 6 and 8.

PHYSICS (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 or 36 or 37 (completed with a grade of "C" or higher). May be offered in Distance Education delivery format. 3 hours lecture, 3 hours laboratory. Transfer: CSU, UC; CSU/GE: B1, B3; IGETC Area 5A & Lab; AA/AS; (CAN PHYS 2); with PHYS 2B: (CAN PHYS SEQ A).

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. Transfer: CSU, UC; CSU/GE: B1, B3; IGETC: Area 5A & Lab; (CAN PHYS 4); with PHYS 2A: (CAN PHYS SEQ A).

4A GENERAL PHYSICS I 5 UNITS

Introduction to the principles of Newtonian mechanics using calculus as needed. Vectors, kinematics, dynamics, energy, momentum, rotation, oscillations and gravitation. Prerequisite: Mathematics 1 (completed with a grade of "C" or higher). May be offered in Distance Education delivery format. 4 hours lecture, 3 hours laboratory. Transfer: CSU, UC; CSU/GE: B1, B3; IGETC: Area 5A & Lab; AA/AS; (CAN PHYS 8); with PHYS 4B and PHYS 4C: (CAN PHYS SEQ C).

4B GENERAL PHYSICS II 5 UNITS

Mechanical waves, electric fields, electric currents, magnetic fields, and induced currents, and alternating circuits. Prerequisite: Physics 4A and Mathematics 2 (both completed with a grade of "C" or higher). May be offered in Distance Education delivery format. 4 hours lecture, 3 hours laboratory. Transfer: CSU, UC; CSU/GE: B1, B3; IGETC: Area 5A Lab; (CAN PHYS 12); with PHYS 4A and PHYS 4C: (CAN PHYS SEQ C).

4C GENERAL PHYSICS III 5 UNITS

Electromagnetic waves, electromagnetic spectrum including reflection, refraction, diffraction, interference, polarization, fluids, sound waves and thermodynamics. Prerequisite: Physics 4B and Mathematics 3 (both completed with a grade of "C" or higher). 4 hours lecture, 3 hours laboratory. Transfer: CSU, UC; IGETC: Area 5A & Lab; (CAN PHYS 14) with PHYS 4A and PHYS 4B: (CAN PHYS SEQ C).

5 MODERN PHYSICS 3 UNITS

Special relativity and modern physics, including photons, quantum mechanics, atoms, solids, nuclear physics, particle physics and cosmology. Prerequisite: Physics 4B (completed with grade of C or higher). 3 hours lecture. Transfer: CSU, UC; CSU/GE: B1.

11 DESCRIPTIVE PHYSICS 4 UNITS

Motion, gravitation, heat, light, sound, electricity, magnetism, atoms and nuclei. 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. Includes an introduction to laboratory, principles and techniques with emphasis on the basic concepts discussed in the class. May not receive credit if Physics 10 or Physics 10L has been completed. Strongly recommended: Mathematics 105 or 105L. 3 hours lecture, 3 hours laboratory. Transfer: CSU, UC; CSU/GE: B1, B3; IGETC: Area 5A & Lab; AA/AS.

18 PREPARATORY PHYSICS 3 UNITS

Basic problem solving techniques in mechanics as preparation for Physics 2A and Physics 4A. Methods and strategies used to solve quantitative Physics problems. Intended for liberal arts, mathematics, engineering, and

science students. Emphasis on group problem-solving activities, diversity in problem-solving approaches, and detailed oral and written presentation of solutions. Strongly recommended: Math 36 or Math 37 (*completed with a grade of "C" or higher*) or equivalent. 3 hours. Transfer: CSU

25 COMPUTATIONAL METHODS FOR ENGINEERS AND SCIENTISTS 3 UNITS

(See also *Engineering 25 and Mathematics 25*)

Methodology and techniques for solving engineering/science problems using numerical-analysis computer-application programs MATLAB and EXCEL. Technical computing and visualization using MATLAB software. Examples and applications from applied-mathematics, physical-mechanics, electrical circuits, biology, thermal systems, fluid systems, and other branches of science and engineering. Prerequisite: Mathematics 1. Strongly recommended: Computer Application Systems 8 or Computer Science 8. May not receive credit if Engineering 25 or Mathematics 25 has been completed. 2 hours lecture, 3 hours laboratory. Transfer: CSU, UC.

122 PHYSICS SUPPLEMENTAL INSTRUCTION ½–1 UNIT

An individualized course with tutorial assistance from an instructor, student tutor, in basic Physics computations designed to develop self-confidence and prepare the student for problem solving in the normal navigation of physics courses. 1½–3 hours

PHYSIOLOGY

(See Biological Sciences)

POLITICAL SCIENCE (POLI)

1 INTRODUCTION TO AMERICAN GOVERNMENT 3 UNITS

Introduction to the historical development of American political ideals and institutions including the Federal and California Constitutions, civil liberties, civil rights, citizenship duties, political parties, participation and elections. Strongly recommended: Eligibility for English 1A. May be offered in Distance Education delivery format. 3 hours. Transfer: CSU, UC; CSU/GE: D8, A1, Group A; IGETC: Area 4; AI, Group A; AA/AS; CAN GOVT 2).

2 INTRODUCTION TO AMERICAN AND CALIFORNIA POLITICS 3 UNITS

Introduction to issues in American and California politics including education, environment, welfare, and health care policy. Special emphasis on California state and local government issues, interpretation of public opinion data, election polls and public policy statistics. Strongly recommended: Eligibility for English 1A. 3 hours. Transfer: CSU; CSU/GE: D8.

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. 3 hours. Transfer: CSU; CSU/GE: D8, A1, Group B; IGETC: AI, Group B; AA/AS.

20 COMPARATIVE GOVERNMENT 3 UNITS

Contemporary forms of government, institutions and political problems of selected national governments. Strongly Recommended: Political Science 1 or 7. 3 hours. Transfer: CSU, UC; CSU/GE: D8, AI, Group B; IGETC: Area 4, AI, Group B; AA/AS.

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: Eligibility for English 1A, Political Science 1 or 7. 3 hours. Transfer: CSU, UC; CSU/GE: D8, A1, Group B; IGETC: Area 4, AI, Group B; AA/AS.

30 INTERNATIONAL RELATIONS 3 UNITS

Introduction to international relations, politics, theories and institutions with an emphasis on contemporary practices. 3 hours. Transfer: CSU, UC; CSU/GE: D8, A1, Group B; IGETC: Area 4, AI, Group B; AA/AS.

40 CONTEMPORARY ISSUES IN AMERICAN POLITICS 3 UNITS

Introduction to current political issues; their historical, and economic causes; and the public policies which have been advanced to solve these issues. Emphasis on decision-making process of government and voluntary organizations. 3 hours. Transfer: CSU, UC; CSU/GE: D8, A1, Group B; IGETC: Area 4, AI, Group B; AA/AS.

PORTUGUESE

(See Foreign Languages)

PSYCHOLOGY (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. May be offered in Distance Education delivery format. 3 hours. Transfer: CSU, UC; CSU/GE: D9; IGETC: Area 4; AA/AS; (CAN PSYC 2).

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. 3 hours. Transfer: CSU, UC; CSU/GE: B1, D9; IGETC: Area 4; AA/AS; (CAN PSY 8)

3 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. Transfer: CSU, UC; CSU/GE: D9; IGETC: Area 4; AA/AS.

5 INTRODUCTORY STATISTICS FOR THE BEHAVIORAL SCIENCES 4 UNITS

Applied descriptive statistics; measures of central tendency and variability; correlation and regression; probability; introduction to statistical inference. Emphasis on selection and interpretation of statistical analyses. Strongly recommended: Mathematics 65 or 65B. 4 hours. Transfer: CSU; AA/AS.

6 ABNORMAL PSYCHOLOGY 3 UNITS

Introduction to problems in emotional and cognitive human behavior ranging from mild social and personal stress to profound personal disorganization. Includes history of treatment and diagnostic models, neuroses, psychoses, sexual dysfunction, anti-social personality and other psychological problems along with a comparative study of contemporary treatment procedures applied to these problems. Strongly recommended: English 1A or 52A. May be offered in Distance Education delivery format. 3 hours. Transfer: CSU, UC; CSU/GE: D9; IGETC AREA 4; AA/AS.

7 INTRODUCTION TO COUNSELING THEORY AND SKILLS 3 UNITS

Introduction to counseling theory and process with emphasis on fundamental principles of behavior change. Includes essential counseling skills, major counseling theories, and legal and ethical issues. Strongly recommended: Psychology 1. 3 hours. Transfer: CSU.

8 HUMAN SEXUALITY 3 UNITS

(See also Health 8 and Sociology 8.)

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. May not receive credit if Health 8 or Sociology 8 has been completed. 3 hours. Transfer: CSU, UC; CSU/GE: E; AA/AS.

12 LIFESPAN PSYCHOLOGY 3 UNITS

Introduction to the psychological, physiological, socio-cultural and socio-historical 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. Transfer: CSU; CSU/GE: E; AA/AS.

18 PSYCHOLOGY OF THE AFRICAN AMERICAN EXPERIENCE 3 UNITS

Psycho-sociological exploration of the African American experience in American society and resultant behavior. 3 hours. Transfer: CSU, UC; IGETC AREA 4; AA/AS.

25 STRESS MANAGEMENT AND HEALTH PSYCHOLOGY 2 UNITS

Analysis of the psychological factors that influence health, stress and illness, and personal well-being. Explores coping with stress, reducing stress, emotion and illness, pressure-cooked kids, children and stress, can't slow down, the mind as healer, the relaxation response, focusing mind, and maximizing performance. May be offered in Distance Education delivery format. 2 hours. Transfer: CSU

25L STRESS MANAGEMENT AND HEALTH PSYCHOLOGY LABORATORY ½ UNIT

Using a scientific approach to the study of stress management, this laboratory will introduce students to current stress reduction techniques used in the field of health psychology. An analysis of the mental, physiological, and nutritional factors which help produce optimal-personal performance in daily living activities will be investigated. Prerequisite: Completion or current enrollment in Psychology 25. May be offered in Distance Education delivery format. 1 hour laboratory.

33 PERSONAL AND SOCIAL ADJUSTMENT 3 UNITS

Personality and behavior theory, personality assessment, and techniques of increasing personal effectiveness; basic human nature and the development of human potentialities through genetic inheritance, maturation and learning in a physical and socio-cultural environment; dynamics of individual and group behavior, motivation, stress, adaptive and maladaptive behavior and group and individual interaction. Strongly recommended: English 1A or 52A. 3 hours. Transfer: CSU, UC; CSU/GE: D9; IGETC Area 4; AA/AS.

45 PSYCHOLOGY OF CREATIVITY 3 UNITS

Introduction to psychological processes involved in creativity, imagination and problem solving. Survey of current theories and research on creativity in such areas as cognitive processes, perceptions, motivation and personality. Emphasis on improving creative and problem solving abilities. 3 hours. Transfer: CSU; CSU/GE: E; AA/AS.

PSYCHOLOGY COUNSELING (PSCN)

DEGREE

**AA-PSYCHOLOGY-COUNSELING-
HUMAN SERVICES**

**AS-PSYCHOLOGY-COUNSELING-
HUMAN SERVICES**

**CERTIFICATION OF COMPLETION:
MULTICULTURAL AWARENESS/
RELATIONS FOR THE SERVICE
PROVIDER**

**MULTICULTURAL AWARENESS/
SELF REFLECTION**

**PSYCHOLOGY-COUNSELING-
HUMAN SERVICES**

**ASSOCIATE IN ARTS OR
ASSOCIATE IN SCIENCE DEGREE**

This degree has been designed to provide students an introduction to social and/or psychological theory, multicultural theory, and Psychology-Counseling skills needed to work as a service provider in a social service setting. Students may follow either the AA or AS General Education pattern, as desired.

FRESHMAN YEAR FALL SPRING

Psychology 1 (General Psychology) or Sociology 1 (Principles of Sociology)	3
Psychology-Counseling 1 (Introduction to Psychology-Counseling in a Multicultural Environment) or Psychology 7 (Introduction to Counseling Theory and Skills)	3
Self-Assessment/Self-Reflection Course(s)*	3
Option Course**	3

SOPHOMORE YEAR FALL SPRING

Psychology 2 (Introduction to Psychological Methodology) or Psychology 3 (Social Psychology) or Sociology 2 (Social Problems)	3
Psychology-Counseling 4 (Multiethnic/Cultural Communication) or Speech 11 (Intercultural Communication)	3

Psychology-Counseling 2
 (Introduction to Case Management for
 Human Services) 3
 Psychology-Counseling 11
 (Interpersonal Relationships) 2
 Psychology-Counseling 13
 (Multicultural Issues in Contemporary
 America) 3
 Psychology-Counseling 80 (Occupational
 Volunteerism in Human Services) 2
Total 28

General Education Courses
 For specific General Education courses refer to catalog section on
 Graduation Requirements
Total minimum units required 60

- *Select a total of 3 units from the following:*
 Psychology-Counseling 10 (Career and Educational
 Planning) 2 units
 Psychology-Counseling 10A (Career Assessment
 Through Testing) 1 unit
 Psychology-Counseling 12 (Self-Esteem for Success) 2 units
 Psychology-Counseling 15 (College Study Skills) 2 units
 Psychology-Counseling 17 (Intercultural Studies) 2 units
 Psychology-Counseling 26 (College Success and the
 Chicano Experience) 1 unit
 Psychology-Counseling 36 (Women in Transition) 1 unit

- **Select a total of 3 units from the following options:*
 Anthropology 3 (Social and Cultural Anthropology) 3 units
 Anthropology 5 (Cultures of the U.S.: Anthropological
 Perspectives on Race, Class, Gender and Ethnicity) 3 units
 Early Childhood Development 60 (Teaching
 Special Needs Infants and Preschoolers) 3 units
 English 21 (The Evolution of the Black Writer) 3 units
 English 22 (Mexican American/Latino Literature
 of the U.S.) 3 units
 English 32 (U.S. Women's Literature) 3 units
 English 38 (Survey of Modern British Literature) 3 units
 Foreign Language 1A (Beginning Foreign Language) 3 units
 Health 4 (Women and Health) 3 units
 Music 5 (American Cultures in Music) 3 units
 Psychology 6 (Abnormal Psychology) 3 units
 Psychology 12 (Life Span Psychology) 3 units
 Psychology 18 (Psychology of the African American
 Experience) 3 units
 Sign Language 64 (ASL Beginning Sign Language) 3 units
 Sign Language 65 (ASL Intermediate Sign Language) 3 units
 Sociology 3 (American Cultural and Racial Minorities) 3 units
 Sociology 4 (Marriage and Family Relations) 3 units
 Sociology 8 or Psychology 8 or Health 8 (Human Sexuality) 3 units
 Sociology 10 (Introduction to Asian American Studies) 3 units
 Sociology 30 (Social Gerontology) 3 units
 Sociology 31 (Dependency in Old Age) 3 units
 Sociology 32 (Social Policy, Programs and Services
 for Elders) 3 units

MULTICULTURAL AWARENESS/RELATIONS FOR THE SERVICE PROVIDER CERTIFICATE OF COMPLETION

This certificate has been designed to provide students an introduction to multicultural theory and Psychology-Counseling skills needed to work as a service provider in a social services setting. The student will conduct a self-assessment and self-reflection component, as part of the skill set. A self-assessment needs to be made in relationship to the culturally diverse community and world in which we currently live but also to evaluate service providers' internalized values which may affect their provision of services in a non-judgmental process. Students completing this Certificate of Completion will investigate a variety of multicultural issues and concepts which can affect social service delivery, evaluate themselves within the context of the diverse culture, further their inquiry into a cultural area of personal interest, and complete a course specifically targeted to Psychology-Counseling issues/skills as they relate to a multicultural community.

CORE COURSES FALL SPRING

Psychology Counseling 13 (Multicultural Issues in Contemporary America)	3
Self Assessments/Self Reflection Course(s)*	3
Option course**	3
Psychology-Counseling 11 (Interpersonal Relationships)	2
Psychology-Counseling 4 (Multiethnic/Cultural Communication) or Speech 11 (Intercultural Communication)	3
Psychology-Counseling 1 (Introduction to Psychology-Counseling in a Multicultural Environment) or Psychology 7 (Introduction to Counseling Theory and Skills)	3
Total	17

- *Select a total of 3 units from the following*
 Psychology-Counseling 10 (Career and Educational
 Planning) 2 units
 Psychology-Counseling 10A (Career Assessment
 Through Testing) 1 unit
 Psychology-Counseling 12 (Self Esteem for Success) 2 units
 Psychology-Counseling 15 (College Study Skills) 2 units
 Psychology-Counseling 17 (Intercultural Studies) 2 units
 Psychology-Counseling 20 (The College Experience) 3 units
 Psychology-Counseling 26 (College Success and the
 Chicano Experience) 1 unit
 Psychology-Counseling 36 (Women in Transition) 1 unit

- **Select a total of 3 units from the following option:*
 Anthropology 3 (Social and Cultural Anthropology) 3 units
 Anthropology 5 (Cultures of the U.S.: Anthropological
 Perspective on Race, Class, Gender and Ethnicity) 3 units
 Early Childhood Development 60 (Teaching Special
 Needs Infants and Preschoolers) 3 units
 English 21 (The Evolution of the Black Winter) 3 units
 English 22 (Mexican American/Latino Literature of
 the U.S.) 3 units
 English 32 (U.S. Womens Literature) 3 units

English 38 (Survey of Modern British Literature) 3 units
Foreign Language 1A (Beginning Foreign Language) 5 units
Health 4 (Women and Health) 3 units
Music 5 (American Cultures in Music) 3 units
Psychology 6 (Abnormal Psychology) 3 units
Psychology 12 (Life Span Psychology) 3 units
Psychology 18 (Psychology of the African American Experience) 3 units
Sign Language 64 (ASL Beginning Sign Language) 3 units
Sign Language 65 (ASL Intermediate Sign Language) 3 units
Sociology 3 (American Cultural and Racial Minorities) 3 units
Sociology 4 (Marriage and Family Relations) 3 units
Sociology 8 or Psychology 8 or Health 8 (Human Sexuality) . . . 3 units
Sociology 10 (Introduction to Asian-American Studies) 3 units
Sociology 30 (Social Gerontology) 3 units
Sociology 31 (Dependency in Old Age) 3 units
Sociology 32 (Social Policy, Programs and Services for Elders) 2 units

**MULTICULTURAL
 AWARENESS/SELF-
 REFLECTION
 CERTIFICATE OF COMPLETION**

This certificate has been designed to provide individual students the opportunity to conduct self-assessment and self-reflection as part of a personal development plan. The self must be analyzed in context of the community at large, which is becoming more diverse and multicultural. Hence, a self-assessment needs to be made in relationship to the culturally diverse community and world in which we currently live. Students completing this Certificate of Completion will be exposed to a variety of multicultural issues and concepts, evaluate themselves within the context of the diverse culture and further their inquiry into a cultural area of personal interest to the student.

CORE COURSES	FALL	SPRING
Psychology-Counseling 13 (Multicultural Issues in Contemporary America)	3	
Self-Assessment/Self-Reflection Courses*	4	
Option Course(s)**	5	
Psychology-Counseling 11 (Interpersonal Relationships)	2	
Psychology-Counseling 4 (Multiethnic/Cultural Communication) or Speech 11 (Intercultural Communication)	3	
Total	17	

*Select a total of 4 units from the following
Psychology-Counseling 10 (Career and Educational Planning) 2 units
Psychology-Counseling 10A (Career Assessment Through Testing) 1 unit
Psychology-Counseling 12 (Self-Esteem for Success) 2 units
Psychology-Counseling 15 (College Study Skills) 2 units
Psychology-Counseling 17 (Intercultural Studies) 2 units
Psychology-Counseling 20 (The College Experience) 3 units
Psychology-Counseling 26 (College Success and the Chicano Experience) 1 unit
Psychology-Counseling 36 (Women in Transition) 1 unit

**Select a total of 5 units from the following options:
Anthropology 3 (Social and Cultural Anthropology) 3 units
Anthropology 5 (Cultures of the U.S.: Anthropological Perspectives on Race, Class, Gender and Ethnicity) 3 units
Early Childhood Development 60 (Teaching Special Needs Infants and Preschoolers) 3 units
English 21 (The Evolution of the Black Writer) 3 units
English 22 (Mexican American/Latino Literature of the U.S.) 3 units
English 32 (U.S. Women's Literature) 3 units
English 38 (Survey of Modern British Literature) 3 units
Foreign Language 1A (Beginning Foreign Language) 5 units
Health 4 (Women and Health) 3 units
Music 5 (American Cultures in Music) 3 units
Psychology 6 (Abnormal Psychology) 3 units
Psychology 12 (Life Span Psychology) 3 units
Psychology 18 (Psychology of the African American Experience) 3 units
Sign Language 64 (ASL Beginning Sign Language) 3 units
Sign Language 65 (ASL Intermediate Sign Language) 3 units
Sociology 3 (American Cultural and Racial Minorities) 3 units
Sociology 4 (Marriage and Family Relations) 3 units
Sociology 8 or Psychology 8 or Health 8 (Human Sexuality) . . . 3 units
Sociology 10 (Introduction to Asian-American Studies) 3 units
Sociology 30 (Social Gerontology) 3 units
Sociology 31 (Dependency in Old Age) 3 units
Sociology 32 (Social Policy, Programs and Services for Elders) 3 units

PSYCHOLOGY-COUNSELING (PSCN)

1 INTRODUCTION TO PSYCHOLOGY-COUNSELING IN A MULTICULTURAL ENVIRONMENT 3 UNITS

Introduction to psychology-counseling theory, skills, techniques, and processes in working with individuals and/or groups. Multiculturalism in American society. Emphasis placed on issues and processes of a minority-majority environment. Includes review of demographics, social services, community agencies, and intervention programs. Fundamental counseling techniques, counseling theory and socio-cultural issues related to working in the "service provider" role. Strongly recommended: eligibility for English 1A and completion of Psychology-Counseling 13. 3 hours. Transfer: CSU; CSU/GE: D7; AA/AS.

2 INTRODUCTION TO 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. Analysis of inter-agency collaboration. Includes issues of monitoring an ongoing case management plan and maintaining consumer commitment to plan success. Designed to provide students with knowledge in case management theory implementation for Human Service, Social Work and/or Mental Health. Strongly Recommended: Psychology-Counseling 1. 3 hours. Transfer: CSU

4 MULTIETHNIC/CULTURAL COMMUNICATION 3 UNITS

Exploration of intercultural and interethnic individual behavior in relationships and the communication between and within at least three of five (5) cultural/ethnic groups in the United States: (1) African-Americans, (2) Asian-Americans, (3) Native/Indigenous Americans, (4) Pacific Islander-Americans, (5) Hispanic-Americans. Ethnic/cultural social norms influencing interpersonal communication. Antecedents of successful and failed interpersonal ethnic/cultural communication styles and increase understanding of these styles. Significant practice and

discussion of individual/group communication styles. Development of individual communication styles between individuals in dominant and emerging subcultures that inhibit individual goal achievement. Use of social science methods of inquiry in interpersonal communication as it applies to successful functioning in and between individuals of different ethnic/cultural groups. 3 hours. Transfer: CSU; CSU/GE: D3; IGETC: Area 4C; AA/AS.

7 CONTEMPORARY ISSUES 1-3 UNITS

(May be repeated 3 times)

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. Transfer: CSU.

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 has been completed.) 2 hours. Transfer: CSU; CSU/GE: E.

10A CAREER ASSESSMENT THROUGH TESTING 1 UNIT

Exploration of career values, interests, and skills through the use of various career assessment instruments. Administration, interpretation and analysis for the purpose of assessing abilities, values, personalities and interests. Includes the setting of realistic personal career goals and objectives. 1 hour. Transfer: CSU.

10B WORLD OF WORK/JOB SEARCH TECHNIQUES 1 UNIT

Investigation of occupational opportunities in the world of work. This includes career trends for the 21st century and practical step-by-step techniques and strategies for planning and organizing an effective job search. Emphasis on developing strategies to deal with job market research, employer contact, resumes and applications, and job interviews. 2 hours. Total 9 weeks. Transfer: CSU.

11 INTERPERSONAL RELATIONSHIPS 2 UNITS

(May be repeated 1 time)

Exploration of behavior in interactions with others. Improving interpersonal relationships to benefit academic, career, and personal development. 2 hours. Transfer: CSU; CSU/GE: E.

12 SELF-ESTEEM FOR SUCCESS 2 UNITS

Exploration of causes of low self-esteem, methods for building self-esteem and habits for success. Designed to improve self-esteem to ensure academic success. 2 hours. Transfer: CSU.

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, (8) Disabled American. May be offered in Distance Education delivery format. 3 hours. Transfer: CSU, UC; CSU/GE: D7; IGETC: Area 4; AA/AS.

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. May be offered in Distance Education delivery format. 2 hours. Transfer: CSU.

17 INTERCULTURAL STUDIES 2 UNITS

Exploration of the complexities of intercultural and intracultural relationships in this pluralistic society. Includes opportunities to share cultural experiences, as well as differences and commonalities. Explores issues of self-identity, values, cultural differences, and socialization practices. 2 hours. Transfer: CSU.

18 UNIVERSITY TRANSFER PLANNING ½-1 UNIT

Introduction to the resources and planning process needed to ease transition from a community college to a four-year college or university. Development of a transfer action plan. Preparation for major and general education requirements. Application cycles and important deadlines. Recommended for those transferring to four-year colleges or universities. 1/2-1 hour. Transfer: CSU.

20 THE COLLEGE EXPERIENCE 2 UNITS

(May be repeated 1 time)

Explores academic programs, college policies, student rights and responsibilities, graduation and transfer requirements, student services, campus resources and activities and the concept of educational planning through self-assessment. Emphasis is on self-assessment of individual interests, values, needs, and abilities. Designed for first-time, returning, and re-entry students to ease transition into college and maximize successful matriculation through college towards academic/vocational goals. (May not be taken for credit if General Studies 20 has been completed.) May be offered in Distance Education delivery format. 2 hours. Transfer: CSU; CSU/GE: E.

21 STRATEGIES FOR COLLEGE SUCCESS 1 UNIT

Assessment of learning and college life. Introduction to practical strategies for success in college. Includes student academic programs, college policies, student rights and responsibilities, graduation and transfer requirements, and campus resources and activities. Designed for first-time, returning and re-entry students to ease transition into college and maximize success towards their academic goals. (May not be taken for credit if Psychology Counseling 20 or General Studies 20 has been completed.) 1 hour. Transfer: CSU.

22 COLLEGE SUCCESS SERIES ½- 1 ½ UNITS

(May be repeated 2 times)

A series of workshops focusing on practical strategies for success in college; includes personal, academic and/or career goal setting, transitioning and adapting to higher education, educational planning for graduation and/or transfer, support services and campus resources, majors and careers, and other topics as needs are identified. Designed for all students to maximize their potential with emphasis on enhancing the new students transition into college. 9-27 total hours. Transfer: CSU.

25 COLLEGE ORIENTATION ½ UNIT

A survey of practical strategies for academic success focusing on the new student. Examines goal setting, college policies, graduation requirements, campus resources, student rights and responsibilities, and student educational planning. Designed for first-time college students in order to enhance their transition into college and maximize their academic/vocational potential. 9 total hours. Transfer: CSU.

26 COLLEGE SUCCESS AND THE CHICANO EXPERIENCE 1 UNIT

Investigation of the relationship between Chicano cultural experiences and college success. Emphasis on examination of how Chicano cultural experience can affect collegiate success. 1 hour. Transfer: CSU.

28 ORIENTATION FOR INTERNATIONAL STUDENTS 1 UNIT

Exploration of practical strategies for academic success and to experience a positive transition into the American educational system and cultural focusing on the new international student. Examines goal setting, cultural adjustment, college policies, graduation requirements, campus resources, programs and services, student rights and responsibilities, introduction to the California systems of higher education, student educational planning and other topics as needs are identified. Designed for first-time International college students in order to enhance their transition into American society and maximize successful matriculation through college toward their academic goals. Required for all foreign-visa students. 1 hour.

36 WOMEN IN TRANSITION 1 UNIT

A first step back to school for women facing career, personal, or academic decisions following divorce, widowhood, and other life changes. Includes clarifying values and goals, increasing self-esteem, and identification of college resources to effect success. Designed for women returning to the job market. 1 hour. Transfer: CSU.

37A WORKPLACE AND INTERPERSONAL SKILLS EDUCATION I 2 UNITS

Development of critical skills to enable students to internalize and use abilities. Effective life management skills transferable to the workplace. Achievement of goals while maintaining dignity and respect for oneself and others. Enhancement of self-esteem, identification of individual talents, creation of internal motivation and drive to expand talents and assume responsibility. 2 hours. Transfer: CSU.

37B WORKPLACE AND INTERPERSONAL SKILLS EDUCATION II 2 UNITS

This course is part B of the experientially based and sequenced curriculum; students build on knowledge and skills acquired in Psychology Counseling 37A. Students develop additional life management skills that are transferable to the workplace; they learn how to claim their self-esteem, identify individual talents, create internal motivation and drive to expand talents, assume responsibility for themselves, and to interact responsibly with others. This course can prove successful in bringing about additional positive behavior changes, based on the student's goals and desires. Critical techniques are reinforced for getting what they want in ways that maintain dignity and respect for themselves. Internal motivation to expand talents enhances the ability to assume responsibility for self, and interact responsibly with others. Prerequisite: Psychology Counseling 37A (completed with a grade of "C" or higher). 2 hours. Transfer: CSU.

39 THE CONFIDENT STUDENT 1 UNIT

Develop and review study skill techniques for becoming a confident student and to work towards college success. Emphasis on motivation on learning, time management, personal learning style, active listening, improving memory, critical thinking, note-taking, test-taking, confidence builders and managing stress. 1 hour. Transfer: CSU.

80 OCCUPATIONAL VOLUNTEERISM IN HUMAN SERVICES 2 UNITS

Volunteer work experience (54-80 hours) in a human services setting approved by PSCN faculty as related to student's Human Services major or classes at Chabot. Cooperative effort between student and volunteer site supervisor to accomplish agreed upon work objective and broaden

experiences for the term enrolled. Student provides verification of volunteer experience hours during the term. Student will make arrangements for hours and duties directly with volunteer site supervisor, after getting volunteer site approved by PSCN faculty. Students will meet with PSCN instructor one hour per week on campus for input and volunteer experience discussion focused on building working relationships and providing appropriate services to clients. 1 hour lecture, 3 hours laboratory.

RADIO AND TELEVISION BROADCASTING

DEGREE: AA-RADIO AND TELEVISION BROADCASTING

This two-year diploma program provides students with formal training to become leaders in the communication industry. All aspects of the radio and television industries are covered with the common focus of making graduates job-ready. Equal importance is given to creative production elements and technical quality in operations. The program follows a hands-on approach to learning, stressing the importance of teamwork. Students follow a common curriculum that emphasizes announcing, broadcast journalism and production techniques.

RADIO AND TELEVISION BROADCASTING ASSOCIATE IN ARTS DEGREE

	FALL	SPRING
FRESHMAN YEAR		
Mass Communications 31 (Introduction to Broadcasting)		3
Mass Communications 33A (Introduction to Television Studio Techniques)		3
Mass Communications 5 (Introduction to Mass Communications)		3
Mass Communications 32 (Radio and Television Announcing/Performance)		3
Mass Communications 34 (Radio Studio Techniques)		3
SOPHOMORE YEAR		
Mass Communications 8 (Advertising Sales and Media Management)		4
Mass Communications 33B (Intermediate Television Studio Techniques)		3
Mass Communications 38 (Special Projects in Radio) or Mass Communication 39 (Special Projects in Television)		2-3
Mass Communications 35 (Writing for Broadcasting)		3
Total		27-28
General Education Courses		
For specific General Education courses refer to catalog section on Graduation Requirements.		
Total minimum units required		60



REAL ESTATE (REST)

DEGREE:
AA—REAL ESTATE
CERTIFICATE OF ACHIEVEMENT:
REAL ESTATE

Real estate courses help prepare students for the Real Estate Licensure Examination and employment as real estate salespersons, brokers, appraisers, escrow officers and real estate planners.

REAL ESTATE ASSOCIATE IN ARTS DEGREE

FRESHMAN YEAR	FALL	SPRING
Business 12 (Introduction to Business)	3	
Real Estate 80 (Real Estate Principles)	3	
Real Estate 81A (Legal Aspects of Real Estate)	3	
Real Estate 84 (Real Estate Practice)	3	
Real Estate 85 (Real Estate Economics) or Business 1A (Principles of Accounting I) or Business 7 (General Accounting)	3-4	
Business 31 (Professional Selling)	3	

SOPHOMORE YEAR	FALL	SPRING
Real Estate 82A (Real Estate Appraisal)	3	
Real Estate 83 (Real Estate Finance)	3	
Option*	3	
Total	27-28	

General Education Courses
 For specific General Education courses refer to catalog section on Graduation Requirements.
Total minimum units required 60

- *Option select one of the following courses:*
- Real Estate 81B (Advanced Legal Aspects of Real Estate) 3 units*
 - Real Estate 82B (Advanced Real Estate Appraisal) 3 units*
 - Real Estate 86 (Escrows) 3 units*
 - Real Estate 88 (Real Estate Property Management) 3 units*
 - Real Estate 89 (Real Estate Office Administration) 3 units*
 - Business 10 (Business Law) 4 units*

The above listing is a suggested sequence only. Some courses may have prerequisites. Students may take courses in any sequence except where a prerequisite applies.

REAL ESTATE
CERTIFICATE OF ACHIEVEMENT

CORE COURSES **FALL** **SPRING**

Real Estate 80** (Real Estate Principles)	3
Real Estate 81A*** (Legal Aspects of Real Estate)	3
Real Estate 82A*** (Real Estate Appraisal)	3
Real Estate 85*** (Real Estate Economics) or Business 1A*** (Principles of Accounting 1)	3-4
Real Estate 83*** (Real Estate Finance)	3
Real Estate 84*** (Real Estate Practice)	3
Option*	9
Total	27-28

*Option select from the following courses:

Business 1B (Principles of Accounting II)	4 units
Business 10 (Business Law)	4 units
Business 12 (Introduction to Business)	3 units
Business 16 (Business Mathematics)	3 units
Computer Application Systems 50 (Introduction to Computer Application Systems)	3 units

Business 34 (Introduction to Advertising)	3 units
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**Required as preparation for the Real Estate Salesperson.

***These courses are required as preparation for the State Real Estate Brokers License.

Three additional courses must be taken prior to being eligible for the brokers' examination from the following list of courses.

Real Estate 80 (Principles of Real Estate)	3 units
Real Estate 81B (Advanced Legal Aspects of Real Estate)	3 units
Real Estate 82B (Advanced Real Estate Appraisal)	3 units
Real Estate 86 (Escrow)	3 units
Real Estate 88 (Real Estate Property Management)	3 units
Real Estate 89 (Real Estate Office Administration)	3 units
Business 10 (Business Law)	4 units

The above listing is a suggested sequence only. Some courses may have prerequisites. Students may take courses in any sequence except where a prerequisite applies.

REAL ESTATE (REST)

80 REAL ESTATE PRINCIPLES **3 UNITS**

Real and personal property acquisition, ownership, estates in real property, joint tenancies, partnerships, sales contracts, homesteads, deeds and taxes. Methods of financing, real estate practices, and regulation of the real estate business. 3 hours. Transfer: CSU.

81A LEGAL ASPECTS OF REAL ESTATE **3 UNITS**

California law as applied to real estate problems; origin and sources of California real estate law; contracts in general; real estate contracts; law of agency and regulation of agents; classification of property; easements; acquisition and transfer of interests of property; methods and incidents of ownership; land description; recordation. Prerequisite: Real Estate 80. 3 hours. Transfer: CSU.

81B ADVANCED LEGAL ASPECTS OF REAL ESTATE **3 UNITS**

Continuation of Real Estate 81A in advanced aspects of California real estate law; homestead; land contracts; mortgages, deeds of trust and involuntary lien; governmental regulations; landlord-tenant relationships; title insurance; probate proceedings. Prerequisite: Real Estate 81A. 3 hours. Transfer: CSU.

82A REAL ESTATE APPRAISAL **3 UNITS**

Real estate appraisals, the appraisal process, and different approaches, methods, and techniques used to determine value of various types of property; current trends, neighborhood analysis, and preparing an appraisal report; emphasis on residential and single-unit property. Prerequisite: Real Estate 80. 3 hours. Transfer: CSU.

82B ADVANCED REAL ESTATE APPRAISAL **3 UNITS**

Appraisal of multiple unit property including commercial and special purpose properties; analysis of income and expenses; techniques of capitalization; emphasis on income producing properties. Prerequisite: Real Estate 82A. 3 hours. Transfer: CSU.

83 REAL ESTATE FINANCE **3 UNITS**

Financing transactions in the real estate business and in lending institutions; analysis of money markets, interest rates and real estate financing. Financing procedures, residential and commercial financing. Prerequisite: Real Estate 80. 3 hours. Transfer: CSU.

84 REAL ESTATE PRACTICE **3 UNITS**

Principles and practical techniques of operating a real estate business. Emphasis on daily activities of brokers and salesperson; introduction to appraising, exchanges, listings, advertising, financing, and marketing. Exchanges, specialized brokerage, property management, professional and public relations. Prerequisite: Real Estate 80. 3 hours. Transfer: CSU.

85 REAL ESTATE ECONOMICS **3 UNITS**

Economic factors influencing real estate. Effects of real estate and business cycles on commercial and residential markets. Government fiscal and monetary policies. Urban development and renewal, regulation of land uses. Prerequisite: Real Estate 80. 3 hours. Transfer: CSU.

86 ESCROWS **3 UNITS**

Escrow procedures for various types of business transactions with emphasis on real estate. Preparation, processing and closing of sales and escrow documents in the transferring, encumbering, and describing of real property. Title search and reports. Prerequisite: Real Estate 80. 3 hours. Transfer: CSU.

87 REAL ESTATE TAXATION AND EXCHANGES **3 UNITS**

Tax aspects of real estate transactions as they affect buyers and sellers. Aspects of real estate marketing that deal with exchanges. Laws pertaining to real estate taxation that affect exchange opportunities. Prerequisite: Real Estate 80. 3 hours. Transfer: CSU.

88 REAL ESTATE PROPERTY MANAGEMENT **3 UNITS**

Problems encountered by owners and resident managers of residential and commercial income properties; application of sound business principles in the pursuit of operational effectiveness. Prerequisite: Real Estate 80. 3 hours.

89 REAL ESTATE OFFICE ADMINISTRATION **3 UNITS**

Practices essential to the management and operation of a real estate office; recruiting and management of sales personnel, office location, types of ownership, advertising, record keeping, budgeting, areas of specialization. Prerequisite: Real Estate 80. 3 hours.

RECREATION AND REHABILITATION THERAPIES (RECR)

67A ACTIVITY DIRECTORS' TRAINING 3 UNITS

Fundamentals of activity programming for patients in Skilled Nursing Facilities and Intermediate Care Facilities. Includes an overview of the specific job responsibilities of an activity director as described in Section 72389, Skilled Nursing Facility Regulations and Intermediate Care Facility Regulations of the State of California, Title 22. 3 hours. Transfer: CSU.

67B ACTIVITY PROGRAMMING FOR LONG TERM CARE FACILITIES 4 UNITS

Therapeutic activity program design for individuals in long term care facilities. Methods used to develop and implement therapeutic, social and restorative activities. Activity analysis, leadership and motivational methods appropriate for residents of long term care facilities. Prerequisite: Recreation and Rehabilitation Therapies 67A (*completed with a grade of "C" or higher*). 4 hours. Transfer: CSU.

RELIGIOUS STUDIES (RELS)

7 BIBLE SYMBOLS 3 UNITS

An exploration of selected books from the Old and New Testaments and related works of art both ancient and modern that make much use of biblical system. Focus on seeing symbols in terms of their origin, function, and surrounding context. 3 hours. Transfer: CSU, UC; CSU/GE: C2; IGETC: Area 3; AA/AS.

50 RELIGIONS OF THE WORLD 3 UNITS

Introduction to the study of religion by (1) surveying the world religions, stating basic principles of each as shown by fundamental scriptures, practices and works of art, highlighting underlying patterns, OR (2) exploring themes and concepts, using the world religions as examples. Themes may include: grace, sin, enlightenment, suffering, and salvation. (Formerly RELS 1) 3 hours. Transfer: CSU, UC; CSU/GE: C2; IGETC: Area 3; AA/AS.

64 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. (Formerly RELS 11) 3 hours. Transfer: CSU, UC; CSU/GE: C2; IGETC: Area 3; AA/AS.

65 RELIGIONS OF ASIA 3 UNITS

Religious traditions of Asia. Focus on a small subset of Asia's great religions. Comparison/contrast of at least three dominant traditions' religious/philosophical thought and everyday practice. Basic theory in academic study of religion. (Formerly RELS 30) 3 hours. Transfer: CSU; CSU/GE: C2; IGETC: Area 3B; AA/AS.

72 CONTEMPORARY ISSUES IN ISLAM 3 UNITS

Insight into the complexities of Islam throughout the world, especially in America. In depth study of topics such as gender roles, contribution of Muslims to the human civilization and the adaptation of Muslim culture into American society provide extensive opportunity for discussion and research. (Formerly RELS 12) 3 hours. Transfer: CSU, UC; CSU/GE: C2; IGETC: Area 3; AA/AS.

SERVICE LEARNING (SERV)

85 LEARNING IN ACTION 2-3 UNITS

(*May be repeated 3 times*)

Placement in meaningful volunteer projects in community organizations or schools, approved by instructor and supervised by site supervisor. Introduction to practical skills and knowledge required to serve as effective volunteers or tutors. Discuss specific problems in the community (themes will vary by semester) and help conceptualize, design, and carry out service projects to address them. Class will meet one hour per week on campus for reflection and discussion of community issues, and students will serve at least 3 hours per week in community agencies or schools. Field placements. 1 hour lecture, 3-6 hours laboratory.

SIGN LANGUAGE (SL)

64 ASL BEGINNING SIGN LANGUAGE 3 UNITS

(*May be repeated 3 times*)

Introduction to beginning communication skills through the language of sign, with emphasis on American Sign Language (ASL). Introduction to an understanding of deafness and the deaf culture. Basic sign vocabulary, the manual alphabet, and a contrast with various other sign systems used throughout the United States. 3 hours. Transfer: CSU, UC; CSU/GE: C2; AA/AS.

65 ASL INTERMEDIATE SIGN LANGUAGE 3 UNITS

(*May be repeated 3 times*)

Further development of skills and knowledge learned in Beginning Sign Language 64, with emphasis on American Sign Language (ASL). Communication of vocabulary building, with emphasis on applying ASL characteristics for communication in phrases and culturally specific language. Prerequisite: Sign Language 64 (*completed with a grade of "C" or higher*). 3 hours. Transfer: CSU, UC; CSU/GE: C2; IGETC: Language; AA/AS.

SOCIAL SCIENCE (SOCS)

DEGREE:

AA-SOCIAL SCIENCE (GENERAL)

An introduction to cultural analysis within and between cultural groups, both in the United States and throughout the world. Emphasis is on comparative theory and methodology. Recognizes the significance of globalization worldwide, its impact of cultures and treats culture as a dynamic entity. Prepares students for upper division majors in an array or subjects where cultural analysis is relevant including anthropology, geography, psychology, sociology, education, counseling, social welfare, global studies, peace studies, multicultural and gender studies.

SOCIAL SCIENCE (GENERAL)

ASSOCIATE IN ARTS DEGREE

FRESHMAN YEAR FALL SPRING

Anthropology 3 (Social and Cultural Anthropology) or Geography 2 (Cultural Geography) 3
 Economics 1 (Principles of Microeconomics) or Economics 10 (General Economics) 3
 Psychology 1 (General Psychology) or Sociology 1 (Principles of Sociology) 3

SOPHOMORE YEAR FALL SPRING

History 2 (History of Western Civilization Since 1600) or History 12 (History of California) 3
 Political Science 20 (Comparative Government) or Political Science 30 (International Relations) 3
 Sociology 2 (Social Problems) or History 27 (U.S. Women's History) or Sociology 30 (Social Gerontology) 3

Total 18

General Education Courses

For specific General Education courses refer to catalog section on Graduation Requirements.

Total minimum units required 60

SOCIOLOGY (SOCI)

1 PRINCIPLES OF SOCIOLOGY 3 UNITS

Designed to illuminate the way students see their social world. Uses a sociological perspective: scientific study of human interaction and society, with emphasis on impact of groups on social behavior. Includes the systematic examination of culture, socialization, social organization, social class, race, gender, deviance, social change and empirical methodology. These content areas are woven throughout the fabric of the course, particularly as they affect the lives of at least three of the following groups: African Americans, Latino Americans, Asian Americans, Native Americans and/or women. May be offered in Distance Education delivery format. 3 hours. Transfer: CSU, UC; CSU/GE: DO; D; IGETC: Area 4; AA/AS; (CAN SOC 2).

2 SOCIAL PROBLEMS 3 UNITS

Introduction to social problems common to modern industrial society, and the role of principal institutions in social organization and social disorganization. Includes crime, juvenile delinquency, divorce, drug addiction, alcoholism, aging, mental health and population as well as other areas. Focus on modern American society. Strongly recommended: Psychology I or 50, or Anthropology 3. May be offered in Distance Education delivery format. 3 hours. Transfer: CSU, UC; CSU/GE: DO; IGETC: Area 4; AA/AS; (CAN SOC 4).

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 American minorities; African Americans, Chicano/Latinos, Asian Americans, and Native Americans. Strongly recommended: Sociology 1 or Anthropology 3 or Psychology 1 or 50. May be offered in Distance Education delivery format. 3 hours. Transfer: CSU, UC; CSU/GE: D3, DO; IGETC: Area 4; AA/AS.

4 MARRIAGE AND FAMILY RELATIONS 3 UNITS

Sociological perspective of the family including mate selection, marital roles, marital adjustment, sexual adjustment, reproduction, child rearing, marital dissolution, and problems associated with the family in modern industrial society. Emphasis on methodology of family investigation. May be offered in Distance Education delivery format. 3 hours. Transfer: CSU, UC; CSU/GE: DO; IGETC: Area 4; AA/AS.

8 HUMAN SEXUALITY 3 UNITS

(See also Health 8 or Psychology 8.)
 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. May not receive credit if Health 8 or Psychology 8 has been completed. 3 hours. Transfer: CSU, UC; CSU/GE: E; AA/AS.

10 INTRODUCTION TO ASIAN AMERICAN STUDIES 3 UNITS

An examination of the experiences and perspectives of Asian Americans from Mid-1800s to the present. Major topics will include family, political involvement, assimilation, education and employment. Provides a comparative context for understanding the panethnic movement. May be offered in Distance Education delivery format. 3 hours. Transfer: CSU; CSU/GE: D3; IGETC Area 4; AA/AS.

11 FEMININITY AND MASCULINITY 3 UNITS

Biological, psychological, sociological, and anthropological overview of the assignment of behaviors to males and females. Identification of physiological and cultural influences on gender identity with emphasis on the historical sex role definition and socialization process in American culture, constraints of those definitions, and issues related to possible future changes. 3 hours. Transfer: CSU, UC; CSU/GE: D4, D0, IGETC: Area 4; AA/AS.

30 SOCIAL GERONTOLOGY 3 UNITS

Introduction to the study of aging, the social world, and social networks of European-American, African-American, Hispanic-American and Asian-American elders. Focus on heterogeneity within specific groups of minority elders, as well as differences in the aging experience for members of these designated subcultures. Emphasis on sociological theory as it applies to the independent elder. 3 hours. Transfer: CSU, UC; CSU/GE: D0, E; IGETC: Area 4; AA/AS.

31 DEPENDENCY IN OLD AGE 3 UNITS

Study of the aged and the disabled from a multidisciplinary perspective, but focusing upon the social factors and stress that impact upon the dependent person in U.S. society. It includes an examination of the loss of physical and intellectual function, disease, institutionalization and the looking glass self. The goal is to make these frequently invisible populations not only visible but also better understood. 3 hours. Transfer: CSU, CSU/GE: D0, E; AA/AS.

32 SOCIAL POLICY, PROGRAMS AND SERVICES FOR ELDERLY 3 UNITS

Examination of the programmatic and policy issues in social gerontology including an overview of public and private agencies which provide services to the elderly. View of legislation and service delivery with analysis of historical trends in societal attitudes towards providing services to older adults. Also includes policy, service and program needs of the minority elderly, specifically African American, Asian American, Hispanic American and Native American elders. Requires that student work as a volunteer for a minimum of 12 hours during the semester in an older adult social program, e.g. senior center, etc. 3 hours. Transfer: CSU; CSU/GE: D0; AA/AS.

63 SOCIAL WORKER DESIGNEE TRAINING 2 UNITS

Responsibilities of the person designated as social worker in skilled and intermediate care facilities serving a predominantly elder population. Focus on identifying and meeting the medically-related social and emotional needs of the frail elderly, chronically ill, cognitively impaired and sub-acute resident that places them within the context of past history, current status, and future goals. Designed to provide theory and skills needed to satisfy State regulations as outlined in Title 22. 2 hours. Transfer: CSU.

SPANISH

(See Foreign Languages)

SPECIAL STUDIES

SPECIAL STUDIES ½–5 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. 1–6 hours.

SPEECH (SPCH)

**DEGREE:
AA—SPEECH COMMUNICATION**

The National Association of Colleges and Employers rated “oral communication” highest among attributes necessary in achieving professional success. More and more businesses and occupations prefer to hire employees who possess strong communication skills. There are opportunities for working in corporate training, consulting, marketing, sales, public relations, human resources, television, radio, telecommunications, and political campaigning. A strong background in communication is also looked upon favorably by four-year universities when evaluating applicants. In addition, effective communication skills can assist in individual development and enhancement of human relations.

**SPEECH COMMUNICATION
ASSOCIATE IN ARTS DEGREE**

FRESHMAN YEAR FALL SPRING

Speech 1 (Fundamentals of Speech Communication) . . .	3
Speech 10 (Interpersonal Communication)	3
Speech 2A (Oral Interpretation of Literature 1)	3
Speech 46 (Argumentation & Debate)	3

SOPHOMORE YEAR FALL SPRING

Option*	3
Total	18

General Education Courses

For specific General Education courses refer to catalog section on Graduation Requirements.

Total minimum units required 60

*Option-choose three units from the following

- Mass Communications 32 (Radio and Television Announcing/Performance)*
- Mass Communications 40 (Radio Theater)*
- Speech 2B (Oral Interpretation of Literature II)*
- Speech 3 (Group Communication)*
- Speech 5 (Readers' Theater)*
- Theater Arts 25 (Fundamentals of Stage Speech)*
- Speech 48 (Activities in Forensics)*
- Speech 11 (Intercultural Communication)*
- Speech 30 (Elements of Speech)*

SPEECH (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. Transfer: CSU, UC; CSU/GE: A1; IGETC Area 1, Group C: AA/AS; (CAN SPCH 4).

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. Transfer: CSU, UC; CSU/GE: C2; AA/AS.

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 theatre. Development of dialect and further vocal characterization. Prerequisite: Speech 2A. 3 hours. Transfer: CSU, UC; M/AS.

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. Transfer: CSU, UC; (CAN SPCH 8).

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. Transfer: CSU, UC; CSU/GE: C2; AA/AS.

10 INTERPERSONAL COMMUNICATION 3 UNITS

Exploration, discussion, and evaluation of the components of verbal and nonverbal communication processes. Strongly recommended: Eligibility for English 1A or 52A. 3 hours. Transfer: CSU; CSU/GE: E; AA/AS; (CAN SPCH 8).

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. Transfer: CSU, UC; CSU/GE: D7; AA/AS.

30 ELEMENTS OF SPEECH 3 UNITS

Emphasis on individual abilities and needs in achieving effective verbal communication in daily life, business situations, and community activities. 3 hours. Transfer: CSU; CSU/GE: A1; AA/AS.

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. Transfer: CSU, UC; CSU/GE: A1, A3; IGETC Area 1, Group C: AA/AS; (CAN SPCH G).

48 ACTIVITIES IN FORENSICS 1-4 UNITS

(May be repeated 3 times)
Intercollegiate competition in the areas of public speaking and oral interpretation. Other activities include performance in workshops, festivals, concert readings, and the community. 4-16 laboratory hours. Transfer: CSU.

TECHNICAL ILLUSTRATION

**DEGREE:
AS-TECHNICAL ILLUSTRATION**

**TECHNICAL ILLUSTRATION
ASSOCIATE IN SCIENCE DEGREE**

FRESHMAN YEAR FALL SPRING

Art 2A (Introduction to Drawing)	4
Art 2B (Drawing and Composition)	4
Art 45 (Creative Portfolio and Self Promotion) or Art 55 (Introduction to Graphic Design Careers)	2-3
Art 48 (Perspective Drawing) or Art 61 (Illustration)	3
Design Technology 52 (Machine Drafting)	3
Photography 50 (Introduction to Photography)	3

SOPHOMORE YEAR FALL SPRING

Art 10 (Design and Materials)	3
Art 11 (Design, Materials and Color)	3
Art 40 (Graphic Design Principles) or Art 60 (Advertising Production)	3
Art 43 (Typography and Publication Design)	3
Design Technology 61 (Electronic Drafting)	3
Design Technology 62A (Computer Aided Drafting CAD)	3
Design Technology 62B (Computer Aided Drafting CAD)	3
Technical Option*	3
Total	43-44

General Education Courses
For specific General Education courses refer to catalog section on Graduation Requirements.
Total minimum units required 60

*Any 3 unit course in Design Technology, Engineering or Engineering Technology.

THEATER ARTS (THTR)

1 INTRODUCTION TO ACTING 3 UNITS

Introduction to the techniques and theories of acting, explored through improvisation, exercises and scene study. Development of the physical and psychological resources for acting including relaxation, concentration, creativity, believability, and commitment. (Formerly THEA 1A). 3 hours. Transfer: CSU, UC; CSU/GE: C1; AA/AS; (CAN DRAM 8).

2 THEORY AND PRACTICE OF ACTING 3 UNITS

Exploration of the theory and practice of acting, focusing on more complex characterization and character analysis. Theatrical styles and period acting with emphasis on monologues and scenes. Voiceover concepts. (Formerly THEA 1B). 3 hours. Transfer: CSU, UC; (CAN DRAM 22).

5 CHILDREN'S THEATER 1-3 UNITS

(May be repeated 3 times)
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. Transfer: CSU; CSU/GE: C1.

10 THEATER HISTORY AND APPRECIATION 3 UNITS

Basic components of the Theater, including its history and development over time and in various cultural contexts. Theatrical texts and performance techniques from the Greeks to contemporary American artists, with particular emphasis on multi-cultural theater of the 20th Century. Works from at least three of the following categories will be considered: African-American, Asian-American, Latino-American, Pacific Islander-American, Native-American, Middle-Eastern American theater artists. 3 hours. Transfer: CSU, UC; CSU/GE: C1; IGETC: Area 3; AA/AS.

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. Transfer: CSU, UC; CSU/GE: C1; IGETC: Area 3.

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. Transfer: CSU, UC; CSU/GE: C1; IGETC: Area 3; AA/AS.

16 DRAMATIC WRITING I 3 UNITS

(May be repeated 3 times)
Introduction to the basic principles of dramatic writing, including writing for theater, film, television, and for electronic media. Discussion and development of original material, resulting in the completion of a working script. 3 hours. Transfer: CSU; CSU/GE: C2.

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. Covers speeches and oral traditions from 1600 to the present. 3 hours. Transfer: CSU, UC; CSU/GE: C1; AA/AS; (CAN DRAM 6).

30 EMERGING WORK 3 UNITS

(May be repeated 3 times)
Participation in experimental workshop plays, original student scripts, and other projects, possibly leading to scheduled performances. 9 hours laboratory. Transfer: CSU, UC.

40 INTRODUCTION TO TECHNICAL THEATER 2 UNITS

Introduction to technical production of theater; scene construction and painting, and organization for production, laboratory experience in preparing plays for public performance. 1 hour lecture, 3 hours laboratory. Transfer: CSU, UC; CSU/GE: C1.

42 COSTUME DESIGN AND MAKEUP 2 UNITS

Introduction to costume design with emphasis on construction, fabrics, basic patterns, wardrobe planning, and historical styles, history, theory, and techniques of theatrical makeup, including stylized forms. Strongly recommended: Theater Arts 40. 1 hour lecture, 2 hours laboratory. Transfer: CSU, UC.

43 STAGE SCENERY AND PROPERTIES 2 UNITS

Introduction to the design of theatrical sets, including properties, techniques of construction, organization, and implementation of design for production. Prerequisite: Theater Arts 40 (*completed with a grade of "C" or higher*). 1 hour lecture, 2 hours laboratory. Transfer: CSU, UC.

44 STAGE LIGHTING 2 UNITS

Introduction to stage lighting design. Physics of light, color, electricity; components of basic lighting technology; comprehensive overview of the art of stage lighting design. Strongly recommended: Theater Arts 40. 1 hour lecture, 2 hours laboratory. Transfer: CSU, UC.

45 THEATER AUDIO 2 UNITS

Introduction to theater audio requirements in relation to sound on stage with emphasis on live sound reinforcement, basics of sound transmission, human reception, and components of theater sound systems. Prerequisite: Theater Arts 40 (*completed with a grade of "C" or higher*). 1 hour lecture, 2 hours laboratory. Transfer: UC.

47 COLLEGE THEATER ACTING 3 UNITS

(*May be repeated. Limit 24 units.*)
Participation in main season production or project. Enrollment is for the duration of the production. Enrollment by audition only. 5–15 hours laboratory. Transfer: CSU, UC; AA/AS.

48 COLLEGE THEATER TECHNICAL 1–6 UNITS

(*May be repeated. Limit 24 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. Transfer: CSU, UC; M/AS.

50 PRODUCTION MANAGEMENT 1–6 UNITS

(*May be repeated. 3 times.*)
Basic building blocks of producing a show, from the choice of material to the staging of a play from a broad range of historical periods. Organizing department productions, including student fund-raisers, student original projects, theater week, and the main stage productions. Personnel management, conducting regular production meetings, reconciling budget considerations, aesthetic demands, and practical matters. The business operations of all the scheduled productions, including promotions and front-of-house duties. 1 hour lecture, 3–15 hours laboratory.

TUTORING (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. Transfer: CSU.

29 INDEPENDENT STUDY-TUTORING ½–2 UNITS

(*May be repeated 3 times*)
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 1 unit, 1 hour lecture, 2 hours tutoring; for 2 units, 1 hour lecture, 4 hours tutoring. Transfer: CSU.

51 STUDY SKILLS & TUTORIALS INTERVENTIONS ½–1 UNIT

Individualized and group activities designed to support success in the classroom setting. Includes learning style assessment and follow-up, study skills workshops, group tutorials activities and assignments for individualized tutoring support. 18–36 hours total. Transfer: CSU.

200 SUPERVISED TUTORING NON-CREDIT

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.

WELDING TECHNOLOGY (WELD)

**DEGREE:
AS–WELDING TECHNOLOGY**

**CERTIFICATE OF ACHIEVEMENT:
INSPECTION AND PIPE WELDING
WELDING**

The program prepares students for employment in the welding trade and intensive preparation for welder certification.

Student will be able to gas and arc weld in all positions as well as use gas and arc cutting equipment. Upon completion of the A.S. Degree in welding, the student will be employable in the trades or will be able to transfer to a state university for study in an industrial-related degree program.

**WELDING TECHNOLOGY
ASSOCIATE IN SCIENCE DEGREE**

FRESHMAN YEAR	FALL	SPRING
Industrial Technology 74*		
(Measurements and Calculation)	3	
Welding Technology 63		
(Welding Layout and Fitting)	2	
Welding Technology 64A (Beginning Arc, Flux-Core Welding and Blueprint Reading)	3	
Welding Technology 65A		
(Beginning TIG, MIG and Blueprint Reading)	3	
Welding Technology 64B		
(Advanced Arc, Flux-Core Welding, and Blueprint Reading)	3	
Welding Technology 65B		
(Advanced TIG, MIG, and Blueprint Reading)	3	
Welding Technology 67A		
(Welding Skills Laboratory)	2	or 2
Welding Technology 67B		
(Advanced Welding Skills Laboratory)	2	or 2

SOPHOMORE YEAR FALL SPRING

Welding Technology 69A** (Fabrication and Installing Piping Systems)	3
Welding Technology 66** (Welding Inspection and Testing)	2
Welding Technology 69B** (Advanced Pipe Welding)	3
Total	29

General Education Courses
 For specific General Education courses refer to catalog section on Graduation Requirements.
Total minimum units required **60**

*Satisfies mathematics requirement for graduation.
 **Offered alternating years.

The above listing is a suggested sequence only Some courses may have prerequisites. Students may take courses in any sequence except where a prerequisite applies.

**WELDING
 CERTIFICATE OF COMPLETION**

This program is recommended for students preparing for entry-level welding position.

CORE COURSES FALL SPRING

Industrial Technology 74* (Measurements and Calculations)	3
Welding Technology 63 (Welding Layout and Fitting)	2
Welding Technology 64A (Beginning Arc, Flux-Core Welding and Blueprint Reading)	3
Welding Technology 65A (Beginning TIG, MIG, and Blueprint Reading)	3
Welding Technology 67A (Welding Skills Laboratory)	2 or 2
Welding Technology 70 (Introduction to Welding)	2 or 2
Total	15

*Satisfies mathematics requirement for graduation
 The above list is a suggested sequence only. Some courses may have prerequisites. Students may take courses in any sequence except where prerequisite applies.

**INSPECTION AND PIPE
 WELDING
 CERTIFICATE OF COMPLETION**

CORE COURSES FALL SPRING

Welding Technology 64B (Advanced Arc, Flux-Core Welding and Blueprint Reading)	3
Welding Technology 65B (Advanced TIG, MIG and Blueprint Reading)	3
Welding Technology 66 (Welding Inspection and Testing)	2
Welding Technology 67B (Advanced Welding Skills Laboratory)	2 or 2
Welding Technology 69A (Fabrication and Installing Piping Systems)	3
Welding Technology 69B (Advanced Pipe Welding)	3
Total	16

The above list is a suggested sequence only. Some courses may have prerequisites. Students may take courses in any sequence except where prerequisite applies.

The **Welding Certificate of Completion** and the **Inspection and Pipe Welding Certificate of Completion**, combined, satisfy welding major requirements for the **Associate in Science Degree**.

WELDING TECHNOLOGY (WELD)

63 WELDING LAYOUT AND FITTING **2 UNITS**
(May be repeated 3 times)

Theoretical and practical application of welding blueprints on welded assemblies and subassemblies. Welding power source classification and process identification, welding joint discontinuities, defects and distortion, AWS codes, standards and recommended procedures, use of jigs, fixtures, holding devices, and welding sequences techniques to control welding distortion, methods of straightening and restoring the dimensions of finished products. Laboratory includes Arc, MIG, TIG, and Flux-core welding, plasma and fuel cutting. Strongly recommended: Industrial Technology 74. 1 hour lecture, 3 hours laboratory. Transfer: CSU.

**64A BEGINNING ARC, FLUX-CORE WELDING,
 AND BLUEPRINT READING** **3 UNITS**
(May be repeated 3 times)

Theory and practical application of: Arc Welding, Shielded Metal Arc Welding (SMAW) and Flux-Core Arc Welding (FCAW), plasma, carbon arc and flame cutting, American Welding Society (AWS) nomenclature and codes, welding metallurgical transformations, welding discontinuities and defects, welding electrodes and wire selection, hazardous materials regulation, general shop equipment usage, shop safety, and blueprint reading (as applied in manufacturing industry). Strongly recommended: Welding Technology 70. 1 hour lecture, 6 hours laboratory. Transfer: CSU.

**64B ADVANCED ARC, FLUX-CORE WELDING
 AND BLUEPRINT READING** **3 UNITS**
(May be repeated 3 times)

Advance theory and practical application of: Arc Welding Shielded Metal Arc Welding (SMAW) and Flux-Core Arc Welding (FCAW), plasma, carbon arc and flame cutting, American Welding Society (AWS) nomenclature and codes, welding metallurgical transformations, welding discontinuities and defects, welding electrodes and wire selection, hazardous materials regulation, general shop equipment usage, shop safety, and blueprint reading (as applied in manufacturing industry). Strongly recommended: Welding Technology 64A or 70. 1 hour lecture, 6 hours laboratory. Transfer: CSU.

**65A BEGINNING TIG, MIG, AND
 BLUEPRINT READING** **3 UNITS**
(May be repeated 3 times)

Theory and practical application of fuel and inert gas welding of ferrous and non-ferrous metals and their alloys, oxyacetylene brazing, flame and plasma cutting, GTAW (Gas Tungsten Arc Welding) and GMAW (Gas Metal Arc Welding), skill development, AWS (American Welding Society) codes and standards, supplies selection, introduction to blueprint reading, proper and safe use of welding equipment and hazardous material regulations. Strongly recommended: Welding Technology 70. 1 hour lecture, 6 hours laboratory. Transfer: CSU.

**65B ADVANCED TIG, MIG AND
 BLUEPRINT READING** **3 UNITS**
(May be repeated 3 times)

Advance theory and GTAW and GMAW skill development of ferrous and non-ferrous metals and their alloys in the vertical and overhead positions according to AWS codes and standards, advanced blueprint reading and fitting, oxyacetylene brazing, flame and plasma cutting, electrodes and wire selection, advance blueprint reading and practical interpretation of welding symbols, proper and safe use of shop and welding equipment, hazardous material regulations. Strongly recommended: Welding Technology 65A and 70. 1 hour lecture, 6 hours laboratory. Transfer: CSU.

66 WELDING INSPECTION AND TESTING**2 UNITS***(May be repeated 3 times)*

Theory and practical application of inspection tests using destructive and non-destructive methods, AWS (American Welding Society) welding codes specification, analysis of joint configuration, wire and electrodes selections, tensile strength, bend and hardness testing, dye penetrant, magnetic particle, radiographic, ultrasonic, and metallographic inspection. Strongly recommended: Welding Technology 65B or Industrial Technology 74. 1 hour lecture, 3 hours laboratory. Transfer: CSU.

67A WELDING SKILLS LABORATORY**2 UNITS***(May be repeated 3 times)*

Development and improvement of practical welding skills using SMAW, FCAW, MIG, GMAW, and GTAW. Strongly recommended: Welding Technology 64A. 6 hours laboratory.

67B ADVANCED WELDING SKILLS LABORATORY**2 UNITS***(May be repeated 3 times)*

Advanced development and improvement of practical welding skills using SMAW, FCAW, MIG GMAW and GTAW. Strongly recommended: Welding Technology 64B and Welding Technology 65B or equivalent. 6 hours laboratory.

68 CERTIFICATION PREPARATION**½–2 UNITS***(May be repeated 3 times)*

Welding processes preparation for certification exams including the theory. 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. 1½ to 6 hours laboratory.

69A FABRICATION AND INSTALLING**PIPING SYSTEMS****3 UNITS***(May be repeated 3 times)*

Theory and practical application of: pipe joint preparation and design, API (American Petroleum Institute) and AWS (American Welding Society) welding codes specification for pipe and pipe fittings, analysis of joint configuration, plasma and flame cutting of pipes, wire and electrodes selections, beginning of pipe welding blue print and welding symbols, SMAW, GMAW, and GTAW of pipe joints, non-destructive and destructive test and qualitative concepts of evaluation. Prerequisite: Welding Technology 64B, Welding Technology 65B or equivalent. 1 hour lecture, 6 hours laboratory.



69B ADVANCED PIPE WELDING**3 UNITS***(May be repeated 3 times)*

Theory and practical application of pipe joint preparation and design; API (American Petroleum Institute) and AWS (American Welding Society) welding codes specifications for pipe and pipe fittings; geometric curve design for branched join of piping systems; wire and electrodes selections; advanced welding blue print and pipe welding symbols; SMAW, GMAW, and GTAW of pipe joints; metallurgical transformation of weld Heat Affected Area (HAA); welding discontinuities and defects; destructive and non-destructive testing; and methods of inspection and testing. Prerequisite: Welding Technology 69A or equivalent. 1 hour lecture, 6 hours laboratory.

70 INTRODUCTION TO WELDING**2 UNITS***(May be repeated 3 times)*

Welding industry fundamentals including introduction to SMAW, GMAW, GTAW, FCAW, oxyacetylene and braze welding, plasma and fuel gas cutting, general shop equipment usage, welding electricity fundamentals, shop safety, welding consumables identification, hazardous materials regulation, introduction to blueprint reading as applied in manufacturing industry. 1 hour lecture, 3 hours laboratory. Transfer: CSU.

71 ART WELDING**1 UNIT***(May be repeated 3 times)*

Provides fundamental welding and typical shop instruction and skills that artistically inclined individuals need to learn in order to be effective in the artistic creation process. Provides instruction on types of metals (aluminum, iron, steel, cast iron, bronze, stainless steel, etc.), mechanical fastenings, cutting and permanent joining together of metals and alloys through welding processes such as SMAW, GMAW, GTAW, FCAW, oxyacetylene and braze welding, plasma and fuel gas cutting. Includes general shop equipment usage, welding electricity fundamentals, shop safety, welding consumable identification, hazardous materials regulation. 1 hour lecture, 3 hours laboratory. Transfer: CSU; CSU/GE: C1.

WORK EXPERIENCE◇ (WEXP)**95 WORK EXPERIENCE◇****1–3 UNITS**

(Business 95 and Work Experience 95 may be repeated for a combined total of 3 times.)

College supervised on-the-job training. Paid or volunteer work experience, including an internship, in an occupation related to student's major or classes at Chabot. Cooperative effort between student, supervisor, and instructor to accomplish new work objective and broaden experiences for each semester enrolled. Corequisite: Work Experience 96. 5–15 hours of employment per week. Transfer: CSU.

96 WORK EXPERIENCE SEMINAR**1 UNIT**

(Business 96 and Work Experience 96 may be repeated for a combined total of 3 times.)

Provides the focal point for the coordination of the student's curriculum with college supervised employment/volunteering in the student's major field. Emphasis on building strong working relationships with supervisors, subordinates, co-workers. Issues pertaining to the modern workplace. Corequisite: Work Experience 95. 1 hour.

98 OCCUPATIONAL WORK EXPERIENCE**ALTERNATE PLAN****4–8 UNITS***(May be repeated 3 times)*

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 students' 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.

◇ Refer to page 14 for program requirements.

DISTRICT FOUNDATION

The Foundation is a non-profit corporation chartered under the laws of the State of California. The specific and primary purposes for which the corporation is formed are to operate for the advancement of community college education and for charitable purposes by the distribution of its funds for such purposes.

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CHABOT COLLEGE FOUNDATION

Chabot College and Las Positas College are authorized to establish subfoundations with their own By-Laws, Officers and Board Directors. The board members who lead the Chabot College Foundation are:

Richard Hong, Chair
Gordon Galvan, Vice Chair
Scheryl Phillipi, Vice Chair
Ed Bullok, Treasurer
Melinda Matsuda, Secretary
Rich Talmo, Executive Director

Gifts to the Foundation work for you and our community and they fill serious voids. Contributions to the Foundation are tax deductible.

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 wish to suggest a needed continuing education class, should telephone (510) 723-6665.





TRAINING AND DEVELOPMENT SOLUTIONS

Workforce preparation and economic development experts agree: the continued vitality of the East Bay economy depends largely on the ability of its workforce preparation systems to respond to the region's growing employers. Training and Development Solutions, the contract training division of the Chabot-Las Positas Community College District, is an integral part of our region's workforce preparation system. The part of the system that will work directly with you on the recruitment, development and retention of your most valuable asset: your human capital.

With access to the highest quality resources necessary, TDS is uniquely positioned to assess the performance of your operations, identify opportunities for performance improvement, and deliver both training and non-training solutions. TDS was specifically designed to be responsive to employers, aid them in reaching defined business and work force performance goals through the delivery of flexible, customized, industry-focused, performance-based business and training solutions.

Contact TDS directly at (925) 485-5239.

COMMUNITY EDUCATION

The Community Education Program supplements the Chabot College regular instructional program by offering community members short-term, inexpensive courses in topics of general interest. Fees are modest and cover only the direct cost of each course. Enrollment is easy—there is no college application form or transcript of record required. Classes start continuously during the term. Some courses meet on campus and others are conducted over the Internet. All classes are taught by certified college faculty or by community members who are experts in their field. Courses are in a variety of areas including computer instruction, financial planning and investing, fitness and health, and recreation. For information and a schedule of classes call the Community Education office at (510) 723-6644.

Student Services provides a variety of programs and procedures through which individuals are brought into the college for instruction, assisted in career planning and development, assisted in planning for and pursuing courses of study, provided with avenues for obtaining financial aid and employment, and given an opportunity to participate in many different activities. Student Services is also responsible for record keeping and reporting in matters relating to student progress, attendance, and status, for health and emergency care procedures, and for the general supervision and control of the campus. Additional information about any of the Student Services areas can be obtained by contacting the office of the Vice President of Student Services, Room 208, Building 200, at Chabot College.

MATRICULATION AT CHABOT COLLEGE

Matriculation is a partnership which you, the student, and Chabot College agree to form for the purpose of realizing your individual educational goals. This partnership acknowledges responsibilities of both the College and YOU, the student, to reach those goals through the established programs, policies, and requirements currently in place.

Chabot College agrees to provide "Partnership to Success" which includes: An admissions process; An orientation to the college instructional programs, support services, and procedures; An assessment of basic educational skills and career goals; Counseling/advising for course selection and for developing your individual educational plan; Quality instruction; Continuous follow-up on your progress with referral to support services when needed; and Institutional research and evaluation which will monitor the effectiveness of all services provided.

YOU, the student, agree 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 you in completing course work; and maintain progress toward an educational goal according to standards set by Chabot College.

EXEMPTIONS

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

1. *Orientation*
 - a. Non-matriculated students;
 - b. Students who have earned a previous college degree;
 - c. Students enrolling in only one activity or performance course;
 - d. Returning students who have attended a Chabot College orientation session.
2. *Assessment*
 - a. Non-matriculated students are exempt except for those students who plan to register in an English and/or mathematics course.

b. Matriculated students exempt from the assessment requirement include:

- (1) Students who have been awarded an Associate or higher degree will be asked to provide verification of the degree and completion of English and mathematics requirements.
- (2) Students concurrently enrolled in high school need a permission form signed by parents and high school official, and must not be enrolling in English or mathematics courses.
- (3) Students enrolled at a four-year college or university will be required to show a current student body card and not be enrolling in English or mathematics courses.
- (4) Students who have completed previous college work in mathematics, English, and/or reading may be exempt from the placement examination upon receipt of transcripts or grade reports.
- (5) Student enrolling in ONLY performance classes (i.e., acting, drawing) or activity classes (i.e., physical education).
- (6) Students who have been individually assessed through the Disabled Student Services.

Counseling/Program Advisement

- a. Non-matriculated students;
- b. Students who have earned a previous college degree;
- c. Students enrolling in only one activity or performance course;
- d. Students who have completed a Student Educational Plan.

Any student who believes he/she is eligible for exemption from any of the Matriculation components may obtain an exemption form from the office of the Dean of Counseling, Building 100, Room 140.

Students who are exempt from one or more of the matriculation components are still encouraged to participate in the process so as to make their enrollment at Chabot College as enjoyable and beneficial as possible.

Any student who believes he/she has been discriminated against in the matriculation process (assessment, orientation, counseling, advisement) may file a grievance with the Dean of Counseling, Building 100, Room 140.

ADMISSION AND REGISTRATION PROCEDURES AND POLICIES

ADMISSION

WHO IS ELIGIBLE 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 Chabot College.

Concurrent Enrollment-Educational Opportunities for Minor Students: Chabot College provides the opportunity for selected minor students to enroll in college level courses. Students who desire to participate in concurrent enrollment must be recommended by their school principal and have written parental permission. Further information on the Concurrent Enrollment policy and procedures contract is available at the Office of Admissions and Records.

INTERNATIONAL STUDENT ADMISSIONS, PROGRAMS AND SERVICES

The international program at Chabot College encourages students from other countries to enroll. The international program includes provision of services to international students who hold student visas by assisting them across matriculation (admissions, assessment, orientation, counseling, follow-up). Events on campus are also coordinated to promote global awareness. Through the college's International Student Club, members plan academic and social events that help international students make friends, learn about other cultures and explore bay area activities and attractions.

Chabot College is authorized under Federal Law to enroll international students. Students seeking admission to Chabot College must first obtain an international student application packet from the Office of Special Admissions, Room 168. The application packet contains the following documents which:

- a. provide evidence of having completed the equivalent of a United States high school education
- b. demonstrate the ability to read and write English at the 12th grade level (*TOEFL-CBT test minimum score of 173 required or 500 PBT or iBT 61*)
- c. show means of adequate financial support and medical care
- d. provide evidence by means of a physical examination certifying freedom from active tuberculosis
- e. proof of voluntary or school mandated medical insurance.

The number of international students admitted will be contingent upon Chabot College's ability to provide services as required. International students will be accepted for admission for either the Fall or Spring semester of each academic year.

For information on international student fees, see the catalog section titled "Fees and Refunds" or consult the current class schedule.

INTERNATIONAL STUDENT ACCEPTANCE POLICY

- A. INTERNATIONAL STUDENT APPLICANT REQUIREMENTS:
 1. Satisfactory completion of appropriate secondary education or the equivalent of a United States high school diploma.
 2. Affidavit of financial support showing availability of sufficient funding for a minimum of one year. The certification document must include source of sup-

port and must be on official letterhead bearing the stamp or seal of the verifying bank.

3. Students must demonstrate English language competency sufficient to benefit from instruction at Chabot College where all courses are taught in the English language. Although the college does offer ESL courses, a comprehensive ESL program is not available. All applicants must pass the TOEFL-CBT test with a minimum score of 173 or 500 PBT or 61 iBT.
4. Provide complete academic records, including official secondary school and post secondary academic records. (Contact the International Student Office for the names of certified translation agencies.)
5. A signed international student agreement to comply with all college/immigration requirements.
6. Contact the International Student Office for a complete application packet.

RESIDENCY REQUIREMENTS FOR ADMISSION

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

Residents: Those who have legally resided in California for at least one year and one day prior to the day before the first day of instruction of a new term. Non-citizens and certain visa holders who meet residency requirements must provide documentation from the Immigration and Naturalization Service. Visa holders should consult the Director of Admissions and Records for further information.

Non-residents (out-of-state and international students): Those who do not meet the California resident requirements as previously outlined. See section on "Fees and Refunds".

All questions concerning residence status should be referred to the Office of Admissions and Records.

ADMISSION PROCEDURES

Students who plan to enroll at Chabot College must complete and submit an Application for Admission. Application forms are available at the Office of Admissions and Records and in the class schedule and online at www.chabotcollege.edu.

Official transcripts of previous academic work are required to assist students to reach their educational objectives at Chabot College. Transcripts are also required for students who are candidates for special admissions programs, e.g., registered nursing, dental hygiene, etc., and/or services such as financial aid and scholarships, veteran's benefits, athletics, concurrent enrollment, EOPS, and international students.

COLLEGE TRANSCRIPTS

Students who desire transcripts of their academic record at Chabot College must submit a written request to the Admissions and Records Office indicating the number of transcripts requested and the designated recipient(s). Transcripts are provided only in response to a written request from the student. Official transcripts will be mailed directly to the designated recipient(s).

Copies of transcripts received from other colleges and universities cannot be forwarded to a third party (another college/university/person/etc.). Students desiring such transcripts must request them directly from the issuing institution.

READMISSION FROM DISMISSED STATUS

Students on dismissed status from Chabot College must submit a Petition for Readmission from Dismissed Status form. In order to enroll in classes, readmission must be approved by the Director of Admissions and Records. Forms are available at Admissions.

ADMISSION WITH ADVANCED STANDING

Credits earned at another accredited college or university will be applied towards an A.A. or A.S. degree from Chabot College upon receipt of official transcripts. Accreditation must have been listed in the Accredited Institutions of Higher Education manual. Credit will also be allowed for college-level courses taken at military service schools if such credit is recommended in the American Council on Education Guide.

EXEMPTION FROM NONRESIDENT TUITION

AB540 effective January 2, 2002 does not grant residency, but it does require that certain nonresident students who attended three years of high school in California and received a high school diploma or its equivalent be exempted from paying nonresident tuition. Students exempted from paying nonresident tuition pursuant to section 68130.5 do not become residents for eligibility purposes for any state-funded program (e.g., EOPS, BOG Fee Waiver, Cal Grant and/or the Governor's Merit Scholar Program). This benefit is available to all US citizens, permanent residents of the US, and aliens who are not nonimmigrants (including those who are undocumented), who meet all other eligibility criteria.

REGISTRATION PROCEDURES

NEW STUDENTS

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

1. Complete and submit an application for admission to the Office of Admissions and Records.
2. Complete the assessment process and obtain an orientation schedule.
3. Attend an orientation session.
4. Counseling services will be provided after attending an orientation session to assist students with program planning.
5. Register for classes on or after open registration date.

FORMER STUDENTS

Students who are not enrolled in the current term but who have previously attended the Chabot/Las Positas

Community College District will need to complete the following steps for registration.

1. Complete and submit a new application for admission to the Office of Admissions and Records.
2. Former students on probation or dismissal must obtain counselor advisement and approval before proceeding with registration.
3. Former students on dismissal status must submit a Petition to Reenroll to the Director of Admissions and Records.
4. Former students in matriculated exempt status (*see Matriculation Process Exemptions, page 140*) may not be required to obtain counselor approval prior to registration. (*Please note: Exempt status does not exempt students from prerequisite requirements.*)
5. Register for classes on or after open registration date.

CONTINUING STUDENTS

Students who are enrolled in the current semester are considered continuing students. Registration appointment notices will be mailed to all continuing students two to three weeks before the registration period begins. Instructions on how to use the on-line registration system (CLASS-Web—Chabot/Las Positas Automated Services System) are included in the current class schedule and posted on the college website at www.chabotcollege.edu.

Continuing Students at Chabot College will be assigned a registration priority number. The priority number is the total number of units completed at the Chabot/Las Positas Community College District followed by a random digit.

Registration appointment dates for continuing students are based on the students' priority within the following groups:

- Group 1: those who have completed a Student Education Plan (SEP) (*see page 140 for Matriculation Process information on SEP*) plus the orientation, 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

REGISTRATION METHODS

Students have two ways to register for classes:

- 1) by the Internet using CLASS-Web accessible from www.chabotcollege.edu; or
- 2) in person at the Office of Admissions and Records, Building 100.

SCHEDULE OF CLASSES

Prior to the beginning of each semester, a schedule of classes is published indicating courses to be offered, the time, the instructor, and the room assignment. Important instructions are included in this publication. Class schedule is subject to change. The schedule is available online.

REGISTRATION POLICIES

PREREQUISITES

Many courses offered by the College require the completion of prerequisite courses taken at Chabot College, or their equivalent at another accredited institution. Students are advised to consult the course descriptions found in the current College Catalog for the identification of the prerequisites for a course. Courses with prerequisites are also designated in the current class schedule.

Important Definitions. If you should see the words *Prerequisite*, *Corequisite* or *Strongly Recommended* in the catalog, it is important for you to understand the definition of these terms.

Prerequisite means a condition of enrollment which a student is required to meet in order to demonstrate current readiness for enrollment in a course or educational program.

Corequisite means a condition of enrollment consisting of a course which a student is required to simultaneously take in order to enroll in another course.

Strongly Recommended means a condition of enrollment which a student is advised, but not required, to meet before, or in conjunction with, enrollment in a course or educational program.

Conditions for Challenging Prerequisite:

1. Challenging the prerequisite on the grounds that it has not been made reasonably available.
2. Challenging the prerequisite on the grounds that it was established in violation of regulation or in violation of the District-approved processes. (*Student documentation required*).
3. The prerequisite is discriminatory or applied in a discriminatory manner (*student documentation required*).
4. Challenging the prerequisite based on a student's knowledge or ability to succeed in the course despite not meeting the prerequisite (*student documentation required*).

For more information, call (510) 723-6770. Challenge forms are available from the Counseling Office or Academic Division offices.

OPEN ENROLLMENT

It is the policy of this District that every class offered, unless otherwise indicated in the official catalog and schedule of classes, shall be fully open to enrollment and participation by any person who meets the academic prerequisites of such class and who is otherwise eligible for admission at Chabot College.

ENROLLMENT LIMITS

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

event, students will be accepted on the basis of criteria established by the college.

RECOMMENDED SKILL LEVELS

For each course listed in the catalog, recommended basic skill levels have been assigned in reading and writing and, where applicable, in mathematics. Students are advised that they should have at least these skill levels for academic success. Specific course skill levels are available in the Counseling Department, Room 164.

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. Petitions of course substitution or waiver of program requirements are available from the Counseling Office and from the Admissions and Records Office. Approval of the request by the Dean of Counseling at Chabot College is required prior to completion of 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 of an appropriate subject matter instructor, Dean or Counselor to validate course equivalency. Students shall be advised that courses waived receive neither unit or grade credit and that other courses may be needed to satisfy the total number of units required to complete the program of study.

STUDENT LOAD

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

COURSE CONFLICT/COURSE OVERLAP

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

COURSE ADD PROCEDURE

Students may attempt to add into open full-term classes during the first few weeks of instruction. Add Authorization numbers are generated on a random basis for instructors to issue to students. Students are generally added from highest to lowest priority number. See Class Schedule for add deadline and procedures.

DROPPING OR WITHDRAWING FROM CLASSES

Students are responsible for dropping or withdrawing from classes. Failure to follow the withdrawal procedures may result in a grade of "F". Students who drop before the no grade of record period will not have a grade appear on their transcript. Student who drop after the no grade of record ("NGR") deadline and before the withdrawal deadline will have a "W" on their transcript.

Drop and withdrawal deadline dates are listed in Schedule of Classes and also online. Students must drop by phone (510)781-1300 or online www.chabotcollege.edu go to CLASS Web.

Withdrawals do not affect the students' grade point average; however, excess "W" notation may result in (1) poor progress or dismissal status, (2) full-time enrollment status, (3) eligibility for financial aid and other benefits, and (4) athletic eligibility.

WITHDRAWING WITH EXTENUATING CIRCUMSTANCES

Students may withdraw from a class with extenuating circumstances after the Withdrawal deadline and prior to finals week. Documentation must be presented verifying the situation, the instructor must approve and verify that the class is being passed with a minimum of a D grade and the Dean of Counseling must approve the request. Circumstances that will be considered are acute medical problem, acute personal or family problem, employment related problem or other similar circumstances preventing a student from completing the class.

MILITARY WITHDRAWAL

If a student is called to active military duty any time during the term, he or she is entitled to military withdrawal (MW). Service men and women must provide copies of their military orders to the Director of Admissions and Records.

TOTAL WITHDRAWAL

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 guarantee symbol "W" is 75% into the term. Refer to the class schedule for deadlines.

INSTRUCTORS' WITHDRAWAL OPTION

Students who miss the first meeting of a course may be dropped by the instructor. 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 periods 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, thus, students may repeat for credit those courses taken for which grades of D, F, or NC were received.

NOTE: Except as provided in the catalog for specific courses or in cases of extenuating circumstances, 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).

Students may not repeat courses in which they received passing grades of A, B, C, or CR. Under the following specific conditions, the Vice President of Student Services or designee may permit the repetition of courses for which a grade of C or better had been received.

1. 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; or
2. When a student should repeat a course because there has been a significant lapse of time since the student previously took the course.
3. When it is legally mandated that a student repeat a course in order to meet a training requirement as a condition of continued paid or volunteer employment.

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

When a student has repeated a course and earned a grade of A, B, C, D, or CR, he/she may petition the Director of Admissions and Records to count, for grade point calculation only, the most recently earned grade. 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 other institutions, they may be held responsible for all units attempted.

STUDENT ON-LINE SERVICES

The Student On-Line Service Center, located in bldg. 100, room 116, provides students on-line access to BANNER web which enables them to retrieve information regarding grades, enrollment, academic history, admission applications, assessment and registration. In addition, students can also access information for career exploration, financial aid, and transfer to colleges and universities.

FEES AND REFUNDS

(Fees are subject to Change—Consult the Current Class Schedule)

Enrollment each term is conditional upon full payment of fee assessed.

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 Chabot College.

NONRESIDENT TUITION

Nonresidents of California are required to pay a tuition fee of \$163.00 per unit in addition to the enrollment fee.

INTERNATIONAL STUDENT TUITION

The tuition fee for international students, non-immigrant aliens or students on other visa types is \$165.00 per unit in addition to the \$26.00 per unit enrollment fee. International students (F-1 visa) are required to enroll in a minimum of twelve units per semester.

MAILING FEE (OPTIONAL)

There will be a \$3.00 optional mailing fee assessed of all students each semester or session.

ASSOCIATED STUDENT ACTIVITIES FEE (OPTIONAL)

The Associated Student Activities Fee is an optional fee of \$5, charged per semester. Students paying this fee receive an activity sticker which intends to provide merchant discounts, discounts on student activities and sports. This fee helps finance student activities, Chabot College clubs, scholarships, and other student-related services.

HEALTH SERVICES FEE

Mandatory health service fee of \$13.00 per semester to support health services for enrolled students. Information on exemptions may be obtained from the Director of Student Life, Room 2355, Building 2300 or by calling (510) 723-6915.

REFUNDS

Enrollment Fee: Students who officially withdraw from classes during the No-Grade-of-Record period (*see Class Schedule for deadlines*) shall be entitled to a full refund less a \$10.00 processing fee. Our refund policy complies with and is based on California law and the Education Code.

No refund will be given to students who withdraw from classes after the No-Grade-of-Record (NGR) deadline.

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:

Date of Withdrawal or Reduction in Program	Refund
Prior to the first day of instruction in a regular semester, term or session	90%
During the first two weeks of instruction for a regular semester, term or session.	75%
After the second week of instruction for a regular semester, term or session.	NONE

For further information concerning tuition charges and refunds consult the Schedule of Classes.

COUNSELING

Counseling services are provided for students attending day and evening classes. Counselors are available to assist students to establish or clarify appropriate educational and

vocational objectives and to help with educational, social or personal problems. Counselors can further assist individuals to participate in the educational process, to make significant choices, and to achieve increasing self-direction.

• **Academic Counseling**

Counselors help students plan their programs of study to reach their educational goals. Counselors offer assistance in exploring life goals, educational planning, and appropriate course selection. This assistance may include helping students evaluate their aptitudes and interest through the use of tests and interviews.

Students are also encouraged to seek advice from faculty members in the Division of their major interest. However, the final responsibility for the selection of proper courses rests with the student.

• **Career Counseling**

Counselors are available to assist students in identifying their career options. Career Counselors work in conjunction with resources found in Chabot's Employment and Career Services Center. The Center is well stocked with the latest information, including career resource books and video cassettes, computerized systems, university and college catalogs, current career oriented magazines and information brochures.

• **Transfer Counseling**

The Transfer Center provides a wide variety of transfer information, including the latest university and college catalogs, informational programs and an annual Transfer Day and Transfer Night. Representatives from universities and colleges are also available to assist students on a scheduled basis. Students have access to ASSIST Articulation Agreement to 4 year institutions. The world wide web is available to research college and university information. Students have the opportunity to meet with university representatives.

• **Personal-Social Counseling**

Counselors are available to students who need assistance with problems which may be affecting their academic progress. Counselors work with students to alleviate their relationship, health, or emotional concerns. The emphasis is on short term counseling. Appointments are arranged at the Counseling Division receptionist desk in Building 100. Matters discussed by the student and counselor are held in strict confidence. When appropriate, students may be referred to other professional services in the community.

ACADEMIC PROBATION

Probationary Contracts are designed for students who are experiencing sustained academic difficulties. Students are required to meet with a Counselor to review their progress, to discuss any problems that might interfere with their studies and to develop effective strategies to strengthen their academic progress. A Probationary

Contract is required each semester a student is on Academic Probation before being cleared for registration.

ARTICULATION

The Articulation Office is the liaison with the University of California, California State University and private colleges and universities regarding how Chabot College courses meet general education or major prerequisite requirements, Chabot College has articulation agreements with a large number of 4-year colleges and universities. For further information regarding articulation agreements, contact the Articulation Officer, Building 100.

ASSESSMENT (TESTING)

The Testing Center is a vital part of the college's counseling services. Tests are used by counselors to assist students with individual counseling and career exploration. Students are asked to consult a counselor to plan for appropriate test instrument referral to the Assessment Center. The Assessment Center also administers tests in English, Math, and Chemistry for appropriate placement into courses. Additional information can be obtained in the Assessment Center, Building 1800, Room 1840, or call counseling services.

COOPERATIVE ADMISSIONS PROGRAM (CAP)

The Cooperative Admissions Program is an agreement between the University of California at Berkeley and Chabot College. The agreement provides guaranteed admission to applicants who meet eligibility criteria for U.C.B. but cannot be accommodated at the time of application and redirects them to Chabot College for the first two years of lower division course work. These students must reapply as transfer students after completing the requirements stated by U.C.B. on the CAP contract. For more information, contact the CAP counselor in the Counseling Office.

EARLY DECISION

The Early Decision Program is designed for local high school seniors. The Early Decision Program allows high school seniors to register for classes earlier than regular new Chabot College students. Chabot College counselors visit local high schools to present admissions, assessment, program, and registration information. Students interested in participating in the Early Decision Program should obtain information from their high school counselor.

ORIENTATION

All students are strongly encouraged to attend an orientation session. The orientations program provides students with important information on academic requirements, registration procedures and campus support services to help facilitate the transition into college. It is designed to address new students' questions and concerns. Please contact the Counseling Office, 723-6718 for information.

PROGRAM PLANNING

All new students are required to meet with a counselor for assistance with assessment interpretation and/or program planning. The student should attend a Program Planning session after attending an Orientation Session.

TRANSFER CENTER

The Chabot College Transfer Center specializes in working with students who intend to transfer to a 4-year college or university. Resources include: college catalogs, college applications, CSU and UC workshops on majors/applications/financial aid, the latest information on transition from Chabot College to a 4-year college, as well as the opportunity to meet with representatives from those colleges. The Transfer Center is located in Building 100, Room 146. For more information, students may call 723-6720.

SPECIAL STUDENT PROGRAMS AND SERVICES

AMERICORPS

The AmeriCorps Program at Chabot College is a one/two year program open to all Chabot College students. The program combines coursework with volunteer service in the community. AmeriCorps provides an opportunity for students to achieve personal and professional goals while strengthening the community through addressing literacy needs of children. Students can either tutor children in local elementary schools or work at preschools with children on pre-literacy skills.

Students in the program will receive training in the following areas: literacy, diversity appreciation, conflict resolution, service-learning, first aid/CPR, safety, and classroom management. Financial assistance for books and supplies, counseling and other support services are available for AmeriCorps members.

Upon successful completion of one year, students will receive an **educational award of \$1,182/\$2,362** to be applied towards future schooling, vocational training, or to repay student loans.

Visit Building 1500, Room 1504 or call 723-6912 for more information.

ASPIRE PROGRAM

(TRIO STUDENT SUPPORT SERVICES)

This program was designed to help low-income and first-generation college students and individuals with disabilities graduate from college with baccalaureate degrees. ASPIRE participants receive assistance with securing financial aid; personal, academic and career counseling; tutoring; and assistance with applying to four-year colleges and universities. Higher education students are now being served at 796 colleges and universities nationwide. For information, call Tammeil Y. Gilkerson at (510) 723-7628.

**BRINGING ACADEMICS TO YOUTH (BAY)
CAREER PROJECT
ALAMEDA COUNTY YOUTH PROJECT**

This is a pilot project in collaboration with Chabot College, Las Positas College, Pivotal Point Youth Services, the Community College Foundation, and Tri Valley Community Foundation. Participants are WIA eligible emancipated former foster youth, teen parents and other at-risk youth residing in Alameda County, excluding Oakland, and must be assessed at a 7th to 8th grade (or above) level in reading and math. Students will begin with a bridge program consisting of Intro to College/Life Skills, Extended Opportunities Programs and Services (EOP&S)/Independent Living Program (ILP), computer skills and soft skills. The cohort will have one semester of intensive contextualized education in developmental Reading, English, and Math for a minimum of 12 college units. In the second semester the cohort will begin their education in the selected high growth/high demand field with continued support from the program in the form of counseling, part-time job placement, case management and referrals. At the end of their education, the students will be assisted with job placement in their chosen field and encouraged, as appropriate, to continue their education and career growth. For more information, call Vanessa Cormier at (510) 723-6912.

CALWORKS

CalWORKS(California Work Opportunities and Responsibility to Kids) is the statewide comprehensive education/job training, job services, and job placement program. TANF (Temporary Assistance to Needy Families) provides time-limited benefits to TANF recipients who must be involved in work/job training activities as part of Federal Welfare Reform. Chabot has designed short-term training programs in collaboration with the County of Alameda for TANF/CalWORKs adult recipients in one-parent and two-parent families. Individualized education/training plans are developed which include classes that provide skills required for success in college and prepare the student for entering the workforce. Support services include counseling, tutoring, career assessment, job search/preparation training, and job placement. The goal of the individualized education and training program is gainful employment. Through cooperation with the Alameda County Department of Social Services, other support services, such as child care and transportation can be provided.

CHILDREN'S CENTER

Chabot College Children's Center offers full day care to students, faculty and staff, serving children ages 3 months to five years. The Center hours are Monday through Friday 7:30 am to 4:00 pm. The Children's Center reflects the diverse population of Chabot College both in children and families served and Center staff. The Center staff are trained Early Childhood professionals who plan and implement appropriate curriculum for children with input and collaboration from each family.

The Center is funded through the state Department of Education, Child Development Grants, Head Start and Chabot College. Child care is free for most qualifying families. The Center maintains an eligibility/wait list of interested parents. Visit the Center in Building 3500 and speak with the secretary to get on the wait list.

Due to the variety of funding sources, the Center is able to assist in providing a wide range of services for children and families as needed. Staff work closely with parents to determine needs and establish resources and referrals.

The Children's Center also serves as a training center for students enrolled in the Early Childhood Education where they work side by side with Center staff. Visit the Children's Center in building 3500, or call 723-6684 for more information.

EMPLOYMENT & CAREER SERVICES CENTER

The Employment & Career Services Center provides comprehensive employment and career information services to students transitioning from school to work. Included are job preparation, job search, and job placement activities; as well as career/vocational assessment and employability counseling. Students can arrange for individual appointments with career counseling faculty, attend small group workshops, access computerized job search information, and meet with the employers through the Center. On-campus student employment is also available through the Center.

The Center is located in building 2300, room 2325. Telephone number: 510-723-7228.

INTERNATIONAL STUDENTS PROGRAM

The international program at Chabot College encourages students from other countries to enroll. The international program includes provision of services to international students who hold student visas by assisting them with matriculation (admissions, assessment, orientation, counseling, and student follow-up). Events on campus are also coordinated to promote global awareness. Through the college's International Student Club, members plan academic and social events that help international students make friends, learn about other cultures, and explore bay area activities and attractions. Telephone number 510-723-6715.

**TEACHER PREPARATION PROGRAM
TEACHERS, EDUCATORS,
AMERICORPS & MENTORS (T.E.A.M.)**

The T.E.A.M. Program at Chabot College is a one/two year program open to qualified Chabot College students. The program is designed to assist future teachers/liberal studies majors gain experience working with children. The program is also designed to encourage other students to consider teaching as a career. T.E.A.M. provides an opportunity for students to achieve personal and professional goals while strengthening the community through addressing literacy needs of children. Students tutor children in

local elementary schools and work with children within the classroom and in small groups.

Students in the program will receive training in the following areas: literacy, diversity appreciation, conflict resolution, service learning, first aid/CPR, safety, and classroom management. Financial assistance (**monthly-\$\$\$-stipend**), supplies, counseling and other support services are available for T.E.A.M. members.

Upon successful completion of one year, students will receive an **educational award of \$1,182** to be applied towards future schooling, vocational training, or to repay student loans.

T.E.A.M. is a California Teacher & Reading Development Partnership (TRDP) Program.

Visit Building 1500, Room 1504 or call 723-6912 for more information.

DISABLED STUDENT PROGRAMS AND SERVICES

(THIS CATALOG IS AVAILABLE IN ALTERNATE FORMAT. CONTACT THE DISABLED STUDENT RESOURCE CENTER, BUILDING 2400 OR CALL 510-723-6725.)

DISABLED STUDENT RESOURCE CENTER

The Disabled Student Resource Center (DSRC) offers support services for students with disabilities. Any student with a verified physical, communication, psychological, or learning disability is eligible for services. Support services include direct services, programs, and campus and community referrals.

Counselors are available in the Center to assist students with academic and vocational goals. Counselors are also available for personal counseling and community referrals. Direct services include assistance with academic planning, registration, new student orientation, mobility, interpreters, reader services, and alternative testing. Available for student use are braille writers, closed circuit TVs for visually impaired, TDDs and Phonic Ears for hearing impaired, and an extensive High Tech Center with adapted computer equipment.

Students are encouraged to participate in the Able-Disabled Club. The Club sponsors activities for both disabled and non-disabled members at Chabot College.

The DSRC is located in our new Building 2400. The telephone number is (510) 723-6725 or TDD (510) 723-7199.

HIGH-TECH CENTER

Computers with state-of-the-art adaptive hardware and software make up the High-Tech Center. Programs include screen readers, screen magnifiers, voice recognition software for students who cannot use a keyboard, and a program to assist students in reading textbooks by use of a scanner. The Center also provides other programs to help students learn keyboarding and word processing, as well as software assigned by other instructors.

LEARNING SKILLS CENTER

The Learning Skills program is designed to assess students to determine if there is a Learning Disability and to provide instruction to prepare students academically for college courses. The program includes the initial assessment of English 116, English 117—Reading, English 118A and 118B—Reading and Writing; English 119—Computing Skills/Problem Solving/Math; and English 120, 121 which are support classes for academic English and Math courses.

ADAPTIVE PHYSICAL EDUCATION

DSPS offers students an opportunity to design their own individualized physical education program with an instructor. Activities range from weight training and flexibility exercise to swimming and self-defense. Chabot provides a fully equipped Adaptive Physical Education gym, where students can work out on treadmills, pulleys, weights, walkers, and exercise bikes.

Adapted Physical Education courses are available for students at Chabot College with physical disabilities. Students with disabilities seeking additional information should contact the Disabled Student Resource Center, 723-6725.

VOCATIONAL REHABILITATION SERVICES

Students who have a verified physical, communication, psychological, or learning disability that impacts them vocationally may be eligible for services from the State Department of Rehabilitation. These services may include vocational counseling, training, and job placement.

Appointments may be made with a counselor by contacting the State Department of Rehabilitation, 1253 A Street, Hayward, California 94541; telephone number: (510) 881-2404. Additional information may be obtained by contacting counselors in the Disabled Student Resource Center.

EOPS/CARE

EOPS is a student academic support program for educationally and economically disadvantaged students, funded by the State of California and the Chabot/Las Positas Community College District. The program is designed to provide educational opportunity for students with academic potential who historically would have not attended college.

Specifically, EOPS provides **eligible** students with academic support services such as personal and career counseling, academic advising, priority registration, financial aid application assistance, transfer assistance, university application fee waivers, EOPS grant and work study assistance, and cultural awareness and enrichment activities.

To be eligible for EOPS sponsorship a student must meet all of the following criteria:

- Must meet California Residency Requirement
- Must qualify for a Board of Governors Waiver (BOGW A or B)

- Must be enrolled full-time (12 units) or more
- Must not have completed more than 70 semester units of college degree applicable work or more than six consecutive semester of college
- Must be determined to be educationally disadvantaged

For further information, contact the EOPS Office located in Building 200, Room 221 or call (510) 723-6909.

CARE (Cooperative Agencies Resources for Education) is a unique educational program which represents a cooperative effort between the Chabot/Las Positas Community College District, the Department of Social Services and community agencies designed to assist single parent, EOPS students achieve their educational goals and work towards achieving financial independence. Support services include: academic and personal counseling, peer support, campus and community referrals, transfer assistance and limited child care financial assistance.

To be eligible for CARE, students must be attending full-time, be eligible for sponsorship into the colleges Extended Opportunity Programs and Services program (EOPS), must be currently receiving Temporary Assistance for Needy Families (TANF), and must have at least one child under the age of 14 years old.

FINANCIAL AID

Financial aid is money provided by the Federal Government, the State of California, and administered by the Chabot Financial Aid Office, to help cover costs associated with attending college at Chabot. The college provides financial assistance to eligible students through scholarships, grants, loans and job opportunities: Federal Pell Grants, Federal Supplemental Educational Opportunity Grants (SEOG), Federal Work Study (FWS), Federal Stafford Loans, Cal Grants, Bureau of Indian Affairs grants (BIA), and other external scholarships. The CA Board of Governor's Fee Waiver program will waive the fees for eligible CA residents.

Students are responsible for knowing all eligibility and renewal requirements and criteria for each type of aid they apply for or receive. The Chabot website is the best source of current information and updates. Links to apply for financial aid, information regarding state, federal and institutions policies, and additional Chabot forms for financial aid processes are available through the Financial Aid Office's web page at www.chabotcollege.edu, by clicking on Financial Aid.

Students must apply by March 2nd of each year prior to the fall semester if they wish to be considered for the Cal Grant Program, and for maximum types and amounts of all financial aid programs (including limited SEOG and FWS funds). Students applying later than this date will be considered for aid as it remains available, and in the order their applications are received, processed and awarded. Each student must reapply each year to be considered for financial aid. Students may view current, accurate information regarding their file status, eligibility, and awards on Class Web.

FINANCIAL AND ACADEMIC ELIGIBILITY

To be eligible to participate in the Title IV student financial aid programs provided by the U.S. Department of Education and the Chabot-Las Positas Community College District, **students must demonstrate both financial and academic eligibility.** Financial eligibility is determined by completion and verification of the Free Application for Federal Student Aid (FAFSA), and academic eligibility is determined by review of academic progress after each term. Maintaining Satisfactory Academic Progress requires all three eligibility criteria are met: minimum 2.00 semester and cumulative grade point average; minimum completion rate of 67% each term; and maximum period of eligibility at 150% of program length in attempted units, or credit hours.

New students are required to provide academic transcripts from prior colleges and universities for review of academic progress by the Financial Aid Office, regardless of whether or not the transcripts are required for the Admissions process, and regardless of whether or not aid was applied for or received for the prior academic attempts.

Students who are determined to be ineligible for financial aid due to failure to demonstrate satisfactory academic progress, or who have exceeded the time limits for eligibility, may request reconsideration if they have extenuating circumstances through an appeal process.

See Chabot College's Financial Aid website for detailed eligibility requirements and policies. See Class Web Financial Aid for individual financial aid file status.

INTERCOLLEGIATE ATHLETICS

Chabot College competes under the regulations of the State Commission on Athletics and is a member of the Coast Conference. Intercollegiate sports offered are Men's Baseball, Men's & Women's Basketball, Men's & Women's Cross Country, Men's Football, Men's Golf, Men's & Women's Soccer, Women's Softball, Women's Water Polo, Men's & Women's Tennis, Men's & Women's Track & Field, Women's Volleyball, Men's Wrestling and Men's & Women's Swimming.

All students meeting eligibility requirements may try out for the appropriate athletic teams. For further information, contact the Division of Physical Education & Athletics at 510-723-7203.

ATHLETIC ELIGIBILITY

In order to be eligible for competition, student athletes must successfully pass a physical health screening, maintain a cumulative 2.0 grade point average in all units attempted, and be actively enrolled in 12 units or more. Before competing in a sport for a second season, athletes must earn 24 units. Transfer athletes with prior competition at another community college must earn 12 units in residency at Chabot College in order to become eligible for competition.

An athlete may compete for a maximum of two seasons in the same sport. Athletes must adhere to a Code of

Conduct which is based upon honor, honesty, fairness, integrity, and loyalty. Athlete who violate the Code of Conduct for student-athletes may lose their eligibility status. For further information contact the Division of Physical Education & Athletics 510-723-7203.

ATHLETIC FACILITIES

A 5,000 seat lighted football field and 400 meter all-weather track stadium is located in the northwest section of the campus. Other athletic facilities include an Olympic swimming pool, baseball and softball stadiums, indoor racquetball courts, a 1,500 seat gymnasium, a matted wrestling room, and strength training facilities. The unique blend of grasses in Chabot's football and soccer stadiums has attracted the National Football League. Bo Jackson's first poster for Nike was photographed on Chabot's football field.

LEARNING COMMUNITIES

DARAJA PROJECT

The Daraja Project is a set of steps, stepping stones or a stairway to success in college. More specifically, it is a year-long, accelerated writing, mentoring and counseling program which focuses on African-American authors and issues. It is designed for students who plan to transfer to 4-year colleges and universities. The program is open to all students who meet the qualifications for enrollment.

An English instructor, counselors and mentors work together as a team with students for two consecutive semesters. Students interview mentors, who are campus or community professionals, and use these interviews as the basis for writing and discussion in English classes. The mentors serve as role models, sharing their experience and knowledge. Students build a network of contacts, both on campus and in the professional community.

The Daraja Project, in existence since 1988, is an award-winning program known as one of the best opportunities for success in community-college education. Graduates have transferred to numerous colleges and universities, both in and out of state. For more information, call (510) 723-6747.

PACE PROGRAM

The PACE Program at Chabot is an A.A. Degree program for working adults which also fulfills general education transfer requirements to the California State University system. PACE classes are conveniently offered so that students may take three classes at a time by coming to school one night a week plus every other Saturday. Two majors are available: Behavioral Sciences or Liberal Studies Option II (other majors are available with additional non-PACE classes). For more information, contact the PACE office, building 700, room 765, or call (510) 723-6699 or (510) 723-6619.

PUEENTE

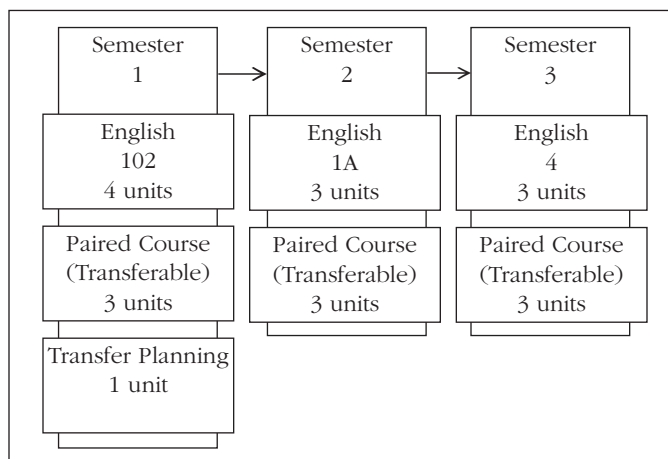
Puente's mission is to increase the number of community college students who transfer to four-year colleges and universities. Puente prepares students to compete academ-

ically in a university environment. It is open to all students who meet the eligibility criteria.

Chabot College's Puente Project is a year-long writing, counseling and mentoring program. Included are English courses, Psychology-counseling courses, counseling support services and a mentorship. The course curriculum and content is based on Chicano/Mexican-American/Latino writers and authors. The courses are graded on class requirements unique to the course content as taught by the instructors. Students are required to participate in all course and project activities, i.e., counseling and mentoring. The Puente Project program year starts with the Fall semester and runs through the Spring semester. Interested students are encouraged to contact the Puente office in February preceding Fall entry. For more information, contact the Puente office, Room 120, in the Counseling Center, Building 100, (510) 723-7120.

SPRINGBOARD TO TRANSFER

Springboard to Transfer is a three-semester learning community for students who want to transfer to a four-year university. The program includes three levels of the English curriculum (English 102 → English 1A → English 4), and each semester, a general education course is paired with the English class. In the first semester, students also receive small-group transfer-planning support from Chabot counselors. Springboard to Transfer provides students a solid base around which to build their schedules and strong connections to their faculty and their fellow students. For more information, see <http://www.chabotcollege.edu/Springboard>



QUEST

The Quest program is designed to meet the needs and interests of the older adults in our community. Classes are offered in areas such as Creative Writing, Computer Skills, Art, Physical Fitness, Line Dance, Tap Dance and Swimming. Classes are located on campus and in off-campus locations in Hayward, Castro Valley and San Leandro. To find out more information about Quest Classes look for the Quest page in the Schedule of Classes or go to the website: <http://www.chabotcollege.edu/QUEST/> The Quest office phone number is 510-723-6699.

TUTORIAL CENTER

The Tutorial Center offers free individual and small group tutoring in specific content areas. Computers are available.

For more information, contact the Language Arts office, Room 702, (510) 723-6804.

WOMEN'S STUDIES

The Women's Studies Project has been offering classes since Fall 1995. Particular sections of regular courses offered at Chabot—English, History and Health Science—are included. TWSP courses focus on women's issues in the context of a general education curriculum, and are open to all qualified students who are interested in this focus.

STUDENT ACTIVITIES

Student Activities plays an essential role in campus life at Chabot College. There is a multitude of events every month for students to enjoy, to experience new cultures and learn from interactive programming. Every week during the Fall and Spring semesters the Student Activities Office holds the College Hour Concert Series. The series showcases both local and Bay Area talent consisting of almost every genre of music. There are also special events throughout the year to commemorate Black History Month, Women's History Month, Asian Heritage Month and Cinco de Mayo. For the latest on what's happening around Chabot College be sure to call the Student Activities Events Hotline at (510) 723-7140. For more information on any events or to find out how to get involved, stop by the Office of Student Life in the Student Center, Building 2300, Room 2355.

ASSOCIATED STUDENTS**STUDENT GOVERNANCE AND CLUBS**

Each currently registered student is a member of the Associated Students at Chabot College. The Student Senate is responsible for bringing student concerns to the academic divisions and College committees. The Student Senate coordinates the participation of students in the governance of the college and also seeks to provide them with additional scholastic, cultural, social, and recreational activities. The Associated Students are responsible for encouraging students to participate in the out-of-class activities as important educational experience. Representatives of the Associated Students serve as members of several regional and state-wide organizations.

The Interclub Council (I. C. C.) is responsible for the coordination of clubs relating to special interests of students and for the conduct of a wide variety of on-campus social activities and events. All College clubs must be officially recognized by I. C. C. to use the College name and to participate in campus activities.

Students interested in leadership, clubs, entertainment, or just helping should contact the Associated Students

President, the I. C. C. Chairperson, or the Coordinator of Student Activities upstairs in the Student Center, Building 2300.

PUBLICATIONS

The Official Chabot College student newspaper, *The Spectator*, is published weekly by the Mass Communications/Journalism instruction program. Students interested in working with the newspaper should contact the Spectator Office located in Room 1635.

SECRET ORGANIZATIONS

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

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."

SOCIAL ACTIVITIES

Numerous social activities are offered at Chabot College each semester through A. S. C. C. and I. C. C. Students interested in working on social activities and entertainment are encouraged to contact the Office of Student Life upstairs in Building 2300, Room 2355.

STUDENT LIFE

The Office of Student Life, located in Room 2355 of the Student Center is the heartbeat of campus life at Chabot College. Student Life offers a variety of services including posting publicity, on campus student employment, the housing resource board, health insurance information, community service opportunities and leadership workshops/classes. The Office of Student Life can help students achieve their goals and get the most out of the college experience at Chabot. Along with diverse services offered, the Office of Student Life oversees Student Activities, Associated Students, the Flea Market, the Student Health Center, and publishes the yearly free student handbook, a complete guide to Chabot College, in collaboration with ASCC. Students are encouraged to stop in and get involved today!

BOOKSTORE

The Chabot College Bookstore is operated as a service to the college community by authorization of the Trustees of the Chabot Las Positas Community College District.

The bookstore staff will assist you in finding the books that are required for your classes, and look forward to serving your educational needs. The bookstore is owned and operated by Chabot College.

Merchandise carried:

- textbooks
- trade books, medical and computer reference books
- dictionaries and study guides
- Apple computers
- computer software
- calculators
- computer supplies
- art, engineering, photo, and general school supplies
- medical and dental supplies
- scantrons and blue books
- greeting cards
- backpacks
- Chabot College clothing and gifts
- class catalogues and schedules
- semester parking permits
- videotape rentals for the Distance Education programs
- candy and snack foods

Location:

The Bookstore is located in building 3800 between the cafeteria and the gymnasium just off the student parking lot "B." Public telephones, local newspaper stands, and a picnic area are situated in front of the store.

General Information:

Bookstore phone number is (510) 783-9800.

Chabot College catalogues are available for sale in the Bookstore. The Bookstore will mail them to you if you send a check or money order in advance for the purchase plus shipping and handling.

The Bookstore accepts cash, checks, VISA, MasterCard, and the Discover Card for payment for purchases made in the store. You must have a valid California driver's license or ID and a Chabot College student ID for payment by check. Business checks are not accepted, and all checks must be pre-printed with your name and address. All checks are subject to the SCAN check approval system. The Bookstore may accept your parent's credit card for payment provided that you have valid identification and a note from your parent authorizing the purchase.

An ATM machine is located in the store which is available for your use whenever the store is open.

Come to the service counter to rent videotapes and for special processing such as EOPS, Veteran's, book loans, Rehab, and New Horizons.

Your personal backpacks and tote bags are not allowed in the store. The Bookstore provides coin return student lockers for your use to secure your belongings while you are shopping in the bookstore. The lockers require 25¢ to operate which is returned to you when you retrieve your belongings. Overnight use of these lockers are not permitted.

Information about the required text and prices for your classes is available one week prior to the beginning of class. The Bookstore begins selling textbooks the week before school starts. The textbook section of the store is

arranged alphabetically by class subject, then by course and section number. Please bring a copy of your registration with you so that we may assist you in finding the correct books for your class. The Bookstore makes every effort to provide as many used books as possible. Shop early for the best selection of used textbooks.

For textbook inquiry, reservation, or purchase on line, go to www.chabotbookstore.com.

Textbook Return Policy:

At the beginning of the semester the bookstore will post the final date to return or exchange your textbooks for a full refund. Save your receipt. You must present your receipt if you need to return a book or any merchandise in the bookstore. In order to qualify for a full refund, your new textbook must be returned in brand new condition without any markings, scratches, damages, or bent pages. Shrink wrapped or boxed books must be returned in its original packaging in order to be eligible for a full refund. Used books must be returned in salable condition. The Bookstore reserves the right to make a decision on the refund based on the condition or salability of the merchandise.

In order to process your refund, you must present your cash register receipt dated for the current semester and your Chabot College student I.D. or a copy of your current Chabot College registration with your California driver's license or I.D.

After the refund period at the beginning of the semester, our standard return policy is two days from the date on your receipt.

The Bookstore does not accept textbook returns after the first six weeks of the semester. Summer refund dates and any changes in the refund policy will be posted in the store.

Used Book Buy Back:

During FINALS WEEK each semester, the Bookstore may buy back your textbooks for up to half of the price that you paid for the books. The price you are offered will vary depending upon whether the book has been adopted for use at Chabot College for the next semester and if the Bookstore still needs to fill our quota. If the book is not being used at Chabot, there may be a market value for the book due to national demand from other colleges, and the Bookstore may buy the book from you at a wholesale price. These books will be sent to a book wholesaler to be distributed to other colleges. If you have an out-of-date edition, your book may not have a market value. The Bookstore does not guarantee the buyback of every book. You do not need to present your receipt for the book during buy back.

The Bookstore may buy your used books at wholesale prices during the first week of classes. You may try to sell your books from prior semesters or from other colleges. Our wholesaler has a computer listing of thousands of titles. The times and dates for this special buyback will be posted in the bookstore. The best prices are offered during finals week.

TEXTBOOKS AND SUPPLIES

All students are required to furnish their own textbooks and supplies which are available at the College Bookstore. Typical costs for books and supplies average \$300 per semester for those persons pursuing a full-time program. Students financially unable to buy their own books and supplies should contact the Financial Aid Office.

STUDENT HEALTH CENTER

All students are eligible for unlimited visits to the Student Health Center located in Building 100, Room 120. Services at low or no cost include assessment, evaluation, and treatment for minor illnesses and injuries, physical examinations, over-the-counter medications, immunizations, reproductive health services, non-urgent emergency care, early illness intervention, physician referrals, and health education and advisement. The Center is open five days a week with limited evening hours. Telephone (510) 723-7625.

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.

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.

MEDICAL EMERGENCIES ON CAMPUS

Students are advised to contact the Security Office for assistance in all cases of a medical emergency or personal injury which occurs on campus. Use any hall telephone and dial 6923 or * 16 from any pay telephone for assistance. All cases of personal injury should be reported to the Campus Safety Office in Building 2300.

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 purchased through the office of the Associated Students, upstairs in Building 2300. The College carries accident insurance.

HOUSING

Chabot College does not provide dormitories or other types of college sponsored housing. Through a joint housing program for Chabot students who are transferring to California State University, Hayward, eligible students may

apply to live at the Pioneer Heights Apartment complex. For details see the Office of Student Life. Listings of rentals and other housing are available on the bulletin boards located in the lobby of the Student Center, Building 2300.

LOST AND FOUND

A centralized Lost and Found is located in the Campus Safety Office in room 2302, building 2300. Articles deposited with the Lost and Found are held until the end of each semester. After this period, unclaimed items will be disposed.

PARKING

Parking on campus is a privilege extended by the Board of Trustees to the faculty, staff, student body and guests. To ensure safety and the efficient use of available parking space, parking rules and regulations adopted by the Board are enforced all year round. There are no grace periods or exceptions to the parking rules and regulations without the expressed direction of the Director of Campus Safety and Security. Drivers using college parking lots shall comply with the rules and regulations adopted by the Board of Trustees pursuant to California Vehicle Code section 21113. Failure to comply with the parking rules and regulations may result in disciplinary action, the issuance of a parking citation and/or cause the vehicle in violation to be towed at the owner's expense. Please refer to the Parking Rules, Procedures, and Information bulletin or contact the Campus Safety and Security Department for more information.

PARKING PERMITS

Parking is by permit only. Student parking permits for each instructional term can be purchased at the College bookstore. Daily parking permits can be purchased for \$1 from dispensers located in all the parking lots. Permits shall be hung from the rearview mirror or displayed on the vehicle dashboard. Permit enforcement hours are Monday through Friday, 7:00 a.m.-10:00 p.m. and Saturday 7:00 a.m.-5:00 p.m. Permit parking is not enforced on Sunday and holidays identified by the college. The following fees have been set for parking in accordance with section 76360 of the California Education Code and adopted by the Board of Trustees.

Fall/Spring Semester motor vehicle:	\$20
Fall/Spring Semester motorcycle:	\$10
Summer Session:	\$10
Daily Permit:	\$ 1

NOTICE: Parking permits do not guarantee a parking space, rather, they authorize parking in available spaces. Lost or stolen parking permits must be replaced at the owner's expense. Parking fees are subject to change. Please refer to your class schedule, the bookstore, or the Campus Safety and Security Department for current fees.

PARKING LOTS

Parking lots are provided and maintained for the convenience of our campus community. Maintenance of the parking lot is funded exclusively by revenue generated through the sales of parking permits and citations. Parking is restricted to designated lots. For example, Faculty/Staff parking lots are restricted to holders of Chabot-Las Positas Faculty/Staff parking permits. Student lots are for use by students, staff, and visitors. All vehicles shall be parked clearly within a designated parking stall (between the white lines) and head in only. Motorcycles must be parked in designated motorcycle parking areas located in all student lots. Designated parking spaces are provided in all campus parking lots for holders of Department of Motor Vehicles disabled license plates or placards.

Do not park in white loading zones, yellow loading zones, or blue disabled spaces or access areas without proper authorization or placards. Never park, stop, or stand in any red zone, traffic thoroughfare, driveways, grass, or planter areas. Do not park, drive, stop or stand on the inner campus or athletic areas without express consent from the Director of Campus Safety and Security or his/her designee.

There are several features we offer to promote safety in our parking lots. First, the parking lots are lit during darkness up until 11:00 p.m. during days of normal operation. In addition, there are emergency call boxes strategically located throughout the campus and parking lots. Look for the blue "Call Box" signs and blue light to locate the call box nearest you. Simply follow the directions printed on the front of the call box for assistance. The following is a list of emergency call box locations:

EMERGENCY CALL BOX LOCATIONS

- CB101: Student lot B near the tennis courts
- CB102: Staff lot A near the bus stop
- CB103: Student lot E near the Child Care Center (bldg 3500/3600)
- CB104: Student lot E near building 3400 and the Depot Road Service Drive
- CB105: Student lot G near the intersection of Depot Rd. and Hesperian Blvd
- CB106: Student lot B near the entrance to the lot from Hesperian Blvd
- CB107: Student lot J near the tennis courts and physical education fields
- CB108: Student lot F near the theatres building 1200/1300
- CB109: Student lot G near the Art building 1000
- CB110: Soccer field area west of Student lot J and north of the football stadium

CAR POOLING

Car pooling and vanpools are encouraged. Carpool information is available at the Office of Student Life in building 2300, room 2355.

BICYCLES-MOTORCYCLES

Bicycles and motorcycles are encouraged alternatives to driving automobiles and/or mass transit. Special motorcycle parking areas are located in all of the student lots. Bicyclist can make use of bicycle racks conveniently located in Student Lot B and at buildings 700, 1900, 2900, and 3800. Please observe the rules and regulations governing the use of motorcycles and bicycles on or about the campus. Contact Campus Safety and Security in building 2300, room 2302 for more information.

PUBLIC TRANSPORTATION

AC Transit currently offers bus route 92 from the downtown Hayward BART station to the bus loop right in front of Chabot College. The current travel time from the BART station to Chabot College takes between 12 and 20 minutes depending on the time of the day. AC Transit also offers several bus routes to Chabot College from various points throughout the country. Bus schedules and passes are available in the Office of Student Life, building 2300, room 2355 or the Disabled Student Resource Center located in building 2400. Please contact AC Transit for current schedules and rates at : (510) 817-1717 or check out their website: www.actransit.org.

We have collaborated with the Bay Area Rapid Transit District (BART) and the Alameda County Transit Authority (AC Transit) to provide easy access to Chabot College. BART tickets may be purchased in the Office of Student Life, building 2300, room 2355. For more information regarding schedules, tickets, or connections, contact BART directly at (510) 441-2778 or check out their website: www.transitinfo.org/BART.

VISITOR'S PARKING

A 20-minute visitor parking zone is provided at the entrance to Chabot College. Long-term visitor parking is available on each student lot when a daily parking permit is purchased from the \$1.00 ticket dispenser and displayed on the dashboard on the driver's side. Those visitors who have a DMV issued Handicapped Placard may purchase a daily parking permit and park in Handicapped designated areas of student lots.

VISITORS TO THE COLLEGE

Visitors to the campus are welcome but must register with the Campus Safety and Security Office, Room 2302, Building 2300, during the hours of 8 a.m.-10 p.m., Monday through Friday, on the Chabot College Campus.

Visits to the classroom are by permit only. Non-students must obtain a permit from the Vice President of Student Services, Room 208, Building 200. **Prior permission from the instructor is also required.**

Chabot College students may visit a class other than those in which registered by obtaining prior permission from the instructor.

Permission to enter upon the property of the District, either stated or implied in other policies or practices, is subject to control of time, place and manner.

USE OF FACILITIES

It is the policy of the Board of Trustees to encourage full use of the College facilities by community groups at such times as they are not required for the educational program. It is also the policy of the Board of Trustees that such usage must be on a cost-reimbursement basis. The Office of Facility Usage located in Room 223, Building 200, provides information and processes applications for the community use of Chabot College facilities.

PETS

No live animal, fowl or reptile, whether or not on a leash or in a cage, shall be allowed in any room or area where food or beverages is prepared, stored, kept or served.

Only with a special permit issued by the Vice-President of Student Services at Chabot College, shall dogs, birds, or reptiles be permitted in any building of the campus. *Seeing-Eye dogs used by the blind are exempt from the restrictions of this rule.* No owner or keeper of a dog shall allow or permit such dog to come on campus unless it is securely restricted by a substantial leash not to exceed six feet in length. The dog shall be in the charge of and under the control of a person competent to keep it under effective charge and control. Under no circumstances shall dogs be tethered and left unattended.

Any dogs on campus in violation of this regulation may be impounded by the College for ultimate transfer to the Alameda County Animal Control Service.

Horses, ponies, mules, donkeys or other such animals are prohibited on the campus at any time, except when authorized by special permit issued in advance by the Vice President, Business Services, and cleared with the Campus Security Service.

VETERANS EDUCATIONAL ASSISTANCE

Chabot College is approved to offer instruction to servicepersons, reservists, and other eligible persons under Title 38, United States Code and Department of Veterans Affairs regulations. The basic categories of educational assistance programs are: Montgomery G. 1. Bill-Active Duty (Chapter 30), Montgomery G. 1. Bill-Selected Reserve (Chapter 106), Veteran's Educational Assistance Program (VEAP-Chapter 32), Survivor's and Dependent's Educational Assistance Program (Chapter 35), Restored Entitlement Program for Survivors (REPS) and Vocational Rehabilitation (Chapter 31).

Students applying for any of these educational benefits are required to request official academic transcripts from each school they have previously attended to be forwarded to the Admissions & Records Office for evaluation.

Information and application for benefits may be obtained from the Chabot College Veteran's Office, Building 100, Room 192.

EDUCATIONAL BENEFITS

Chabot 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 regulations. Eligibility for benefits under any of these programs is determined by the appropriate federal or state agency, not by the College.

DEPENDENTS OF VETERANS

A student who is the 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.

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 100, and an Enrollment Certification Request form. Students must request enrollment certification each semester. Student must notify the Chabot Veterans Office of their enrollment, major, or address changes. The Chabot Veterans Office will make necessary certifications of enrollment, changes in enrollment, and progress. Courses or programs pending state approval cannot be certified for VA benefits.

ADVANCE PAY OPTION

Certification/processing is through the V.A. Regional Center in Muskogee, Oklahoma, and generally takes about 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. Veterans are encouraged to request Advance Payment if eligible.

CONTINUATION OF BENEFITS

During the first semester, all students receiving veterans educational benefits are required to (1) have submitted to the Admissions and Records Office official academic transcripts from each school previously attended, and (2) complete a "Veterans Evaluation" with a College counselor for transfer and check with Veterans Office for Certificate, A.A. and A.S. Degree, which establishes an educational plan. Courses will NOT be certified for benefits after the first semester until this is complete. Only courses which meet requirements for the major and degree objective indicated on the evaluation will

be certified for payment. If the educational objective is changed, the student must complete a new evaluation. Chabot College can only certify for Certificate, A.A., or A.S. majors listed in the catalog or for transfer majors for which official articulation has been completed.

TRANSFER EVALUATIONS

Each student who is receiving funding from the Veteran's Administration is required to develop and file an Educational Plan. Counselor's are available to assist these students with their plans. For more information, or to talk to a Veteran's Office representative, students may call 723-6910.

For more information contact the Chabot College Veterans Office, (510) 723-6910 or the Veterans Administration Regional Office at 1-800-827-1000, or 1-888-442-4551.

STUDENT RIGHTS AND PRIVACY

Each student and alumnus of Chabot College has a right to (1) review the official educational records, files, documents, and other materials which 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 Admissions and Records 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.

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 in writing the Office of Admissions and Records at the beginning of each semester or session of attendance.

The College is required to comply with all federal regulations governed by the Family Educational Right and Privacy Act.

CAMPUS SAFETY AND SECURITY

MISSION STATEMENT

The Chabot College Department of Campus Safety and security, in partnership with the Hayward Police Department, is committed to providing a safe and secure

learning and work environment for all members of the campus community and guests. We recognize our role as service providers and are dedicated to delivering consistent and quality service to diverse groups of people and individuals alike.

ABOUT THE DEPARTMENT OF CAMPUS SAFETY AND SECURITY

The Chabot College Department of Campus Safety and Security is comprised of a unique partnership between Chabot College and the Hayward Police Department. The director is a sworn Hayward police sergeant who is augmented by a staff consisting of a Hayward police officer, classified campus safety officers, classified dispatchers, hourly campus safety officers, and hourly student cadets. This blend of police and civilian staff affords a greater range of services to our campus community. Officers are on duty at all times when classes are in session, and on weekends and holidays to patrol the campus. Officers enforce the laws of the State of California and regulations adopted by the Board of Trustees of the Chabot/Las Positas Community College District.

Chabot College is concerned about the safety and welfare of all members of the college community and is committed to providing a safe and secure environment. Although the college has been fortunate in not having experienced a significant number of criminal incidents, it would not be honest to assume such incidents could not take place. Therefore, we have developed policies and procedures designed to prevent or minimize the potential for criminal events before they take hold. Please take the time to read the section on crime prevention, safety programs, and crime statistics or contact the Department of Campus Safety and Security for more details.

CONTACTING THE DEPARTMENT OF CAMPUS SAFETY AND SECURITY

The Chabot College Safety and Security Department public office is located in building 2300, room 2302 (adjacent to the cafeteria). When the office is closed, the on-duty security officer can be contacted by telephone in the following ways.

- From any off-campus telephone dial (510) 723-6923 or 6923 from any college phone.
- Dial *19 from any campus pay phone.
- Activate any one of the ten emergency call boxes located throughout the campus.
- **FOR EMERGENCIES DIAL 911 FROM ANY PHONE.**

REPORTING CRIMES, SUSPICIOUS ACTIVITIES, OR SAFETY HAZARDS

All members of our campus community must share responsibility in reporting crimes, suspicious activities, and safety hazards to keep our campus safe for all. Crimes against persons and violent crimes will be investigated on campus by the Hayward Police Department by the assigned campus police officer or a police officer summoned by a campus

safety officer. Crimes against property will be investigated by a campus safety officer unless the incident involves a substantial loss or theft of a motor vehicle. Suspicious activities and safety hazards will be investigated promptly by the on-duty campus safety officer who will delegate the appropriate resources to resolve the incident.

CRIME PREVENTION

The most essential element of any effective crime prevention program is educating the members of the community. We offer several crime prevention tips and brochures published by the Hayward Police Department at the Office of Campus Safety and Security. Another key element to a successful crime prevention program is active participation by members of the community. Each of us can do our part to prevent crime by taking appropriate preventative measures and promptly reporting crimes or suspicious activities. Here is how you can do your part.

- Avoid isolated, dark, or less traveled areas of the campus.
- Walk in well traveled, lighted areas.
- Try to avoid walking alone at night. Stay in groups or take advantage of our Safe Ride program which offers student escorts.
- Carry a whistle, cellular telephone or other device to summon aid if you detect trouble.
- Stay alert and be aware of your surroundings.
- Become familiar with the locations of phones and emergency call boxes.
- Always lock your car and never leave valuables in sight.
- When returning to your vehicle, always have your keys in hand for a speedy entry. Check the rear seat of your vehicle before entering and immediately lock your car doors upon entering.
- Avoid working or studying in buildings alone at any time.
- Report any suspicious activity to the Department of Campus Safety and Security.

SAFETY PROGRAMS AND MEASURES

Safe Ride Program—The Department of Campus Safety and security offers escorts to the campus community to and from the parking lots. To arrange to have an escort accompany you from your classroom or office to your vehicle, dial 6923 from any college phone, *19 from any campus pay phone, or activate a nearby emergency call box. An escort will be dispatched by radio to meet you at your location.

The Department of Campus Safety and Security sponsors educational programs on a wide variety of issues related to crime prevention and personal safety. Check with the Campus Safety and Security office or Office of Student Life for details on upcoming events. In addition, the Department of Campus Safety and security is committed to keeping the campus community informed about patterns, trends, or incidents that pose a threat or substantial risk to our community. Such information is typically published in special crime bulletins posted at the office of the Department of Campus Safety and security or other campus media such as the campus newspaper, *The Spectator*.

Safety through environmental design is yet another component of effective crime prevention. Our Maintenance and Operations Department works hard at keeping the campus grounds well groomed and adequately lit during darkness. The campus grounds and parking lots are lit at nightfall until 11:00 p.m. during normal days of operation. Emergency Call Boxes and telephones are strategically located throughout the campus for your safety.

Emergency Call Boxes are outdoors in all the parking lots and adjacent to the athletic fields. They can be found by locating the blue “Call Box” signs or illuminated blue light during darkness. Simply follow the directions on the call box for assistance. The location of our emergency call boxes can be found under the parking lots section of this publication.

Emergency Campus Telephones can be found in all of our elevators and buildings. The telephones are marked “Emergency Telephone” and most are contained inside a red or white metal box mounted to the wall. Simply open the box, pick up the phone and follow the printed directions. Elevator phones will dial directly to the Campus Safety and Security Office while other phones require you dial the Campus Safety and Security extension (6923 or 6666). Please familiarize yourself with the locations of the emergency phones in the areas you travel on campus.

CHABOT COLLEGE CRIME STATISTICS

In 1998, the federal government passed The Jeanne Clery Disclosure of Campus Security Policy and Campus Crime Statistics Act, formerly The Student Right to Know Act of 1990. This law requires colleges and universities receiving federal funding to disclose the reported instances of criminal activity on their campuses. The following table is an accounting of mandatory crime statistics on campus.

CHABOT COLLEGE CRIME STATISTICS				
	2002	2003	2004	2005
Homicide	0	0	0	0
Rape	1	0	0	1
Robbery	0	0	0	0
Aggravated Assault	1	1	2	1
Burglary	0	1	2	4
Larceny/Theft	57	66	68	65
Motor Vehicle Theft	21	32	30	21
Arson	3	0	0	1
Liquor Law Violations	0	0	1	9
Drug Abuse Violations	0	1	0	3
Weapons Possession	0	1	0	0
Hate Crimes	0	0	0	0

You may contact the Hayward Police Department (510) 293-7272, for crime statistics on public property adjacent to the campus.

ACCESS TO COLLEGE FACILITIES

The college’s normal hours of operation are printed on signs at every entrance to the campus. There are typically



special events that take place after the normal hours of operation, however, access is restricted to the special event(s). Individuals who need to be in campus buildings or areas outside normal hours of operations must obtain authorization from their supervisor and must notify the on-duty campus safety officer of their presence. All students, faculty and staff have been issued ID cards which they may be asked to produce if there is a question about their authorization to be in a specific areas before, during, or after the normal hours of operation.

Many college buildings, classrooms and labs are protected by intrusion alarms. Do not enter the area until an instructor or authorized person has deactivated the alarm. Report any problems with safety or security of our building, facilities, or areas promptly to the Campus Safety and Security office.

**SCHOLASTIC STANDARDS
OF CHABOT COLLEGE**

The academic standards policy of Chabot College is established to assist students in making appropriate educational plans. There are two indices to academic standards: Academic Status and Academic Progress. Academic Progress is an evaluation of the student's successful completion of units. The College will advise students of their grade point average and progress in order that they may make sound self-appraisal of their college work.

GRADES

Grades are a means of communicating student achievement within courses of instruction. The suggested meaning of college grades is as follows:

- “A” — The student has been *consistently superior* in all phases of the course and has shown initiative, imagination, and self-direction well beyond that required by the instructor.
- “B” — The student has satisfied the course objectives with fairly consistent performance typically above average and demonstrates considerable mastery of the course materials.
- “C” — The student has completed most of the course objectives and requirements in a satisfactory manner as to quantity and quality of performance, including attendance and participation.
- “D” — The student has barely met the course objectives and success in advanced work is doubtful.
- “F” — The student has failed to accomplish the minimum requirements of the course and has not met the course objectives to any significant degree.
- “CR” — The student has *completed* the course with “C” or better work.
- “NC” — The student has completed the course but without credit. The student has either not taken the examination or has fallen below the grade of “C.”
- “I” — The student has not completed the course, has not taken the final examination, and has made an agreement with the instructor to complete the requirements.*

*“I” (incomplete) grades represent an instructor-student agreement that 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 “I” will be replaced with the alternate letter grade assigned by the instructor at the time the incomplete was assigned. Consequently the revised G.P.A. will be calculated.

ACADEMIC GRADE POINT AVERAGE

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

Grades earned in non-degree-applicable courses (numbered 100–299) will not be used when calculating a student's degree applicable grade point average. No courses below the English 1A requirement are degree applicable.

To enable the calculation of grade point average, eligibility for honors and recognition, and other scholastic status, letter grades are converted to numerical form using the following grade point equivalents:

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.
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.
	Incomplete	0 grade points—no units earned and no units attempted. May negatively affect Progress.

The grade point average (G.P.A.) is calculated by dividing total grade points by total units attempted:

$$\text{G.P.A.} = \frac{\text{Total Grade Points}}{\text{Total Units Attempted}}$$

Example:

History 1	3 units × 3 grade points (B)	= 9 grade points
Math I	5 units × 2 grade points (C)	= 10 grade points
P.E. 1	½ unit × 4 grade points (A)	= 2 grade points
TOTAL:	8½ units	21 Total Grade Points

$$\text{G.P.A.} = \frac{21}{8.5} = 2.47 \text{ or C}$$

SCHOLASTIC HONORS

Students who graduate with “Highest Honors” (G.P.A. of 3.50 or better) and those who graduate with “Honors” (G.P.A. of 3.25 or better) are recognized at graduation.

Students who complete at least 6 units of work each semester with grades of A, B, C, D, or F yielding a semester grade point average of 3.5 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.

Academic achievement is further recognized by both the Sigma Rho Chapter (Chabot College) of Alpha Gamma Sigma, the California Community College Honor Scholarship Society. Individual programs and divisions may also

recognize their graduates at commencement or special ceremonies. Membership eligibility and other information is available from the Office of Student Life in Building 2300, Chabot College.

ACADEMIC PROBATION AND DISMISSAL

A student who has attempted at least 12 semester units of college courses (not including W's) and has a cumulative grade point average of less than 2.0 will be placed on Academic Probation level I.

A student on Academic Probation I who does not raise his/her cumulative grade point average to a 2.0 or higher in the following semester will be placed on Academic Probation level II. Please note that Veterans lose their certification for Veterans benefits after two semesters of academic probation. Please refer to the colleges' Office of Veterans Affairs Academic Standards of Progress for further information.

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. 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, he/she will be taken off of 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 semester units of college course work (not including W's) will be placed on Progress Probation level 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, he/she 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. 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.

APEAL PROCESS

Under extenuating circumstances beyond the student's control or ability to foresee, exceptions to these policies may be granted by the Director of Admissions and Records upon the recommendation of the Committee on Academic Status. The Committee on Academic Status shall consist of the Dean of Counseling, Chabot College, or the Chairperson of the College Committee on Student Services and a faculty member appointed by the Faculty Senate.

Students should see a counselor to discuss their progress or academic status and for details associated with the academic standards policy.

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 submitted to the division Dean who will forward the form to the Vice-President of Academic Services. Final authorization to change the grade shall be granted by the President of the College or designee.

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

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 which rendered the student 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. 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.

CREDIT/NO CREDIT GRADES

(UNIT LIMITATIONS MAY EXIST AT TRANSFER INSTITUTIONS)

In accordance with the Education Code and the Administrative Code, Chabot College has established a grading policy which 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 or Associate in Science Degree. (Additional units may be applied provided the student secures prior approval of the division Dean of Counseling. 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” (no credit) grades will affect the student’s academic progress ratio, resulting in a low figure.

Offering courses for credit/no credit grades provides the student with the opportunity to explore areas outside his/her current interest field without undue concern for his or her grade point average. This policy allows the student to take coursework outside his or her major without the fear of a substandard grade, namely a “D” or “F.” Students are expected to complete the course and comply with College attendance requirements and other expectancies of the course. Should they fail to do so, their enrollment in the class may be terminated and the work may be graded on the basis of a standard letter grade.

Chabot College offers:

1. Some courses solely for a credit/no credit (CR or NC) grade.
2. Some courses solely for a standard letter grade.
3. Some courses in which the student may choose to complete the course for either a credit no credit grade OR for a standard letter grade.

On or before the last day of the fifth week of the semester, the student shall inform the Admissions and Records Office, by petition, of his or her intention to complete a course for a credit/no credit grade and the instructor shall report to the Registrar a final grade of “CR” (credit) or “NC” (no credit) 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” (credit) 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” (no credit) is earned.

ADMINISTRATIVE SYMBOLS “IP,” “RD,” AND “I”

Administrative Symbol “IP”—Mastery Learning Courses

The administrative symbol “IP” is established to indicate coursework “in progress.” Its use is limited to mastery learning courses. It may be used only for a student who is making satisfactory progress toward the completion of a course but who has not completed all of the modules by the end of the semester or session.

The symbol “IP” is not a grade; therefore, it has no value in calculating unit credit or grade point average.

Only one symbol “IP” may be received by a student for any mastery learning module or course. The required coursework to remove the “IP” must be completed by the end of the term or session following the date the “IP” was granted. If a student is assigned an “IP” at the end of an attendance period and does not re-enroll in and complete that course during the subsequent attendance period, the appropriate faculty member will assign an evaluate symbol (grade) to be recorded on the student’s permanent record.

Administrative Symbol “RD”—Report Delayed

The administrative symbol “RD” may be assigned only by the Director of Admissions and Records. 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 an “I” symbol being entered by the instructor on the student’s permanent record. A “grade change card” with the following documentation shall be maintained by the Director of Admissions and Records.

1. The condition(s) stated by the instructor for removal of the “I.”
2. The letter grade to be assigned if the work has not been completed within the designated time limit.
3. The letter grade assigned when the stipulated work has been completed.
4. The signature of the student.

The “I” shall be made up by the end of the term or semester following the date it was granted. The student may petition to extend this deadline date because of extenuating circumstances, but this will require the approval of the Vice-President of Student Services, or designee, and the instructor of record.

The letter grade to be assigned if work has not been completed within the designated time shall be changed following grade change procedure (page 154).

The “I” symbol shall not be used in calculating units attempted nor for grade points.

CREDIT BY EXAMINATION

Chabot College supports the general proposition that the full value of classroom learning experiences 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 administered by the College. Standardized examination may be used in specified "licensure" programs and to determine the appropriate placement of students in a field of study. The student receiving credit must be registered at the College, in good academic standing and have paid all applicable fees and/or tuition. The courses for which credit is allowed must be listed in the Chabot College Catalog. The amount of credit to be granted cannot be greater than that listed for the course in the catalog. Credit by examination is offered under the provisions of the California Administrative Code, Title 5.

Comprehensive Examination Administered by the College

1. *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.

2. *Application and Administration*

A petition for completing a course through credit by examination must be approved by the appropriate instructor, division dean, and the Vice President of Academic Services. Applicable fees and/or tuition must be paid at the Admissions and Records Office. 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 any appropriate form such as written, oral, demonstration or a combination of methods.

3. *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. Where the student does not achieve a grade of "C" or better, he or she will be expected to complete the course in the usual manner.

4. The Director of Admission & Records, or designee, will annotate the student's transcript to indicate that the credit was granted for the course in question by examination. This credit by examination coursework may not be counted as part of the 12-unit residency requirement necessary for graduation from Chabot College.

5. *Limitations*

Credit cannot be given for a course which is comparable to a course already credited on the student's secondary school transcript although an examination in

such a course may be given to determine the level of achievement and the appropriate placement of the student in the field of study. The amount of credit which may be earned and counted toward graduation at Chabot College is 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.

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. The grades alleviated by this process will be disregarded in the computation of 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 Director of Admissions and Records at Las Positas College or the Director of Admissions and Records at Chabot College for academic renewal upon completion of the following:

1. a minimum of 12 units taken consecutively at Las Positas and/or Chabot with a grade point average of 2.5 or better,
- or
2. a minimum of 20 units taken consecutively at Las Positas and/or Chabot 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.

PROGRAM REQUIREMENT WAIVER AND/OR SUBSTITUTIONS

Students who have course work from other institutions or knowledge gained elsewhere which is equivalent to Chabot College course(s) may request course substitutions for degree or certificate requirements. Student may obtain

course substitution or Waiver request forms and procedural information from a counselor.

EXAMINATIONS

Students are expected to take mid-term and final examinations in each course for which they are enrolled. Additional examinations may be scheduled by instructors at their discretion. Unless students have made prior arrangements with the instructor, the instructor is under no obligation to help a student make up an examination he or she has missed.

NOTICE OF UNSATISFACTORY WORK

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 in planning a student educational plan.

CAPABILITY TO PROFIT FROM INSTRUCTION

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

1. capability to meet the demands of college instruction at Chabot College;
2. capability to master and proceed beyond the minimum basic skill levels required for success in college education;
3. capability to show substantial progress in cognitive and affective learning in college courses;
4. capability 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 capability to profit is a matter of composite professional judgment based upon available evidence.

Additional information may be obtained from the Office of the Vice-President of Student Services, Chabot College.

IMPOUNDING STUDENT RECORDS

Whenever a student is delinquent through failure to comply with College rules and regulations, to pay debts, or to return property owned by the College, that student's records may be impounded. A student whose records are impounded shall not be allowed (1) to register for subsequent terms of instruction; (2) to receive transcripts of work completed; or (3) to receive other services of the College which relate to his/her records. When the student has cleared his/her obligation with the College, the impoundment of his/her records shall be removed.

ATTENDANCE REQUIREMENTS

It is assumed that each student will consider 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 or dropping the student from the course.

REPORTING ABSENCE

Absences should be cleared directly with instructors. (Note: The size of the College prevents telephone messages being given to instructors.)

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.

USE OF TAPE RECORDERS

Students are not permitted to make tape recordings in class or in any campus meetings without the express approval of the instructors involved. Exceptions shall be made for physically limited students who have a permit issued by the Disabled Student Resource Center. The permit is evidence of the physical need of the student to use a tape recorder and of the student's agreement to not use or allow to be used the content of the tape for any purpose(s) other than course related study.

STUDENT CONDUCT AND DUE PROCESS 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 District accords every student the right of protection. Students, however, are responsible for complying with college and district regulations and for meeting the appropriate college requirements. The Colleges have an obligation to maintain conditions under which the work of the colleges can go forward freely, in accordance with the highest standards of quality, institutional integrity and freedom of expression. In joining the academic community, the student enjoys the right of freedom to learn and shares responsibility in exercising that freedom. A student is expected to conduct himself or herself in accordance with standards of the college.

When a student is charged with misconduct such charge shall be processed in accordance with the district policy and procedure in order to protect the student's rights and the colleges interest. Disciplinary action may be imposed on a student for violation of law, district and college policy and regulations, the Education Code and the Administrative Code. Provisions related to disciplinary action shall be published and available to students, faculty and management staff. Student conduct may result in disciplinary action by the college and/or criminal prosecution. 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.

A. Expulsion, Suspension and Probation of Students

A college student may be expelled, suspended, placed on probation or given a lesser sanction for good cause and in accordance with procedures consistent with due process. Good cause includes, but is not limited to, one or more of the following behaviors which must be related to college activity or attendance:

1. Cheating or plagiarism in connection with a college academic program.
2. Forgery, alteration or misuse of college documents, records, or identification or knowingly furnished false information to a college representative in connection with the performance of official duties.
3. Misrepresentation of oneself or of an organization as an agent of the college/district.
4. Obstruction or disruption, on or off campus property, of the college educational process, administrative process, or other college or district function or operation.
5. Physical abuse on or off college property of the person or property of any member of the college community or of members of his or her family or the threat of such physical abuse.

6. Theft of, or non-accidental damage to, college property, or property in the possession of; or owned by, a member of the college community.
7. Unauthorized entry into, unauthorized use of, or misuse of college property.
8. On college property, the sale or knowing possession of dangerous drugs, restricted dangerous drugs, or narcotics as those terms are used in California statutes.
9. Knowing possession or use of explosives, dangerous chemicals or deadly weapons on college property or at a college function.
10. Engaging in lewd, indecent, or obscene behavior on college property or at a college function.
11. Abusive behavior directed toward, or hazing of, a member of the college community.
12. Violation of any order of the District Chancellor, College President or designee or notice of which had been given prior to such violation and during the academic term in which the violation occurs. This includes notice by publication in the college newspaper, or by posting on an official bulletin board designated for this purpose, and which order is not inconsistent with any of the other provisions of this section.
13. Soliciting or assisting another to do any act which would subject a student to expulsion, suspension, probation, or other sanction pursuant to this article.
14. Harassment, including sexual harassment, in violation of state or federal law.
15. Discrimination based on race, color, religion, gender, national origin, ancestry, age, marital status, disability, sexual orientation, and/or Vietnam era or special disabled veteran status.
16. Commission of a computer-related crime.
17. Use of any electronic listening or recording device in any classroom without the prior consent of the instructor, except as necessary to provide reasonable auxiliary aids and academic accommodations to students with disabilities.
18. Persistent misconduct where other means of correction have failed to bring about proper conduct.
19. Violation of college/district parking and traffic regulations.
20. Formation of/or membership in secret organizations.
21. Violation of the district/college policy related to time, place and manner of expression.
22. Obstruction or disruption of administrations disciplinary procedures, or other college activities, including its community service activity.
23. Obstruction or disruption of teaching. Interface with the course of instruction to the detriment of other students, including but not limited to entering the classroom after the class has started

and disrupting the lecture or class activities including verbal outbursts that disrupt the instructor's lesson. Failure to comply with the instruction or directives of the course instructor.

24. Disruption of classes or other academic activities in an attempt to stifle academic freedom of speech.
25. Obtaining a copy of an examination or assignment prior to its approved release by the instructor. Selling or distributing course lecture notes, handouts, examinations or other information provided by an instructor, or using them for any commercial purpose without the express permission of the instructor.
26. Unauthorized entry to or use of college facilities, including the possession or duplication of keys to any College/District premises, or unauthorized use of public address systems.
27. Unauthorized entry into a file, to use, read, or change the contents or for any other purpose. Unauthorized use of another individual's identification and password. Unauthorized use of phone or electronic devices such as radios, etc. Use of computing facilities to interfere with the work of another student, faculty member or college official. Use of computing facilities to send obscene or abusive messages. Use of computing facilities to interfere with normal operation of the college computing systems. Unauthorized use of the internet. Use of laser pointers anywhere on the college grounds that would cause a disruption of instruction or services, or create a hazard to any individual.
28. Failure to present registration/identification card when requested to do so by College Official or other authorized persons.
29. Failure to comply with directions of College Officials acting in the performance of their duties.

For purposes of this policy, the following definitions apply:

1. Member of the district/college community is defined as the Board of Trustees of the Chabot-Las Positas Community College District, academic, non-academic and administrative personnel and students of the district, and other persons while such other persons are on college property or at a college function.
2. Cheating is defined as fraud, deceit, or dishonesty in an academic assignment or using or attempting to use materials, or assisting others in using materials which are prohibited or inappropriate in the context of the academic assignment in question, such as:
 - copying or attempting to copy from others during an examination or on an assignment;
 - communicating test information with another person during an examination;

- preprogramming a calculator or computer to contain answers or other unauthorized information for exams;
 - using unauthorized materials, prepared answers, written notes, or concealed information during an examination; and
 - allowing others to do an assignment or portion of an assignment, including the use of a commercial term paper service.
3. Plagiarism includes the deliberate misrepresentation of someone else's works and ideas, as one's own, as well as paraphrasing without footnoting the source.
 4. District/college property includes real or personal property in the possession of, or under the control of the Board or Trustees of the Chabot-Las Positas District and all district facilities whether operated by the district or by a district auxiliary organization.
 5. Deadly weapons include any instrument or weapon of the kind commonly known as a blackjack, sling shot, billyclub, sandclub, sandbag, metal knuckles, any dirk, dagger, switchblade knife, pistol, revolver, or any other firearm, any knife having a blade longer than five inches, any razor with an unguarded blade, and any metal pipe or bar used or intended to be used as a club.
 6. Behavior means conduct and expression.
 7. Hazing means any method of initiation into a student organization or any pastime or amusement engaged in with regard to such an organization which causes, or is likely to cause, bodily danger, or physical or emotional harm, to any member of the college community; but the term hazing does not include customary athletic events or other similar contests or competitions.
- B. The President of the college, or the Vice President of Student Services, or the official designee, may impose the following sanctions of students who violate the district/college rules and regulations.
1. Probation: verbal or written warning.
 2. Temporary Exclusion: removal for the duration of the class period or of the activity.
 3. Suspension: exclusion from all district classes, facilities, privileges and activities for a specified period of time as set forth in the notice of suspension.
 4. Expulsion: a recommendation by the President and District Chancellor to the Board of Trustees to terminate a student's status, including exclusion from all district classes, facilities, and functions.
- C. Student disciplinary action may be imposed by:
1. The Board of Trustees who alone may expel.
 2. The President, the Vice President of Student Services or the official designee may immediately impose an interim suspension in all cases in which there is reasonable cause to believe that such an immediate suspension is required in order to protect lives or property.

A student placed on interim suspension shall be given prompt notice of charges and the opportunity for a hearing within the ten (10) days of the imposition of interim suspension. During the period of interim suspension, the student shall not, without prior written permission of the Vice President of Student Services or designee, enter the college campus other than to attend the hearing. Violation of any condition of the interim suspension shall be grounds for expulsion.

3. An administrator may temporarily exclude the student from college sponsored or supervised activity for the duration of the activity.
4. An instructor may temporarily exclude the student from class for the remainder of the class period.

PROCEDURES

All complaints of alleged misconduct made against a student by any person should be submitted to the Vice President of Student Services. These complaints must be made in writing, specifying the time, place, and nature of the alleged misconduct. All complaints must be signed. If the Vice President of Student Services determines the complaint to be capricious, the complaint may be dismissed.

The Vice President of Student Services shall conduct an investigation of the reported incident as is appropriate. The Vice President will confer with the accused student for the purposes of advising the student of the report and of the student's rights under college rules and regulations. The Vice President may also procure information relating to the report from the accused student and other persons, including an assessment of damage to property or injury to persons. Such investigations shall be treated as confidential and shall not be placed in the student's file unless a charge is upheld and a decision is rendered by the Vice President against the student.

Following investigation, the Vice President of Student Services will render a decision in writing to the student as well as the person filing the complaint against the student (if appropriate) within five (5) working days. The Vice President may find that the complaint lacks merit; or deliver a written statement to the accused student formally charging that student with misconduct. This statement will specify one of the following actions that will be taken in the case:

1. Place on record a verbal or written reprimand.
2. Place the student on probation, temporary exclusion or suspension.
3. Recommend expulsion to the District Board of Trustees via the President of the College and the District Chancellor.
4. Assign the case for further review to a formal Hearing Committee.

The student may do either of the following:

1. Accept the Vice President's decision.
2. Notify the Vice President within two (2) working days to initiate a formal hearing.

Procedures for Formal Hearing

1. The Vice President of Student Services shall transmit to the Hearing Committee the case of any student or complaint requesting a formal hearing. Procedurally, informal action becomes formal upon the Vice President or Dean convening the Hearing Committee.
2. The Hearing Committee shall be selected as follows:
 - a. Two faculty members appointed by the Faculty Senate President.
 - b. Two students appointed by the Associated Students' President.
 - c. One person appointed by the President of the college who may be an instructor or a manager other than the Dean of Students of the Vice President of Student Services.
 - d. Committee members shall select one of their members as Chair.
3. The Hearing Committee shall conduct its proceedings as follows:
 - a. A summary record shall be provided by the Vice President of Student Services.
 - b. The committee shall discuss issues, hear testimony, examine witnesses and consider available evidence pertaining to the charge.
 - c. Both parties shall have the right to present statements, testimony, evidence and witnesses. The accused person may be represented by counsel or by a person of his/her choice. Each party shall have the right to question witnesses and to hear testimony.
 - d. The student who is charged is presumed innocent until proven otherwise by the preponderance of the evidence.
 - e. The committee shall submit its findings of facts and its recommended action to the Vice President of Student Services, a copy to the College President, the student, and to the complainant involved.
 - f. The hearing shall be closed to the public unless the student requests from the Vice President at least two (2) working days in advance that the hearing be public. The Vice President may refuse such a request if confidentiality must be maintained in order to insure the rights of either party in the dispute.
 - g. A summary record of the proceedings, if held in closed session, shall be kept in a confidential file by the Vice President of Student Services. All applicable guidelines as specified by the Family Education Rights and Privacy Act of 1974 shall be followed regarding student record privacy. h. All proceedings, from the recipient of the request for a formal hearing to the Vice President's rendering and submission to the parties involved of a written decision, are to be handled with deliberate speed and shall be completed within twenty (20) working days.

Final Action

1. The Vice President of Student Services, upon receiving the findings of facts and recommendations of the Hearing Committee, shall render a written decision, which either (a) dismisses the charge, (b) reduces the discipline recommended by the Hearing Committee, or (c) sustains the recommendations of the Hearing Committee. Copies of this decision will be given to the Hearing Committee, the Vice President of Student Services, the President of the college, the student, the complainant and other appropriate administrative officials.
2. If the student is dissatisfied with the decision of the Vice President of Student Services, a written appeal may be filed with the College President within two (2) working days after being advised of the Vice President of Students decision. Upon receipt of this appeal, the President shall review the proceedings, conduct such investigation as is deemed appropriate. One of the following actions will be taken.
 - a. Dismiss the charge.
 - b. Reduce the recommended sanctions.
 - c. Concur with the Vice President of Student Services decision.
3. The decision of the Vice President of Student Services or the President is final in all actions prescribed in this Policy except expulsion, which is a decision of the Board of Trustees.

Pending final action on the charge, the student's status shall not be altered and the person shall be allowed to be present on campus and to attend class. The Vice President may rule otherwise if the student's presence is deemed to be of danger to the student or others, or places in jeopardy college functions or property.

Expulsion

If the final recommendation in the case is expulsion from the college, this recommendation is made to the District Board of Trustees, who will make the final decision at the next regularly scheduled Board meeting. The decision of the Board of Trustees regarding expulsion is final.

Policy Definitions

1. The term (District) means Chabot-Las Positas Community College District.
2. The term (College) means Chabot College or Las Positas College.
3. The term "student" includes all persons taking courses at the College, both full-time and part-time studies. Persons who are not officially enrolled for a particular term but who have a continuing relationship with the (College) are considered "students".
4. The term "faculty member" means any persons hired by the (College/District) to conduct classroom activities.
5. The term "manager" includes any person employed by the (College/District) performing assigned administrative, professional, or staff responsibilities.

6. The term "agent of the college" includes any person who is a student, faculty member, (College/District) official or any other person employed by the (College).
7. The term "(College) premises" includes all land, buildings, facilities, and other property in the possession of or owned, used or controlled by the (College) including adjacent streets and sidewalks.
8. The term "college community" includes any person who is a student, faculty member, staff, (College/District) official or any other person employed by the (College).
9. The term "organization" means any number of persons who have complied with the formal requirements for (College) enrollment/registration.
10. The term "behavior" includes conduct and expression.
11. The term "hazing" means any method of initiation into a student organization or any pastime or amusement engaged in with regard to such an organization or causes, or is likely to cause bodily danger, or physical or emotional harm, to any member of the college community.
12. The term "deadly weapons" includes any instrument or weapon of the kind commonly known as blackjack, sling shot, billyclub, sandclub, sandbag, metal knuckles, any dirk, dagger, switchblade knife, or any knife having a blade longer than five inches, pistol, revolver, or any other firearm, any razor with an unguarded blade, any metal pipe or bar used or intended to be used as a club.
13. The term "Hearing Committee" means faculty, students and administration, authorized by the college administration to determine whether a student has violated the Student Code and to recommend imposition of sanctions.
14. The term "shall" is used in the imperative sense.
15. The term "may" is used in the permissive sense.
16. The term "Policy" is defined as the written regulations of the (College/District) as found in, but not limited to, the Student Code, and College Catalog.
17. The term "cheating" includes, but is not limited to: fraud, deceit, or dishonesty in an academic assignment or using or attempting to use materials, or assisting others in using materials which are prohibited or inappropriate in the context of the academic assignment in questions, such as: copying or attempting to copy from others during an exam or on an assignment, communicating answers with another person during an exam, preprogramming a calculator to contain answers or other unauthorized information for exams, using unauthorized materials, prepared answers, written notes, or concealed information during an exam, or allowing others to do an assignment or portion of an assignment for you, including the use of a commercial term-paper service.

18. The term “plagiarism” includes, but is not limited to, the use, by paraphrase or direct quotation, of the published or unpublished work or another person without full and clear acknowledgement. It also includes the unacknowledged use of materials prepared; by another person or agency engaged in the selling of term papers or other academic materials.
19. The term “designee” is the person(s) designated by the (College).

STUDENT GRIEVANCE POLICY

The Chabot-Las Positas Community College District encourages all its students to pursue academic studies and other college sponsored activities that will promote intellectual growth and personal development. In pursuit of these goals, the student should be free of unfair or improper action from any member of the academic community. Toward that end, the following procedures have been developed to provide every student with a prompt and equitable means of seeking an appropriate remedy for any alleged violation of the student’s rights.

The 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 maintaining the appropriate requirements as established by the instructor for each course in which they are enrolled. The district shall insure that the student is fully accorded due process as stated in this student grievance policy.

GENERAL PROVISIONS

Under this section, a grievance may be initiated by a student alleging violation of college/district policies and procedures. The grievance may be against another student, an instructor, an administrator or a member of the classified staff.

Processing the Grievance

When a student feels subjected to an unjust action or denied rights by a member of the academic community, the students may seek redress according to the following procedures. The following actions are grounds for student grievance:

- a. Prejudiced or capricious decision in the academic evaluation of a student’s performance.
- b. Prejudiced or capricious decision in orientation, counseling, assessment or any other matriculation procedure.
- c. Act or threat of intimidation or harassment.
- d. Act or threat of physical aggression.
- e. Arbitrary action or imposition of sanctions without proper regard to due process as specified in college procedures.
- f. Violation of student rights which are described in the college rules and regulations.

Step I—Informal Procedure

Before filing a formal, written grievance, the student shall first attempt to resolve the issue in the following

manner. An informal conference should be conducted with:

- a. The person against whom the grievance is directed.
- b. The appropriate division dean or manager.
- c. The Vice President of Academic Services for academic evaluation of a student’s performance (a., above under Processing the Grievance.)
- d. The Vice President of Student Services for all other student grievances (b. through f., above under Processing the Grievance.)

If the student feels that the grievance has not been resolved by any of the above conferences within five (5) working days, a formal grievance may be submitted to the appropriate vice-president.

Step II—Formal Procedure

Grievances involving prejudiced or capricious decisions in the academic evaluation of a student’s performance shall be submitted to the Vice President of Academic Services for referral to the Academic Fairness Committee; all other grievances requiring further investigation shall be submitted to the Vice President of Student Services and referral to the Student Grievance Committee. Both of these committees shall be standing committees with one year appointments.

The process for submitting a formal grievance to the appropriate vice-president is as follows:

- a. The student shall complete and submit within five (5) working days a grievance form provided by the Vice-President.
- b. Upon receipt of the completed grievance form, the Vice President shall within five (5) working days, (1) request a response from the person against whom the charges are made. That person should submit a response within ten (10) working days (failure to respond within the defined time lines will not delay the processing of the grievance); and (2) refer the grievance materials from both parties to the chair of the (appropriate) committee. The committee chair will convene the committee to conduct formal hearings; establish findings of facts, and recommend action for resolution.

The Vice-President shall also advise the student of the investigation that will ensue.

- a. The Academic Fairness Committee shall be established as follows:
 - (1) The Academic Senate shall appoint two standing members. A third appointment shall be made at the time of the grievance to ensure that one faculty member be named who has specific knowledge of the academic discipline involved. Should one of the standing members be a party to the grievance, an alternate will be named.
 - (2) The Associated Students shall appoint one student to serve as a standing member for a one-year term. Should the standing member be a party to the grievance, an alternate will be selected.

- (3) The President of the college shall appoint one member who may be a student, an instructor, a member of the classified staff, or an administrator other than the Vice President of Academic Services or a member of that vice president's administrative staff.
 - (4) The Committee shall select one of their members to be chair.
- b. The Academic Fairness Committee shall conduct its proceedings as follows:
- (1) A record of all information in the possession of the vice president shall be given to the Committee chair. The Committee shall make every reasonable effort to conduct its hearing and present its findings and recommendations within fifteen (15) working days of receiving the grievance.
 - (2) The Committee shall discuss issues, hear testimony, examine witnesses and consider all available evidence pertaining to the charge.
 - (3) Both parties shall have the right to present written or oral statements, testimony, evidence and witnesses. Each party may be present at the hearing and be represented by a person of his/her choice. Each person has the right to question witnesses and hear testimony.
 - (4) The Committee shall judge the relevancy and weight of testimony and evidence and make its findings of facts, limiting its investigation to the formal charge. The Committee shall also make recommendations for the disposition of the charge.
 - (5) The hearing shall be closed to the public unless the student requests from the Vice-President at least two (2) working days in advance that the hearing be public.
 - (6) The Committee shall submit its findings of facts and recommend action within seven (7) working days after the hearing to the Vice-President, with a copy to each party and the President of the college.
 - (7) A summary record of the proceedings will be the responsibility of the chair of the Committee, if the hearing is held in closed session. These proceedings shall be kept in a confidential file by the Vice-President and shall be available at all times to both parties.
- c. The Student Grievance Committee shall be established as follows:
- (1) The Associated Students shall appoint two standing members. Should one of the standing members be a party to the grievance, an alternate will be named.
 - (2) The Academic Senate shall appoint two standing members. Should one of the standing members be a party to the grievance, an alternate will be named.
 - (3) The President of the college shall appoint one member who may be an instructor, a member of the classified staff, or an administrator other than the Vice-President or a member of the Vice-President's administrative staff.
 - (4) The Committee shall select one of their members to be chair
- d. The Student Grievance Committee shall conduct its proceedings as follows:
- (1) A record of all information in the possession of the Vice President shall be given to the committee chair. The Committee shall make every reasonable effort to conduct its hearing and present its findings and recommendations within fifteen (15) working days of receiving the grievance.
 - (2) The Committee shall discuss issues, hear testimony, examine witnesses and consider all available evidence pertaining to the charge.
 - (3) Both parties shall have the right to present written or oral statements, testimony, evidence and witnesses. Each party has the right to be present at the hearing and be represented by a person of his/her choice. Each person shall have the right to question witnesses and hear testimony.
 - (4) The Committee shall judge the relevancy and weight of testimony and evidence and make its findings of facts, limiting its investigation to the formal charge. The Committee shall also make recommendations for the disposition of the charge.
 - (5) The hearing shall be closed to the public unless the student requests from the Vice-President at least two (2) working days in advance that the hearing be public.
 - (6) The Committee shall submit its findings of facts and recommended action within seven (7) working days to the Vice-President with a copy to each party, and the President of the college.
 - (7) A summary record of the proceedings will be the responsibility of the chair of the committee, if the hearing is held in closed session. These proceedings shall be kept in a confidential file by the Vice-President and shall be available at all times to both parties.
- e. Final action for all grievances: the Vice-President, upon receiving the findings of facts and recommendations of the committee, will review the proceedings of the Committee, conduct such investigations as are appropriate and take one of the following actions:
- (1) Concur with the Committee's recommendations.
 - (2) Reduce the recommended sanctions.
 - (3) Dismiss the charge.
- If (2) or (3) should occur, the Vice-President shall convene the Committee for further discussion and consultation.
- The decision by the Vice-President shall be rendered within seven (7) working days and transmitted, in writing, to the accused person, the appropriate committee, the President of the college and the student filing the grievance.
- f. The accused or the aggrieved person may write an appeal of the decision made by the Vice-President to the

President of the college within seven (7) working days. Upon receipt of the appeal, the college President will review the proceedings of the Committee, conduct such investigations as are appropriate and take one of the following actions:

- (1) Concur with the Committee's recommendations.
- (2) Reduce the recommended sanctions.
- (3) Dismiss the charge.

If (2) or (3) should occur, the college President shall convene the Vice-President and Committee for further discussion and consultation.

The decision by the President shall be rendered within seven (7) working days and transmitted, in writing, to the accused person, the Committee, the Vice-President and the student filing the grievance.

- g. If the accused or aggrieved person is dissatisfied with the college President's decision, a written appeal may be filed with the Chancellor within seven (7) working days. Upon receipt of the appeal, the Chancellor will review the proceedings of the Committee, conduct such investigations as are appropriate and take one of the following actions:

- (1) Concur with the Committee's recommendations.
- (2) Reduce the recommended sanctions.
- (3) Dismiss the charge.

The decision by the Chancellor shall be rendered within fourteen (14) working days and transmitted, in writing on the accused person, the Committee, the President, the Vice-President and the student filing the grievance.

- h. If the accused or aggrieved person is dissatisfied with the Chancellor's decision, a written appeal may be filed with the Board of Trustees within fourteen (14) working days. Upon receipt of the appeal, the Board of Trustees will review the proceedings of the Committee, conduct such investigations as are appropriate and take one of the following steps:

- (1) Concur with the Committee's recommendations.
- (2) Reduce the recommended sanctions.
- (3) Dismiss the charge.

The decision by the Board of Trustees shall be rendered within twenty-one (21) working days and transmitted, in writing, to the accused person, the committee, the Chancellor, the President, the Vice-President and the student filing the grievance. The decision of the Board of Trustees shall be considered the final step that may be taken under academic grievance and due process.

- i. Retaliation: Any retaliatory action of any kind by an employee or student of the district/college against any student as a result of filing a grievance under these procedures, cooperating in an investigation, or other participation in these procedures is prohibited, and may be regarded as the basis for disciplinary action.

Age

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

Disability

Chabot 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

Chabot 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 be otherwise subjected to discrimination under any program of the colleges. Chabot 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 colleges.

Sex

Chabot College does not discriminate on the basis of sex 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 basis of sex in education programs and activities operated by the colleges. Such programs and activities include admission of students and employment.

SEXUAL HARASSMENT

Chabot College desire to maintain an academic and work environment which protects the dignity and promotes the mutual respect of all employees and students. Sexual harassment of employees or students will not be condoned. In general deliberate verbal comments, gestures or physical contact of a sexual nature that are unsolicited and unwelcomed will be considered harassment (Title VII of the Civil Rights Act of 1964).

Inquiries concerning the application of these policies to programs and activities may be referred to the following officers assigned the administrative responsibility of reviewing such matters:

Employee Concerns:

District Human Resources Director
Telephone (925) 485-5235

Student Concerns:

Vice-President of Student Services
Telephone (510) 723-6744

Disability Related Concerns:

Vice-President of Student Services
Telephone (510) 723-6744

Inquiries may also be addressed to the Regional Director of the Office of Civil Rights, Region 9, 1275 Market Street, 14th Floor, San Francisco, CA 94103.

DECLARACION DE NO DISCRIMINACION

Chabot College, de acuerdo con las leyes civiles, declara que no discrimina hacia ninguna persona a base de su raza, color, nacionalidad, ascendencia, religion, creencia, sexo, edad o incapacidad, en sus programas y politicas de empleo y educacion. El conocimiento limitado del idioma no limita acceso a programas y servicios ocupacionales. Cualquier pregunta sobre la aplicacion de esta declaracion puede dirigirse a Vice-President of Student Services; Chabot College, telefono (510) 723-6744 (asuntos de estudiantes); a Human Resources Director, telefono (925) 416-2085 (asuntos de empleo); a Melinda Matsuda Room 208, telefono (510) 723-691G; o al Regional Director of the Office of Civil Rights, Region 9, 1275 Market St., 14th Floor, San Francisco, CA 94103.

AMERICANS WITH DISABILITIES ACT (ADA)

In accordance with Section 504 of the Rehabilitation Act of 1973 and 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 oneself. People who have a record of such an impairment and those regarded as having an impairment are also protected.

The college ensures that students with disabilities will not be unlawfully subjected to discrimination or excluded from participating in or benefiting from programs, services or activities. Students are accorded due process as outlined in specific complaint procedures developed by the College.

Students with disabilities at the College have the right to:

- access courses, programs, services, activities and facilities offered through the College;
- an equal opportunity to learn and receive reasonable accommodations, and/or auxiliary aids and services;
- be assured that all information regarding their disability is kept confidential;
- disclose their disability directly to faculty.

Students with disabilities at the College have the responsibility to:

- meet all fundamental course requirements and qualifications and maintain essential institutional standards for courses, programs, services, employment, activities and facilities;
- identify themselves to the Disabled Student Resource Center (DSRC) as an individual with a disability when an accommodation is needed and demonstrate and/or document (from an appropriate professional) how the disability limits their participation in courses, programs, services, employment, activities and facilities;
- actively work in partnership with faculty and DSRC staff to develop reasonable accommodations appropriate to their disability; and

- comply with the Academic Accommodations Procedures for requesting and utilizing DSRC services.

For information regarding filing complaints based upon discrimination on the basis of physical or mental disability, students should contact the college ADA/504 Coordinator, Vice-President of Student Services, Melinda Matsuda in Building 200, Room 208.

CAMPUS POSTING POLICY

The posting, distributing or disseminating of printed materials that advertise, publicize or otherwise provide notice of activities, events or information are subject to the following regulations.

1. All printed materials must indicate the name of the sponsoring individual, department, or registered club or organization.
2. All printed materials written in a language other than English must be accompanied by an English translation.
3. Any printed material deemed to be slanderous, libelous, grossly obscene, offensive or pornographic will not be accepted for posting.
4. The Dean of Students supervises and authorizes all campus publicity including posting of flyers and banners and distributing hand-outs or products.
5. Except as specified in these guidelines, no printed material may be placed on or against, attached to, or written on any structure or natural feature of the campus, such as, but not limited to doors, windows, building walls, walkways, roads, posts, fences, waste receptacles, trees, plants or shelters.
6. No printed materials may be left unattended on campus grounds or inside campus buildings without prior permission of the Dean of Students or the Dean responsible for the specific building.
7. Publicity may not be affixed or inserted into campus lawns or grounds.
8. Publicity may not be affixed to or left on cars in Chabot College parking lots.
9. The use of the Chabot College name or logo is limited to authorized or official publicity. It may only be used by a registered student club with approval of the Director of Student Life.

Posting Areas

At Chabot College, the Office of Student Life is responsible for posting of all materials on campus, in designated locations. This service is offered at no charge to all college departments, clubs and organizations, and for a minimal fee to non-affiliated and off-campus organizations. Academic and administrative department bulletin boards (usually located in specific department buildings) are maintained by each department. Permission for posting at these locations must be obtained individually from each area Dean.

Flyers are posted on Tuesdays and Fridays during the regular school year, for up to two weeks. Due to space limitations, flyers must not exceed 8 1/2" × 14" in size.

Exceptions to this must be pre-approved and are subject to space availability. Posting for summer and holidays may vary. All items to be posted must be received by 5 pm on the day prior to the posting day desired, at the Office of Student Life, Building 2300, Room 2355. Approved posters will be stamped and posted. Any displayed posting not in the designated areas or not displaying the approved posting stamp, will be removed immediately. Repeat offenders found to be posting illegally will lose future rights to have materials posted at Chabot College. There is a limit of 25 flyers to be posted for any one event or program.

Special Posting for Housing Availability, Employment Opportunities, Community Service/Volunteer Opportunities and Car Pooling/Transportation can be done at no cost through the Office of Student Life. Enclosed glass cases for each area are updated regularly. Preprinted forms for each specific area can be completed in Room 2355.

CHABOT COLLEGE FERPA POLICY

The Family Educational Rights and Privacy Act (FERPA) affords students certain rights with respect to their education records. These rights are:

1. **The right to inspect and review the student's education records within 45 days of the day the College receives a request for access.** Students should submit to the Director of Admissions and Records, a written request that identifies the record(s) they wish to inspect. The Director will make arrangements for access and notify the student of the time and place where the records may be inspected. If the records are not maintained by the Director of Admissions and Records, they shall advise the student of the correct official to whom the request should be addressed.
2. **The right to request the amendment of the student's education records that the student believes is inaccurate or misleading.** Students may ask the College to amend a record that they believe is inaccurate or misleading. They should write the Director of Admissions and Records or College official responsible for the record, clearly identify the part of the record they want changed, and specify why it is inaccurate or misleading. If the College decides not to amend the record as requested by the student, the College will notify the student of the decision and advise the student of his or her right to a hearing regarding the request for amendment. Additional information regarding the hearing procedures will be provided to the student when notified of the right to a hearing.
3. **The right to consent to disclosures of personally identifiable information contained in the student's education records, except to the extent that FERPA authorizes disclosure without consent.** One exception, which permits disclosure without consent, is disclosure to *school officials* with *legitimate educational interests*.

A *school official* is defined as a person employed by Chabot-Las Positas Community College District in an administrative, supervisory, academic, or support staff position (including law enforcement unit and health staff); a person or company with whom the College or District has contracted (such as an attorney, auditor, or collection agent); a person serving on the Board of Trustees; or a person assisting another school official in performing his or her tasks.

A school official has a *legitimate educational interest* if the official needs to review an education record in order to fulfill his or her professional duties and responsibilities.

Upon request, the College discloses education records without consent to officials of another school in which a student seeks or intends to enroll.

While the college does not provide general student directory services, it *may* release the following information about a student without consent: name, address, telephone number, date of birth, major field of study, degrees and awards received and dates of attendance. Any student who does not wish such information to be released about him/herself shall notify the Office of Admissions and Records in writing, no later than 10 school days after the start of the term. Chabot College does not release student information for individual use, private business or commercial firms for use in advertising and publicity.

If a student has a concern they have the right to file a complaint with the U.S. Department of Education concerning alleged failures by the College to comply with the requirements of FERPA. The name and address of the office that administers FERPA is:

FAMILY POLICY COMPLIANCE OFFICE

U.S. Department of Education
400 Maryland Avenue, S.W.
Washington, DC 20202-4605

<http://www.ed.gov/policy/gen/guid/fpco/ferpa>

For more information regarding FERPA regulations and confidentiality & privacy of student records, go to <http://www.chabotcollege.edu/admissions/ferpa.asp>.

COLLEGE FERPA OFFICIALS

Student Discipline

Melinda Matsuda
Vice President, Student
Services
(510)723-6744
mmatsuda@chabotcollege.edu

Student Records

Judy Young
Director, Admissions and Records
(510)723-6700
jyoung@chabotcollege.edu

**CHABOT-LAS POSITAS
COMMUNITY COLLEGE DISTRICT
5020 FRANKLIN DRIVE,
PLEASANTON, CA 94588**

ACADEMIC ADMINISTRATORS

COTA, SUSAN A., 1991; A.A., Immaculate Heart College; M.S., San Francisco State University; Ed.D., University of San Francisco; Chancellor
KINNAMON, JOEL L., 2002; B.S., Oklahoma State University; M.B.A., Oklahoma City University; Ed.D., Nova Southeastern University; Vice Chancellor, Educational Services and Planning

NON-ACADEMIC ADMINISTRATORS

ARIES, JENNIFER L. District Director, Public Information and Marketing
BREWINGTON, MAZIE L. Controller
DOBBS, STAN R. District Director, Facilities Planning & Management
DOZIER, JULIA A. Director, Economic Development-Contract Education
FISHER, MARIANN L. Marketing & Sales Manager-Contract Education
HOWE, ANDREW D. Manager, Purchasing and Warehouse Services
HUTCHINSON, JUDY T. District Budget Officer
LEGASPI, LORENZO S. Vice Chancellor, Business Services
METHE, JEANNINE P. Chief Technology Officer
MORRIS, ANITA L. Director, Human Resources
NELSON, TIM C. Director, Maintenance & Operations
NORIEGA, ALICE G. Manager, Employee Benefits/Worker's Compensation

FACULTY OFFICE HOURS

Chabot College is noted for the close relationship of the faculty with students. The educational benefits of the student being able to know and talk personally with his or her instructor is recognized. Each member of the full-time faculty schedules office hours each week for this purpose. This schedule is posted outside the instructor's office. Students are encouraged to take advantage of this opportunity, the benefits of which include:

- Assistance in understanding and achieving specific course expectancies.
- The development of concepts and understandings beyond the course expectancies.
- Insights into career opportunities within the instructor's area of expertise.
- Encouragement, assistance, and direction in meeting both educational and personal needs.
- A continuing association with a member of the academic community.

CHABOT COLLEGE

ACADEMIC ADMINISTRATORS

CARLSON, ROBERT E., 2002; B.A., M.A., Southern Illinois University; Ed.D., Virginia Polytechnic Institute & State University; President

CLARK, THOMAS C., 2005; B.A., CalPoly, Pomona; M.A., California State University, Chico; Dean, Applied Technology & Business.
CORCORAN, MARCIA L., 2005; B.A., University of California, Santa Barbara; M.A., Stanford University; Ph.D., University of California, Berkeley; Dean, Language Arts
GROPPETTI, EUGENE P., 1975; B.A., University of the Pacific; M.F.A., Ohio University; J.D., University of the Pacific, McGeorge School of Law, Dean, Arts & Humanities.
JAHNKE, SARAH A., 1998; B.A., University of Northern Iowa; M.S., Mankato State University; Dean, Science and Mathematics
MALONEY, MARGARET, E., 1998; B.A., Mundelein College, Chicago; M.A., San Francisco State University; Dean, Social Sciences.
MATSUDA, MELINDA K., 1985; B.A., M.A., California State University, Hayward; Vice President, Student Services.
MINUS, DARYL L., 2006; B.S., Hampton University; M.A., New York University; Dean, Counseling.
SHIMADA, GERALD A., 2000; B.A., University of California, Berkeley; M.A., San Francisco State University; Dean, Special Programs & Services.
TAYLOR, RONALD C., 2003; B.A., M.A., Ph.D., University of California, Berkeley; Vice President, Academic Services.

NON-ACADEMIC ADMINISTRATORS

CURL, DIANA E., Manager, Children's Center
CURRY, ROBERT N., Vice President, Business Services
GUTIERREZ, ANTHONY, Director, Student Life
KASER, KATHLEEN P., Manager, Bookstore.
LINZMEYER, KATHRYN, Director, Financial Aid
MAY, SUSAN H., Director, Community Education & Marketing.
NAKANO, WAYNE K., Assistant Manager, Bookstore.
PIATETSKY, STEVEN S., Director Media Services
TALMO, RICHARD D., Executive Director of the Foundation
YOUNG, JUDY, Director, Admissions and Records

FACULTY

FACULTY SENATE-CHAD MARK GLEN, PRESIDENT

ABSHER, MICHAEL S., 2002; A.A., Chabot College; Machine Tool Technology
ALEGRE, JOSE REYES M., 1990, A.A., Saddleback College; B.A., M.A., California State University, Fullerton; Mathematics.
ALEXANDER, NICHOLAS V, 1988; B.S., University of California, Berkeley, Ph.D., Stanford University; Physics.
ALLEN, KATHLEEN R., 1997; A.A., Las Positas College; B.A., California State University, Hayward; M.A., San Francisco State University; Disabled Students Programs and Services (DSPS).
AMBRIZ, NORMA J., 1991; A.A., Hartnell Community College; B.S., M.S., San Diego State University; Psychology/Counseling
AMES, JASON M., 2005; B.A., University of San Francisco; M.A., California State University, Hayward; Speech/Forensics.
ANDERES, E. DESRE, 1995; A.B., M.A., San Diego State University; Geography.
ARNOLD, CAROLYN L., 1992; A.B., Smith College; Ph.D., Stanford University; M.S., Stanford University; M.A., San Francisco State University; Institutional Research.
AROVOLA, DAVID E., 1970; B.A., M.A., San Jose State College; Speech.
ASHRAF, SADAF, 2005; A.A., DeAnza College; B.A., University of California, Berkeley; M.A., Santa Clara University; Counselor.
AYE, DENNIS P., 2005; B.A. St. Ambrose University; M.A., University of Connecticut; Physical Education/Men's Basketball Coach
BARAN, FE L., 1989; B.A., St. Theresa's College, Philippines; M.A., University of California, Los Angeles; English/ESL.
BARDE, LINDA J., 1975; B.A., California State University, Hayward; M.S., California State University, San Francisco; M.A., College of Notre Dame, Belmont; Therapeutic Recreation, Sign Language.

ADMINISTRATION, FACULTY AND STAFF

- BATCHELOR, EGL T., 1991; B.S., M.S., California State University, Hayward; Mathematics.
- BAUM, JAMES G., 2005; Automotive Technology.
- BAUMANN, CAROL A., 1989; B.A., Simmons College; M.S., School of Library and Information Science; Librarian.
- BERG, JANE C., 2002; A.A., Chabot College; B.A., University of California, Berkeley; M.A., San Francisco State University; Assistive Computer Technology.
- BERLAND, JOSEPH H., 1989; B.A., University of California, Los Angeles; M.S., California State University, Los Angeles; Mathematics.
- BHANGAL, JASWINDER K., 2004; A.A., B.A., Bundelkhand University; M.A., University of Phoenix; Business.
- BRAGANZA AGNELLO F., 1990; B.S., Makerere University; M.S., West Virginia University; Ph.D., University of California, Davis; Biology.
- BUCHWALD, NORMAN I., 2000; B.A., California State University, Northridge; MFA, Colorado State University; MLIS, University of Southern California; Librarian.
- CAIN, LARRY A., 1982; A.A., Los Angeles Valley College; A.B., M.A., University of California, Berkeley; English.
- CALCAGNO, DANIEL W., 2003; A.A., Chabot College; B.A., California State University, Sonoma; M.A., St. Mary's College; Physical Education/Assistant Football Coach.
- CARNEY, CEINWEN L., 1989; B.A., Occidental College; M.A., University of California, Berkeley; English.
- CHAUDHURI, INDRANI, 2000; B.S., M.S., Calcutta University, India; M.A., San Francisco State University; Mathematics.
- CHOWENHILL, DENNIS C., 1977; A.A., Los Angeles Harbor College, Wilmington; B.A. California State University, Chico; M.A. University of Florence, Italy; Ed.D., University of California, Berkeley; English.
- CHUN, DESMOND K., 1990, B.S., University of Southern California; B.S., California State University, Hayward; M.B.A., Golden Gate University; Computer Science.
- CHURCH, JANE C., 1992; A.B., San Diego State College; M.S., National University; M.S., San Diego State University; Counselor/Articulation Officer
- COCKERHAM, RUDOLPH C., 2002; B.A., Humbolt State University; B.S.N., M.S.N., Samuel Merritt College; Nursing
- COLLINS, ROBERT W., 1968; B.A., San Jose State University, M.A., California State University, Hayward; Biological Science.
- CORBETT, RUTH A., 1983; A.A., Chabot College; B.A., California State University, Hayward; M.A., California State University, Hayward; Political Science.
- COWAN, NANCY L., 1976; R.N., B.S., University of Oregon; M.S., University of California at San Francisco; Ed.D., Nova Southeastern University; Nursing.
- CREW, JAMES D., 2002, A.A., Chabot College; B.S., M.S., California State University, Hayward; Mathematics
- DALE, ValJEAN, 1998; B.A., M.A., John F Kennedy University; Counseling.
- D'ALOISIO, MICHAEL J., 2003; B.A., M.A., Indiana University; Counselor.
- DAPRATO, STEVEN L., 2001; B.A., M.A., California State University Sacramento; Physical Educational/Head Football Coach.
- DAVE, TIMOTHY A., 2000; B.A., University of California, Berkeley; M.S., Brown University; Physics/Astronomy
- DAVIS, MATTHEW A., 1992; B.A., California State University, Sacramento; M.A., California State University, Sacramento; Mathematics.
- DAVIS, PETER K., 1976; B.S., Weber State College; M.A., University of California, Berkeley; Physical Education.
- DEWITT, THOMAS W., 1991, B.A., University of California, Berkeley; Secondary Education Credential. San Francisco State University; M.A., University of Virginia; English.
- DOCKTER, LAURIE B., 1976; B.A., University of California, Berkeley; M.S., San Diego State University; Chemistry.
- DROUIN, JEFFREY W., 2006; B.S., University of La Verne, M.A., University of San Francisco; Athletic Advisor/Physical Education/ Assistant Football Coach.
- EBERHARD, KENNETH R., 1969, B.S., M.S., California State University, Hayward; Mathematics.
- EGUSA, JERRY R., 1977; B.S., M.A., Santa Clara University; M.A.T, College of Notre Dame; M.A., Ed.D., University of San Francisco; Learning Skills.
- ESQUIERDO, EUGENE J., 1991; B.F.A., M.F.A., California College of Arts and Crafts, Oakland; Art.
- FOUQUET, DAVID D., 1992; B.A., University of California, Los Angeles; M.A., University of California, Santa Cruz; Mathematics.
- FRIEND, STEVEN K., 1993; B.S., San Jose State University; M.S., St. Marys College; Physical Education.
- GALLIANO, JOSEPHINE A., 2000; B.A., M.A., University of San Diego; Dental Hygiene.
- GARCIA, MELVA Y., 1992; B.A., M.S., California State University, Hayward; Counselor.
- GENERA, SANDRA F., 2004; A.A., Mills College; B.A., University of California, Berkeley; M.A., California State University, Hayward; Counselor.
- GIBSON DONNA, 1993; B.S., Stockton State College; M.S., Cornell University; Chemistry.
- GILKERSON, TAMMEIL Y., 2005; B.A., University of California, Berkeley; M.A., California State University, Hayward; Counselor.
- GILL, SUSAN M., 1988; B.S., M.A., University of Wisconsin, M.P.H., University of California, Berkeley; English.
- GILLIS, CHRISTINE A., 1989, B.S., University of New Mexico; M.S.N., San Jose State University; Nursing.
- GLEN, CHAD M., 1993; A.A., Chabot College; B.A., M.A., San Francisco State University; Mass Communications.
- GOLDEN, CAROL J., 1995; B.A., University of California, Santa Barbara; M.P.H., University of California, Los Angeles; Dental Hygiene Educator.
- GOLOJUCH, JANICE L., 1995; A.S., State University of New York, Farmingdale; B.A., M.A., State University of New York, Albany; M.F.A., Syracuse University; Art.
- GRACE, KENNETH W., 1995; A.A., Chabot College; B.S., California State University, Hayward; M.A., Stanford University; Physical Education.
- HANHAN, DORIS F., 2004; B.A., California State University, Hayward; M.A., University of California, Santa Cruz; Mathematics.
- HARBIN, CAREY E., 1986; B.A., M.Ed., University of South Carolina; Psychology/Counseling.
- HARRIS, TIMOTHY E., 2005; B.A., California State University, Hayward; M.A., University of North Texas; Music
- HERN, KATHLEEN M., 2004; B.A., New York University; B.A., Mills College; M.A., Bowling Green State University; English.
- HICKS, CYNTHIA G., 1985; B.A., Indiana University; M.A., San Francisco State University; English.
- HILDRETH, SCOTT S., 1991; B.S., University of California, Davis and University of Edinburg; M.A., University of California, Berkeley; Physics/Astronomy.
- HO, MING-LUN, 2004; B.A., M.A., University of California, Berkeley; Mathematics.
- HODGSON, FREDERICK G., 1988; B.A., Dartmouth College; M.A., Ph.D., University of California, Santa Barbara; French.
- HOLLANDER, BENJAMIN B., 1993; B.A., M.A., San Francisco State University; English.
- HOLLOWAY, JOHN L., 1988; A.A., Orange Coast College; B.A., M.B.A., San Francisco State University; Business.
- HOWELL, DEBRA I., 1991; A.B., University of California, Berkeley; Teaching Credentials, Dominican College of San Rafael; M.S., Arizona State University; Biology.
- HUGHES, ROBERT L., 1995; A.A., Los Angeles Valley College; B.A., Northridge State University; M.A., California State University, San Francisco; Psychology.
- HUNT, GAYLE J., 1990, B.A., Willamet University; M.A., San Francisco State University; English/ESL.
- IGWE, ANTHONY O., 2002; B.A., University of San Francisco; M.S., San Francisco State University; Physical Education.

- IMMISCH, DIANA E., 1990, B.A., University of Manchester, England; M.A., California State University, Hayward; M.L.S., University of California, Berkeley; Librarian.
- JACOBSEN, SHARI L., 1985; B.A., M.S., California State University, Hayward; Counseling.
- JOHNSON, WILLIAM B., 1989; B.A., Northwestern University; M.A., Stanford University; Journalism.
- JOHNSON-MURPHY, GAIL C., 1973; B.S. M.S., California State University, Hayward; Counseling, Psychology.
- KAJIWARA, KATSUSHIGE, 1981; B.A., University of California, Riverside; M.S., Colorado State University, Mathematics; M.S., University of Hawaii; Computer, Mathematics.
- KALYAGIN, DMITRIY M., 2000, A.S., Des Moines Area Community College; B.S., Samara State Pedagogical Institute; M.B.A., Drake University; Business.
- KEELING-HAINES, PATRICIA A., 1978; A.A., Chabot College; B.A., M.A., University of California, Berkeley; Speech.
- KELLEY, KATHY G., 1993; B.A., University of California, Los Angeles; M.S., California State University, Hayward; Human Development.
- KOLB, MARCIA S., 2002; B.A., University of California, Berkeley; M.A., University of California, San Diego; Mathematics.
- KOMISAR, JOHN A., 1981; B.A., University of Kentucky, M.F.A., University of Tennessee; Art.
- KUBICKI, GREG C., 2004; B.A., California State University, Hayward; M.A., St. Mary's college; Physical Education/Water Polo Coach.
- KUWABARA, JOSEPH, JR., 1973; B.S., M.S. California State University, Hayward; Recreation, Ed. Psychology, Counseling.
- LANGDON, MICHAEL R., 2005; B.A., University of North Carolina, Charlotte; M.A., Portland State University; English.
- LEBEIKO, THERESA M., 1988; B.A., Notre Dame of Ohio; M.A., Loyola University, Ph.D., University of California, Santa Barbara; English.
- LEONARDI, DANIEL J., 1974; A.A., College of San Mateo; B.A., M.A., San Jose State University; Photography.
- LePELL, ANN R., 1993; B.A., University of California, Davis; M.A., San Francisco State University; English.
- LOFFT, CHARLOTTE E., 1983; B.S., M.S., State University of New York; Ed.D., University of San Francisco; J.D., Santa Clara University; Nursing.
- LONG, ASHLEY, 1983; A.A., Chabot College; Machine Tool Technology.
- LOOZE, HELENE J., 1975; A.A., Pasadena City College; B.A., M.A., California State University, Los Angeles; Ph.D., University of Southern California; History.
- LOWDON-MORALES, LINDA M., 1991; A.S., Contra Costa College; B.S.N., M.S.N., University of California, San Francisco; Nursing.
- MACHADO, LOIS N., 1976; A.A., Riverside City College; B.S., M.S., California Polytechnic College; Physical Education.
- MAGALLON, ANGIE F., 2002; A.A., Chabot College; B.A., California State University, Hayward; M.A., San Francisco State University; English
- MALDONADO-AZIMINIA, RACHEL M., 1983; A.A., Fresno City College; B.A., California State University, Fresno; M.S.W., California State University, San Jose; Counselor (EOPS).
- MARAWALA, ZARIR, G., 1994; A.S., City College of San Francisco; B.A., University of California, Berkeley; M.A., San Francisco State University; D.P.M., California College of Pediatric Medicine; Biology.
- MATTHEWS, JAMES E., 1988; B.A., California State University, Sacramento; M.L.S., San Jose State University; Librarian.
- MAYER, BRUCE E., 2003; A.S., Cabrillo College; B.A., University of California, Berkeley; M.A., Stanford University; Engineering.
- McDANIEL, CHRISTINE L., 198G; B.A., California State University, Hayward; M.B.A., John F Kennedy University; Administration of Justice.
- McDONALD, WILLIAM A., 1992; A.A., Canada College; A.B., San Diego State University; M.A., San Francisco State University; Counselor.
- McFARLAND, SEAN E., 1992; B.A., University of California, Santa Cruz, M.A., San Francisco State University; English.
- MC LEAN, CLARA D., 2003; B.A., University of California, Berkeley; M.A., Ph.D., University of California, Irvine; English.
- MEADS, GLORIA M., 1991; B.S., Columbia University; M.S., University of California, San Francisco; Nursing.
- MEHL, KEITH H., 2000; B.A., University of Texas, Austin; M.S., California State University, Hayward; Computer Science.
- MILLER, DANIEL J., 1991; A.A., Chabot College; B.S., M.S., California State University, Hayward; Physical Education.
- MIZE, NAOMA L., 1989; B.A., Washington State University; M.A., San Francisco State University; Counselor.
- MOFIDI, ZAHRA F., 1985; B.S.N., Shiraz (Pahlau) University, M.S.N., Indiana University School of Nursing; Nursing.
- MONIZ, RICK G., 1991; A.A., Chabot College; B.A., M.A., California State University, Hayward; History.
- MOORE, GAILA A., 1977; B.S., Illinois Institute of Technology, M.A., College of the Holy Names; M.S., California State University, Hayward; Business, Counseling.
- MORRISON, KIM L., 2004; B.A., Fairhaven College; M.A., University at Buffalo; Library.
- MUMFORD, JAY K., 2005; B.A., Western Michigan University; Real Estate
- MUNGER, MONICA, R., 1994; B.A., University of Washington, Seattle; M.A., University of Denver; English-Learning Skills.
- MURRAY, CAROL W., 1988; B.A., Lewis Clark State College; M.A., University of Washington; English/English as a Second Language.
- NATSON, CHARLES R., 1990; B.A., St. Mary's College; M.Ed., University of San Francisco; Counselor.
- NGO, MAURICE A., 1975; B.S., University of the Philippines; M.A., Ph.D., University of California, Berkeley; Mathematics.
- NOVAK, JANICE V., 2004; B.A., M.A., University of Illinois, Urbana; Business.
- ODOM, JUDITH ANN, 2001; B.S., University of LaVerne; M.A., California Polytechnic University; Computer Applications Systems.
- OGMAN, BARBARA A., 2001; B.A., New College of California; M.S., Bank Street College of Education; Early Childhood Education.
- OLIVER, ADOLPH A., 1976; B.S., M.S., Stanford University; M.S., California State University, Hayward; Geology, Statistics.
- ORTIZ, GUADALUPE S., 1986; B.S., Texas A & I University; M.A., Stanford University; History.
- OTTO, REBECCA A., 2004; B.A., Michigan State University; M.A., Central Michigan University; Biology.
- OZDEMIR, HILAL H., B.A., Gazi University; M.A., Pacific Oaks College; Early Childhood Development.
- PALACIO, JON D. Jr., 2002; B.A., M.A., California State University, Hayward; Music
- PAPACHRISTOS, ZACK G., 1969; B.S., University of Utah; M.A., San Jose State University; Physical Education.
- PARADA, RAMON C., 1986; B.A., California State University, Pomona; M.S.W., University of California, Berkeley; Counseling.
- PARENTE, JOHN J., 2004; B.A., Brooklyn College of CUNY; M.A., St. John's University; D. Min. University of Creation Spirituality; Humanities/Religious Studies.
- PASCOA, ORLANDO S., 1989; B.A., San Francisco State University, M.S., California State University, Hayward; Counselor/Instructor.
- PAZ, JEANNETTE G., 1990; B.S., University of San Francisco; M.A., John F. Kennedy University; Health.
- PETERSEN, TERRY M., 1995; B.A., M.A., California State University, Long Beach; Speech.
- PHILLIPS, WAYNE A., 2001; A.A., Chabot College; B.A., Saint Mary's College of California; Electronics.
- PLONDKE, L. DONALD, 2000; B.A., George Washington University, District of Columbia; M.A., University of California, Berkeley; Geography.
- PLUNKETT, IRENE L., 1984; B.A., Willamette University, M.A., San Jose State University; English.
- PREMEAU, DIANE C., 1995; B.A., University of California, Santa Barbara; Health Information Technology.
- PUCKETT, THERESA J., 1999; B.A., New Mexico State University; M.F.A., Southwest Texas State University; English.
- RAVEICA, DANIEL, 2001; A.S. Chabot College; Welding.

ADMINISTRATION, FACULTY AND STAFF

- RICHARDSON, JULEE J., 1986; B.S., State University at Buffalo; M.A., Holy Names College; Ph.D., University of California, San Francisco; Human Development & Aging.
- RUBE, MILTON I., 1985; B.S., M.S., University of Wisconsin; Mathematics/Computer Science.
- RUGGIERO, CRISTINA M., 2005; B.A., Wesleyan University; M.A., University of Wisconsin, Madison; Political Science.
- RUIZ, NORBERTO, 1983; A.A., Chabot College; B.S., California State University, Hayward; Electronics Technology.
- SAMMONS, AMBER R., 2005; B.A., University of Maine; M.A., California Polytechnic Institute, San Luis Obispo; Physical Education/Volleyball Coach.
- SAWHNEY, HARJOT K., 2005; B.A., M.A., Guru Nanak Dev University; M.A., Indian Institute of Technology; M.A., California State University, Hayward; Chemistry.
- SCHAEFFER, MARK A., 2003; B.A., Princeton University; Digital Media.
- SCHUMACHER, MARGARET A., 2000; B.S., University of Wisconsin, Parkside; M.S., University of Wisconsin, Madison; Chemistry.
- SCOLES, NICOLE R., 2004; B.A., University of San Francisco; Dental Hygiene.
- SEGEDY, JULIE A., 1988; B.A., Sonoma State University; M.A., San Francisco State University; English.
- SHANNON, PATRICIA D., 2002; B.A., Michigan Technological University; M.A., Graduate Theological Union; Humanities and Religious Studies
- SHERRY, MICHELLE, 1997; A.A., Merritt College; B.A., San Jose State University; M.A., University of San Francisco; Early Childhood Development.
- SHOEMAKER, ROSS E., 1968; B.A., M.A., University of the Pacific; Physical Education.
- SIROY, STEVEN, 1993; B.A., San Francisco State University; M.A., University of San Francisco; Physical Education.
- SKILES, DONALD K., 1988; B.A., M.A., San Francisco State University, English.
- SMALL, STEPHEN A., 2003; A.A., Chabot College; Automotive Technology
- SPERLING, SUSAN S., 1987; A.B., M.A., Ph.D., University of California, Berkeley; Anthropology.
- STEELE, TIMOTHY T., 1994; B.A., Oberlin College, Ohio; MARCH., Yale University School of Architecture; Architecture.
- STICKNEY, SALLY, 1998; B.S., Portland State University; M.A., John F. Kennedy University; Counseling.
- STUBBLEBINE, CYNTHIA S., 1991; B.S., California State University, Hayward; M.S., Purdue University; Mathematics
- SWANSON, LINDA L., 1990; B.A., University of California, Santa Cruz; M.A., University of California, Berkeley; English.
- TELES, CONNIE L., 2000; A.A., Chabot College; B.S., California State University, Dominguez Hills; M.S., San Jose State University; Nursing.
- TENN, SHOSHANNA E., 2001; B.A., University of California, Los Angeles; M.A., San Francisco State University; English.
- THIEL, CLAYTON E., 1990; B.F.A., Maryville College; M.F.A., San Jose State University; Art.
- THOMPSON, MICHAEL L., 2003; B.A., M.A., University of California, Berkeley; History
- TONG, SUSAN A., 1989; B.A., San Francisco State University; M.A., Ph.D., Western Michigan University; Sociology.
- TRAUGOTT, JONATHAN C., 2002; B.A., B.S., M.S., Stanford University; Computer Science
- UCHIYAMA, KENT L., 1991; B.A., Grinnell College; M.A., San Francisco State University; English/ESL.
- VALLELY, JANE, 1985; B.S., Chapman College; Health.
- VICTORIA, ERNESTO, 2001; B.A., University of Houston; M.S.W., San Jose State University; Counselor.
- VILCHE, ELLA M., 1995; A.A., Chabot College; B.A., California State University, Fresno; M.S., California State University, Hayward; Physical Education.
- VO-KUMAMOTO, TRAM, 2000; B.A., University of California, Berkeley; M.S., California State University, Hayward; Counselor
- WAGONER, J. DALE, 1989; A.A., Chabot College; B.S., California State University, Chico; M.A., University of California, Berkeley; Health.
- WAHAMAKI, LINNEA E., 1999; A.A., Diablo Valley College; B.S., California State University, Hayward; M.A., San Jose State University; English as a Second Language.
- WALDO, CHRISTOPHER L., 1992; B.A., Beloit College; M.A., Michigan State University; Social Sciences.
- WAH, ANITA J., 2000; B.A., Oberlin College; M.S., Harvard University; Mathematics.
- WELLONS, RETHA V., 2005; B.A., M.A., M.S., Ph.D., University of Michigan; Nursing
- WELLS, ANDREW V., 2001; B.A., University of California, San Diego; Ph.D., Massachusetts Institute of Technology; Chemistry.
- WIESER, CHARLENE A., 1990; A.A., Skyline College; B.A., University of California, Santa Barbara; M.S., California State University, Hayward; Mathematics.
- WILLIAMS, KENNETH R., 1980; B.A., M.A., San Jose State University; Economics.
- WILSON, BURNIEROSE L., 1990; B.A., Stanford University; M.A., University of California, Berkeley; Ph.D., The Wright Institute, Berkeley; Counselor.
- WILSON, JEANNE D., 2005; B.A., The American College; M.A., California State University, Hayward; Counselor
- WIN, SOE M., 2000; B.S., M.S., Ph.D., University of Illinois; Electronics.
- WOLFORD, JANE A., 1991; B.A., California State University, Hayward; M.A., San Francisco State University; History.
- WONG, WANDA Y., 2001; B.A., University of California, Berkeley; M.B.A., California State University, Hayward; Computer Science.
- WOODHAMS, STEPHEN V., 1989; B.A., M.A., San Francisco State University; English.
- WORTHINGTON, BARBARA J., 2005; A.A., Merritt College; B.A., M.A., California State University, Hayward; English
- YEAGER, SHERRI A., 1993; B.A., American University; M.A., San Francisco State University; History.
- ZAPPA, STEPHANIE A., 1999; B.A., California State University, Hayward; M.F.A., Mills College; English.
- ZERMENO, FRANCISCO C., 1978; B.A., M.A., University of California, Santa Barbara; Spanish.
- ZULIANI, DIANE M., 2000; B.A., California State University, Long Beach; M.A., University of New Mexico; Art History.
- ZWEIFEL, LINDA J., 1983; A.A., Laney College; B.S., University of Houston; Dental Health Programs.

FACULTY EMERITI

AUDREY D. WEILLS, Instructor-Counselor Director of Counseling and Guidance	1965–75
PAUL L. BRODERICK, Instructor-Counselor	1965–76
KENNETH L. EDWARDS, Instructor	1962–76
FLOSSIE E. SHEEHAN, Instructor	1965–76
ARYLENE F. MARSH, Instructor	1962–77
EMILY G. PLETTA, Instructor	1961–77
JANET M. COTTER, Instructor	1964–78
FRED HIRSCH, Chairman-instructor	1961–78
R. GLENN LEUNING, Chairman-instructor	1964–78
MARIE G. MAIERHOFFER, Instructor	1962–78
WALLACE B. PEFLEY, Instructor	1962–78
NANCYJEAN WEITZMANN, Instructor	1962–78
C. MARIE BUSBY, Instructor	1961–79
CHESTERA LAVELLE, Instructor	1967–79
HAROLD O. PALMER, Chairman-instructor	1961–79
BYFORD H. SCOTT, Instructor	1962–79
DONALD J. GREEN, Instructor	1962–80
ROBERT BARTHOL, Instructor	1967–81
REED L. BUFFINGTON, Superintendent/President	1961–81
LEENDERT KAMELGARN, Instructor	1965–81
YVETTE K. LEHMAN, Instructor	1967–81
WALLACE LOOK, Librarian	1969–81
JOHN R. MCKINLEY, Dean of Administrative Services	1962–81

ADMINISTRATION, FACULTY AND STAFF

ROBERT T. WHALEN, Instructor	1961–81	DORET R. KOLLERER, Instructor	1965–92
BERT P. JAMISON, Instructor	1961–82	JOHN T. HEALEY, Instructor	1966–92
EDWIN F. QUINNELL, Librarian	1969–82	GORDON T. RANDALL, Instructor	1967–92
MISCHA SCHWARTZMANN, Instructor	1963–82	MARILYN M. RHODES, Instructor	1971–92
VIVIAN BORKGREN, Instructor	1972–83	BARBARA L. SHORT, Instructor	1971–92
DOLORES E. CYSEWSKI, Instructor	1965–83	STANLEY C. LICHTENSTEIN, Instructor	1975–92
WARREN B. HICKS, Associate Dean of Instruction Learning Resources	1963–83	KATHLEEN R. CONNEELY, Instructor	1961–93
DAVID P. HILL, Instructor-Counselor	1965–83	VITTORIO VALENZA, Instructor	1961–93
MARGUERITE P. HOPE, Instructor	1967–83	JOHNN T. MILLER, Instructor	1962–93
ARTHUR L. LARSON, Dean of Student Personnel	1967–83	RAY STANFANSON, Instructor	1962–93
BATES L. BRIAN, Instructor	1968–84	NEIL R. COLEY, Instructor	1963–93
R. WAYNE CREWS, Instructor	1965–84	GORDON R. PEAK, Instructor	1965–93
JACK CRIQUI, Instructor	1963–84	FRANK E. WEST, Instructor	1969–93
THOMAS H. DRISCOLL, Instructor	1965–84	DIANE M. SIVERS, Instructor	1973–93
STUART J. INGLIS, Instructor	1965–84	MARGARET C. EMERY, Instructor	1975–93
L. JACK FISHBAUGH, Instructor	1961–85	PETER G. MADSEN, Instructor	1982–93
EUGENE F. MARKER, Instructor	1964–85	JOHN L. WAGONER, Chair, Division of Physical Education	1962–94
DAVID M. MINOR, Instructor	1965–85	GENE R. WELLMAN, Director of Athletics	1962–94
GEORGIA E. OWENS, Instructor	1964–85	DON C. EATON, Instructor	1963–94
WILLIAM H. HOPPER, Instructor	1964–86	GLENN A. MALCOLM, Instructor	1963–94
ELEANOR B. MEYER, Instructor-Counselor	1963–86	EZRA A. MEYER, Instructor	1964–94
LAWRENCE D. MOSHER, Instructor	1966–86	GRETA V. WEAVER, Instructor-Counselor	1964–94
JAMES T. DAVIS, Instructor	1962–87	CLYDE T. ALLEN, Instructor	1965–94
MARK C. JONES, Instructor	1962–87	DAVID L. GARNHART, Instructor	1965–94
JAMES F. COOVELIS, Instructor	1963–87	JOHN E. CLEARY, Instructor	1966–94
FREDERICK B. AUGUSTINE, Instructor	1965–87	LEE HINCKLEY, Counselor	1967–94
BEVERLY J. LEVINE, Instructor	1965–87	OTTO E. MIELENZ, Chair-Instructor	1967–94
BETSY M. MAHLE, Instructor	1966–87	ROBERT L. HARRIS, Instructor	1968–94
JOY L. SANDERSON, Instructor	1971–87	GORDON W. LOCKLEAR, Instructor	1968–94
GEORGE A. SAGE, Instructor	1961–88	NICK L. SINGARES, Instructor	1969–94
MARY M. BOUBEL, Instructor-Librarian	1962–88	WILLIE J. JACKSON, Instructor	1970–94
PAUL E. BECKETT, Instructor	1963–88	MARION A. SANCHEZ, Instructor-Counselor	1970–94
ROBERT E. KELLY, Instructor	1963–88	GEORGE B. IMMISCH, Instructor	1975–94
KAYE C. KENNETT, Chair-Instructor	1964–88	MASON C. LAYMAN, Instructor-Counselor	1975–94
AMY E. AWTRY, Instructor	1965–88	DONALD CHRISTIANSEN, Instructor	1976–94
ELSIE G. KENT, Instructor	1966–88	MILDRED J. COLLINS, Instructor	1977–94
BARBARA W. GARFINKLE, Counselor	1967–88	HOWARD B. LARSEN, Instructor	1985–94
WALDEN A. LEECEING, Instructor	1967–88	JUANITA R. FOCHA, Instructor	1967–95
MARVIN D. THOMPSON, Instructor-Counselor	1968–88	EDWARD G. CATES, Instructor	1970–95
BEVERLY R. SKLUEFF, Instructor	1977–88	CONSTANTINE MASTROYANNIS, Instructor	1965–95
TRUMAN FISHER, Instructor	1961–89	JERALD T. BALL, Instructor	1964–96
JACKSON CONLEY, Instructor	1966–89	ROBERT G. HUNTER, Dean of Academic Services, Vocational and Applied Technology	1966–96
MELVIN EDWARDS, Instructor	1966–89	ROBERT E. DAHL, Instructor	1967–96
ROBERT J. FORESTER, Counselor	1968–89	ELIZABETH O. VICIAN, Counselor/Instructor	1967–96
HAROLD B. FRASER, Instructor	1969–89	NORMAN V. OLSON, Instructor	1970–96
HERBERT B. KENNEDY, Instructor	1969–89	JIMMY G. S. ONG, Instructor	1971–96
HARRISON J. HANNON, Instructor	1972–89	JUDY U. PORTA, Instructor	1975–96
GEORGE ANNA TOW, Counselor	1975–89	JANICE M. ALBERT, Instructor	1962–97
PHOEBE E. CORTESSIS, Instructor	1976–89	BILLYA, SMITH, Instructor	1965–97
STEPHEN I. MALTZ, Instructor	1963–90	HELEN P. BRIDGE, Instructor	1975–97
MARY LOU FITZGERALD, Instructor	1964–90	DONALD CAPPA, Instructor	1975–97
JOHN C. NEWELL, Instructor	1964–90	JAMES A. HEALEY, Instructor	1965–97
FRANK C. DENNEY, Instructor	1965–90	KINMONTT, HOITSMA, Instructor	1970–97
GLENYS W. WILSON, Instructor	1965–90	JOHN BRUNN, Instructor	1961–98
RICHARD D. YEO, Executive Dean	1965–90	ELLEN L. McILROY, Instructor	1966–98
WILL A. DICKHUTH, Director of Counseling & Guidance	1968–90	ELAIN T. DIAS, Instructor	1975–98
CLAIRE E. CHAPIN, Instructor	1971–90	MARK N. WAYNE, Instructor	1965–98
RAY J. EDWARDS, Instructor	1962–91	GILBERT J. RIBERA, Instructor	1964–98
JOHN D. YARBROUGH, Instructor/Counselor	1962–91	GEORGIE A. CHIVINGTON, Instructor	1965–98
JOHN L. MAXWELL, Instructor	1964–91	LEONARD I. BLAU, Instructor	1966–98
DAVID S. BURTON, Instructor	1965–91	MARYL. EVANS	1967–98
JAMES E. WICKENS, Instructor	1966–91	DIANE B. KERRICK, Instructor	1967–98
GERALD D. FRIEDEL, Instructor	1967–91	DAVID J. PERRY, Instructor	1967–98
IRVING BATZ, Dean of Student Services	1968–91	CHARLES T. GOETSCHEL, Instructor	1975–98
DONALD V. NILSON, Instructor	1974–91	LELAND F. KENT, Dean of Academic Services	1975–98
ROBERT G. BROWN, Instructor	1964–92	RUTHIE L. SELF, Vice-President of Student Services	1983–98
JOSEPH E. GRAVES, Instructor	1964–92		

ADMINISTRATION, FACULTY AND STAFF

HARRIET N. HUNGATE, Instructor	1985-98
FELIX GALAVIZ, JR., Project Puente Coordinator	1975-99
PATRICIA R. McGRATH, Project Puente Coordinator	1969-99
MILTON F. NORTE, Instructor	1980-99
JAMES F. JOSEPH, Instructor	1979-99
ALLEN J. WALL, Instructor	1989-99
HANS J. PEETERS, Instructor	1963-00
BARBARA M. POPE, Instructor	1965-00
VALERIE C. HICKS, Librarian	1969-00
ELLIOTT A. CHARNOW, Dean of Humanities Instructor	1972-00
WILLIAM B. BROPHY, Instructor	1976-00
FREDERICK L. COLLINS, Instructor	1982-00
CLIFFORD F. OLIVER, Instructor	1965-01
CHARLES W. HAMMOND, Instructor	1967-01
FREDERICK SIMS, Instructor	1968-01
TERRY CAGAANAN, Instructor	1970-01
NEILL G. STUDLEY, Instructor	1972-01
VICTORIA P. MORROW, Instructor	1975-01
LEONARD WOOLFOLK, Instructor	1975-01
CONNIE I. CLARK, Instructor	1977-01
PAYTON P. NATTINGER, Instructor	1976-01
RICHARD ALBERT, Instructor	1962-02
CAROL Y. CONWAY, Instructor	1976-02
ALLAN R. REIFF, Instructor	1967-03
ADAM D. YOUNG, JR., Instructor	1967-03
CAROLYN J. GREENE, Instructor/Counselor	1968-03
ELIZABETH A. FLYNN, Instructor	1970-03
ORDEAN G. SEVERUD, Instructor	1976-03
JEAN J. SMITH, Instructor	1985-03
MILTON TANNER, Instructor	1964-04
MYRNA L. BOWMAN, Instructor	1973-04
DAVID F. LEONARD, Instructor	1973-04
ROBERT R. WISEMAN, Instructor	1975-04
LYDIA E. COOPER, Instructor	1980-04
DAVID W. BUTLER, Librarian	1983-04
RONALD D. ARROYO, Instructor/Counselor	1984-04
RAY K. WESTERGARD, Instructor	1986-04
ROBERT W. THOMSEN, Instructor	1963-05
CHESTER D. RHOAN, Instructor	1968-05
WILLIAM E. THRELFALL, Instructor	1968-05
DAN A. ALEX, Instructor	1975-05
LARRY A. BEAL, Instructor	1975-05
VIRGINIA MARUYAMA, Instructor	1975-05
RUSSELL L. BRESLAUER, Instructor	1980-05
RICHARD E. BOTELHO, Instructor	1981-05
FRANCISCO C. SUMARES, Instructor	1982-05
EUGENE F. ROCKEMANN, Instructor	1983-05

CLASSIFIED STAFF

CLASSIFIED SENATE-RACHEL UGALE, PRESIDENT

ABAWI, FARIDA A.	Early Childhood Specialist
ADAMSON, ARLENE L.	Instructional Assistant II
ALDANA, NANETTE F.	Telephone Operator/Receptionist
ALY HAFISA, A.	Bookstore Cashier
AMONS, JONATHAN R.	Bookstore Cashier
BALANGITAO, DOLORES B.	Special Admissions Coordinator
BARBOZA, ARTHUR	Student Services Assistant (EOPS)
BELTRAN, VICTORIA A.	Administrative Assistant II
BERVEN, JOANNE M.	Clinical Assistant
BHATT, BHARATI K.	Early Childhood Specialist
BISHOP, JACK W.	Security Officer
BLACK, SARAH L.	Security Communications Dispatcher
BLACKMON, SUZANNE M.	Administrative Assistant II
BLAIR-KEENEY, RICHARD A.	Counselor Assistant II
BOLICH, KATHERINE A.	Early Childhood Specialist

BONGARD, LORA M.	Counselor Assistant I
BONONCINI, KIMBERLY A.	Administrative Assistant II
BOOKER, MICHAEL D.	Counselor Assistant II (EOPS)
BRAUNSTEIN, ISABEL R.	Media Services Specialist II
BROUDY, GLORIA J.	Children's Center Cook
BROWN, MEGAN A.,	Instructional Assistant II
CAMPI, DANIELLE M.	College Clerk II
CAO, KIM-UYEN T.	Administrative Assistant II
CARR-NSHIMBA, BRENDA A.	Student Employment Coordinator
CASAREZ, MIGUEL A.,	Laboratory Technician III
CASTILLO, SHANE M.	Physical Education/Athletics Assistant
CISNEROS, MARYLOU C.	Veterans Benefits Specialist
CLARK, ALEXANDER P	Instructional Computer Laboratory Specialist
COOK, KAREN M.	Early Childhood Specialist
CORMIER, VANESSA	Teacher Preparation and AmeriCorps Program Manager
DANAHER, EDNA E.	Student Records Evaluator
DANIELS, SHARRON V.	Bookstore Course/General Book Buyer
DECKER, RONALD L.	Laboratory Technician III
DE LA CRUZ, ANDRES M.,	Instructional Computer Laboratory Specialist
DEL AGUILA, ANA M.	ECD Professional Development Coordinator
DeLEON, ARLENE K.	Instructional Computer Laboratory Specialist
DOLIN, DARRELL	Security Officer
DOMIRE, CRYSTAL A.	Early Childhood Specialist
DUTRA, LAUREEN M.	Student Services Specialist II
EARNEY, DONNA M.	Locker Room Attendant
FERREIRA, RICHARD A.	Student Services Specialist II
FISCUS, SUSAN M.	Student Services Specialist II
FOGLE, MELITA R.,	Instructional Assistant II
FORTMAN, JONATHAN R.	Laboratory Technician IV
FRANCO, HORTENCIA (TENCY)	Administrative Assistant II
FRANCO, JOAN E.	Instructional Computer Lab Specialist
GALLARDO, ARTHUR,	Bookstore Shipping/Receiving Specialist
GENER, JEAN B.	Laboratory Technician IV
GENTILUOMO, JOSEPH M.	Intercollegiate Athletics Technician
GERMAN, VANESSA G.	Early Childhood Specialist
GERTON, CONNIE J.	Coordinator, Clinical Skill Lab
GUTIERREZ, ANA A.	Early Childhood Specialist
HAGEDORN, JOEL M.,	Webmaster
HALE, EUGENE	Stage Technician
HAMPTON, KATRIN M.	Assessment Specialist
HARVEY, MIYO T.	Student Counseling Assistant
HASHIMOTO, KAREN K.	Administrative Assistant II
HENRY, WILLIAM A.	Counselor Assistant II
HERNANDEZ, RUBEN	Student Services Specialist II
HODSON, ADRIENNE M.	Childrens Center Assistant Manager
HSU, ALICE	College Business Office Supervisor
IBRAHINI, HASSINA	Early Childhood Assistant
IRIARTE, LORENZO	Reprographics Systems Technician II
IRIARTE, MICHELLE M.	Counselor Assistant I-EOPS/CARE/CalWorks
JANGER, SARILEE	Administrative Assistant II
KIGER, NINA	Student Life Operations Coordinator
KLING, DEBRA K.	Administrative Assistant II
KNOWLES, KAREN A.	Bookstore Cashier
KNOX, EARNEST C.	Security Officer
KRUEG, KAAREN A.	Executive Assistant to the Vice President
KUITA, DEBRA A.	Bookstore Cashier
LAWRENCE, BARBARA L.	Library Services Specialist

ADMINISTRATION, FACULTY AND STAFF

LEWIS, BLAKE V.,
 LIM, DANIEL D.
 LO, ALICE P.
 LOPEZ, JOSE D.
 McDONNELL, NAN V.
 MENDEZ, ROBERTO

McGREGOR, MICHELLE A.
 MINO, MARY M.
 MOGLE, ROSEMARY L.

MONTOUTH, STEFANIE M.
 MOORE, NATHAN M.
 MOORE, STACY R.
 MUJAHID, HANIYYAH F.
 NICHOLSON, SHEELA M.
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 PATCHIN-SOTO, THERESA M.
 PATEL, DHARMA P.

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 POSADA, PATRICIA
 POWELL, CATHERINE V.
 PRATT, ROBERTA
 RAMIREZ, SYLVIA M.

REES, GREGORY P.
 RICE, M. CAROL
 RIPPLINGER, VIRGINIA P.
 ROBERTS, CYNTHIA M.
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 SAMRA, RAJINDER S.
 SANDOVAL, LYNN H.
 SEATON, MICHAEL J.

SHREVE-ANTONINI, JAMMIE L.
 SHRIVER, LAWRENCE M.
 SILVA-GONZALEZ, KAREN

SIMS, JOHN H.
 SIN, SIT C.,
 SOARES, DEBORAH A.
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 STOCK, NICOLA J.,
 SULLIVAN, JAMES
 SULTAN, SVETLANA
 THOMAS, MAGUERITE
 THOMPSON, TERRANCE M.

TRAN, SANDY D.
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 TSUBAMOTO, VIRGINIA M.,
 UGALE, RACHEL A.
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 VAN, SHEILA
 VERNIERI, JESSICA L.
 VO, MELLISSA G.
 WATT, GORDON J.
 WEBB, PHYLLIS
 WIEMER, ERNA G.
 WITT, BELLA B.
 WONG, JUDY S.

Library Technician I
 Accounting Specialist
 Administrative Assistant II
 Physical Education/Athletic Assistant
 Counselor Assistant II
 Student Services/Financial Aid
 Outreach Liaison
 Early Childhood Specialist
 Admissions and Records Assistant II
 Student Services Assistant - Special
 Programs
 Student Counseling Assistant I
 Security Officer
 Counselor Assistant II
 Early Childhood Specialist
 Early Childhood Specialist
 Early Childhood Assistant
 Theater Manager
 Early Childhood Specialist
 Staff Assistant - Children's Center
 Instructional Assistant II
 Academic Services Specialist II
 Administrative Assistant I
 Alternative Media Technology
 Specialist
 Distance Education Coordinator
 Articulation Specialist
 Instructional Assistant III
 Security Dispatcher
 Student Services Assistant Special
 Programs
 Business Office Coordinator
 Instructional Assistant II
 Instructional Television Technician III
 Admission and Records Assistant II
 Student Records Evaluator
 Research Analyst
 Instructional Designer/Developer II
 Instructional Computer Support
 Specialist II
 Family Resources Coordinator
 Instructional Assistant II
 Executive Assistant to College
 President
 Instructional Systems Technician
 Library Technician III
 Library Technician II
 Bookstore General Merchandise Buyer
 Physical Education/Athletics Assistant
 Admissions and Records Assistant II
 Laboratory Technician II-Biology
 Academic Services Specialist II
 Workforce Development/
 Job Placement Coordinator
 Library Technician I
 Children's Center Assistant Manager
 Early Childhood Specialist
 Student Services Technology Specialist
 Instructional Assistant II
 Bookstore Accounting Specialist
 Grant Developer/Writer
 Early Childhood Specialist
 Computer Network Support Specialist
 Reprographic Assistant I
 Admissions and Records Assistant III
 Administrative Assistant II
 Laboratory Technician I

WRIGHT, JUDY ANNE
 YOW, ISABEL
 YASAKI, JOHN K.

ZUIDEMA, LINDA K

Admissions and Records Assistant II
 Admissions and Records Assistant II
 Computer/Network Support
 Specialist II
 Security Officer

CHABOT-LAS POSITAS COMMUNITY COLLEGE DISTRICT

CLASSIFIED STAFF ASSIGNED TO CHABOT COLLEGE

AMBRECHT, ALLAN L.
 APOSTOL, RODOLFO V.,
 BARTO, KATHLEEN M.

BENSON, DONALD W.
 BROWN, PATRICIA J.
 BRUSSTAR, ROBERT C.
 CABRAL, KEVAN A.
 CERVANTES, MARTHA
 CORREA, GREGORY L.
 CORRIGAN, JOHN F.
 DELEON, ELIZABETH V.
 DIAZ, MARY L.
 ELLIS, JESSE
 DOUGLAS, KIRK R.
 FOLLOWILL, STACEY L.
 FRANCO, LINDA E.
 FULLER, THOMAS P
 GOULD, CATHERINE A.
 GUERRERO, JUAN J.
 HALLECK, MICHAEL J.
 HERNANDEZ, DAVID H.
 HERNANDEZ, MARTHA M.,
 HIRSTEIN, THERESA A.
 HOLLEMAN, ROBERT M.
 JENNINGS, HARRY H.

JUDSON, KYLE T.
 KINT, ROBERT E.
 KLAMM, MIKE
 LAURELLA, MARIETTA
 LIVINGS, OSCAR H.
 McHUGH, JOHN L.
 MILLS, EDNA J.
 MOLINA, SILVIA,
 MONTANA, NATHAN P.
 NOBRIGA, JOHN A.
 PATCHIN, STEVE D.
 PERRY, KEITH A.
 PICHT, ROBERT O.
 PIMENTAL, JOSEPH
 POLIZZI, JULIET A.
 POLVOROSA, ISABEL G.
 PUGH, MARVIN L.
 REXROAD, WALTER A.
 RICH, GERALD L.
 RIOS, SONIA A.
 RIVERA, SCOTT
 SALAS, ELIZABETH
 SANCHEZ, GREGORY R.
 SILVA, CYNTHIA A.
 SMALLEY, STEVEN P.
 SMYTHE, MARK C.

SOLES, JAMES B.
 STARLING, Re VOYDA F.
 STRICKLEN, ERIC V.
 SUHR, DAVID A.

Electrician
 Custodian I
 Computer Operator/User Support
 Specialist
 Lead Custodian
 Administrative Systems Analyst II
 Custodian II
 Lead Storekeeper
 Custodian I
 Maintenance Technician
 HVAC Maintenance Engineer
 Custodial Supervisor
 Custodian I
 Hardware Maintenance Specialist
 Grounds Worker I
 Senior Programmer/Analyst I
 Lead Custodian
 Grounds Manager
 Sr. Programmer Analyst II
 Custodian I
 Custodian II
 Custodian I
 Custodian I
 Computer Operations Supervisor
 HVAC Maintenance Engineer
 Grounds Mechanic/Equipment
 Operator
 Sr. Programmer/Analyst I
 Maintenance Worker
 Custodian II
 Custodian I
 Custodian II
 Network Services Specialist II
 Custodian I
 Custodian I
 Custodian II
 Maintenance Supervisor
 Lead Grounds Worker
 Custodian II
 Custodian II
 Lead Custodian
 Administrative Assistant II
 Computer Operator
 Custodian I
 Grounds Worker I
 Custodian II
 Custodian II
 Storekeeper
 Custodian I
 Custodian
 Administrative Assistant
 Maintenance Worker
 Computer/Network Support
 Specialist II
 Maintenance Manager
 Network Systems Specialist
 Senior Programmer/Analyst II
 Senior Programmer/Analyst II

ADMINISTRATION, FACULTY AND STAFF

TAYLOR, PAI RICK B. Grounds Worker II
 TOLLEFSON, KATHERINE User Support Specialist/Webmaster
 TROCHE, DANITA A. Senior Programmer/Analyst I
 WILLIAMS, ELVIS B. Custodian I
 WOOD, ROYCE A. Custodial Supervisor
 YEATS, DAVID L., Custodian I

CLASSIFIED STAFF EMERITI

JOSEPH H. BUNIO 1968–1986 Groundsworker
 CHARLES DEAN, JR. 1968–1986 Custodian I
 MAXINE CALLERI 1973–1986 Personnel Technician II
 VIRGINIA I. MacCROSSEN 1973–1986 Admissions and Records Clerk II
 NORMA L. KERNES 1965–1987 Student Services Assistant
 CHARLES E. SHERMAN 1965–1987 Maintenance Technician
 DON MARTINEZ, JR. 1966–1987 Maintenance Worker
 DOLORES H. CAMARENA 1976–1987 Secretary I
 MARION H. McSWEENEY 1962–1988 Learning Resources Technician III
 VICTOR T. CABRAL 1966–1988 Maintenance Worker
 JAMES J. MILLER 1966–1988 Grounds Worker
 BARRY C. ABELLA 1974–1988 Admissions and Records Clerk I
 ELLEN E. JOHNSON 1975–1988 Admissions and Records Clerk I
 CARL R. JOHNSON 1976–1988 Maintenance Technician
 SEGUNDO C. RAYMUNDO 1976–1988 Custodian I
 SUSANNE E. CROUSE 1965–1989 Secretary II
 VINCENT F. GALLEGOS 1965–1989 Maintenance Mechanic
 BETTY W. GIBLIN 1965–1989 Registrar/Manager, Admissions and Records
 SUSUMU MATSUMOTO 1965–1989 Gardener
 MARJORIE R. O'LEARY 1971–1989 Executive Secretary
 ROSEMAY RIDDELL 1979–1989 Secretary II
 JOHN ALEXANDER 1973–1990 Grounds Worker
 LOUISE G. BATTLE 1976–1990 Custodian I
 IRENE M. JEUITT 1979–1990 Custodian I
 FRANCISCO T. CALBONERO 1980–1990 Custodian I
 LESLIE (BOB) R. ENCE 1966–1991 Manager Media Operations
 ABEL S. MARKS 1971–1991 Grounds Worker I
 PATRICIA A. BURNSIDE 1974–1991 Admissions and Records Clerk I
 PATRICIA A. BROCK 1977–1991 Accounting Technician
 AGNES L. HOLBROOK 1978–1991 Accounting Assistant
 FAYE L. GLEASON 1980–1991 Secretary I
 DOROTHY C. SULLIVAN 1981–1991 Admissions and Records Clerk I
 DANIEL R. BOKWKA 1961–1992 Payroll/Risk Manager
 MAUREEN M. MURRAY 1967–1992 Admissions and Records Clerk I
 LOUIE C. ABAITUA 1972–1992 Assistant Maintenance Supervisor
 IRIS E. PULLEN 1974–1992 Printing Systems Operator I
 LUCILLE M. ABRAHAM 1977–1992 Media Services Specialist II
 DOLORES M. TASSINARI 1981–1992 Learning Resources Technician
 BETTY D. DAVIS 1962–1993 Executive Assistant to the Chancellor
 JOHN R. RODRIGUEZ 1965–1993 Grounds Technician
 JOAN M. CAMPANILLE 1966–1993 Secretary to the President
 SETH T. BAILEY 1973–1993 Laboratory Technician II

LAWRENCE SIZAR 1973–1993 Director, Personnel Services and Employee Relations
 ELIZABETH E. INGLIS 1976–1993 Instructional Assistant II
 ELEANOR JARDINE 1976–1993 Learning Resources Technician II
 BARBARA ANDERSON 1980–1993 Secretary I
 ROYAL J. JOHNSON 1980–1993 Custodian I
 NATHANAEAL CLARK 1981–1993 College Clerk III
 KAREN A. CUFFLIN 1978–1994 Manager, Bookstore
 THERESA M. RIVERA 1979–1994 Custodian I
 WILLIAM H. COX 1984–1994 Lead Custodian
 GENE W. HOUCK 1969–1995 Television Technician III
 RAYMOND MARCHAN 1972–1995 Custodian I
 JoANNE C. NEU 1979–1996 Executive Secretary
 MARY L. RIVERA 1971–1996 Mailroom Clerk
 JAMES M. SHEEHAN 1978–1996 Custodian
 EVERETT D. ARRUDA 1986–1996 Maintenance Technician
 GAY M. CONNOR 1965–1997 Staff Assistant
 MARGARET P. RODDAN 1970–1997 Student Records Evaluator
 KAY C. NICHOLSON 1978–1997 Admissions and Records Clerk I
 LINDA K. PYZER 1982–1997 Computer Operator
 MARY J. TWOMEY 1982–1997 Instructional Assistant II
 ALBERTA M. PITTS 1969–1998 Locker Room Attendant
 IDA M. THOMPSON 1977–1998 Admissions & Records Assistant II
 ANNE M. WARRIN 1977–1998 Instructional Assistant II
 JANET COVINGTON 1961–1999 Reprographic Systems Technician II
 MARY F. McCLENDON 1963–1999 Academic Services Specialist II
 MADGIE FAYE ROBERTS 1976–1999 Learning Resources Technician I
 PATRICIA L. SIRA 1976–1999 Custodian I
 DIANNE J. COLON 1975–2000 Telephone Receptionist
 DIANA J. BOND 1981–2000 Secretary II
 SYLVESTER JOHNSON 1972–2001 Locker Room Attendant
 VINCENT L. TRIGGS 1972–2001 Laboratory Technician II
 IRENE N. GARCIA 1974–2001 Career Transfer Center Specialist
 PEGGY A. WENTZ 1976–2001 Admissions & Records Assistant II
 PEGGY R. PETTIS 1982–2001 Bookstore General Merchandise Buyer
 NANCY E. BEERS 1991–2001 Student Services Assistant
 STEPHNE J. MACINTOSH 1977–2003 Library Technician III
 CONNIE LEAL 1986–2003 Custodian I
 ROSALIE J. STEMPIN 1987–2003 Administrative Assistant II
 ANN M. REYMUNDO 1989–2003 Admissions and Records Assistant
 WIANA L. CHOY 1982–2004 Academic Services Specialist II
 GARY R. CHAMBERLAND 1987–2004 Maintenance Supervisor
 HEIDI SPEARER 1991–2004 Administrative Assistant
 JIMMY A. RUMELHART 1988–2005 Laboratory Technician-Electronics
 LOISANNE M. SELLARS 1994–2005 Bookstore Textbook Purchasing Clerk
 MARILYN H. MANSOURIA 1979–2006 Executive Assistant to the Vice President

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