Chabot College

2012-2014 Catalog

Thanks to David Steffes for many of the photos used on the cover.

Academic Freedom

Academic freedom exists and is nurtured in our community for the common good of all citizens. Students, faculty, administrators and society itself derive benefits from the practice of academic freedom with its open search for truth and its free exposition. Academic freedom is fundamental for the protection of the instructor's right in teaching and the student's right in learning in the classroom and on the campus. Academic freedom carries with it responsibilities correlative with rights, such responsibilities being implicit in all freedoms and assured by all members of the college to insure the rights of others.

Any issue involving the alleged violation of academic freedom on campus shall follow the procedures of academic due process as provided for the students, faculty, and the college, whichever be appropriate. (*Board Manual,* Policy 4320, adopted March 19, 1996)

Student Non-Discrimination Policy

In compliance with Titles VI and VII of the Civil Rights Act of 1964. Title IX of the Education Amendments of 1972 (45 CFR 86). Sections 503 and 504 of the Rehabilitation Act of 1973, the Age Discrimination in Employment Act of 1974 and its own statements of philosophy and objectives. Chabot College does not discriminate on the basis of race, color, national origin, religion, sex, sexual orientation, age or handicap.

Inquiries regarding the College's equal opportunity policies and procedures may be directed to the Vice-President of Student Services, Room 708, Building 700, telephone (510) 723-6744 (student matters); Human Resources Director and District Affirmative Action Officer, telephone (925) 485-5235 (employment matters); or to the Director of the Office of Civil Rights, U.S. Department of Education, 230 "C" Street, S.W., Washington, D.C. 20201.

Chabot-Las Positas Community College District

Chabot College
25555 Hesperian Boulevard
Hayward, California 94545
Telephone: (510) 723-6600

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

Susan Sperling
President Chabot College

Caminante, no hay camino, se hace camino al andar…

~Antonio Machado

Dear Student,

As President of Chabot College, I extend my warm welcome. You are joining a community of learners that is one of the most diverse and inspiring in the Bay Area. Chabot's academic, vocational, and technical programs are justifiably celebrated, and have set the bench mark for excellence in a number of areas. Our commitment to the education of the "whole person" is exemplified in our outstanding arts and athletics programs, our student government, and the excellence of our support programs, which help guide you through your college experience. We are proud to be an Hispanic Serving Institution, as well as serving a richly diverse community of students from many other backgrounds. As faculty, students, and staff we are committed to, and nurture, the importance of civic engagement with the social, political, economic, and cultural institutions of the communities we serve.

I hope that you will sample many of our offerings, develop your direction, hone your critical thinking abilities, learn new skills, and participate fully in the life of our college. In the words of the Spanish poet Antonio Machado, whom I have quoted above, "Traveler, there is no road, you make your path as you walk." At Chabot College, we will offer you many pathways but it is your individual journey. Make it a great one!

Sincerely,

Susan Sperling, Ph.D.

President

Chabot-Las Positas Board of Trustees

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

Name/Position	Area Represented	Year First Elected
Isobel F. Dvorsky, President	Area 2 – San Leandro	1985
Arnulfo Cedillo, Ed.D., Secretary	Area 3 – Union City	1985
Donald L. "Dobie" Gelles	Area 4 – Castro Valley	1998
Hal G. Gin, Ed.D.	Area 6 – San Lorenzo	2005
Barbara F. Mertes, Ph.D.	Area 7 – Livermore	2000
Marshall Mitzman, Ph.D.	Area 1 – Hayward	2008
Carlo Vecchiarelli	Area 5 – Pleasanton	2004

Trustees Emeriti

E.J. "Jay" Chinn	1961–1985
Elva M. Cooper	1987–1996
Gary R. Craig	1985–2005
Fred M. Duman	1967–1991
Ann H. Duncan	1971–1984
Dorothy S. Hudgins	1967–1987
Lawrence R. Jarvis	1975–1987
Alison S. Lewis	1991–2008
James S. Martin	1969–1975
Edward E. Martins	1961–1967
Barry Schrader	1988–2000
Fredrick T. Sullivan	1961–1971
William A. Tenney	1961–1967
L. Arthur Van Etten	1961–1985
Margaret R. Wiedman	1977–1989

JULY

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AUGUST

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OCTOBER

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Fall Semester 2012

August 20 . . . . . **Regular Full-Term Classes Start**

August 25. . . . . Saturday Classes Start

August 31. . . . . Last Day to ADD or DROP with NGR (No-Grade-of-Record) **in-person**

September 1–3 . . . . . Labor Day Weekend—No Saturday Classes

September 3 . . . . . Last Day to ADD or DROP with NGR (No-Grade-of-Record) **online**

September 3* . . . . . Holiday—Labor Day (No Instruction)

September 4 . . . . . **CENSUS DAY**

September 14 . . . . . Last Day to Apply for Pass/No Pass

October 31. . . . . Last Day to Apply for Graduation

November 9 . . . . . Last Day to WITHDRAW with a "W" **in-person and online**

November 10 . . . . . Saturday Classes meet

November 12* . . . . . Veterans Day-Holiday (No Instruction)

November 21–23* . . . . . Thanksgiving Recess (No Instruction)

November 24 . . . . . No Saturday Classes

December 14. . . . . **Last Day of Instruction**

December 15 . . . . . Saturday Finals

December 15–21. . . . . **Final Examination Period**

January 7. . . . . Fall Grades Due by 12:00 NOON

December 22–January 21. . . . . Semester Recess (No Instruction)

*Holiday—All Employees

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

JANUARY

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MARCH

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APRIL

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MAY

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JUNE

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Spring Semester 2013

January 21* . . . . . Holiday—Martin Luther King, Jr.

January 22 . . . . . **Classes Start**

January 26 . . . . . Saturday Classes Start

February 4 . . . . . Last Day to ADD or DROP with NGR (No-Grade-of-Record) **in-person**

February 6 . . . . . Last Day to ADD or DROP with NGR (No-Grade-of-Record) **online**

February 7 . . . . . **CENSUS DAY**

February 17 . . . . . Last Day to Apply for Pass/No Pass

February 15*, 16*, 17* . . . . . Presidents' Weekend (No Instruction)

April 8 . . . . . Last Day to WITHDRAW with a "W"

April 15 . . . . . Last Day to Apply for Graduation

March 30 . . . . . Saturday Classes meet

April 1–6 **Spring Break** (No Instruction, No Saturday Classes)

May 18 . . . . . .Saturday Finals

May 23. . . . . Last Day of Instruction

May 24 . . . . . Final Examinations

May 27* . . . . . Memorial Day Holiday

May 28–31 . . . . . **Final Examinations**

TBA. . . . . Commencement

June 5. . . . . .Spring Grades Due

*Holiday—All Employees

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

PRESIDENT **723-6640**
Institutional Planning
Program Review
Institutional Research
Marketing and Community Relations
Grant Development
Alumni Association
Staff Development

ADMINISTRATIVE SERVICES
Vice President, Administrative Services **723-6618**
Fiscal Services
Budget Development and Management
Purchasing Control
College Bookstore
College Box Office
College Bursar
Facilities Rental
College Mailroom
College Maintenance and Operations
College Capital Construction
College Switchboard

Director, Campus Safety and Security **723-6771**
Media Services **723-6752**
Publication Graphics
Duplicating Center
Manager, Bookstore **723-6925**
Assistant Manager, Bookstore **723-6925**

ACADEMIC SERVICES
Vice President **723-6626**
Chabot Web Services
Tech Prep

Dean, Applied Technology and Business. **723-6652**
Accounting, Automotive Apprenticeship, Automotive Technology, Business, Computer Application Systems, Entrepreneurship, Electronic Systems Technology, Construction Electricians Training Program (CELT), Fire Technology, Industrial Technology, Machine Tool Technology, Real Estate, Welding Technology, Work Experience.
Vocational Education (CCCAOE, Advisory Committees)
VTEA
Dean, School of the Arts. **723-6828**
Architecture, Art, Art History, Digital Media, Graphic Design, Humanities, Interior Design, Mass Communications, Music (Applied), Music (Literature, Theory, and Musicianship), Music (Performance), Music (Recording and Technology), Philosophy, Photography, Religious Studies, Theater Arts.
Performing Arts Center
Radio Station
TV Station
The Spectator
Dean, Health Physical Education and Athletics **723-7202**
Dental Hygiene, Health, Medical Assisting, Nursing, Nutrition, Physical Education.
Athletics
Dental Hygiene Clinic
Fitness Center
Nursing Skills Lab
Dean, Language Arts **723-6805**
Communication Studies, English Composition, English Learning Skills, English Literature, English As A Second Language (ESL), World Languages (*Chinese, French, German, Italian, Japanese, Portuguese, Spanish*), GeneralStudies, Library Skills, Sign Language, Tutoring.
Language Center
Learning Connection/PATH
Library
Dean, Science and Mathematics. **723-6897**
Astronomy, Biological Sciences (*Anatomy, Biology, Biotechnology, Environmental Science, Microbiology, Physiology*), Chemistry, Computer Science, Engineering, Mathematics, Physical Science, Physics.
Dean, Social Sciences **723-6669**
Administration of Justice, Anthropology, Early Childhood Development, Economics, Ethnic Studies, Geography, History, Political Science, Psychology, Recreation and Rehabilitation Therapies, Social Science, Sociology.
CARI, Foster Care, Independent Living
PACE

Director, Off Campus Programs **723-7531**
2+2 Program
Community Education

Manager, Children's Center **723-7483**
Child Care Services, Day/Evening
Education (CCAMPIS, Food Program, Health Care)
Family Resources Coordination

STUDENT SERVICES
Vice President **723-6744**
Student Health Center **723-7625**
Dean, Counseling **723-6717**

Academic Counseling
Articulation
Assessment
Career Counseling
Career/Transfer Center
Crisis Intervention and Referral
Matriculation
New Student Orientation
Peer Mentoring Program
Personal Counseling
Project Renew—Career Transition Services
Psychology-Counseling (Instruction/Curriculum)
Student Follow-Up
Student Online Services Center (SOS)

Director, Admission and Records **723-2665**
Admissions
Attendance Accounting and Grades
Concurrent Enrollment
Cross-Registration with Transfer Institutions
Evaluations
Health Science Admissions
International Student Admissions
Photo I.D. Center
Records Disposition, Security, and Maintenance
Registration
Special Admissions
State Attendance Reporting
Student Accounts
Transcript/Enrollment Verifications
Veterans Services **723-6910**

Director, Financial Aid **723-6751**
Federal (Title IV) Programs
Academic Competitiveness Grant (ACG)
Federal Work Study
Pell Grant
SEOG
Stafford Loans
California State Programs
BOG. Fee Waiver
Cal Grants
Chafee (Foster Youth) Grant
Disbursement of Other Program Funds (Scholarships, EOPS, ASPIRE, etc.)
Community and Campus Financial Aid Outreach

Dean, Special Programs and Services **723-6917**
EOPS/CARE/CalWORKs
Learning Communities (Daraja Program, Puente Project)
Student Discipline
Summer Youth Sports Program (SYSP)
TRIO/ASPIRE Student Support Services
TRIO/Talent Search

Director of Student Life **723-6914**
ASCC Flea Market **723-6918**
Spirit Force! Stunt, Cheer and Mascot Team. . . . **723-6800**
Co-curricular funding
ASCC Inter-Club Council/Student Clubs **723-6800**
Scholarships and Awards
Student Activities and Events Hotline **723-7140**
Student Government (ASCC) **723-6800**
ASCC President **723-7460**

DISTRICT OFFICE

(Use Area Code 925 for telephone numbers with a 424, 485, or 560 prefix.)

BUSINESS OFFICE/FISCAL SERVICES/PURCHASING

Vice Chancellor	Lorenzo Legaspi	485-5203
Director of Business Services	Barbara Yesnosky	485-5231
Accounting	Karen Esteller	485-5224
Manager, Purchasing/Warehouse	Victoria Lamica	485-5233
Buyer	Annie Harris	485-5205
Director, Maintenance & Operations	Tim Nelson	723-6648

CHANCELLOR

Chancellor	Joel L. Kinnamon	485-5206

(Board of Trustees, Operation of District)

ECONOMIC DEVELOPMENT AND CONTRACT EDUCATION

Director	Julia Dozier	560-9444

EDUCATIONAL SERVICES AND PLANNING

Vice Chancellor		485-5204

HUMAN RESOURCE SERVICES

Vice Chancellor	Vacant	485-5235
Information and Questions	Denise Marriott	485-5236
Human Resources Director	Wyman Fong	485-5261
Mgr., Employment, Diversity	James Andrews	485-5513
Supervisor, Employment	Lydia Penaflor	485-5240
Manager, Payroll Services	Lori Benetti	485-5228
Mgr., Preparedness/Safety	Frank Ramos	485-5512

INFORMATION TECHNOLOGY SERVICES

Chief Technology Officer	Jeannine Methe	485-5213
		424-1720

FACILITIES PLANNING AND MANAGEMENT

Vice Chancellor	Jeff Kingston	485-5244

The Chabot-Las Positas Community College District

History

The Chabot-Las Positas Community College District is in its 48th 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. Las Positas College 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 district serves over 26,000 students.

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 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

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.
   (2009-2011)

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

Strategic Plan and Educational Master Plan

The college's current Strategic Plan and the Educational Master Plan can be accessed on the college website, www.chabotcollege.edu, or by calling 510-723-6640.

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).

Global and Cultural Involvement
- Aesthetic responsiveness
- Environmental
- Familiarity with multiple paradigms and methodologies
- Human context

Civic Responsibility
- Informed citizenship in a democracy
  Cultural
  Economic
  Historical
  Political
- Promoting the development of values, integrity, and ethical behavior

Communication
- Information technology
- Language and linguistics
- Reading
- Respectful and ethical communication
- Speaking
- Writing

Critical Thinking
- Analysis of multiple paradigms and methodologies
- Information literacy
- Logic and rhetoric
- Problem solving
- Quantitative and qualitative reasoning

Development of the Whole Person
- Creativity and innovation
- Integration of mind, body, and spirit for healthy quality of life
- Lifelong learning for increasing employability and continuing education
- Personal responsibility in the learning and planning process
- Personal, professional, and self development
- Timeliness and punctuality

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 17–19. 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 higher and meet the graduation requirements as set forth on **pages 19-21.**

The ***Certificate of Achievement*** is awarded upon successful completion of a minimum of 18 semester units of prescribed study, with a grade-point average of 2.0 or higher.

The ***Certificate*** or ***Certificate of Proficiency*** is awarded upon successful completion of a minimum of 10 semester units of prescribed study, 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 and committees presently operate: Accounting and Business, Administration of Justice, Architectural, Automotive Technology, Computer Applications Systems, Dental Health Programs, Disabled Students Programs and Services, Early Childhood Development, Electronics, Engineering, EOPS/CARE/CalWORKs, Film Production, Fire Technology, Graphic Design, Human Services, Interior Design, Machine Tool Technology, Medical Assisting, Nursing, Radio and Television Broadcasting, Real Estate, Service to Seniors, Welding Technology. 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 Math Lab (mathematics tutoring), PATH Center (tutoring across the curriculum, Building 2300), or to the WRAC Center (Writing and Reading Across the Curriculum, Building 100) for additional help with their studies. *(For more information on The Learning Connection, go to Page 52.)* The Disabled Student Resource Center (Building 2400) offers high-tech equipment and personal counseling. The Employment and Career Services Center helps students find jobs and look toward their future. A state-of-the-art computer lab in the Library has more than 120 Internet-ready computers available to students, along with other computer labs.

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 doorknobs and electric doors, and renovation of 70 restrooms.

In 1999, a 40,000-square-foot computer and science building was added to the campus. Many other buildings are under renovation or construction since the passage of the district's facilities bond in 2004. In the 2009-10 academic year, the campus opened two new facilities: a 33,500-square-foot Instructional Office Building (Building 400) and the 51,000-square-foot-Community and Student Services Center (Building 700). Both are state of the art and are built to LEED Silver standards.

Campus 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, a planetarium, two gymnasiums, five athletic fields, tennis courts, 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.

Off-Campus Programs

Chabot College offers a number of classes at various locations in Hayward and in surrounding communities. The San Leandro Center, located 8 miles north of the Hayward campus at 1448 Williams Street in San Leandro, is our newest location in the community, and has now served over 500 students. The Center offers a wide range of Chabot courses that meet requirements for four-year college and university transfer, general education, and the AA/AS degree or certificate.

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 189.

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 Office of the Dean of Applied Technology and Business at (510) 723-6653.

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 full-time student for these things is estimated to be $800 per semester or $1,600 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 (Subject to Change)

Enrollment Fee: $46.00 per unit.

Nonresident Tuition: Out-of-state students are required to pay $226.00 per semester unit in addition to the enrollment fee and basic fees.

International, Non-immigrant Visa Tuition: International students and non-immigrant aliens attending on other visa types are required to pay $226.00 per semester unit in addition to the enrollment fee and basic fees.

Mailing Fee: Students may pay a $3.00 optional 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 $10.00 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 $17 per semester and $15 for Summer Session to support health services for enrolled students. Information on exemptions may be obtained from the Director of Student Life, Room 2355, Building 2300.

Admissions and Records Fees:

Transcripts	$ 3.00
On-demand transcript (includes one copy of transcript)	$10.00
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.

Degrees and Certificates

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 Proficiency.

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 19-21.

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 18 semester units of specifically approved courses, with a grade-point average of 2.0.

A **Certificate or Certificate of Proficiency** 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 Proficiency 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. **Please note:** Certificates of Proficiency and Certificates are not posted on the student's transcript per Title 5 §55070(b).

An **Individual Occupational Major** may be developed with a counselor, for approval by the appropriate Division Dean 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 Arts 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, P, NP, 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.

Program	Associate in Arts		Associate in Science		Certificate of Achievement	Certificate of Proficiency*	Certificate*
	AA	AA-T	AS	AS-T			
Accounting			X				
Accounting Technician					X		
Administration of Justice	X						
Administrative Assistant			X		X		
Administrative Assistant Entrepreneur						X	
Anthropology	X						
Aquatics					X	X	
Architecture	X		X				
Art (General)	X						
Art—Emphasis in Ceramics	X						
Art—Emphasis in Painting	X						
Art—Emphasis in Sculpture	X						
Automotive Technology			X				
Automotive Technology (Emphasis in BMW Manufacture Training)			X				
Automotive Maintenance Technology					X		
Automotive Chassis Technology					X		
Automotive Drivetrain Technology					X		
Automotive Engine Machining					X		
Automotive Engine Performance Technology					X		
Automotive Technology Entrepreneur						X	
Behavioral Science (General)	X						
Biology	X						
Biology—Emphasis in Allied Health	X						
Bookkeeping					X		
Business			X				
Business—Emphasis, Management			X				
Business—Emphasis, Marketing			X				
Business—Transfer					X		
Business Administration			X				
Business Graphics						X	
Business Skills						X	
California State University General Education Breadth (CSU/GE Breadth)					X		
Case Management for Human Services						X	
Chemistry			X				
Coaching					X	X	
Communication Studies		X					
Computer Science (General)	X		X				
Computer Science (Emphasis in Mathematics)	X		X				

*Certificates of Proficiency and Certificates are not posted on the student's transcript per Title 5 §55070(b).

Program	Associate in Arts		Associate in Science		Certificate of Achievement	Certificate of Proficiency*	Certificate*
	AA	AA-T	AS	AS-T			
Consumer Technology					X		
Creative Writing							X
Dental Hygiene	X						
Digital Design						X	
Digital Media							X
Early Childhood Development	X			X			
Early Childhood Development (Basic Teacher)					X		
Early Childhood Development (Associate Teacher)						X	
Early Childhood Intervention	X						
Early Childhood Intervention Assistant					X		
Electronic Systems Technology			X				
Engineering			X				
English—Emphasis in Literature	X						
Environmental Studies	X						
Entrepreneurship						X	
Ethnic Studies	X						
Fire Technology	X		X		X		
Fire Prevention Inspector	X		X		X		
Fitness Instructor					X	X	
French	X						
Geographic Information Systems						X	
Geography	X						
Graphic Design	X					X	
Health Care Management					X		
Human Resources Assistant					X		
Human Services (see also Case Management and Multicultural Awareness)	X		X				
Humanities (General)	X						
Illustration							X
Industrial Electronic Technology					X		
Industrial Technology			X				
Inspection and Pipe Welding						X	
Interior Design			X		X		
International Studies	X						
Intersegmental General Ed Transfer Curriculum (IGETC)					X		
Journalism	X						
Kitchen and Bath Design					X		
Liberal Arts	X						
Liberal Studies—Elementary Teacher Preparation	X						
LVN to RN Nursing Program	X						

*Certificates of Proficiency and Certificates are not posted on the student's transcript per Title 5 §55070(b).

Program	Associate in Arts		Associate in Science		Certificate of Achievement	Certificate of Proficiency*	Certificate*
	AA	AA-T	AS	AS-T			
Machine Tool Technology			X				
Machinist					X		
Management					X		
Marketing					X		
Mass Communications	X						
Mathematics	X		X	X			
Medical Assisting	X				X		
Multicultural Awareness/Relations for the Service Provider						X	
Multicultural Awareness/Self-Reflection						X	
Music	X						
Music Industry Entrepreneur						X	
Numerical Control			X				
Numerical Control Programmer (Machinist)					X		
Nursing	X						
Nursing Program, LVN to RN	X						
Office Technology					X	X	
Photography	X					X	
Physical Education	X						
Political Science		X					
Project Management							X
Radio and Television Broadcasting	X						
Real Estate	X				X		
Real Estate Entrepreneur						X	
Retail Management			X		X		
Retailing						X	
Small Business Management					X		
Social Science (General)	X						
Sociology		X					
Software Specialist			X		X		
Spanish	X						
Speech Communication	X						
Sports Injury Care					X	X	
Theater Arts	X						
Tool Maker					X		
Welding						X	
Welding Technology			X				
Writing							X

*Certificates of Proficiency and Certificates are not posted on the student's transcript per Title 5 §55070(b).

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 higher. The General Education Requirements for the Associate in Arts Degree are listed below.

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

A. LANGUAGE AND RATIONALITY:

1. English Composition . . . . . Complete a minimum of 3 SEM UNITS

English 1A

(Title 5 §55063—Effective for all students admitted Fall 2009 or thereafter—completed with a grade of "C" or higher)

2. Writing and Critical Thinking . . . . . Complete a minimum of 3 SEM UNITS

Business 10
English 4, 7
French 2A*, 2B*
German 2A*, 2B*
Italian 2A*, 2B*
Spanish 2A*, 2B*

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

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

Business 14, 16, 31
Chinese 1A*, 1B*
Communication Studies 1, 2B, 10, 11*, 20, 30, 46
Computer Application Systems 50, 92A, 92B, 92C, 92D
Computer Science 8, 10, 14, 15, 19A
English 70
Entrepreneurship 30
French 1A*, 1B*
Geography 20*, 21*, 22*
German 1A*, 1B**
History 5*, 12*
Industrial Technology 74
Italian 1A*, 1B*
Japanese 1A*, 1B*
Mass Communications 43, 44
Mathematics 1, 2, 12, 15, 16, 20, 31, 33, 36, 37, 40, 43, 47, 54, 54L, 55, 55A, 55B, 55L, 57, 65, 65B, 65L
Psychology 5
Spanish 1A*, 1B*
Theater Arts 3, 25*

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

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

Anatomy 1
Anthropology 1*, 1L, 13
Astronomy 10, 20, 30
Biology 2, 2A, 2B, 4, 6, 10, 25, 31, 50
Biotechnology 20, 30, 40
Chemistry 1A, 8, 10, 30A, 30B, 31
Environmental Science 10, 11, 12
Geography 1*, 1L, 8, 20*, 21*, 22*
Microbiology 1
Physical Education 17
Physical Science 15
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
Art 2A, 3A, 16A, 17, 22, 23, 24, 54, 56, 57, 58, 59
Art History 1, 4, 5, 6, 7, 20, 50, 51
Chinese 1A*, 1B*
Communication Studies 2A, 5, 6
English 11, 12, 13, 20, 21, 22, 24, 25, 26, 28, 30, 31, 32, 33, 38, 45, 48
Film 14, 50, 60
French 1A*, 1B*, 2A*, 2B*
General Studies 31
German 1A*, 1B*, 2A*, 2B*
History 1*, 2*
Humanities 50, 60, 65, 68, 72, 75
Italian 1A*, 1B*, 2A*, 2B*
Japanese 1A*, 1B*
Music (MUSL) 1, 2A, 2B, 2C, 2D, 3, 4, 5, 8
Music (MUSP) 12A, 14A, 44, 45
Philosophy 50, 60, 65, 70
Photography 20, 50, 53A
Religious Studies 50, 64, 65, 70, 72
Sign Language 64, 65, 66
Spanish 1A*, 1B*, 2A*, 2B*, 5
Theater Arts 1, 4, 10, 11, 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 45, 50, 60, 70
Anthropology 1*, 2, 3, 4, 5, 7, 8, 12
Business 12, 17, 36, 40, 42
Communication Studies 11*, 50
Early Childhood 40, 52, 56, 62, 69, 79, 87
Economics 1, 2, 5, 10, 12
Entrepreneurship 1
Ethnic Studies 1, 2, 3
Geography 1*, 2, 3, 5, 10, 12, 21*, 22*
Health 8
History 1*, 2*, 3, 4, 5*, 7*, 8*, 12*, 19, 20*, 21*, 22*, 25*, 27*, 44
Mass Communications 40, 41
Political Science 1*, 10, 12, 20, 25, 30, 45
Psychology 1, 2, 3, 6, 8, 12, 33, 45
Psychology-Counseling 1, 4, 13
Sociology 1, 2, 3, 4, 5, 6, 8, 10, 11, 30

E. WELLNESS

1. Areas of Health . . . . . Complete 3 SEM UNITS
Choose Option A or B

A. Early Childhood 54, Health 1, 4, Nutrition 1, Physical Education 18, 65 or
B. A.A. Degree in Nursing or Dental Hygiene

2. Physical Education . . . . . Complete 1 SEM UNIT

Physical Education (activity) 1, 2, 3, 4, 5, 6, 10, 13, 13R, 14, 30–48, 50, 62

Students who hold an A.A./A.S. Degree or higher are exempt. Exemption is allowed for illness or physical disability. You must file a "Request for Course Substitution or Waiver" available in the Counseling Office. You will need to provide a physician's statement. See a counselor for assistance.

AMERICAN INSTITUTIONS: . . . . . Complete a minimum of 3 SEM UNITS

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

** 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 "P". 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
Art History 7
Communication Studies 11
Early Childhood Development 79
English 26, 32, 33
Ethnic Studies 1
History 5, 7, 8, 12, 27
Humanities 65
Music (MUSL) 8
Psychology-Counseling 1, 4, 13
Sociology 1, 3, 30

MATHEMATICS PROFICIENCY:

Proficiency in mathematics must be demonstrated by either 1) Passing the Math Proficiency Test (See Math Division Office, Building 2000 for information) or 2) Passing one of the following courses with a grade of "C" or higher or "P". When appropriate, the course can simultaneously satisfy other graduation or disciplinary requirements.

(Title 5 §55063—Effective for all students admitted Fall 2009 or thereafter—completed with a grade of "C"or higher)

Mathematics 1, 2, 15, 16, 20, 31, 33, 36, 37, 40, 43, 47, 54, 54L, 55, 55B, 55L, 57

II. ADDITIONAL REQUIREMENTS

1. All requirements for the major must be met *with a grade of "C" or "P"* plus electives to total 60 semester units, overall GPA of 2.0 is necessary. *(Title 5 §55063)*
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. Chabot Residency Requirement: Students earning a certificate, A.A., or A.S. degree in an Occupational/Technical area must complete a minimum of 12 units in residence at Chabot College within the degree major or certificate program. Students in articulated degree transfer or Liberal Arts programs will need a total of 12 units in residence at Chabot College in general education, major and/or elective courses. (See Engineering major for specific residency requirements.
4. All courses in the major need to have at least a grade of "C" or "P". There are limitations on the number of "P" units allowed for the degree.
5. All official college transcripts from other colleges must be submitted to the Admissions and Records Office before a graduation evaluation may be completed.

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 must 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 higher. The General Education Requirements for the Associate in Science Degree are listed below.

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

A. LANGUAGE AND RATIONALITY:

1. English Composition. . . . . Complete a minimum of 3 SEM UNITS

English 1A

(Title 5 §55063—Effective for all students admitted Fall 2009 or thereafter—completed with a grade of "C' or higher

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

Business 14, 16, 31
Chinese 1A*, 1B*
Communication Studies 1, 2B, 10, 11*, 20, 30, 46
Computer Application Systems 50, 92A, 92B, 92C, 92D
Computer Science 8, 10, 14, 15, 19A
English 70
Entrepreneurship 30
French 1A*, 1B*
Geography 20*, 21*, 22*
German 1A*, 1B*
History 5*, 12*
Industrial Technology 74
Italian 1A*, 1B*
Japanese 1A*, 1B*
Mass Communications 43, 44
Mathematics 1, 2, 12, 15, 16, 20, 31, 33, 36, 37, 40, 43, 47, 54, 54L, 55, 55A, 55B, 55L, 57, 65, 65B, 65L
Psychology 5
Spanish 1A*, 1B*
Theater Arts 3, 25*

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

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

Anatomy 1
Anthropology 1*, 1L, 13
Astronomy 10, 20, 30
Biology 2, 2A, 2B, 4, 6, 10, 25, 31, 50
Biotechnology 20, 30, 40
Chemistry 1A, 8, 10, 30A, 30B, 31
Environmental Science 10, 11, 12
Geography 1*, 1L, 8, 20*, 21*, 22*
Microbiology 1
Physical Education 17
Physical Science 15
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
Art 2A, 3A, 16A, 17, 22, 23, 24, 54, 56, 57, 58, 59
Art History 1, 4, 5, 6, 7, 20, 50, 51
Chinese 1A*, 1B*
Communication Studies 2A, 5, 6
English 11, 12, 13, 20, 21, 22, 24, 25, 28, 26, 30, 31, 32, 33, 38, 45, 48
Film 14, 50, 60
French 1A*, 1B*, 2A, 2B
General Studies 31
German 1A*, 1B*, 2A, 2B
History 1*, 2*
Humanities 50, 60, 65, 68, 72, 75
Italian 1A*, 1B*, 2A, 2B
Japanese 1A*, 1B*
Music (MUSL) 1, 2A, 2B, 2C, 2D, 3, 4, 5, 8
Music (MUSP) 12, 14A, 44, 45
Philosophy 50, 60, 65, 70
Photography 20, 50, 53A
Religious Studies 50, 64, 65, 70, 72
Sign Language 64, 65, 66
Spanish 1A*, 1B*, 2A, 2B, 5
Theater Arts 1, 4, 10, 11, 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 45, 50, 60, 70
Anthropology 1*, 2, 3, 4, 5, 7, 8, 12
Business 12, 17, 36, 40, 42
Communication Studies 11*, 50
Early Childhood 40, 52, 62, 69, 79, 87
Economics 1, 2, 5, 10, 12
Entrepreneurship 1
Ethnic Studies 1, 2, 3
Geography 1*, 2, 3, 5, 10, 12, 21*, 22*
Health 8
History 1*, 2*, 3, 4, 5*, 7*, 8*, 12*, 19, 20*, 21*, 22*, 25*, 27*, 44
Mass Communications 40, 41
Political Science 1*, 10, 12, 20, 25, 30, 45
Psychology 1, 2, 3, 6, 8, 12, 33, 45
Psychology-Counseling 1, 4, 13
Sociology 1, 2, 3, 4, 5, 6, 8, 10, 11, 30

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

E. WELLNESS (Areas of Health or Physical Education) . . . . . Complete a minimum of 1 SEM UNIT

Early Childhood 54
Health 1 or 4 or Physical Education 18, 65
Nutrition 1
Physical Education (activity) 1, 2, 3, 4, 5, 6, 10, 13, 13R, 14, 30-48, 50, 62

Students who hold an A.A./A.S. Degree or higher are exempt. Exemption is allowed for illness or physical disability. You must file a "Request for Course Substitution or Waiver" available in the Counseling Office. You will need to provide a physician's statement. See a counselor for assistance.

F. PROGRAM-BASED GENERAL EDUCATION REQUIREMENT ..... Complete a minimum of 3 SEM UNITS

For the program-based selections for specific Associate in Science Degree Programs, see program listings on pages 71-189.

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 "P". 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
Art History 7
Communication Studies 11
Early Childhood Development 79
English 26, 32, 33
Ethnic Studies 1
History 5, 7, 8, 12, 27
Humanities 65
Music 8
Psychology-Counseling 1, 4, 13
Sociology 1, 3, 30

MATHEMATICS PROFICIENCY:

Proficiency in mathematics must be demonstrated by either 1) Passing the Math Proficiency Test (See Math Division Office, Building 2000 for information) or 2) Passing one of the following courses with a grade of "C" or higher or "P". When appropriate, the course can simultaneously satisfy other graduation or disciplinary requirements.

(Title 5 §55063—Effective for all students admitted Fall 2009 or thereafter—completed with a grade of "C" or higher)
Mathematics 1, 2, 15, 16, 20, 31, 33, 36, 37, 40, 43, 47, 54, 54L, 55, 55B, 55L, 57

II. ADDITIONAL REQUIREMENTS

1. All requirements for the major must be met *with a grade of "C" or "P"* plus electives to total 60 semester units, overall GPA of 2.0 is necessary. *(Title 5 §55063)*
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. Chabot Residency Requirement: Students earning a certificate, A.A., or A.S. degree in an Occupational/Technical area must complete a minimum of 12 units in residence at Chabot College within the degree major or certificate program. Students in articulated degree transfer or Liberal Arts programs will need a total of 12 units in residence at Chabot College in general education, major and/or elective courses. (See Engineering major for specific residency requirements.
4. All courses in the major need to have at least a grade of "C" or "P". There are limitations on the number of "P" units allowed for the degree.
5. All official college transcripts from other colleges must be submitted to the Admissions and Records Office before a graduation evaluation may be completed.

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 must 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.

General Education Reciprocity with Community Colleges

Effective Fall 2007, the Chabot-Las Positas Community College District has entered into a mutual agreement with seven other local community colleges to accept the General Education and graduation proficiency of these colleges as completed for Chabot College and Las Positas College. The participating colleges are: DeAnza College (Cupertino), Evergreen Valley College (San Jose), Foothill College (Los Altos Hills), Gavilan College (Gilroy), Mission College (Santa Clara), Ohlone College (Fremont), San Jose City College (San Jose), and West Valley College (Saratoga).

Students who obtain an official General Education Reciprocity Program Certification (which verifies completion of Associate Degree General Education and graduation proficiency) or complete an associate degree at any one of the participating colleges will have both their General Education course work and graduation proficiency accepted as completing Chabot College's and Las Positas College's General Education and graduation proficiency for the Associate in Arts and/or the Associate in Science Degree. No additional general education course work will be required if the certification is officially presented. Students will still be required to complete all courses or prerequisites needed for a major. The agreement also means that the other participating colleges will accept the General Education and graduation proficiency pattern of Chabot College and Las Positas College if an official General Education Reciprocity Program Certification is presented at any of the member colleges. Students must request certification at Admissions and Records, Building 700. This agreement will be reviewed periodically.

Transfer

Chabot College provides the freshman and sophomore years of a baccalaureate degree granting institution (college or university) program. Students intending to transfer to colleges and universities may complete their lower-division general education AND lower division major preparatory courses at Chabot College. The Counseling Office in Building 700 provides the most current transfer information. The Career and Transfer Center (723-6720) in Building 700, Room 761, provides many transfer related activities including transfer workshops and field trips to universities.

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

Transfer Preparation

The three components of the baccalaureate granting institution lower-division requirements are listed below. This three-part combination of requirements may be complex and necessitates transfer students see a counselor to be assured they meet all transfer requirements. Not being fully prepared to meet admission and transfer requirements could prohibit a student from being admitted at the desired transfer institution.

1. General Education Requirements.

To earn a bachelor's (BA/BS/AB) degree from the University of California (UC) or California State University (CSU), each student must complete a program of general education. The pattern for the California State University system is called CSU/General Education (GE) Breadth Requirements. The Intersegmental General Education Transfer Curriculum (IGETC) is a GE pattern valid for both the UC and CSU systems and is a good choice for the student considering either system or who is undecided.

2. Lower-Division Major Requirements

Student may need to fulfill specific lower-division courses required for their chosen major (also called "major preparatory courses"). Impacted majors (competitive majors having more applicants then space available) typically require all or most major preparatory courses to be completed before transfer. The primary web site providing lower-division major preparation for the UC and CSU systems is called ASSIST (www.assist.org). ASSIST lists course-to-course articulation for most majors offered within the UC and CSU systems. Lower-division major preparation requirements MAY DIFFER at different universities for the same major; therefore, it is strongly recommended that students review the agreements with each university they are considering.

3. Electives

Electives are courses taken in addition to the lower-division major preparation and general education requirements in order to meet the total number of units to transfer. Look for FLYER #100 (CSU transferable course list) and/or FLYER 102 (UC transferable course list) for all of the courses that transfer to CSU or UC respectively and could be used for electives.

Transferring to Private and/or Out-Of-State Colleges/Universities

Currently there is no specific web site which displays transfer information to private and/or out-of-state colleges/universities. Transfer requirements may be quite different from CSU and UC requirements. Many times transfer preparation is very specific to the target transfer school. Counselor assistance can be invaluable in determining general education and lower division major preparation

requirements to private and/or out-of-state colleges/ universities.

Articulation and the Transferability of Chabot Courses

Students can transfer a maximum of 70 community college transferable semester units to most California public colleges or universities (courses may be taken over 70 units to meet subject and major preparatory requirements). Many baccalaureate level courses offered at Chabot have course-to-course articulation with comparable courses found at the University of California (UC), California State University (CSU) and many private institutions. Current UC and CSU transfer flyers are available in the Career/Transfer Center and Counseling Center (Building 700).

- CSU Transferable Courses flyer (alphabetical listing of all courses transferable to CSU.)
- CSU/General Education Breadth Requirements flyer
- UC Transferable Courses flyer (alphabetical listing of all courses transferable to UC)
- IGETC Requirements flyer (for transfer to UC/CSU and some private schools)

ASSIST.org also provides the most up-to-date transfer course lists, course-to-course articulation and major preparation agreements for CSU and UC schools. Students need to review these transfer flyers at the beginning of each academic year to obtain updated information.

ASSIST.org

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

The Articulation Office

The Articulation Office procures and maintains course-to-course and lower-division major preparation agreements with transfer baccalaureate granting institutions; CSU, UC and private institutions and out-of-state schools. Chabot articulation services are a big component of a seamless transfer for students. The Articulation Office maintains the college's transfer flyers for CSU/GE Breadth Requirements, CSU Transferable Courses, IGETC Requirements and UC Transferable Courses and 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 and articulation concerns. The Articulation Officer can be reached at (510) 723-6741.

CALIFORNIA STATE UNIVERSITY (CSU)

www.calstate.edu
www.csumentor.edu (application information)

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 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 higher in all transferable college units completed. Some programs require a higher GPA for admissions. Consult the individual CSU website or college representative for specific information.
- 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 15 course (A-G) 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:

- Complete Areas A.1.(Oral Communication), A.2. (Written Communication), A.3. (Critical Thinking) and B.4. (Mathematics) all with a grade of "C" or higher.
- Complete an additional 18 units from CSU/GE Areas A-E (including the units from above (12) for a minimum total of 30 units. All courses would need to have a grade of "C" or higher.

- Complete an overall total of 60 semester CSU transferable units with a cumulative GPA of at least a 2.0 ("C").
- Are in good standing at the last college or university attended, i.e., you are eligible to re-enroll.
- CSU will apply up to 70 transferable lower-division units toward the baccalaureate degree.
- IGETC can also be used in lieu of CSU/GE Breadth.

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. It is strongly recommended that students consult with a counselor to determine which general education pattern is best for their transfer program.

California State University also requires completion of 6 units of U.S. History, Constitution and American Ideals for graduation which can be satisfied prior to transfer. See the IGETC flyer or the CSU/GE Breadth flyer for a list of courses that complete this requirement.

CSU General Education Breadth Requirements

Chabot students have the opportunity to complete all of their lower-division CSU/GE requirements for the baccalaureate degree prior to transfer to any of the 23 California State Universities.

CSU/GE is separated into 5 separate academic areas. Each area requires specific class/unit requirements. More detail regarding the academic areas and the courses associated with those areas can be found on our CSU/GE Breadth flyer. Briefly, those areas are:

Area A: Communications in the English Language (9 semester units)
Area B: Physical and Life Sciences and Mathematics (9 semester units)
Area C: Arts, Literature, Philosophy and Foreign Language (9 semester units)
Area D: Human Social, Political and Economic Institutions and Behavior (9 semester units)
Area E: Understanding and Self Development (3 semester units)
Area F: California State University also requires completion of 6 semester units of U.S. History, Constitution and American Ideals for graduation, which can be satisfied prior to transfer. Courses used to complete this area can be also used to satisfy requirements in Area D.

Associate in Arts for Transfer and Associate in Science for Transfer Degree Requirements

The Student Transfer Achievement Reform Act (Senate Bill 1440, now codified in California Education Code sections 66746-66749) guarantees admission to a California State University (CSU) campus for any community college student who completes an "associate degree for transfer," a newly established variation of the associate degrees traditionally offered at a California community college. The Associate in Arts for Transfer (AA-T) or the Associate in Science for Transfer (AS-T) is intended for students who plan to complete a bachelor's degree in a similar major at a CSU campus. Students completing these degrees (AA-T or AS-T) are guaranteed admission to the CSU system, but not to a particular campus or major. In order to earn one of these degrees, students must complete a minimum of 60 required semester units of CSU-transferable coursework with a minimum GPA of 2.0. Students transferring to a CSU campus that does accept the AA-T or AS-T will be required to complete no more than 60 semester units after transfer to earn a bachelor's degree (unless the major is a designated "high-unit" major). This degree may not be the best option for students intending to transfer to a particular CSU campus or to university or college that is not part of the CSU system. Students should consult with a counselor when planning to complete the degree for more information on university admission and transfer requirements.

The following are required for all AA-T and AS-T degrees:

- Completion of a minimum of 60 CSU-transferable semester units.
- Minimum grade point average (GPA) of at least 2.0 in all CSU-transferable coursework. (While a minimum of 2.0 is required for admission, some majors may require a higher GPA. Please consult with a counselor for more information.)
- Completion of a minimum of 18 semester units with a "C" or higher (or a "P" if the course is taken on a Pass/No Pass basis) in all courses required as a part of an AA-T or AS-T major as identified by the college catalog. (Title 5 §55063)
- Certified completion of the California State University General Education-Breadth pattern (CSU GE Breadth) OR the Intersegmental General Education Transfer Curriculum (IGETC) pattern general education requirements. (See pages 25-26 in the catalog for more information.)

Associate in Arts for Transfer Degrees

- Completion of the requirements for an associate degree for transfer (see the requirements listed above).
- 2. Completion of a minimum of eighteen (18) units with at least a "C" or higher in each course in one of the

college's associate degree for transfer programs. (Refer to the particular discipline for course descriptions and requirements for each major.)

Associate in Science for Transfer Degrees

- Completion of the requirements for an associate degree for transfer (see the requirements listed above).
- 2. Completion of a minimum of eighteen (18) units with at least a "C" or higher in each course in one of the college's associate degree for transfer programs. (Refer to the particular discipline for course descriptions and requirements for each major.)

Chabot College Transfer Degrees

AS-T Business Administration
AA-T Communication Studies
AS-T Early Childhood Development
AS-T Mathematics
AA-T Political Science
AA-T Sociology

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 higher 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) flyer 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. 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) Requirements Flyer

IGETC is separated into six separate academic areas. Each area requires a specific unit/class requirement(s). A grade of "C" or "P" is required for each course used to satisfy IGETC requirements. It is recommended IGETC be completed in its entirety prior to transfer. Students who do not complete the entire program before transfer could be subject to the general education requirements of the campus or college to which they transfer.

The areas for UC/IGETC are:

Area 1. English Communication
1A: English Composition,
1B: Critical Thinking (6 semester units)
Area 2. 2A: Mathematical Concepts and Quantitative Reasoning (Min of 3 semester units)
Area 3. Arts and Humanities. (3A: Arts, 3B: Humanities) (9 semester units)
Area 4. Social and Behavioral Sciences (9 semester units)
Area 5. Physical and Biological Sciences (5A Physical Sci, 5B Biological Sci) (7-9 semester units)
Area 6A. Language Other Than English (LOTE).

Students transferring to UC are required to demonstrate competence (proficiency) in a language other than English equal to two years of high school study. Competence may be demonstrated through the following mechanism:

1) Satisfactory completion of two years of high school coursework (US high school or high school in country where the language of instruction is English) in a language other than English, with a grade of "C" or better in each course. The two years must be in the same language.

2) Satisfactory completion of a course (or courses) at a college or university with a grade of "C" or better in each course. Chabot courses: French 1B, or German 1B or Italian 1B or Japanese 1B or Spanish 1B or Sign Language 65 will satisfy this requirement.

3) Satisfactory completion, with "C" grades or better, of two years of formal schooling at the sixth grade-level or higher in an institution where the language of instruction is not English. Appropriate documentation must be presented to substantiate that the required coursework was completed.

4) Satisfactory score on the SAT II: Subject Test in languages other than English.

5) Satisfactory score, 3 or higher, in the College Board Advanced Placement examination in languages other than English.

6) Satisfactory score, 5 or higher, in the International Baccalaureate (IB) Higher Level Examinations in language other than English.

7) Satisfactory completion of an achievement test administered by a community college, university or other college in a language other than English (see a counselor for assistance).

8) Language other than English "O" level exam with grade of "A", "B" or "C".

9). Language other than English International "A" level exam with a score of 5, 6, 7.

The student is advised to see a counselor for assistance determining the completion of the IGETC Language Other Than English Area 6A requirement.

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 700, Room 750.

Certification of CSU/GE Breadth

Full CSU/GE Certification: Students are eligible for Full CSU/GE Certification when they have completed the required number of units and courses in each GE Area. Students with full certification will not have to complete additional lower-division GE requirements that may be required at the CSU transfer school.

Partial CSU/GE Certification: Partial CSU/GE Certification is granted when one or more GE Area has been completed. A student who transfers to a CSU with partial GE Certification will not have to complete additional GE requirements in the same GE area upon transfer.

Full IGETC Certification: Students are eligible for Full IGETC Certification when they have completed the required number of units and courses in each GE Area. Students with full certification will not have to complete additional lower-division GE requirements that may be required at the CSU or UC transfer school.

Partial IGETC Certification: Partial IGETC certification is defined as completing all but 2 courses on the IGETC pattern. Upon request for IGETC certification, if a partial certification is sent, each UC or CSU will inform a student who has submitted a partial certified IGETC of the specific timelines and courses needed to complete IGETC. The UC or CSU is responsible for verifying that the missing courses are completed. Partial completion of IGETC could jeopardize admission into some UC campuses.

Certification does not happen automatically; the student must request certification at the same time a request for a final transcript to be sent to the transfer school is made. Requests for certification are made with Admissions and Records, Building 700, Room 703.

Independent Colleges and Universities

Transfer requirements for independent colleges and universities vary from college to college. Students should consult the transfer institution's catalog and/or website. Chabot College counselors can also advise students on independent college and university requirements and preparation. For California independent colleges and universities you can go to www.aiccu.edu.

Career and Transfer Center

The Chabot College Career and Transfer Center specializes in working with students who intend to transfer to a 4-year college or university. The Career and Transfer Center also provides employment services to students for on/off campus work. The Career and Transfer Center is located in Building 700, Room 761. For more information, students may call (510) 723-6720. The following resources are available through the Center:

- Transfer assistance and information
- College Catalogs
- Representatives from local universities available for transfer assistance
- Transfer and career related workshops
- University Admission Application information
- Personal statement assistance (UC)
- 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
- College and University Websites
- Major preparation workshops
- Annual job fair
- Representatives from local businesses seeking employees

Transfer Admission Guarantee (TAG)

A TAG 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 Guarantees with the following baccalaureate degree granting institutions: UC Davis, UC Irvine, UC Merced, UC Riverside, UC San Diego, UC Santa Barbara, UC Santa Cruz, CSU Monterey Bay, and Santa Clara University. Please consult with a counselor for additional information about Transfer Admission Guarantees.

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 700, Room 750.

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. Interested students should contact the Counseling Center, Building 700, Room 750.

Concurrent Enrollment With 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. Students must pay Chabot College enrollment fees and UC Berkeley administrative fees. For further information, contact the Counseling Center, Building 700, Room 750.

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. The Air Force ROTC is offered through the Aerospace Studies department at U.C. Berkeley. Scholarships (including tuition, book allowance, and stipend) are available for qualified students. Students may enroll and attend one course per semester at the U.C. Berkeley campus at no cost. Upon completion of the program and granting of 4-year degree, students will commission as Second Lieutenants in the United States Air Force. To be eligible for AFROTC, applicant should be a full time student and meet additional fitness, GPA, testing, and other requirements. Interested students, please visit the department website: http://airforcerotc.berkeley.edu, call 510-642-3572, or email airforce@berkeley.edu. For Army ROTC information please contact the Department of Military Science at U.C. Berkeley 14th Brigade, Western Region, 173 Hearst Gym, # 4440 at (510) 642-3374.

Transcripts From Other Colleges And Universities

Any student enrolled at Chabot College who has academic credit for courses taken at other accredited colleges/universities must submit official transcripts of that work to the Admissions and Records Office. Official transcripts are defined as academic records that are sent from other institutions to Chabot. They can be hand carried by the student, but must be unopened (in the sealed envelope of the institution). If there is evidence that the transcripts have been opened, the student will be requested to have the former school mail transcripts directly to Chabot.

Transcripts received from other institutions cannot be forwarded to other colleges. This does not apply to Las Pos-

itas College, since academic information from both Chabot and Las Positas Colleges is recorded on the same transcript.

Official transcripts are required for the following academic transactions:

1. AA/AS degree evaluations
2. Academic Renewal petitions
3. Financial Aid student education plans
4. 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 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")
3. 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.

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.

Unofficial transcripts (those that have been opened) can be used for:

1. Unofficial evaluation by a counselor
2. Prerequisite over-rides
3. Student Education Plan (SEP) development with a counselor
4. Petitions for course substitutions and waivers

Use of AP, IB, and CLEP Examinations

Advanced Placement (AP) Program

Chabot College grants credit for successful completion of examinations of the Advanced Placement (AP) Program of the College Entrance Examination Board (CEEB). Students who want to receive credit for AP examinations must provide official verification of scores. Students wishing to apply AP exam scores for transfer are strongly advised to see a counselor for assistance. Because individual schools may evaluate AP differently, Chabot does not post AP equivalencies on the student's transcripts; notations about the application of AP to Chabot's programs is available in the student's academic record.

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

Credit will be allowed at Chabot College as follows:

- Course credit granted for Advanced Placement Examinations with a score of 3, 4, or 5 can be used to meet the requirements for the AA/AS degree and major requirements at Chabot College. Students should be aware that AP test credit is evaluated by corresponding it to an equivalent Chabot College course, e.g., History 7. A student who receives AP credit and then takes the equivalent Chabot College course will have the unit credit for such duplication deducted prior to being awarded the A.A. degree. AP credit is not cited on the student's transcripts, but is available in the student's academic file.
- Courses deemed equivalent to AP courses/exams as determined by Chabot faculty can be used to clear prerequisites.
- Students must have the College Board send AP exam results to the Admissions Office (hand carried copies will not be accepted) for use on the A.A. and/or GE patterns.
- Course credit and units granted at Chabot College may differ from course credit and units granted by a transfer institution.
- Currently, AP credit is granted according to the following chart for AA/AS, IGETC and CSU/GE. The student is advised to meet with a counselor for assistance in petitioning use of AP exams not listed on this chart.
- Advanced Placement exam scores may be applied to Intersegmental General Education Transfer Curriculum (IGETC). Each AP exam (with a score of 3 or higher) may be applied to one IGETC area satisfying one course requirement, with the exception of Language other Than English. Transfer credit is determined by UC. A counselor can assist with determining applicability of AP to IGETC and number of units that will transfer to UC .
- Advanced Placement exam scores may be applied for CSU General Education Breadth (CSU/GE) requirements. CSU policy is to grant credit for exam scores of 3, 4, 5 in the GE categories shown in the AP Chart.

Additional Transfer information:

Because each college and university evaluates and applies AP exams scores differently, students should contact the institution to which they are transferring regarding AP exam

meeting specific requirements. For example, AP exam scores may meet university GE requirements, but not requirements for specific majors. It is strongly recommended students with AP exam scores work with a counselor.

Students will not receive credit for a course if they have already been granted credit for that course using AP exam results. Transfer institutions may not grant credit for taking a course that was awarded AP exam credit, however in certain majors it may be necessary to actually take the course. Students transferring to UC need to check on www.assist.org for any specific AP exam score information for some specific major AP exam requirements, notably Engineering.

The College Level Examination Program (CLEP)

The College-Level Examination Program of the College Board provides students with the opportunity to earn college credits by earning qualifying scores on any of 33 examinations. Students who pass the CLEP exams are able to earn college credits for knowledge they've gained through independent study, prior course work, professional development, on-the-job training, cultural pursuits, or internships.

The CSU System has recently allowed use of CLEP exams to satisfy a number of CSU/General Education requirements. The chart below illustrates the unit limitations and GE areas that can be satisfied (and CSU/GE Certified) by CLEP. Students and counselors should contact the individual CSU representative for more information on how subject credit may be granted. There also may be limits on the number of CLEP units accepted for transfer.

Currently the UC system does not accept CLEP to satisfy any transfer units or requirements.

Currently Chabot College does not accept CLEP to satisfy units or requirements toward the Associate Degree or Certificates.

International Baccalaureate Organizaton (IB) Examination

The International Baccalaureate Organization awards either a diploma or a certificate for individual IB exams. Both CSU and UC grant limited course and or transfer credit based on the chart included below.

For the UC: students who complete the IB diploma with a score of 30 or above will receive 30 quarter (20 semester) units toward their UC degree. Students who receive IB certificates with scores of 5, 6, or 7 on Higher Level exams will receive 8 quarter (5.3 semester) units.

Also noted in UC guidelines for use of IB credit. Students should be advised that college courses taken before or after attending UC may duplicate IB examinations. If the student does duplicate an exam with a college course or vise versa, we will award credit for only one.

Students and counselors should contact individual UC campus representatives for more information on how subject credit may be granted.

The CSU student: The information on the IB chart notes the awarding of credit by CSU for both transfer and application to CSU/GE Certification. Students and counselors should contact individual CSU campus representatives for more information on how subject credit may be granted.

Chabot College does not currently award units nor GE credit towards satisfaction of the Associate Degree.

COLLEGE CREDIT FOR ADVANCED PLACEMENT (AP) TESTS

AP EXAM	Chabot Equivalent	Chabot AA/AS Applicability (Units/GE Area)	CSU GE	CSU—UNITS EARNED TOWARD TRANSFER	IGETC	UC—UNITS EARNED TOWARD TRANSFER
Art History	Art History 4 or 5	Area C 3 semester units	Area C1 or C2 3 semester units	6 semester units	Area 3A or 3B 3 semester units	8 quarter/5.3 semester units
Art (Studio) 2-D Design 3-D Design Drawing	N/A	Area c, portfolio review required 3 semester units	N/A	3 semester units	N/A	8 quarter/5.3 semester units (Maximum units for all Studio Art Exams)
Biology	Biology 31	Area B 4 semester units	Area B2 and B3 4 semester units	6 semester units	Area 5B (with lab) 4 semester units	8 quarter/5.3 semester units
Calculus AB/AB Subscore	Math 1	Area A3 on AA/A2 on AS & Math Proficiency 5 semester units	Area B4 3 semester units	3 semester units*	Area 2A 3 semester units	4 quarter/2.7 semester units max between AB and AB/ subscore**
Calculus BC	Math 2	Area A3 on AA/A2 on AS & Math Proficiency 5 semester unihartrts	Area B4 3 semester units	6 semester units*	Area 2A 3 semester units	8 quarter/5.3 semester units**
AP CALCULUS EXAM LIMITATIONS:>>				*Only one exam may be used toward transfer		**Maximum credit 8 quarter/5.3 semester units for both
Chemistry	Chemistry 1A	Area B 5 semester units	Areas B1 and B3 4 semester units	6 semester units	Area 5A (with lab) 4 semester units	8 quarter/5.3 semester units
Chinese Language & Culture	N/A	Area A3 on AA/A2 on AS or Area C 5 semester units	Area C2 3 semester units	6 semester units	Area 3B and 6A 3 semester units	8 quarter/5.3 semester units
Computer Science A	Computer Science 14	Area A3 on AA/A2 on AS 4 semester units	N/A	3 semester units**	N/A	2 quarter/1.3 semester units***
Computer Science AB	Computer Science 14 & 19A	Area A3 on AA/A2 on AS 8 semester units	N/A	6 semester units**	N/A	4 quarter/2.7 semester units***
AP CS EXAM LIMITATIONS:>>>				**Maximum one exam toward transfer		***Maximum 4 quarter/2.7 semester units for both
Economics - Macroeconomics	Economics 2	Area D 3 semester units	Area D2 3 semester units	3 semester units	Area 4B 3 semester units	4 quarter/2.7 semester units
Economics - Microeconomics	Economics 1	Area D 3 semester units	Area D2 3 semester units	3 semester units	Area 4B 3 semester units	4 quarter/2.7 semester units
English - Language & Composition	English 1A	Area A1 3 semester units	Area A2 3 semester units	6 semester units	Area 1A 3 semester units	8 quarter/5.3 semester units*
English - Literature & Composition	English 1A	Area A1 3 semester units	Area A2 and C2 6 semester units	6 semester units	Area 1A or 3B 3 semester units	8 quarter units/5.3 semester units*
AP ENGLISH EXAM LIMITATIONS:>>>						*8 quarter/5.3 semester units maximum for both

AP EXAM	Chabot Equivalent	Chabot AA/AS Applicability (Units/GE Area)	CSU GE	CSU—UNITS EARNED TOWARD TRANSFER	IGETC	UC—UNITS EARNED TOWARD TRANSFER
Environmental Science		Area B	Area B2 and B3 (if taken prior to Fall 2009) Or Area B1 and B3 (regardless of when taken). 4 semester units	4 semester units	Area 5A (with lab) 3 semester units	4 quarter/2.7 semester units
French Language	French 1B	Area A3 on AA/A2 on AS or Area C 5 semester units	Area C2 3 semester units	6 semester units	Area 3B and 6A 3 semester units	8 quarter/5.3 semester units
French Literature		Area C 5 semester units	Area C2 3 semester units	6 semester units	Area 3B and 6A 3 semester units	8 quarter/5.3 semester units
German Language	German 1B	Area A3 on AA/A2 on AS or Area C 5 semester units	Area C2 3 semester units	6 semester units	Area 3B and 6A 3 semester units	8 quarter/5.3 semester units
Government & Politics - Comparative	Political Science 20	Area D 3 semester units	Area D8 3 semester units	3 semester units	Area 4H 3 semester units	4 quarter/2.7 semester units
Government and Politics - U.S.	Political Science 1	Area D or American Institutions 3 semester units	Area D8 and US-2* 3 semester units	3 semester units	Area 4H 3 semester units	4 quarter/2.7 semester units
History - European	History 1 or 2	Area C or D 3 semester units	Area C2 or D6 3 semester units	6 semester units	Area 3B or 4F 3 semester units	8 quarter/5.3 semester units
History - U.S.	History 7 or 8	Area D or American Institutions 3 semester units	Area C2 or D6 and US-1 3 semester units	6 semester units	Area 3B or 4F 3 semester units	8 quarter/5.3 semester units
History - World		Area D 3 semester units	Area C2 or D6 3 semester units	6 semester units	Area 3B or 4F 3 semester units	8 quarter/5.3 semester units
Human Geography		Area D 3 semester units	Area D5 3 semester units	3 semester units	Area 4E 3 semester units	4 quarter/2.7 semester units
Italian Language & Culture		Area A3 on AA/A2 on AS or Area C 5 semester units	Area C2 3 semester units	6 semester units	Area 3B and 6A 3 semester units	8 quarter/5.3 semester units
Japanese Language & Culture		Area A3 on AA/A2 on AS or Area C 5 semester units	Area C2 3 semester units	6 semester units	Area 3B and 6A 3 semester units	8 quarter/5.3 semester units
Latin - Vergil		Area C 3 semester units	Area C2 (if taken prior to Fall 2009) 3 semester units	6 semester units	Area 3B and 6A 3 semester units	4 quarter/2.7 semester units
Latin - Literature		Area C 3 semester units	Area C2 3 semester units	6 semester units	Area 3B and 6A 3 semester units	4 quarter/2.7 semester units
Music Theory	Music 2A & 2B	Area C 3 semester units	Area C1 (if taken prior to Fall 2009) 3 semester units	6 semester units	N/A	8 quarter/5.3 semester units

AP EXAM	Chabot Equivalent	Chabot AA/AS Applicability (Units/GE Area)	CSU GE	CSU—UNITS EARNED TOWARD TRANSFER	IGETC	UC—UNITS EARNED TOWARD TRANSFER
Physics B	Physics 4A	Area B 5 semester units	B1 and B3 4 semester units*	6 semester units*	Area 5A (with lab) 4 semester units	8 quarter/5.3 semester units**
Physics C - Mechanics	Physics 4A	Area B 5 semester units	Area B1 and B3 4 semester units*	4 semester units*	Area 5A (with lab) 3 semester units	4 quarter/2.7 semester units**
Physics C - Electricity/Magnetism	Physics 4B	Area B 5 semester units	Area B1 and B3 4 semester units*	4 semester units*	Area 5A (with lab) 3 semester units	4 quarter/2.7 semester units**
AP PHYSICS EXAM LIMITATIONS:>>				*Maximum 4 semester units toward GE and 6 semester units toward transfer		**Maximum 8 quarter/5.3 semester units for all three Physics exams
Psychology	Psychology 1	Area D 3 semester units	Area D9 3 semester units	3 semester units	Area 4I 3 semester units	4 quarter/2.7 semester units
Spanish Language	Spanish 1B	Area A3 on AA/A2 on AS or Area C 5 semester units	Area C2 3 semester units	6 semester units	Area 3B and 6A 3 semester units	8 quarter/5.3 semester units
Spanish Literature		Area C 5 semester units	Area C2 3 semester units	6 semester units	Area 3B and 6A 3 semester units	8 quarter/5.3 semester units
Statistics	Math 43	Area A3 for AA/A2 for AA & Math Proficiency 4 semester units	Area B4 3 semester units	3 semester units	Area 2 3 semester units	4 quarter/2.7 semester units

COLLEGE LEVEL EXAMINATION PROGRAM (CLEP)

The chart below lists how College Level Examination Program (CLEP) exams may be applied toward the California State University General Education (CSU/GE).

CSU/GE: 3 semester units are applied toward CSU/GE certification and transfer if exams are passed with the required scores indicated below. Students and counselors should contact individual campuses for more information on how subject credit may be granted.
IGETC: CLEP exams are not used to certify UC or CSU IGETC.
AA/AS: CLEP esams will not be used to satisfy units or GE requirements for the AA/AS degree.

College Level Examination Program (CLEP) Exam	Passing Score Required	Minimum Semester Units earned. (1)	SEM Units Toward CSU/GE Certification	CSU/GE or American Institutions Area (2)
American Government	50	3	3	D8
American Literature	50	3	3	C2
Analyzing and Interpreting Literature	50	3	3	C2
Biology	50	3	3	B2 (no lab)
Calculus	50	3	3	B4
Chemistry	50	3	3	B1 (no lab)
College Algebra	50	3	3	B4
College Algebra-Trigonometry	50	3	3	B4
College Mathematics	50	0	0	N/A
English Composition (no essay)	50	0	0	N/A
English Composition (with essay)	50	0	0	N/A
English Literature	50	3	3	C2
Financial Accounting	50	3	0	N/A
French Level I (7)	50	6	0	N/A
French Level II (7)	59	12	3	C2
Freshman College Composition	50	0	0	N/A
German Level I (7)	50	6	0	N/A
German Level II (7)	60	12	3	C2
History, United States I	50	3	3	D6+US-1
History, United States II	50	3	3	D6+US-1
Human Growth & Development	50	3	3	E

College Level Examination Program (CLEP) Exam	Passing Score Required	Minimum Semester Units earned. (1)	SEM Units Toward CSU/GE Certification	CSU/GE or American Institutions Area (2)
Humanities	50	3	3	C2
Information Systems & Computer Applications	50	3	0	N/A
Introduction to Educational Psychology	50	3	0	N/A
Introductory Business Law	50	3	0	N/A
Introductory Psychology	50	3	3	D9
Introductory Sociology	50	3	3	D0
Natural Sciences	50	3	3	B1 or B2
Pre-Calculus	50	3	3	B4
Principles of Accounting	50	3	0	N/A
Principles of Macroeconomics	50	3	3	D2
Principles of Management	50	3	0	N/A
Principles of Marketing	50	3	0	N/A
Principles of Microeconomics	50	3	3	D2
Social Sciences & History	50	0	0	N/A
Spanish Level I (7)	50	6	0	N/A
Spanish Level II (7)	63	12	3	C2
Trigonometry	50	3	3	B4
Western Civilization I	50	3	3	C2 or D6
Western Civilization II	50	3	3	D

(1) These units count toward eligibility for admission. These units may not all apply toward certification of the corresponding GE-Breadth area. See Executive Orders **1033** and **1036** or **Academic Affairs Coded Memo AA-2011-12** for details.

(2) Areas of GE-Breadth (A1 through E) are defined in EO 1033. Areas of American Institutions (US-1 through US-3) are set forth in Sections KA and IB of EO 405, and at www.assist.org.

(7) If a student passes more than one CLEP test in the same language other than English (e.g., two exams in French), then only one examination may be applied to the baccalaureate. For each test in a language other than English, a passing score of 50 is considered "Level I" and earns six units of basccalaureate redit; the higher score listed for each test is considered "Level II" and earns additional units of credit and placement in Area C2 of GE-Breadth, as noted.

INTERNATIONAL BACCALAUREATE (IB) EXAMS

The chart below lists how International Baccalaureate (IB) exams may be applied toward the California State University General Education (CSU/GE) pattern and Intersegmental General Education Transfer Curriculum (IGETC). The GE areas referenced in the chart may be found within each course description

CSU/GE: 3 semester units are applied toward CSU/GE certification and transfer if exams are passed with the required scores indicated below.
IGETC: Te earn credit toward IGETC and UC transfer, a score of 5, 6, or 7 on Higher Level (HL) exam is required. 3 semester units are applied toward IGETC certification. Students who have earned credit from an IB exam should not take a comparable college course because transfer credit will not be granted for both. Students and counselors should contact individual campuses for more information on how subject credit may be granted.
AA/AS: IB exams will not be used to satisfy units or GE requirements for the AA/AS degree.

International Baccalaureate (IB) Exam	CSU GE + Score Required	Semester Units Toward CSU Transfer	Semester Units Toward CSU/GE Certification	IGETC (Score of 5, 6, or 7)	Semester Units Toward IGETC Certification	Semester Units Towards UC Transfer
IB Biology HL	B2 Score = 5	6	3	5B (without lab)	3	5.3
IB Chemistry HL	B1 Score = 5	6	3	5A (without lab)	3	5.3
IB Economics HL	D2 Score = 5	6	3	4B	3	5.3
IB Geography HL	D5	6	3	4E	3	5.3
IB History (any region) HL	C2 or D6 Score=5	6	3	3B or 4F	3	5.3
IB Language A1 HL*	C2 Score=4 (any language)	6	3	3B (any laguage) 3B and 6A (any language except English)	3	5.3
IB Language A2 HL*	C2 Score=4 (any language)	6	3	3B (any laguage) 3B and 6A (any language except English)	3	5.3
IB Language B (any language) HL*	N/A Score=4	6	0	6A	3	5.3
IB Mathematics HL	B4 Score=4	6	3	2A	3	5.3
IB Physics HL	B1 Score=5	6	3	5A (without lab)	3	5.3
IB Psychology HL	D9 Score=5	6	3	4I	3	5.3
IB Theatre HL	C1 Score=4	6	3	3A	3	5.3

*The IB Curriculum offers language at various levels for native and non-native speakers. Language B courses are offered at the intermediate level for non-natives. Language A1 and A2 are advanced courses in literature for native and non-native speakers, respectively.

STUDENT SERVICES

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 708, Building 700, at Chabot College and on the college website at www.chabotcollege.edu.

General Information

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.

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."

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.

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.

Admission Procedures and Policies

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.

Students who plan to enroll at Chabot College must complete and submit an Application for Admission. Students may apply 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.

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.

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.

Readmission From Dismissed Status

Students on dismissed status from Chabot College must submit a Petition for Admission 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 www.chabotcollege.edu/admissions/forms.

International Student Admission

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, available online at www.chabotcollege.edu/international or from the International Student Admissions Office, Room 703E1, Building 700. The application packet contains form and instructions for providing evidence of the following:

1. provide evidence of having completed the equivalent of a United States high school education
2. demonstrate the ability to read and write English at the 12th grade level *(TOEFL test with a minimum score of 61 iBT or 173 CBT or 500 PBT or the IELTS test with a minimum band score of 5.5 academics).*
3. show means of adequate financial support and medical care
4. provide evidence by means of a physical examination certifying freedom from active tuberculosis
5. 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 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 support 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 either the TOEFL test with a minimum score of 61 iBT or 173 CBT or 500 PBT or the IELTS test with a minimum band score of 5.5 academics.
4. Provide complete academic records, including official secondary school and post secondary academic records. (Contact the International Student Admissions Office for the names of certified translation agencies.)
5. A signed international student agreement to comply with all college/immigration requirements.
6. Essay/Statement of Purpose.
7. $100 non-refundable application fee.
8. Passport photo.

special Admission—concurrent enrollment

The college offers concurrent enrollment education opportunities 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 and medical emergency authorization. For additional information on the Concurrent Enrollment policy and procedures contact the Office of Admissions and Records.

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 U.S. Citizenship and Immigration 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.

Bookstore

The Chabot College Bookstore is honored to be your on-campus source for textbooks, school supplies, Chabot College apparel and gifts, graduation items, and snacks. We support Chabot College's educational mission through the

services we offer and the student scholarships and campus donations that we provide.

Location and Contact Information:
The Bookstore is located in building 3800 between the cafeteria and the gymnasium, just off the student parking lot "B" *(see map inside back cover).* You can contact us by phone at (510) 723-2650 or via email at Chabot@bkstr.com. For current store hours, product information, and more, visit our website at Chabot.bkstr.com.

General Purchasing Information:
Students can order textbooks and select general merchandise on our website at Chabot.bkstr.com. Online textbook orders are fulfilled by the store within 48 hours or less whenever possible. Students can choose to pick up their online orders in-store, or have their orders shipped via FedEx. Please note that FedEx Ground is generally the fastest shipping option for Bay Area destinations.

The Bookstore accepts Visa, MasterCard, American Express, and Discover. The cardholder must be present and must present government-issued ID for all credit transactions. Parents wishing to place orders for their children are encouraged to place orders on our website for in-store pickup. An ATM machine maintained by the Chabot Federal Credit Union is located inside the Bookstore. We do not accept personal or business checks.

Textbook Information:
We partner with college departments and instructors to provide the most accurate and up-to-date textbook information available. Current textbook information—including pricing and money-saving used, rental and digital options—is posted on our website several weeks before the start of each term. Please note that textbook prices and information are subject to change as we receive additional information from instructors and publishers.

Textbooks represent a significant expense, and we endeavor to provide cost-saving options for students whenever possible. We obtain used books whenever possible. We are part of a national textbook rental program, Rent-a-Text, and a national digital textbook platform, CafeScribe, which together offer hundreds of Chabot titles in less expensive rental and digital formats. We also work closely with faculty and departments to add additional rental titles and offer less-expensive versions of major textbooks that are customized exclusively for Chabot.

Textbook Buyback:
We offer textbook buyback in the store. We buy back textbooks every day, though prices are often highest during Finals Week each semester, which is when books are in the highest demand for the upcoming semester. The price we are able to offer depends on the current demand for a given book both at Chabot and nationwide. When we buy back books to meet demand for the next semester's students, we are able to offer half of the original purchase price. Books not currently in demand at Chabot can be sold back at the national market value, and will be sent to a book wholesaler to be distributed to other colleges.

Refund Policy:
Textbooks may be returned for a full refund for any reason for 7 days from the start of the semester or within two days of purchase thereafter. A full refund is also available until the day after the NGR drop date to students who drop their class with an NGR (No Grade of Record) and bring proof of the drop at the time of the return. An original sales receipt is required for all returns. For late-start and summer term classes, textbook refunds with a receipt will be given within two days of purchase.

For all refunds books must be in original condition (I.e., no marking or highlighting in new books) and books sold in shrink-wrapped packages must be unopened. Textbooks purchased during the last week of classes or during exams are not returnable, but may be sold back at buyback. Books purchased with a credit card must be refunded to the same credit card, and the actual card is required at the time of the refund. No facsimiles or photocopies will be accepted.

Non-textbook items (excluding software) may be returned or exchanged within thirty days of the sale with the original receipt, providing the merchandise is in original condition. Study aids, snacks, software, and graduation merchandise are not returnable.

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 700, Room 750. 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.

For Counseling Division hours of operation and contact information, please visit www.chabotcollege.edu/counseling or call (510) 723-7013.

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 700, Room 753G.

Assessment (Testing)

The Assessment 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 700, Room 714, or at www.chabotcollege.edu/counseling/assessment or by calling (510) 723-6722.

Employment & Career Services Center

The Transfer, 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 700, Room 761. Telephone number: (510) 723-6720.

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 or visit the Early Decision website at www.chabotcollege.edu/counseling/ed/.

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 at (510) 723-6718 for more information.

Program Planning

All new, first time in college students can meet with a counselor for assistance with assessment interpretation and/or program planning. At Chabot, program planning is provided in a small group immediately following assessment.

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 700, Room 761. For more information, students may call (510) 723-6720 or visit us online at www.chabotcollege.edu/counseling/TECS.

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 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.

Matriculation

Matriculation, Pathways to Success, is the process which brings the college and you, the student, into an agreement for the purpose of developing and realizing your educational objective. This process is designed to help you from the moment you first apply until you complete your studies at Chabot. The agreement acknowledges responsibilities of both the college and the student.

Chabot College agrees to provide a "path to success" which includes:

- An admission process
- An orientation to college instructional programs and student life
- An assessment of basic educational skills
- Counseling and advising for course selection and the development of a Student Educational Plan (SEP)
- Quality Instruction
- Continuous follow-up on your progress with referral to support services when needed

- Institutional research and evaluation which will monitor the effectiveness of all services provided

You, the student, agree to pursue a "path to success" by:

- Expressing a broad educational intent upon admission and declare a specific educational objective within a reasonable period of enrollment.
- Attending classes and completing assigned work.
- Meeting with counselors to discuss educational choices.
- Seeking support services as needed to assist you in completing course work and maintaining progress toward an educational goal based on standards set by Chabot College.

Matriculating students are students who have chosen to:

- Transfer to a four-year college/university (with or without an associate's degree), or
- Obtain a two-year associate/vocational degree (without transfer), or
- Earn a vocational certificate (without transfer), or
- Improve basic skills in English, reading and math, or
- Are undecided in your goal.

Exemptions

Any student who is enrolling in only one activity or performance course may be exempted from all matriculation components.

Any student who has earned an Associate Degree or higher may be exempted from the all matriculation components, except for Assessment if the student is taking English/math courses.

In addition to the above exemptions, any student may be exempted from individual Matriculation components as follows:

Orientation Exemption

If the student has completed orientation at another college or university (proof required), he/she may be exempted from the Orientation component.

Assessment Exemption

If the student has an AP English and/or Calculus Test score of 3 or better (a copy of the test results required); and/or

If the student completed a college-level English and/or mathematics course with a grade "C" or higher (transcripts required) he/she may be exempted from the Assessment component.

Counseling Exemption

If the student has already completed a Student Education Plan (proof required), he/she may be exempted from the Counseling component.

Any student who is eligible for exemption from any of the Matriculation components may obtain an exemption form from the Counseling Division in Building 700, Room 750.

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) may file a grievance with the Dean of Counseling located in Building 700, Room 750.

Registration

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 online at www.chabotcollege.edu.
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 online at www.chabotcollege.edu.
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 for Admission from Dismissed Status to the Director of Admissions and Records.
4. Former students in matriculated exempt status 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 60 or more units in CLPCCD and completed Assessment, Orientation and Counseling.

Group 2: those who have completed 30.0–59.9 units in CLPCCD and completed Assessment, Orientation and Counseling.

Group 3: those who have completed 0.1–29.9 units in CLPCCD and completed Assessment, Orientation and Counseling.

Group 4: those who have completed 60 or more units in CLPCCD without all three matriculation components (Assessment, Orientation and Counseling).

Group 5: those who have completed 30.0–59.9 units in CLPCCD without all three matriculation components (Assessment, Orientation and Counseling).

Group 6: those who have completed 0.1–29.9 units in CLPCCD without all three matriculation components (Assessment, Orientation and Counseling).

Students who have earned an AA/AS Degree or higher must indicate their education level in the Chabot College application for the Matriculation exemption to be reflected in their priority registration number.

All components must be completed at least two weeks PRIOR to the start of the registration process. Changes to your matriculation status may not be reflected on your priority registration mailer. Check CLASS-Web for your priority registration date.

Some students may qualify for exemption from certain matriculation components by completing a Request to Review Priority Registration Status form with a counselor. This form must be submitted to the Counseling Department at least two weeks PRIOR to the start of the registration process. Students must be registered in at least one course past the "NGR" deadline each semester to maintain priority registration status as a continuing student.

NOTE: All continuing students will retain the priority registration status earned through the prior Matriculation computation. Movement up the registration priority scale for future terms will be based on the criteria noted above.

Registration Method

Students may register for classes by using CLASS-Web accessible from www.chabotcollege.edu.

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 also available online.

Fees And Refunds

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 $46 per unit for classes at Chabot College. *Enrollment fees are subject to legislative changes throughout the year.*

Nonresident Tuition

Nonresidents of California are required to pay a tuition fee of $226 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 $226 per unit in addition to the enrollment fee. International students (F-1 and M-1 visa) are required to enroll in a minimum of twelve units per semester.

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 U.S. citizens, permanent residents of the U.S., and aliens who are not nonimmigrants (including those who are undocumented), who meet all other eligibility criteria.

Excepción de la matricula de no-residente de California

Para estudiantes elegibles que se graduaron de una High School de California

(La legislatura aprobó la ley bajo el nombre "AB 540")

información general

Todos los estudiantes (menos los extranjeros que no sean inmigrantes) que cumplen con los requisitos siguientes no tienen que pagar la matrícula de no-residente en las universidades públicas del estado de California, que son: los *California Community Colleges, California State University,* y *University of California.*

- Los Requisitos:
  - El estudiante tiene que haber asistido a clases de un *High School* en el estado de California (pública o privada) por lo menos tres años.
  - El estudiante tiene que haberse graduado de un *High School* de California o haber aprobado un examen de graduación (por ejemplo, el *GED* o el examen *California High School Proficiency*) antes del comienzo del periodo académico.
  - Todos los estudiantes que no tengan un estado de inmigración legal deben someter una declaración con la universidad en la cual indiquen que ya han sometido una petición para arreglar tal estado o, si esto no es posible en la actualidad, que lo van a hacer tan pronto califiquen.
- Los estudiantes que tienen visas de no-inmigrantes (las visas de estudiante 'F' y las visas de turista 'B') no califican para esta excepción.
- El estudiante tiene que someter una petición para la excepción con la universidad, incluyendo una declaración legal firmada en la cual afirma que ha cumplido con todos los requisitos pertinentes. Esta información se mantendrá confidencial al menos cuando la ley requiera que se proporcione.

- Los estudiantes elegibles para esta excepción que piensan cambiarse a otra universidad pública deben someter una nueva petición para esta excepción a cada universidad en la cual se piensen matricular (y si es necesario los documentos necesarios).
- Aunque los estudiantes no-residentes que complen con esos requisitos no tendrán que pagar la matricula de no-residente, no se convierten en residentes de California a través de esta nueva ley. Siguen siendo *non-residents*.
- La ley AB540 no ofrece a los estudiantes sin eocumentos la posibilidad de conseguir becas gubernamentales. Estos estudiantes siguen inelegibles para estas becas, tanto al nivel nacional como al nivel estatal.

Health Services Fee

The Associated Students of Chabot College approved the mandatory health service fee of $17 per semester and $15 for Summer Session to provide health services for enrolled students.

The only exceptions to not paying the Student Health Fee are as follows:

- Students who are taking classes held only on Saturday or at an off-campus site, including approved apprenticeship programs; or
- Students who rely on prayer for healing in accordance with teachings of a bona fide religious sect, denomination, or organization. To apply for a waiver, students must provide a statement of such reliance from an official of the sect, denomination or organization to the Office of Student Life.

Please contact the Health Center for information about services and referrals. The Center is located in Room 120 in Building 100 or visit the website at http://www.chabotcollege.edu/HealthCenter/.

Mailing Fee (Optional)

There will be a $3 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 $10, 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.

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 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.

Students may request a refund of enrollment fees as long as the student withdraws from the class during the first two weeks of instruction for a regular-term class or by the ten percent point of the length of a short-term class. Refunds are not automatic. Requests for refunds must be filed by the last day of instruction in the semester for which the fee was paid. Credit balances do not carry over to the next semester/term.

A student who must withdraw for military purpose shall be refunded 100% fees paid, regardless of the date of withdrawal. In this case, requests for refunds made after the end of the semester will be honored.

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 changes and refunds consult the Schedule of Classes.

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. This condition of simultaneous enrollment is required throughout the duration of the term. Should one of the corequisite classes be dropped for any reason, the student will be disenrolled from the other corequisite class.

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, visit website www.chabotcollege.edu/counseling/prerequisites.asp. Challenge forms are available from the Counseling Office or Academic Division offices.

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.

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.

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 a counselor.

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

Basic Skills Course Limitation

Basic skills courses (courses numbered above 100) are not degree-applicable. Basic skills courses provide a foundation in reading, writing, mathematics, English as a Second Language, learning and study skills. Students are expected to learn skills necessary to succeed in college-level work. Except as specifically exempted, no student shall accrue more than 30 units of credit for basic skills coursework at the College. (Title 5, §55756.5)

The following classifications of students are exempted from the 30-unit limitation on Basic Skills coursework:

- Student enrolled in one or more courses of English as a Second Language
- Students identified as learning disabled according to Title 5, §56014 and §56029.

Non-exempt students who have exhausted the unit limitation shall be referred to appropriate alternate educational service providers.

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. 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 may drop online, via CLASS Web (www.chabotcollege.edu).

Withdrawals do not affect the students' grade point average; however, excess "W" notation may result in (1) poor progress or dismissal status, and affect (2) full-time enrollment status, (3) eligibility for financial aid and other benefits, and (4) athletic eligibility.

Students may withdraw no more than 4 times for the same course. Subsequent enrollment in the course will require special permission from the Vice President of Student Services or designee. *(Title 5, §55024)*

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 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 guaranteed 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. The first meeting of online or

hybrid Distance Education courses is the first day of the class as specified in the class schedule listing. For these courses, instructors may drop students who do not login to their Blackboard course and/or complete indicated activities by the third day of classes. 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 NP 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 TWO ATTEMPTS to repeat a course for the purpose of alleviating a substandard grade (D, F, or NP). *(Title 5, §55042)*

Students may not repeat courses in which they received passing grades of A, B, C, or P. 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 *(Title 5, §55045)*;
2. When a student should repeat a course because there has been a significant lapse of time since the student previously took the course *(Title 5, §55043)*;
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 *(Title 5, §55041)*.

Certain courses designated by the Academic Services may be repeated up to a maximum of three repetitions. Students should consult the course listings in this catalog *(Title 5, §55040)*.

When a student has repeated a course the most recent grade points are applied to the student's grade point average and academic progress standing.

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.

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 $500 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.

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).

Campus Safety and Security

Mission Statement

The Chabot College Department of 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 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 polices 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.
- Activate any one of the red emergency Talk A Phones located throughout the campus.
- **FOR EMERGENCIES DIAL 911 FROM ANY PHONE.**

Reporting Crimes, Suspicious Activities, or Safety Hazard

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 jointly by the Hayward Police Department and the 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 Talk A Phones.
- 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, or activate a nearby emergency Talk A Phone. 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 Talk A Phones and telephones are strategically located throughout the campus for your safety.

Emergency Talk A Phones are outdoors in all the parking lots and adjacent to the athletic fields. They can be found by locating the red Emergency Talk A Phone or illuminated blue light during darkness. Simply follow the directions on the Talk A Phone for assistance. The location of our red Emergency Talk A Phones 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 are 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

	2007	2008	2009	2010
Murder/Non Negligent Manslaughter	0	0	0	0
Negligent Manslaughter	0	0	0	0
Sex Offenses—Forcible	0	0	0	1
Sex Offenses—Non Forcible	1	1	0	0
Robbery	0	0	2	6
Aggravated Assault	0	11	1	1
Burglary	1	17	5	3
Motor Vehicle Theft	15	6	15	13
Arson	0	0	2	1
Illegal Weapons Possession	0	1	0	4
Drug Law Violations	3	7	3	7
Liquor Law Violations	3	3	0	0
Hate Crime	0	1	1	0

You may contact the Hayward Police Department (510) 293-7272, for crime statistics on public property adjacent to the campus.

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 semester parking permits are *only* available online through CLASS-Web or The Zone. Daily parking permits can be purchased for $2 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:	$30.00
Fall/Spring Semester motorcycle:	$15.00
Summer Session:	$15.00
Daily Permit:	$ 2.00
Summer Session motorcycle	$ 7.50

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 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. A valid parking permit must also be displayed.

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 Talk A Phones strategically located throughout the campus and parking lots. Look for the red Emergency Talk A Phone and blue light to locate the Emergency Talk A Phone nearest you. Simply follow the directions printed on the front of the Talk A Phone for assistance. The following is a list of emergency Talk A Phone locations:

Emergency Talk A Phone Locations

Parking Lot J
Parking Lot B Section B1, B4, B6, B15
Parking Lot A Section A2, A8 near Campus Drive
Parking Lot D near Building 3900
Parking Lot E near Building 3400
behind Building 1400 (Automotive)
behind Building 3500 (Children's Ctr.)
Between Buildings 1400 and 1600
Between Buildings 1800 and 2000
Between Buildings 1900 and 2200
Building 2300 walkway (by Building 100)
Building 2100 walkway (facing Building 2400)
Building 2500 walkway (next to Bookstore)
Building 2700 (on the Swimming Pool upper deck)
Softball Field Snack Bar Wall
Soccer/Tennis Court Storage (on Athletic pathway)

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 100, 400, 700, 1500, 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 22 from the downtown Hayward BART station to the bus stop at 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 30-minute visitor parking zone is provided in Parking Lots B and H at Chabot College. Long-term visitor parking is available on each student lot when a daily parking permit is purchased from the $2.00 ticket dispenser and displayed on the dashboard. Those visitors who have a DMV issued Handicapped Placard may purchase a daily parking permit and park in Handicapped designated areas of student lots.

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.

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 708, Building 700. **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 Business Services 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, Student Services, and cleared with the Campus Security Service.

SPECIAL STUDENT PROGRAMS AND SERVICES

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 applying for 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 (510) 723-7547.

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 (ICC) 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 ICC 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 ICC Chairperson, or the Coordinator of Student Activities upstairs in the Student Center, Building 2300.

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 the Federal Welfare Reform.

Chabot provides training programs in collaboration with the County of Alameda for TANF/CalWORKs adult recipients in one- 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, and job placement. The goal of the individualized education and training program is gainful employment. Through cooperation with the

Alameda County Social Services Agency, other support services, such as child care and transportation can be provided.

For further information, contact the EOPS/CARE/CalWORKs reception desk, second floor kiosk, Building 700, or call (510) 723-6909.

CDC–WORKS!

The CDC (Child Development Careers) WORKS Program provides training and support to Community College students who are interested in becoming child development and early childhood educators. To be eligible for CDC–WORKS you must be a Chabot College Student with Early Child Development as your major. You must also currently be on CalWORKs, timed out, or have been on CalWORKs in the past. We provide:

- Personalized support and mentoring,
- Financial assistance,
- Job placement services,
- Early Childhood Permit assistance,
- Free Workshops,
- Work Study, and
- Additional incentives: copy cards, funds for fingerprinting and more.

For further information, contact CDC–WORKS at (510) 723-6912.

Children's Center

The Chabot College Children's Center and Lab School serves Chabot College students who are ECD majors. The Center is established to provide a laboratory setting for observation and to teach ECD students about children through first-hand/practicum experience in the classroom. The Center also provides quality care for children of students, the community, the staff and faculty. Admissions priority goes to lower income families. We are able to offer subsidized funding due to contributions from state and federal funds. We provide a safe environment that meets the developmental needs of children from infancy though preschool. We are located in Bldg 3500. For further information, call (510) 723-6684.

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 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, (510) 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.

Educational Talent Search

Pre-College Program 7–12 Grade

This program identifies and assists individuals from disadvantaged backgrounds who have the potential to succeed in higher education. The program provides academic, career, and financial counseling to its participants and encourages them to graduate from high school and continue on to the postsecondary institution of their choice. Talent Search provides service to Middle school and High school students in our local area. The goal of Talent Search is to increase the number of youths from disadvantaged backgrounds who complete high school and enroll in postsecondary education institutions of their choice. For information, call (510) 723-7502.

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, transfer assistance, priority registration, university application fee waivers, financial aid application assistance, EOPS grants, 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 degree applicable units or more than six consecutive semesters of college;
- Must be determined to be educationally disadvantaged.

CARE (Cooperative Agencies Resources for Education) is a unique educational program which represents a cooperative effort between Chabot/Las Positas Community College District, the Alameda County Social Services Agency, and community agencies designed to assist single parents achieve their educational goals and work towards achieving financial independence. Support services include: personal and career counseling, academic advising, transfer assistance, CARE grants and meal tickets, peer support, and campus and community referrals.

To be eligible for CARE, students must meet all of the following criteria:

- Must meet the eligibility criteria for EOPS sponsorship (listed above);
- Must be currently receiving Temporary Assistance for Needy Families (TANF);
- Must have one child under the age of 14.

For further information about EOPS and/or CARE, visit the EOPS/CARE/CalWORKs reception desk, second floor kiosk, Building 700, or call (510) 723-6909.

Health Services

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.

Dental Hygiene Clinic

All students are eligible to receive low cost dental hygiene services at half price in the Dental Hygiene Clinic—Building 2200, Room 2203. Dental hygiene services include

oral health screenings, blood pressure checks, cleanings, nonsurgical periodontal therapy, exams, x-rays, and sealants. Dental referrals are provided for any dental treatment needed. The clinic is open Fall and Spring semesters. Appointments can be made by calling (510) 723-6900.

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. Please call (510) 723-6715 or visit www.chabotcollege.edu/international for more information.

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 Football, Men's Golf, Men's & Women's Soccer, Women's Softball, 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 Health, Physical Education and 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. Baseball, Softball, and Soccer fields are all natural grass turf. The Football field in the stadium is all-weather Field Turf®.

The Learning Connection

Chabot College's Learning Connection is an innovative campus-wide collaboration among students, faculty, and staff to promote learning and success.

Current Learning Connection learning support tutoring programs include: Peer Academic Tutoring Help (PATH), in Room 2351; the Writing and Reading Across the Curriculum (WRAC) Center, on the Library Mezzanine; the Math Lab, in Room 1712; the Language Center (ESL support), in Room 2351. Currently being piloted are the World Languages Center, in Room 2351; the Speech and Communication Lab, in Room 2351; and ChabotLink, a peer advising program. In addition, in-class tutors, or Learning Assistants, are available upon instructor request to support students in their classrooms; and some chemistry and math instructors make use of Peer-Led Team Learning (PLTL) Leaders to facilitate workshops for students that reinforce classroom instruction.

A new Learning Connection Center for Teaching and Learning is being developed to support teaching excellence. Expected to be fully operational by the year 2012, the CTL will offer instructors and staff opportunities to investigate common teaching themes with colleagues on and off campus, conduct research in teaching and learning, become proficient in the use of instructional technology, develop curricula, and engage in other activities related teaching and learning.

More information about Learning Connection programs is available at www.chabotcollege.edu/learningconnection.

Office of 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!

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, East Bay, 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.

Social Activities

Numerous social activities are offered at Chabot College each semester through ASCC and ICC 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 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.

On-Line Services/Welcome Center

The On-Line Services/Welcome Center, located in Building 700, Room 710, provides students on-line access to CLASS-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.

Veterans Educational Assistance

The Veterans Services Office at Chabot College is designed to assist veterans and their dependents in reaching their educational goals. The Veterans Services Office is your liaison to the Department of Veterans Affairs to help you process the necessary educational benefits claims. Once veterans or veterans' dependents receive their educational benefits at Chabot College, they are required to comply with all application regulations, policies, and procedures at the College.

Eligibility for Veterans 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. Educational benefits eligibility is determined by the appropriate federal or state agency, not by Chabot College. The basic categories of educational assistance programs are:

- The Montgomery G.I. Bill (Chapter 30)
- Vocational Rehabilitation Program (Chapter 31)
- Post 9/11 GI Bill (Chapter 33)
- Dependents' Educational Assistance (Chapter 35)
- Reservists Montgomery GI Bill (Chapter 1606)
- Reserve Educational Assistance Program (Chapter 1607)

Educational Benefits Application Process

The following documentations must be submitted to the Veterans Services Office in order to properly process educational benefits. Failure to submit the necessary documents may cause a delay in receiving educational benefits.

1. Apply for admission to Chabot College online via www.chabotcollege.edu.
2. Apply for VA Educational benefits via www.gibill.va.gov.
3. Submit all official transcripts to the Office of Admissions and Records.
4. Choose a Major.
   - For B.S., B.A., Transfer Majors (CSU, UC. Private School)—Schedule an appointment with a Chabot counselor to complete a *Veterans Transfer Evluation Form.*
   - For A.A., A.S., Certificate, submit *Veterans Request for Course Evaluation* form to Chabot Veterans Services Office.

5. Register for courses.
   - Only courses that satisfy requirements outlined by curriculum guide or graduation evaluation form can be certified for VA purposes. Students cannot be certified for courses that do not fulfill a program requirement.
6. Complete *Veteran's Enrollment Certification Request* form and submit DD-214 and Certificate of Eligibility.

Course Applicability

According to VA regulations, only courses that satisfy requirements outlined by a course evaluation form or transfer evaluation can be certified for VA purposes. Every student receiving veterans educational benefits at Chabot College will be required to have a Course/Transfer Evaluation for current major.

Evaluation of Prior Education and Training

All students receiving veterans educational benefits are required to 1) have submitted to the Veterans Services Office or Office of Admissions and Records ALL official academic transcripts from each school previously attended, 2) have submitted a DD-214 if they were on active duty, and 3) complete a "Veterans Evaluation" with a counselor, which establishes a personalized education plan based on prior education and training and the student's current academic objective. The institution will conduct an evaluation of all previous education and training and will grant appropriate credit, shorten the veteran's or eligible person's duration of the intended course proportionately, and will notify the VA Regional Center and the student accordingly, in compliance with Title 38 regulations.

Priority Registration

In order to be assigned priority registration, veterans must provide a copy of their DD-214 and "honorable" discharge to the Veterans Services Office.

DD-214 Credit

Qualified veterans will receive 3 units of elective credit towards the Associate Degree.

Warning Status

Veterans or veterans' dependents will be placed on "Warning Status" for the following reasons:
- Failure to earn twice as many satisfactory grade points as all units certified for educational benefits during a term.
- Continuous failure to progress toward an objective, when such failure appears to be within the student's control.

Unsatisfactory Status

Veterans or veterans' dependents will be placed on "Unsatisfactory Status" for the following reasons:
- While on "Warning Status" the student fails to earn twice as many satisfactory grade points as units certified for educational benefits during a term.
- Academic Dismissal or Poor Progress Dismissal from college.

Reinstatement

Students may regain eligibility for Veterans benefits after dismissal by doing one or more of the following, based on the reason for dismissal:
- Completing not less than six units with 2.0 GPA during one semester.
- Raising their cumulative GPA to 2.0.

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.

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.

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.

"P" — The student has *completed* the course with "C" or better work.

"NP" — 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 GPA 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.
P	Pass	0 grade points—units earned with no units attempted.
NP	No Pass	0 grade points—no units earned and no units attempted. May negatively affect Progress.
I	Incomplete	0 grade points—no units earned and no units attempted. May negatively affect Progress.

The grade point average (GPA) is calculated by dividing total grade points by total units attempted:

$$\text{GPA} = \frac{\text{Total Grade Points}}{\text{Total Units Attempted}}$$

Example:

History 1	3 units x 3 grade points (B) = 9 grade points	
Math I	5 units x 2 grade points (C) = 10 grade points	
P.E. 1	½ unit x 4 grade points (A) = 2 grade points	
TOTAL:	8½ units	21 Total Grade Points

$$\text{GPA} = \frac{21}{8.5 = 2.47 \text{ or C}}$$

SCHOLASTIC HONORS

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

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, NP, or I (Poor Progress Grades). A student who has attempted 12 semester units of college course work 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, NP or I grades to less than 50% of his/her total units attempted. Summer session does not count as a semester in determining progress status.

Appeal Process

Under extenuating circumstances beyond the student's control or ability to foresee, exceptions to these policies may be granted by the Director of Admissions and Records.

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 by the instructor 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).

Pass/No Pass Grades*
(Unit Limitations May Exist at Transfer Institutions)

In accordance with the Education Code and Title 5, §55022, Chabot College has established a grading policy which adds the "P" (pass) and "NP" (no pass) grades to the standard letter grades (A,B,C,D,F) used in colleges and universities. Courses in which a "P" (pass) 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 "P" (pass) 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 "NP" (no pass) grade is earned will not apply toward graduation and will not affect the student's grade point average. An excess number of "NP" (no pass) grades will affect the student's academic progress ratio, resulting in a low figure.

Offering courses for pass/no pass 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 pass/no pass (P or NP) 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 pass/no pass 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 pass/no pass grade and the instructor shall report to the Director of Admissions and Records a final grade of "P" (pass) or "NP" (no pass) for students who so petition. The student's decision to opt for pass/no pass grade may not be reversed by either the student or the instructor at a later date.

The "P" (pass) 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 "NP" (no pass) is earned.

Formerly "Credit/No Credit"

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, section 55050.

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 Admissions and 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 students 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 Title 5, section 55046, 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 Chabot College or the Assistant Dean/ Registrar at Las Positas College for academic renewal upon completion of the following:

1. a minimum of 12 units taken consecutively at Chabot and/ or Las Positas with a grade point average of 2.5 or better,
   or
2. a minimum of 20 units taken consecutively at Chabot and/ or Las Positas with a minimum grade point average of 2.0.

The coursework to be disregarded cannot include courses previously used to meet Associate degree or Certificate requirements or to establish eligibility to transfer.

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.

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 or Other Recording Devices

Students are not permitted to make 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.

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, 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 positing.
4. The Office of Student Life 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 Office of Student Life 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 8½"x14" 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 p.m. 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.

Declaration of Non-Discrimination

Chabot College desires 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 of Chabot College may be referred to the following officers assigned the administrative responsibility of reviewing such matters:

Employee Concerns:
Wyman Fong
Director of Human Resources
(925) 485-5235

Student Concerns/Discrimination Concerns:

Vice President of Student Services
Building 700, Room 708
(510) 723-6743

Inquiries may also be addressed to: San Francisco Office of Civil Rights, U.S. Department of Education, 50 Beale Street, Suite 7200, San Francisco, CA 94105, (415) 486-5555.

Declaración De No Discriminación

Chabot y Las Positas colleges, de acuerdo con las leyes civiles, declara que no discrimina hacia ninguna persona a base de su raza, color, nacionalidad, ascendencia, religión, creencia, sexo, edad o incapacidad, en sus programas y políticas de empleo y educación. El conocimiento limitado del idioma no limita acceso a programas y servicios ocupacionales. Cualquier pregunta sobre la aplicación de esta declaración puede dirigirse a:

Assuntos de Empleo:
Wyman Fong
Director of Human Resources
(925) 485-5235

Asuntos de Estudiantes/Asuntos de Discriminación
Vice President of Student Services
Building 700, Room 708
(510) 723-6743

Las investigaciones se pueden también tratar a: San Francisco Office of Civil Rights, U.S. Department of Education, 50 Beale Street, Suite 7200, San Francisco, CA 94105, (415) 486-5555.

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 or 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.

Student Rights and Privacy

The Family Educational Rights and Privacy Act (FERPA) (20 U.S.C. § 1232g; 34 CFR Part 99) is a Federal law that protects the privacy of student education records. The law applies to all schools that receive funds under an applicable program of the U.S. Department of Education.

FERPA gives parents certain rights with respect to their children's education records. These rights transfer to the student when he or she reaches the age of 18 or attends a school beyond the high school level. Students to whom the rights have transferred are "eligible students."

- Parents or eligible students have the right to inspect and review the student's education records maintained by the school. Schools are not required to provide copies of records unless, for reasons such as great distance, it is impossible for parents or eligible students to review the records. Schools may charge a fee for copies.

- Parents or eligible students have the right to request that a school correct records which they believe to be inaccurate or misleading. If the school decides not to amend the record, the parent or eligible student then has the right to a formal hearing. After the hearing, if the school still decides not to amend the record, the parent or eligible student has the right to place a statement with the record setting forth his or her view about the contested information.

- Generally, schools must have written permission from the parent or eligible student in order to release any information from a student's education record. However, FERPA allows schools to disclose those records, without consent, to the following parties or under the following conditions (34 CFR § 99.31):

  » School officials with legitimate educational interest;
  » Other schools to which a student is transferring;
  » Specified officials for audit or evaluation purposes;
  » Appropriate parties in connection with financial aid to a student;

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 Arts Option I or Option II (other majors are available with additional non-PACE classes). For more information, contact the PACE office, (510) 723-6699 or 723-6619.

Puente

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 academically 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 Aspire/Puente/Daraja reception, second floor kiosk, Building 700, (510) 723-7120.

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

AC: Course meets Chabot's American Cultures requirement.

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. 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, 69, 74, 79, and 89.

Administration of Justice (ADMJ)

45 LAW AND DEMOCRACY 3 UNITS

(See also Political Science 45)

The Law and Democracy course is an interdisciplinary exploration of themes such as equality, citizenship, participation, access, and social justice. We will look critically at how law structures as well as limits democracy and examine the idea of democracy as a universal value. Strongly recommended: eligibility for English 1A. Prerequisite: Political Science 1 or Administration of Justice 50 *(completed with a grade of "C" or higher).* (May not receive credit if Political Science 45 has been completed.) 3 hours. Transfer: CSU; CSU/GE: D8; IGETC: Area 4H; AA/AS.

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; CSU/GE: D0; IGETC: Area 4J; AA/AS.

54 INVESTIGATIVE REPORTING 3 UNITS

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

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 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; CSU/GE: D8; IGETC: Area 4H; AA/AS.

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.

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.

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. Transfer: CSU.

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. Transfer: CSU.

79 HOMICIDE INVESTIGATION 3 UNITS
Analysis 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 to investigation of the death scene. 3 hours. Transfer: CSU.

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
Designed for candidates of a reserve police program and fulfills the PC832 requirements for Peace Officer Safety and Training (POST) certification. Includes ethical considerations concerning law enforcement ethics; leadership in law enforcement; criminal justice system; criminal law; arrest; laws of arrest; search and seizure; methods of arrest; investigation and communications; use of firearms and chemical agents. 4 hours.

91 RESERVE MODULE A: FIREARMS 1 ½ UNITS
Fire arm training with ethical considerations concerning the use of firearms and firearms safety. Techniques of shooting 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)

DEGREE: AA–Anthropology

Chabot College offers an Associate in Arts Degree in Anthropology to provide students with a multidisciplinary and holistic approach to the study of humans. Emphasis is placed on biological and cultural diversity, on the interaction between humans and their physical and cultural environment and on the evolution of human biological and cultural adaptations. The core courses introduce students to three of the subfields of Anthropology: Biological/Physical Anthropology, Archeology, and Social/Cultural Anthropology. Students can then focus on their area/s of interest by taking additional Anthropology courses (Area A), and courses in related fields (Area B).

ANTHROPOLOGY

ASSOCIATE IN ARTS DEGREE

FRESHMAN YEAR	FALL	SPRING
Anthropology 1 (Biological/Physical Anthropology)	3	
Anthropology 1L (Biological/Physical Anthropology Laboratory)	1	
Anthropology 2 (Introduction to Anthropology: Prehistory and Culture Growth)	3	

SOPHOMORE YEAR	FALL	SPRING
Anthropology 3 (Social and Cultural Anthropology)	3	
Electives*	**12-16**	
Total	**22-26**	

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

***Area A** - *Choose 2 courses from the following list:*
- Anthropology 4 (Language and Culture) . . . . . 3 units
- Anthropology 5 (Cultures of the U.S. in Global Perspective) . . 3 units
- Anthropology 7 (Introduction to Globalization: An Anthropological Perspective) . . . . . 3 units
- Anthropology 8 (Native American Cultures) . . . . . 3 units
- Anthropology 12 (Magic, Religion, Witchcraft and Healing) . . 3 units
- Anthropology 13 (Forensic Anthropology) . . . . . 3 units

Area B - *Choose 2 courses from the following list:*
- Administration of Justice/Political Science 45 (Law and Democracy) . . . . . 3 units
- Anatomy 1 (General Human Anatomy) . . . . . 5 units
- Biology 2 (Principles of Cell/Molecular Biology and Genetics) . 5 units
- Biology 4 (Principles of Animal Biology and Evolution) . . . . . 4 units
- Biology 6 (Principles of Plant Biology and Ecology) . . . . . 4 units
- Biology 10 (Introduction to the Science of Biology) . . . . . 4 units
- Biology 25 (Human Heredity and Evolution) . . . . . 3 units
- Biology 31 (Introduction to College Biology) . . . . . 4 units
- Biology 50 (Anatomy and Physiology) . . . . . 4 units
- Communication Studies 11 (Intercultural Communication) . . 3 units
- Early Childhood Development 50 (Early Childhood Principles and Practices) . . . . . 3 units
- Early Childhood Development 52 (Childhood and Adolescence) . . . . . 3 units
- Early Childhood Development 56 (Child Growth and Development) . . . . . 3 units
- Early Childhood Development 62 (Child, Family and Community) . . . . . 3 units
- Early Childhood Development 79 (Teaching in a Diverse Society) . . . . . 3 units
- Environmental Science 10 (Humans and the Environment) . . . 3 units
  - or Environmental Science 11 (Humans and the Environment with Laboratory) . . . . . 4 units
  - or Environmental Science 12 (Current Issues in Environmental Science) . . . . . 3 units
- Ethnic Studies 3 (Introduction to Muslim-American Studies) . 3 units
- Geography 1 (Introduction to Physical Geography) . . . . . 3 units
- Geography 2 (Cultural Geography) . . . . . 3 units
- Geography 5 (World Regional Geography) . . . . . 3 units
- Geography 10 (Global Environmental Problems) . . . . . 3 units
- Geography 12 (Geography of California) . . . . . 3 units
- Geography 20 (Introduction to Geographic Information Systems) . . . . . 3 units
- History 3 (World History: Beginnings to 1500) . . . . . 3 units
- History 4 (World History: 1500 to the Present) . . . . . 3 units
- History 7 (U.S. History through Reconstruction) . . . . . 3 units
- History 8 (U.S. History since Reconstruction) . . . . . 3 units
- History 12 (History of California) . . . . . 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 23 (American Indian History and Culture) . . . . . 3 units
- History 27 (U.S. Women's History) . . . . . 3 units
- Philosophy 50 (God, Nature, and Human Nature) . . . . . 3 units
- Philosophy 60 (Introduction to Philosophy: Ethics) . . . . . 3 units
- Political Science 1 (Introduction to American Government) . . . . . 3 units
- Political Science 10 (Seminar in Comparative Politics) . . . . . 3 units
- Political Science 12 (Introduction to California State and Local Government) . . . . . 3 units
- Political Science 20 (Comparative Politics) . . . . . 3 units
- Political Science 25 (Introduction to Political Theory) . . . . . 3 units
- Political Science 30 (International Relations) . . . . . 3 units
- Psychology 1 (General Psychology) . . . . . 3 units
- Psychology 2 (Introduction to Psychological Methodology) . . . . . 3 units
- Psychology 3 (Introduction to Social Psychology) . . . . . 3 units
- Psychology 6 (Abnormal Psychology) . . . . . 3 units
- Psychology 8/Sociology 8 (Human Sexuality) . . . . . 3 units
- Psychology-Counseling 4 (Multiethnic/Cultural Communication) . . . . . 3 units
- Psychology-Counseling 13 (Multicultural Issues in Contemporary America) . . . . . 3 units
- Religious Studies 50 (Religions of the World) . . . . . 3 units
- Sign Language 64 (Beginning Sign Language) . . . . . 3 units
- Sociology 1 (Principles of Sociology) . . . . . 3 units
- Sociology 2 (Social Problems) . . . . . 3 units
- Sociology 3 (American Cultural and Racial Minorities) . . . . . 3 units
- Sociology 4 (Marriage and Family Relations) . . . . . 3 units

1 BIOLOGICAL/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; CSU/GE: B2, D1; IGETC: Area 4A, 5B; AA/AS.

1L BIOLOGICAL/PHYSICAL ANTHROPOLOGY LABORATORY 1 UNIT

Laboratory exercises developed as an adjunct to Anthropology I (introduction to Biological/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: CSU/GE: B3; IGETC: Area 5B LAB; AA/AS.

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; CSU/GE: D1; IGETC: Area 4A; AA/AS.

3 SOCIAL AND CULTURAL ANTHROPOLOGY 3 UNITS

How human beings in different cultures meet basic biological, social and cultural needs, including kinship and marriage practices, political and social organization, economic institutions, religious and childrearing practices, social change, as well as other aspects of cultural behavior. Emphasis on understanding other cultures on their own terms. Includes the many subcultures making up North American populations. 3 hours. Transfer: CSU; UC; CSU/GE: D1; IGETC: Area 4A; AA/AS.

4 LANGUAGE AND CULTURE 3 UNITS

An introduction to the core concepts of linguistic anthropology and the study of language in culture and society, including how language perpetuates the identity of individuals through their social interactions and their culture in everyday speech events. Topics such as identity, social status, gender, race, and institutional power, are examined in contemporary language use. Traditional study of the methods of linguistic anthropologists as well as the study of biological basis of communication and speech, the structure of language, language origins, language through time, language variation, the ethnography of communication, sociolinguistics, nonverbal communication and writing, and how cultural context sets meaning. 3 hours. Transfer: CSU; CSU/GE: D1; IGETC: Area 4A; AA/AS.

5 CULTURES OF THE U.S. IN GLOBAL PERSPECTIVE 3 UNITS

Issues relevant to understanding constructs of race, class, gender and culture in U.S. society from a global perspective. Factors affecting at least three major U.S. cultural communities (such as African American, Asian American, Latino American and others) including impacts of globalization, patterns of migration, permeability of cultural communities in the U.S., the cultural politics of identity and inclusion and exclusion, and other factors influencing modern U.S. society. 3 hours. Transfer: CSU; UC; CSU/GE: D1, D3; IGETC: Area 4A; AA/AS; AC.

7 INTRODUCTION TO GLOBALIZATION: AN ANTHROPOLOGICAL PERSPECTIVE 3 UNITS

Explores the current processes of "globalization" in the world today and the impact on people and societies. The conflicts arising out of competition over resources such as land, water and oil will be examined. Includes the impact of wars, economic and environmental disruption, leading to transnational migrations of people. Explores debates over globalization and the social movements that have arisen in response to the impact of globalization. 3 hours. Transfer: CSU; CSU/GE: D1; IGETC: Area 4A; AA/AS.

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; CSU/GE: D1; IGETC; Area 4A; AA/AS.

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; CSU/GE: D1; IGETC: Area 4A; AA/AS.

13 FORENSIC ANTHROPOLOGY 3 UNITS

Introduction to the recovery and interpretation of human physical remains within the medico-legal context. Major topics include identification of human skeletal and dental remains, sex determination, age at death, ancestry, stature, analysis and identification of different types of trauma and pathologies, post-mortem alteration, age since death, recovery techniques, and legal and ethical issues pertaining to the treatment of human remains in a forensic context. 3 hours. Transfer: CSU; CSU/GE: B1; IGETC: Area 5B; AA/AS.

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
- 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 JAC, call District Training and Development Solutions at (925) 465-5219.

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 68 (CAD for Architecture and Interior Design)	3	
Mathematics 1 (Calculus I)	5	
Architecture 2B (Architectural Drawing and Graphics II)		3
Architecture 33 (3-D Modeling)		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		**49**

ARCHITECTURE
DEGREE:
AA–Architecture
AS–Architecture

ARCHITECTURE
ASSOCIATE IN ARTS DEGREE

FRESHMAN YEAR	FALL	SPRING
Architecture 2A (Architectural Drawing and Graphics I)	3	
Architecture 68 (CAD for Architecture and Interior Design) or Interior Design 68 (CAD for Architecture and Interior Design)	3	
Architecture 2B (Architectural Drawing and Graphics II)		3
Architecture 33 (3-D Modeling)		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		**34**

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

ARCHITECTURE

ASSOCIATE IN SCIENCE DEGREE

FRESHMAN YEAR	FALL	SPRING
Architecture 2A (Architectural Drawing and Graphics I)	3	
Architecture 68 (CAD for Architecture and Interior Design) or Interior Design 68 (CAD for Architecture and Interior Design)	3	
Architecture 2B (Architectural Drawing and Graphics II)	3	
Architecture 33 (3-D Modeling)	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		**31**

GENERAL EDUCATION UNITS FOR A.S. DEGREE 19
For specific A.S. General Education courses refer to catalog section on A.S. Graduation Requirements.
General Education Courses (Areas A-E) 16
Architecture GE Requirement 3
Complete a minimum of 3 units
Architecture 14 (California Architecture and Urban Design)
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. Prerequisite: Art 2A *(completed with a grade of "C" or higher)*. 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.

4B ARCHITECTURAL DRAFTING PRINCIPLES II 3 UNITS
(May be repeated 3 times)
Continuation of Architecture 4A with emphasis on architectural working drawings for 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 electronic/web-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 *(completed with a grade of "C" or higher).* 3 hours lecture, 3 hours studio. Transfer: CSU; UCB; AA/AS.

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 determinates 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 on 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.

33 3-D MODELING 3 UNITS
(May be repeated 3 times)
Introduction to 3-dimensional digital modeling using 3-dimensional 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. Prerequisite: Architecture 68 *(completed with a grade of "C" or higher).* 2 hours lecture, 4 hours studio. Transfer: CSU.

68 CAD FOR ARCHITECTURE AND INTERIOR DESIGN 3 UNITS
(May be repeated 3 times) (See also Interior Design 68)
Introduction to computer-aided drafting. 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. (Combined credit for Architecture 68 and Interior Design 68 may not exceed 12 units.) 2 hours lecture, 4 hours studio. Transfer: CSU.

80 ARCHITECTURE INTERNSHIP 2 UNITS
(Students must contact instructor prior to registering for this class.)
Architecture Internship in Architecture department setting approved by Architecture faculty as related to student's architecture major or classes at Chabot. Cooperative effort between student and architecture firm supervisor to accomplish agreed upon work objectives and broaden experiences. Student provides verification of service experience hours during the term. Students will get an architecture firm approved by architecture faculty and make arrangements for hours and duties directly with architecture firm supervisor. Students will meet with architecture instructor one hour per week on campus for input and hands-on experience discussion focused on architecture firm structures, project procedures, design developments and construction documents. Prerequisite: Architecture 4B, 8B, 12 and 68 (all completed with a grade of "C" or higher). 1 hour 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 OF PROFICIENCY:
Digital Design
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 History 1 (Introduction to Art)	3	
Art 2A (Introduction to Drawing)	3	
Art 23 (2-D Foundations)	3	
Art 2B (Drawing and Composition)		3
Art 17 (Beginning Sculpture)		3
Art 24 (3-D Foundations)		3

SOPHOMORE YEAR	FALL	SPRING
Art 12A (Oil/Acrylic Painting–Beginning I)	3	
Art 3A (Figure and Composition I)	3	
Art History 4 (Art History–Ancient to Gothic)	3	
Art History 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 History 1 (Introduction to Art)	3	
Art 23 (2-D Foundations)	3	
Art 16A (Introduction to Ceramics)	3	
Art 16B (Introduction to Ceramics II)		3

SOPHOMORE YEAR	FALL	SPRING
Art History 4 (Art History–Ancient to Gothic)	3	
Art 16C (Introduction to Ceramics III)	3	
Art History 5 (Art History–Renaissance to Modern)		3
Art 16D (Ceramics–Intermediate)		3
Art 17 (Beginning 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 History 1 (Introduction to Art)	3	
Art 2B (Drawing and Composition)		3
Art 12B (Oil/Acrylic Painting–Beginning II)		3

SOPHOMORE YEAR	FALL	SPRING
Art History 4 (Art History–Ancient to Gothic)	3	
Art 12C (Oil/Acrylic Painting–Advanced I)	3	
Art 23 (2-D Foundations)	3	
Art History 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 History 1 (Introduction to Art)	3	
Art 17 (Beginning Sculpture)	3	
Art 23 (2-D Foundations)	3	
Art 3A (Figure and Composition I)	3	
Art 18 (Wood and Stone Sculpture)		3
Art 24 (3-D Foundations)		3
Art 3B (Figure and Composition II)		3

SOPHOMORE YEAR	FALL	SPRING
Art 2A (Introduction to Drawing)	3	
Art History 4 (Art History–Ancient to Gothic)	3	
Art 20 (All Media Sculpture)	2	
Art 22 (Metal Sculpture–Lost Wax Bronze Casting)	3	
Art History 5 (Art History–Renaissance to Modern)		3
Total		**35**

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

GRAPHIC DESIGN
ASSOCIATE IN ARTS DEGREE

FRESHMAN YEAR	FALL	SPRING
Art 56 (Graphic Design I)	3	
Digital Media 31A (Photoshop I)	1½	
Digital Media 32A (Illustrator I)	1½	
Art 57 (Graphic Design Internship)	2	
Art 58 (Graphic Design II)		3

SOPHOMORE YEAR	FALL	SPRING
Art 55 (Introduction to Graphic Design Careers)	2	
Art 61 (Illustration)	3	
Art 45 (Artist Portfolio and Self-Promotion)	2	
Art 59 (Graphic Design III)		3
Total		**21**

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

DIGITAL DESIGN
CERTIFICATE OF PROFICIENCY

FRESHMAN YEAR	FALL	SPRING
Art 56 (Graphic Design I)	3	
Digital Media 31A (Photoshop I)	1½	
Digital Media 32A (Illustrator I)	1½	

Art 58 (Graphic Design II) 3
Digital Media 35A (Dreamweaver I) 1½

SOPHOMORE YEAR	FALL	SPRING
Art 55 (Introduction to Graphic Design Careers)	2	
Art 45 (Artist Portfolio and Self-Promotion)	2	
Total	**14½**	

GRAPHIC DESIGN
CERTIFICATE OF PROFICIENCY

FRESHMAN YEAR	FALL	SPRING
Art 56 (Graphic Design I)	3	
Digital Media 31A (Photoshop I)	1½	
Digital Media 32A (Illustrator I)	1½	
Art 58 (Graphic Design II)	3	

SOPHOMORE YEAR	FALL	SPRING
Art 55 (Introduction to Graphic Design Careers)	2	
Art 59 (Graphic Design III)	3	
Art 45 (Artist Portfolio and Self-Promotion)	2	
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 (Artist Portfolio and Self-Promotion)	2	
Art 54 (Illustrating Children's Books)	3	
Total	**16**	

Art (ART)

2A INTRODUCTION TO DRAWING 3 UNITS
Skill development in black and white drawing using composition, light and shade, perspective and other basics applied to realism drawing. 2 hours lecture, 4 hours studio. Transfer: CSU; UC; CSU/GE: C1; AA/AS.

2B DRAWING AND COMPOSITION 3 UNITS
Development of knowledge and skills introduced in Art 2A, emphasizing media and composition and realism drawing at an intermediate level. 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.

2C INDIVIDUAL PROJECTS IN ACADEMIC REALISM DRAWING 3 UNITS
(May be repeated 3 times)
Individual project development for advanced drawers to create a related body of drawings in the style of academic realism. Concept definition and development to be determined by the student and approved by the instructor. Prerequisite: Art 2B (completed with a grade of "C" or higher). 2 hours lecture, 4 hours studio.. Transfer: CSU.

3A FIGURE AND COMPOSITION I 3 UNITS
Fundamental skills, techniques and knowledge of art related to drawing of the human form using graphite, charcoal, ink, and conte crayon. Compare figurative compositions using the human form through design, master paintings, verbal and written descriptions, and critiques. Awareness of the creative process as it applies to anatomical analysis by class drawings, anatomy assignments, and figurative compositions which require the student to explore drawing techniques, compose, and evaluate drawings. Open to any student, no drawing experience required. 2 hours lecture, 4 hours studio. Transfer: CSU; UC; AA/AS.

3B FIGURE AND COMPOSITION II 3 UNITS
Continued development of knowledge and skills introduced in Art 3A. Emphasis on composition and color and different figurative design elements during the drawing of the human form. Strongly recommended: 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
Continued development of knowledge and skills further developed in Art 3B. Emphasis on composition and color and different figurative design elements during the drawing of the human form. Drawing elements stressing emotions and expressions. Strongly recommended: 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
Continued development and skills further developed in Art 3C. Emphasis on composition and color and different figurative design elements during the drawing of the human form. Drawing elements stressing individual philosophies and expressions. Strongly recommended Art 3C *(completed with a grade of "C" or higher).* 2 hours lecture, 4 hours studio. Transfer: CSU; UC.

7A INTRODUCTION TO WATERCOLOR PAINTING 3 UNITS
The student will learn materials, methods, techniques and watch demonstrations of transparent watercolor painting, including its effects and possibilities. The student will work with the instructor to maximize watercolor painting skills during class and at home. Strongly recommended: Art 2A. 2 hours lecture, 4 hours studio. Transfer: CSU; UC.

7B INTERMEDIATE WATERCOLOR PAINTING 3 UNITS
(May be repeated 3 times)
Continued development of knowledge and techniques introduced in Art 7A. Emphasis on various intermediate watercolor techniques that produce different types of watercolor paintings that advance the student's skills. Strongly recommended: 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
(May be repeated 3 times)
Builds upon the skills and techniques introduced in Art 7B, so that the student can solve composition problems as well as begin to utilize personal

expressions. Emphasizes composition, concept and visualization skills. Strongly recommended: Art 7B. 2 hours lecture, 4 hours studio. Transfer: CSU; UC.

7D ADVANCED WATERCOLOR PAINTING II 3 UNITS
(May be repeated 3 times)
Continued development of skills and techniques introduced in Art 7C directed towards individual needs. Student artist is directed to develop personalized imagery and begin to settle on individual techniques. Strongly recommended: Art 7C. 2 hours lecture, 4 hours studio. Transfer: CSU; UC.

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
Continued development of 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
(May be repeated 3 times)
Instruction in the fundamental techniques of wheel-thrown and hand-constructed clay forms. Survey of clay and glaze materials and reaction to fire will be included. Methods of decorating using glazes will be introduced. Influence of Eastern and Western contemporary and historical works and the students' creations. Formulate personal creative process, including inspiration, experimentation, and evaluation. Designed for art majors as well as general education students. 2 hours lecture, 4 hours studio. Transfer: CSU; UC; AA/AS.

16B INTRODUCTION TO CERAMICS II 3 UNITS
(May be repeated 3 times)
Further development of the technical skills of wheel thrown and hand constructed clay forms. Exploration of surface decoration, using various glazing techniques and methods of slip decoration is continued. Designed for art majors as well as general education students. 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
(May be repeated 3 times)
Introduction of intermediate technical skills of throwing forms on the wheel with emphasis on the creative expression of the form. Kiln loading and firing procedure and process introduction. Continued development of various hand construction techniques of 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 3 times)
Intermediate technical skills of wheel-thrown and hand-constructed clay forms. Glaze exploration and experimentation. Exploration in the history of contemporary ceramic art and masters. Prerequisite: Art 16C *(completed with a grade of "C" or higher).* 2 hours lecture, 4 hours studio. Transfer: CSU; UC.

16E INDIVIDUAL PROJECTS IN CERAMICS 3 UNITS
(May be repeated 3 times)
Project development for Advanced Potters. Concept definition and development. Creation of a coherent body of work expressing an individual style. Refinement of techniques and skills acquired in previous courses. Individual critiques. Prerequisite: Art 16D *(completed with a grade of "C" or higher).* 2 hours lecture, 4 hours studio. Transfer: CSU.

17 BEGINNING SCULPTURE 3 UNITS
(May be repeated 1 time)
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; AA/AS.

18 WOOD AND STONE SCULPTURE 3 UNITS
Design and carve three-dimensional and relief sculptures, using subtractive methods in wood and stone. Includes an introduction to art history

and fundamentals of pneumatic (air power) 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 studio.. Transfer: CSU; UC.

20 ALL MEDIA SCULPTURE 3 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. 2 hours lecture, 4 hours studio. Transfer: CSU; UC; CSU/GE: C1.

21 INDIVIDUAL PROJECTS IN SCULPTURE 3 UNITS

(May be repeated 3 times)

Projects in Sculpture for intermediate to advanced students. Building on previous knowledge and skills acquired from previous work, students will produce artwork that expresses their individual styles. Prerequisite: Art 17 *(completed with a grade "C" or higher).* 2 hours lecture, 4 hours studio. Transfer: CSU.

22 METAL SCULPTURE—LOST WAX BRONZE CASTING 3 UNITS

(May be repeated 3 times)

Comprehensive introduction to various metal sculpture processes. Mold-making techniques for casing bronze, aluminum, as well as basic welding. Emphasis on 3-dimensional design quality, craftsmanship, and subject matter, with research in the history of traditional and contemporary sculpture. 2 hours lecture, 4 hours studio. Transfer: CSU; AA/AS.

23 2-D FOUNDATIONS 3 UNITS

Introduction to the concepts, applications, and historical/multicultural references related to two-dimensional art and composition, including the study and analysis of the basic principles and elements of line, shape, texture, value, color and spatial illusion. Development of a visual vocabulary for creative expression through lecture presentations, studio projects, problem solving and written assignments. (May not receive credit if Art 10 has been completed.) 2 hours lecture, 4 hours studio. Transfer CSU; AA/AS.

24 3-D FOUNDATIONS 3 UNITS

Introduction to the concepts, applications, and historical references related to three-dimensional design and spatial composition, including the study of the elements and organizing principles of design as they apply to three-dimensional space and form. Development of a visual vocabulary for creative expression through lecture presentations and use of appropriate materials for three-dimensional studio projects. 2 hours lecture, 4 hours studio. Transfer CSU; AA/AS.

45 ARTIST PORTFOLIO AND SELF-PROMOTION 2 UNITS

Development of an artist's portfolio and strategies for self-promotion of ideas and skills effectively in the working art world. Includes use of effective techniques of presentation. 2 hours lecture, 1 hour studio.. 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 uses of perspective as it applies to all two-dimensional surfaces. 2 hours lecture, 4 hours studio. Transfer: CSU; UC.

54 ILLUSTRATING CHILDREN'S BOOKS 3 UNITS

(May be repeated 3 times)

Creation of two different children's books in any medium. Overview of the field of illustrating children's 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

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

56 GRAPHIC DESIGN I 3 UNITS

Introduction to the field of graphic design and the use of typography. Field trips to explore industry related occupations. Assignments include creating graphic designs and advertising designs. 2 hours lecture, 4 hours studio.

57 GRAPHIC DESIGN INTERNSHIP 2 UNITS

(May be repeated 3 times)

Work experience in a graphic design studio or related environment. To be approved by the instructor and employer. Work time and hours are to be arranged by the employer and student. Position may be paid or unpaid. Prerequisite: Art 56 *(completed with a grade of "C" or higher).* 7 hours studio. Transfer: CSU; AA/AS.

58 GRAPHIC DESIGN II 3 UNITS

Creation and production of advanced graphic designs for real clients. Prerequisite: Art 56 *(completed with a grade of "C" or higher).* 2 hours lecture, 4 hours studio. Transfer: CSU; AA/AS.

59 GRAPHIC DESIGN III 3 UNITS

Advanced graphic design and typography, with emphasis on creating and crafting package and label designs. Prerequisite: Art 56 (*completed with a grade of "C" or higher).* 2 hours lecture, 4 hours studio. Transfer: CSU; AA/AS.

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 traditional draftsmanship, craftsmanship and presentation. 2 hours lecture, 4 hours studio. Transfer: CSU.

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.

Art History (ARTH)

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. (Formerly ART 1; may not receive credit if ART 1 has been completed.) 3 hours. Transfer: CSU; UC; CSU/GE: C1; IGETC: Area 3A; AA/AS.

4 ART HISTORY—ANCIENT TO GOTHIC 3 UNITS
History of Western art from prehistoric times through Egyptian, Mesopotamian, Aegean, Greek, Etruscan, Roman, Early Christian, Byzantine, Medieval, Romanesque, and Gothic civilizations. (Formerly ART 4; may not receive credit if ART 4 has been completed.) 3 hours. Transfer: CSU; UC; CSU/GE: C1; IGETC: Area 3A; AA/AS.

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. (Formerly ART 5; may not receive credit if ART 5 has been completed.) 3 hours. Transfer: CSU; UC; CSU/GE: C1; IGETC: Area 3A; AA/AS.

6 ART HISTORY—TWENTIETH-CENTURY ART 3 UNITS
History of significant Modern, Postmodern and Contemporary art movements. Lectures include discussions of works made in various media by well-known and lesser-known makers, including women artists, non-western artists, and artists of color. 3 hours. Transfer: CSU; UC; CSU/GE: C1; IGETC: Area 3A; AA/AS.

7 MULTICULTURAL HISTORY OF AMERICAN ART 3 UNITS
A multicultural survey of American art from 1800 to the present. Special emphasis on art objects created by Native American, Asian American, African American, and Hispanic/Latino artists and artisans. Considers how art objects express the maker's identity within the specific historical, social, and political circumstances of his or her life. Addresses how male and female artists and artisans from these groups have used various art forms to assert their gender and ethnic identity in response to historical change. 3 hours. Transfer: CSU; CSU/GE: C1; IGETC: Area 3A; AA/AS; AC.

20 HISTORY OF PHOTOGRAPHY 3 UNITS
(See also Photography 20)
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 Photography 20, Photography 67, or Art 67 has been completed.) 3 hours. Transfer: CSU; UC; CSU/GE: C1; IGETC: Area 3A; AA/AS.

50 INTRODUCTION TO MUSEUM AND GALLERY TECHNIQUES 3 UNITS
(May be repeated 3 times)
Learn the display of visual art within a museum/gallery space. Meet artists from the Bay Area and beyond, learn the meaning behind their art work, and gain hands-on practice in a range of activities covering the presentation, handling and security of original artwork in the Chabot Art Gallery. 2 hours lecture, 3 hours laboratory. Transfer: CSU; CSU/GE: C1; AA/AS.

51 INTRODUCTION TO MUSEUM STUDIES 4½ UNITS
(May be repeated 3 times)
Museum history, theory, and practice. History and theory components are lecture-based; practice component involves hands-on instruction in museum and gallery skills, culminating in the hanging of the Chabot student art show. Held in the Chabot Art Gallery with one to two field trips to local museums, galleries and/or historical societies. (Formerly ART 6; may not receive credit if ART 6 has been completed.) 3 hours lecture, 5 hours laboratory. Transfer: CSU; CSU/GE: C1; AA/AS.

Astronomy (ASTR)

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. 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. 3 hours. Transfer: CSU; UC; CSU/GE: B1; IGETC: Area 5A; 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.

Automotive Technology (ATEC)

degree:
AS–Automotive Technology
AS–Automotive Technology (Emphasis in BMW Manufacture Training)

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 automotive technician.

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 A.S. Degree in Automotive Technology may be earned.

FRESHMAN YEAR	FALL	SPRING
Automotive Technology 50 (Introduction to Automotive Technology)	3	
Automotive Technology 5** (Automotive Braking Systems)	3	
Automotive Technology 6A* (Automotive Electrical and Electronic Fundamentals)	4	
Automotive Technology 4 (Automotive Suspension and Steering)	3	
Automotive Technology 6B* (Automotive Electrical and Electronic Systems)	3	

SOPHOMORE YEAR	FALL	SPRING
Automotive Technology 1 (Automotive Engines)	4	
Automotive Technology 3 (Automotive Manual Transmissions and Transaxles)		3
Emphasis options (Select from the emphasis option list below)	4–21	
Total	**27–44**	

GENERAL EDUCATION UNITS FOR A.S. DEGREE 19
For specific A.S. General Education courses refer to catalog section on A.S. Graduation Requirements.
General Education Courses (Areas A-E) 16
Automotive Technology GE Requirement 3
Complete a minimum of 3 units
Industrial Technology 74 (Measurements and Calculations)
Total minimum units required 60

Emphasis 1 - Maintenance, add:
Automotive Technology 2 (Automotive Automatic Transmissions and Transaxles) . . . . . 3 units
Automotive Technology 7*** (Automotive Heating and Air Conditioning Systems) . . . . . 2½ units
Automotive Technology 8* (Automotive Air and Fuel Delivery) . . . . . 4 units
Automotive Technology 10* (Automotive Advanced Engine Performance) . . . . . 3 units
Automotive Technology 90 (Hybrid Vehicle Operation and Servicing) . . . . . 2 units
Automotive Technology 91 (Hybrid Diagnosis and Alternate Fuels Technology) . . . . . 2 units

Emphasis 2 - Chassis, add:
Automotive Technology 90 (Hybrid Vehicle Operation and Servicing) . . . . . 2 units
Automotive Technology 91 (Hybrid Diagnosis and Alternate Fuels Technology) . . . . . 2 units

Emphasis 3 - Drivetrain, add:
Automotive Technology 2 (Automotive Automatic Transmissions and Transaxles) . . . . . 3 units
Automotive Technology 7*** (Automotive Heating and Air Conditioning Systems) . . . . . 2½ units
Automotive Technology 8* (Automotive Air and Fuel Delivery) . . . . . 4 units
Automotive Technology 90 (Hybrid Vehicle Operation and Servicing) . . . . . 2 units

Automotive Technology 91 (Hybrid Diagnosis and Alternate Fuels Technology) . . . . . 2 units

Emphasis 4 - Engine Machining, add:

Automotive Technology 63A (Introduction to Engines and Machining Processes) . . . . . 3 units
Automotive Technology 63B (Engines, Machining and Assembly Processes) . . . . . 3 units
Machine Tool Technology 60A (Machine Tool Technology I) . 4 units
Automotive Technology 90 (Hybrid Vehicle Operation and Servicing) . . . . . 2 units
Automotive Technology 91 (Hybrid Diagnosis and Alternate Fuels Technology) . . . . . 2 units

Emphasis 5 Engine Performance, add:

Automotive Technology 7*** (Automotive Heating and Air Conditioning Systems) . . . . . 2½ units
Automotive Technology 8* (Automotive Air and Fuel Delivery) . . . . . 4 units
Automotive Technology 10* (Automotive Advanced Engine Performance) . . . . . 3 units
Automotive Technology 80*** (California Emissions Testing Technician Training Course) . . . . . 7½ units
Automotive Technology 90 (Hybrid Vehicle Operation and Servicing) . . . . . 2 units
Automotive Technology 91 (Hybrid Diagnosis and Alternate Fuels Technology) . . . . . 2 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.

AUTOMOTIVE TECHNOLOGY (Emphasis in BMW Manufacture Training)

ASSOCIATE IN SCIENCE DEGREE

This program prepares students for employment as entry-level automotive technicians. Students may also earn BMW of North America training credits in several different areas. Successful completion of the Associate in Science Degree can enhance the placement level at BMW dealerships across the nation.

FRESHMAN YEAR	FALL	SPRING
BMW 10 (BMW Technical Systems)	5	
Automotive Technology 50 (Automotive Fundamentals)	3	
Automotive Technology 5** (Automotive Braking Systems)	3	
Automotive Technology 6A* (Automotive Electrical and Electronic Fundamentals)	4	
BMW 20 (BMW Body Electronics)	5	
Automotive Technology 4 (Automotive Suspension and Steering)	3	
Automotive Technology 7*** (Automotive Heating and Air Conditioning Systems)		2½

SOPHOMORE YEAR	FALL	SPRING
BMW 30 (BMW Chassis Dynamics)	5	
Automotive Technology 1 (Automotive Engines)	4	
Automotive Technology 8* (Automotive Air and Fuel Delivery)		4
BMW 40 (BMW Engine Electronics and Engine Technology)		5
Automotive Technology 90 (Hybrid Vehicle Operation and Servicing)		2
Automotive Technology 91 (Hybrid Diagnosis and Alternate Fuels Technology)		2
Total		**47½**

GENERAL EDUCATION UNITS FOR A.S. DEGREE 19
For specific A.S. General Education courses refer to catalog section on A.S. Graduation Requirements.
General Education Courses (Areas A-E) 16
Automotive Technology GE Requirement 3
Complete a minimum of 3 units
Industrial Technology 74 (Measurements and Calculations)
Total minimum units required 60

AUTOMOTIVE MAINTENANCE TECHNOLOGY

CERTIFICATE OF ACHIEVEMENT

FRESHMAN YEAR	FALL	SPRING
Automotive Technology 50 (Automotive Fundamentals)	3	
Automotive Technology 5** (Automotive Braking Systems)	3	
Automotive Technology 6A* (Automotive Electrical and Electronic Fundamentals)	4	
Automotive Technology 4 (Automotive Suspension and Steering)	3	
Automotive Technology 6B* (Automotive Electrical and Electronic Systems)	3	

SOPHOMORE YEAR	FALL	SPRING
Automotive Technology 8* (Automotive Air and Fuel Delivery)		4
Automotive Technology 7*** (Automotive Heating and Air Conditioning Systems)		2½
Automotive Technology 10* (Automotive Advanced Engine Performance)		3
Total		**25½**

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)	3	
Automotive Technology 5** (Automotive Braking Systems)	3	
Automotive Technology 6A* (Automotive Electrical and Electronic Fundamentals)	4	
Automotive Technology 4 (Automotive Suspension and Steering)	3	
Automotive Technology 6B* (Automotive Electrical and Electronic Systems)	3	
Total	**16**	

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)	3	
Automotive Technology 3 (Automotive Manual Transmissions and Transaxles)	3	
Automotive Technology 6A* (Automotive Electrical and Electronic Fundamentals)	4	
Automotive Technology 2 (Automotive Automatic Transmissions and Transaxles)	3	
Automotive Technology 6B* (Automotive Electrical and Electronic Systems)	3	
Total	**16**	

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)	3	
Automotive Technology 63A (Introduction to Engines and Machining Processes)	3	
Automotive Technology 63B (Engines, Machining and Assembly Processes)	3	
Machine Tool Technology 60A (Machine Tool Technology I)	4	
Total	**13**	

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)	3	
Automotive Technology 1 (Automotive Engines)	4	
Automotive Technology 6A* (Automotive Electrical and Electronic Fundamentals)	4	
Automotive Technology 7*** (Automotive Heating and Air Conditioning Systems)	2½	
Automotive Technology 6B* (Automotive Electrical and Electronic Systems)	3	

SOPHOMORE YEAR	FALL	SPRING
Automotive Technology 8* (Automotive Air and Fuel Delivery)	4	
Automotive Technology 10* (Automotive Advanced Engine Performance)	3 units	
Automotive Technology 80*** (California Emissions Testing Technician Training Course)	7½	
Total	**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.

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 Technology (ATEC)

1 AUTOMOTIVE ENGINES 4 UNITS

Automotive engine fundamentals including; configurations and designs, operation, diagnostic tests; disassembly, inspection, thread repair, broken bolt removal, precision measurement, assembly, timing chains and belts, valve adjustments, cooling systems, introduction to engine machining,

proper use of shop related tools and equipment, and safety practices. Prerequisite: Automotive Technology 50 (may be taken concurrently) or equivalent. 2½ hours lecture, 5½ hours laboratory.

2 AUTOMOTIVE AUTOMATIC TRANSMISSIONS AND TRANSAXLES 3 UNITS

Automotive Automatic Transmission fundamentals including: Diagnosis, inspection, repair, and adjustment of automatic transmission/transaxle assemblies, torque converters, friction materials, hydraulics, gear trains, manual and electronic controls, driveshaft and axle operation service and repair. Prerequisite: Automotive Technology 50 (may be taken concurrently) or equivalent. (May not receive credit if Automotive Technology 64B has been completed.) 1½ hours lecture, 5 hours laboratory. Transfer: CSU.

3 AUTOMOTIVE MANUAL TRANSMISSIONS, AND TRANSAXLES 3 UNITS

Automotive Manual Transmission fundamentals including: Diagnosis, inspection, repair, and adjustment of automotive manual drive train and axle assemblies, final drives, clutches, viscous couplings, and transfercases. Two, four and all wheel drive assemblies, service and repair. Prerequisite: Automotive Technology 50 (may be taken concurrently) or equivalent. (May not receive credit if Automotive Technology 64A has been completed.) 1½ hours lecture, 5 hours laboratory. Transfer: CSU.

4 AUTOMOTIVE SUSPENSION AND STEERING 3 UNITS

Automotive Suspension and Steering fundamentals including: Diagnosis, inspection, repair, and adjustment of modern automotive steering, suspension, supplemental restraint, tire pressure monitoring, and alignment systems, theory of operation, 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. (May not receive credit if Automotive Technology 66 has been completed.) 1½ hours lecture, 5 hours laboratory. Transfer: CSU.

5 AUTOMOTIVE BRAKING SYSTEMS 3 UNITS

Automotive brake system including: Diagnosis, inspection, repair, and adjustment of modern automotive brakes, including anti-lock braking systems, traction control, and dynamic stability control systems, theory of operation, the study of basic laws of hydraulics, brake service equipment. Prerequisite: Automotive Technology 50 (may be taken concurrently) or equivalent. (May not receive credit if Automotive Technology 65 has been completed.) 1½ hours lecture, 5 hours laboratory. Transfer: CSU.

6A AUTOMOTIVE ELECTRICAL AND ELECTRONIC FUNDAMENTALS 4 UNITS

Automotive Electrical and Electronic fundamentals including: Ohm's Law, 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) or equivalent. (May not receive credit if Automotive Technology 60 has been completed.) 2½ hours lecture, 5½ hours laboratory. Transfer: CSU.

6B AUTOMOTIVE ELECTRICAL AND ELECTRONIC SYSTEMS 3 UNITS

Automotive body electronics, vehicle lighting, instrumentation, OEM audio, navigation, and communication systems, supplemental restraint systems, starter interlock systems, computer controlled charging systems. Prerequisite: Automotive Technology 6A or equivalent. 1½ hours lecture, 5 hours laboratory. Transfer: CSU.

7 AUTOMOTIVE HEATING AND AIR CONDITIONING SYSTEMS 2½ UNITS

Automotive Heating and Air Conditioning including: Diagnosis, testing, adjustment, and repair of air conditioning, cooling and heating systems, heat and energy, psychometrics, air flow, refrigerant recycling, equipment and controls. Prerequisite: Automotive Technology 50 (may be taken concurrently) or equivalent. Strongly recommended: Automotive Technology 6A or equivalent. (May not receive credit if Automotive Technology 62 has been completed.) 1½ hours lecture, 4 hours laboratory. Transfer: CSU.

8 AUTOMOTIVE AIR AND FUEL DELIVERY SYSTEMS 4 UNITS

Automotive Air and Fuel Delivery including: Introduction to the principles of automotive fuel induction systems, including the inspection, diagnosis, and evaluation of fuel storage, fuel pumps, carburetion, intake and exhaust systems, engine operation principles, computerized engine controls, and fuel injection systems. Prerequisite: Automotive Technology 6A or equivalent. (May not receive credit if Automotive Technology 61 has been completed.) 2½ hours lecture, 5½ hours laboratory. Transfer: CSU.

10 AUTOMOTIVE ADVANCED ENGINE PERFORMANCE 3 UNITS

Automotive Engine Management Systems including: Ignition systems, combustion process, emission control devices, diagnostic practices for drivability, emissions, on board diagnostic systems, vehicle systems integration, and new engine technology. Prerequisite: Automotive Technology 6A or equivalent. 1½ hours lecture, 5 hours laboratory. Transfer: CSU.

50 AUTOMOTIVE FUNDAMENTALS 3 UNITS

Automotive industry fundamentals including careers, safety; fasteners, hand tool identification and usage; vehicle systems, electrical fundamentals; service information access and use; automotive chemical and fluid applications; hazardous waste handling; general shop equipment usage, and vehicle servicing. 2½ hours lecture, 2½ hours laboratory. Transfer: CSU.

52 AUTOMOTIVE CAREER EXPLORATION 1 UNIT

Researching current career pathways related to the automotive industry including job opportunities, salary expectations, and training expectations. 1 hour.

63A INTRODUCTION TO ENGINES AND MACHINING PROCESSES 3 UNITS

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.

63B ENGINES, MACHINING AND ASSEMBLY PROCESSES 3 UNITS

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), or equivalent. 1½ hours lecture, 5 hours laboratory. Transfer: CSU.

80 CALIFORNIA EMISSIONS TESTING TECHNICIAN TRAINING COURSE 7½ UNITS

(May be repeated two times)

Motor vehicle emission inspection and maintenance: Includes the Bureau of Automotive Repair (BAR) requirements for: BAR Alternate A6, BAR Alternate A8, BAR Alternate L1, Basic Clean Air Car Course (BCACC), Advanced Clean Air Car Course (ACACC), Transition Course, and the current BAR Update. These courses are required for eligibility to take the State Licensing examination in addition to: 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. 6 hours lecture, 6 hours laboratory. Transfer: CSU.

90 HYBRID VEHICLE OPERATION AND SERVICING 2 UNITS

Study of hybrid vehicle architecture, operation, and servicing. Prerequisite: Automotive Technology 50 or equivalent. Highly recommended: Automotive Technology 2, 5, 6A, 8, 10 or equivalent. 24 total hours lecture, 32 total hours laboratory. Transfer CSU.

91 HYBRID DIAGNOSIS AND ALTERNATE FUELS TECHNOLOGY 2 UNITS

Hybrid vehicle diagnosis and repair processes, and alternate fuels application and operation. Prerequisite: Automotive Technology 9901 or Automotive Technology 90 (completed with a grade of C or higher). 24 total hours lecture, 32 total hours laboratory. Transfer: CSU.

Automotive Technology (BMW)

10 BMW TECHNICAL SYSTEMS 5 UNITS

Introduces and develops the use of BMW's technology including BMW's proprietary internet resource information systems and BMW's workshop equipment for diagnosis, coding, and programming. Additional content includes service, maintenance, and warranty programs. Prerequisite: Automotive Technology 50 (may be taken concurrently) or equivalent. 4 hours lecture, 4.6 hours laboratory. Transfer: CSU.

20 BMW BODY ELECTRONICS 5 UNITS

Covers basic electricity, DVOMs, breakout boxes and connectors, understanding diagnostics, BMW's drive away protection systems (EWS), electronic signals, batteries, starting and charging systems, bus communication systems, power modules, car access systems (CAS) and voltage supply systems. Prerequisite: BMW 10. Strongly recommended: Automotive Technology (ATEC) 6A. 3 hours lecture, 6 hours laboratory. Transfer: CSU.

30 BMW CHASSIS DYNAMICS 5 UNITS

Contains suspension geometry, BMW suspension systems, wheel alignment procedures, road force balancing, chassis dynamics, active steering systems, DSC dynamic drive systems, active all wheel drive systems, active roll stabilization, level control systems, electronic damper control, electronic parking brakes, and tire pressure monitoring systems. Prerequisite: BMW 10 and 20. Strongly Recommended: Automotive Technology (ATEC) 4 and 5. 3 hours lecture, 6 hours laboratory. Transfer: CSU.

40 BMW ENGINE ELECTRONICS AND ENGINE TECHNOLOGY 5 UNITS

Breaks down the current BMW engine management systems into power supply, fuel management, air management, ignition, emissions, and performance controls. Engine diagnosis and repair in VANOS, Valvetronic, differential intake air systems (DISA), engine and vehicle managements are reinforced. Prerequisite: BMW 10 and 20. Strongly recommended: Automotive Technology (ATEC) 8 and 63A. 3 hours lecture, 6 hours laboratory. Transfer: CSU.

Behavioral Science

DEGREE: AA—Behavioral Science (General)

This major is highly recommended for transfer students because it provides a basic foundation for subsequent specialization 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		
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 5 UNITS
Structure and function of the human body with emphasis on microscopic and gross anatomy. Microscopic examination of normal and pathological tissues, and dissection, supplemented by use of charts, models, and computer assisted instruction. Prerequisite: Biology 31 or equivalent course *(completed with a grade of "C" or higher).* Strongly recommended: Eligibility for English 1A. 3 hours lecture, 6 hours laboratory. Transfer: CSU; UC; CSU/GE: B2, B3; IGETC: 5B & Lab; AA/AS.

BIOLOGY

DEGREE:
AA—Biology
AA—Biology (Emphasis in Allied Health)

Biologist 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
Biology 6 (Principles of Plant Biology and Ecology)	4	
Chemistry 1A (General College Chemistry I)	5	
Chemistry 1B (General College Chemistry II)		5
Biology 4 (Principles of Animal Biology and Evolution)		4

SOPHOMORE YEAR	FALL	SPRING
Biology 2 (Principles of Cell/Molecular Biology and Genetics)	5	
Physics 2A (Introduction to Physics I)	4	
Physics 2B (Introduction to Physics II)		4
Total	**31**	

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
Chemistry 30A (Introductory and Applied Chemistry I)	4	
Anatomy 1 (General Human Anatomy)		5
Chemistry 30B (Introductory and Applied Chemistry II)		4

SOPHOMORE YEAR	FALL	SPRING
Microbiology 1 (Microbiology)		5
Physiology 1 (Human Physiology)		5
Total	**23**	

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

Biology (BIOL)

2 PRINCIPLES OF CELL/MOLECULAR BIOLOGY AND GENETICS 5 UNITS
Principles of the structure and function of biological molecules, viruses, prokaryotic, and eukaryotic cells with emphasis on homeostasis, cell reproduction and its controls, molecular and transmission genetics, control of gene expression and interactions, genetic control of pattern

formation in development, and cell metabolism. Prerequisite: Biology 4 or 6 and Chemistry 1A or equivalent and Mathematics 55 or equivalent *(all completed with a grade of "C" or higher).* Strongly recommended: eligibility for English 1A. Intended for biological sciences majors. 3 hours lecture, 6 hours laboratory. Transfer: CSU; CSU/GE: B2, B3; AA/AS.

2A PRINCIPLES OF BIOLOGY I 5 UNITS
Principles of the structure and function of biological molecules, viruses, prokaryotic, and eukaryotic cells with emphasis on homeostasis, cell reproduction and its controls, classical, molecular and transmission genetics, control of gene expression and interactions, cell metabolism and evolution. Course is for biology majors and pre-professional students, i.e., pre-medical, pre-dental, pre-physical therapy. Prerequisite: Chemistry 1A or equivalent *(completed with a grade of "C" or higher).* Strongly recommended: eligibility for English 1A. 3 hours lecture, 6 hours laboratory. Transfer: CSU; UC; CSU/GE: B2, B3; IGETC: Area 5B & Lab; AA/AS.

2B PRINCIPLES OF BIOLOGY II 5 UNITS
Biological process at the organismal level are studied with emphasis placed on the whole organism and higher levels of organization. Topics include systematics; structure, function, reproduction and development of invertebrates and vertebrates, representative protists, fungi, non-vascular and vascular plants; principles of ecology including conservation biology. Intended for biological sciences majors. Prerequisite: Biology 2A or equivalent *(completed with a grade of "C" or higher).* Strongly recommended: Eligibility for English 1A. 3 hours lecture, 6 hours laboratory. Transfer: CSU; UC; CSU/GE: B2, B3; IGETC: Area 5B & Lab; AA/AS.

4 PRINCIPLES OF ANIMAL BIOLOGY AND EVOLUTION 4 UNITS
Principles of the diversity, structure and function of heterotrophic organisms—animals, protists, and fungi with emphasis on homeostasis, development, phylogeny, and taxonomy. Principles of evolution, evolutionary history, and population genetics. Intended for biological sciences majors. Prerequisite: Mathematics 55 or equivalent *(completed with a grade of "C" or higher).* Strongly recommended: eligibility for English 1A. 3 hours lecture, 3 hours laboratory. Transfer: CSU; CSU/GE: B2, B3; AA/AS.

6 PRINCIPLES OF PLANT BIOLOGY AND ECOLOGY 4 UNITS
Principles of the diversity, structure and function of plants, autotrophic protists, and bacteria with emphasis on cell reproduction, alternation of generations, homeostasis, development, phylogeny, taxonomy, and systematics. Principles of ecology including conservation biology. Intended for biological sciences majors. Prerequisite: Mathematics 55 or equivalent *(completed with a grade of "C" or higher).* Strongly recommended: eligibility for English 1A. 3 hours lecture, 3 hours laboratory. Transfer: CSU; UC; CSU/GE: B2, B3; IGETC: 5B & Lab; AA/AS.

10 INTRODUCTION TO THE SCIENCE OF BIOLOGY 4 UNITS
Basic principles of biology, cell biology, and genetics, 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: Area 5B & Lab; AA/AS.

25 HUMAN HEREDITY AND EVOLUTION 3 UNITS
Fundamental concepts underlying heredity and evolution with a focus on the human species. Includes cell division, reproduction, molecular genetics, inheritance, population genetics, and evolution. Contemporary topics such as reproductive technologies, biotechnology, gene therapy, prenatal diagnosis, bioethics, and the genetics of cancer will be explored. 3 hours. Transfer: CSU; UC; CSU/GE: B2; IGETC: Area 5B; AA/AS.

31 INTRODUCTION TO COLLEGE BIOLOGY 4 UNITS
Basic principles of biology. Cell structure and function, cell division, cell metabolism, reproduction, genetics, taxonomy, origin of life, and evolution. Laboratory emphasis on developing various laboratory skills, using the metric system, collecting data, graphing, interpreting data, and preparing for and taking laboratory exams. Designed to prepare the necessary concepts and laboratory skills and experience that are needed to succeed in more advanced courses in biology. Geared towards Biology majors and Allied Health students. Strongly recommended: Mathematics 65 or 65A and eligibility for English 1A. 3 hours lecture, 3 hours laboratory. Transfer: CSU; UC; CSU/GE: B2, B3; IGETC: Area 5B & Lab; AA/AS.

50 ANATOMY AND PHYSIOLOGY 4 UNITS
Structure and function of the human body is studied. Emphasis on human anatomy and physiological principles at the cellular and systemic level. Designed primarily for majors in paramedic and medical assisting programs and pre-medical students who wish to explore the realm of anatomy and physiology. 3 hours lecture, 3 hours laboratory. Transfer: CSU; UC; CSU/GE: B2, B3; IGETC: Area 5B & Lab; AA/AS.

Biotechnology (BIOT)

20 CHEMISTRY FOR BIOTECHNOLOGY 4 UNITS
Covers the basic concepts of inorganic and organic chemistry, and biochemistry as they apply to the human body. Included are concepts such as properties of aqueous systems, equilibrium, acid-base reactions, proteins, nucleic acids and catabolic processes. Emphasis on safety and proper technique. Satisfies the requirements of the biotechnology program. Strongly recommended: Math 65 or 65B or 65L *(completed with grade of "C" or higher)* and eligibility for English 1A. 3 hours lecture, 3 hours laboratory. Transfer: CSU; CSU/GE: B1, B3; IGETC: Area 5A; AA/AS.

30 BASIC BIOTECHNOLOGY: INTRODUCTION TO CELL AND MOLECULAR BIOLOGY 4 UNITS
Basic biological concepts, for example, measuring volume and mass, preparing solutions, performing aseptic technique, using micropipettors, operating a spectrophotometer, microscope, pH meter, and electrophoresis apparatus. Also included are culture techniques and concepts of recombinant DNA. Strongly recommended: Mathematics 65 or 65B or 65L *(completed with grade of "C" or higher)* or appropriate skill level as demonstrated by the mathematics placement test, Computer Science 8 or equivalent and eligibility for English 1A. 3 hours lecture, 3 hours laboratory. Transfer: CSU; AA/AS.

40 BIOTECHNOLOGY LABORATORY SKILLS I 4 UNITS
Introduces students who are interested in biotechnology, biological sciences, and current industry workers to laboratory research methods and

concepts in biotechnology. Laboratory skills include use of measuring equipment, volume and mass measurements, proper use of micropipettors, pH meters, spectrophotometers, and microscopes. Additional laboratory skills include sterile techniques, solution and media preparation, solution dilution, aseptic technique, culture of microbial colonies, agarose and polyacrylamide electrophoresis, chromatography, DNA extraction, DNA restriction digest, PCR, and bacterial transformation. Strongly recommended: Mathematics 54 *(completed with grade of "C" or higher)* or appropriate skill level as demonstrated by the mathematics placement test, and eligibility for English 1A. 2 hours lecture, 5 hours laboratory. Transfer: CSU; CSU/GE: B2, B3; AA/AS.

50 BIOTECHNOLOGY LABORATORY SKILLS II 2 UNITS

Introduces students who are interested in biotechnology, biological sciences, and current industry workers to the advanced laboratory research methods and concepts in biotechnology. Laboratory skills include mastering the tools used in biotechnology such as isolation and quantification of DNA, amplifications with PCR, media preparation and dilution, aseptic technique, and cell culture. Strongly recommended: Mathematics 54 *(completed with grade of "C" or higher)* or appropriate skill level as demonstrated by the mathematics placement test, and eligibility for English 1A. 1 hour lecture, 3 hours laboratory. Transfer: CSU.

Environmental Science (ENSC)

10 HUMANS AND THE ENVIRONMENT 3 UNITS

Identification of problems created by humans' modification of their environment by focusing on ecological interactions involving the human species; investigating the life processes of organisms as they relate to specific environments. Environmental Science 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 humans' modification of their environment by focusing on ecological interactions involving the human species; investigating the life processes of organisms as they relate to specific environments. Environmental Science 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. Environmental Science 10, 11, and 12 may be combined for a maximum of 4 units. 3 hours. Transfer: CSU; UC; CSU/GE: E, AA/AS.

Microbiology (MICR)

1 MICROBIOLOGY 5 UNITS

Bacteria, fungi, protozoa, and viruses with an emphasis on their relationship to humans and disease. Cultivation, control, metabolism, body's defenses against disease, microbial genetics, laboratory tests, and contemporary infectious diseases. Methods used in the laboratory include staining, investigation, cultivation, identification of unknowns, and sensitivity testing. Prerequisite: Biology 31, and Chemistry 30A or Chemistry 1A (all completed with a grade of "C" or higher). Strongly recommended: Anatomy 1, eligibility for English 1A. 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. 3 hours lecture, 6 hours laboratory. Transfer: CSU; UC; CSU/GE: B2, B3; IGETC: Area 5B & Lab; AA/AS.

Business (BUS)

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

DEGREE:
AS—Accounting
AS—Business
AS-T—Business Administration
AS—Retail Management

CERTIFICATE OF ACHIEVEMENT:
Accounting Technician
Bookkeeping
Business—transfer
health care management
human resources assistant
Management
Marketing
Retail Management
Small Business Management

CERTIFICATE OF PROFICIENCY:
BUSINESS SKILLS
PROJECT MANAGEMENT
RETAILING

ACCOUNTING

ASSOCIATE IN SCIENCE DEGREE

The A.S. degree in Accounting is the highest level of the accounting program at Chabot. The degree requires the most time and intellectual commitment. A student should obtain the degree after completing the certificate in Accounting Technician. The degree prepares students for entry-level positions within accounts receivable and accounts payable departments, payroll units, income tax firms, and financial services organizations. Graduates of the program will be able to identify, analyze, summarize, communicate, record, and interpret business transactions and financial statements. Students will learn commercial and customized accounting software and spreadsheets and will apply the skills via intensive accounting applications. Students will study professional and ethical behavioral case studies for business, as well as attain oral and written communication skills that are necessary for success. Technical courses in accounting, taxes, and payroll with commercial software will allow graduates to seek advanced placement in accounting or information systems departments. With this accounting degree, jobs are available in just about every corporate business and non-profit organization.

FRESHMAN YEAR	FALL	SPRING
Business 1A* (Financial Accounting)	4	
Business 12 (Introduction to Business)	3	
Business 16 (Business Mathematics)	3	
Business 1B (Managerial Accounting)		4
Business 93 (QuickBooks)		2
Computer Application Systems 54A (Microsoft Excel I)		3

SOPHOMORE YEAR	FALL	SPRING
Business 10 (Business Law)	4	
Business 3 (Income Tax Accounting)	4	
Computer Application Systems 58 (Introduction to Microsoft Access)		3
Business 92 (Excel Spreadsheets for Accounting)		2
Option**		9-10
Total		**41-42**

GENERAL EDUCATION UNITS FOR A.S. DEGREE 19
For specific A.S. General Education courses refer to catalog section on A.S. Graduation Requirements.
General Education Courses (Areas A-E) 16
Accounting GE Requirement 3
Complete a minimum of 3 units
Business 14 (Business Communications)
Total minimum units required 60

** Business 7 (Accounting for Small Business) is strongly recommended before taking Business 1A.*

*** Select a minimum of 9 units from the following options:*
Business 2 (Intermediate Accounting) . . . . . 3 units
Business 4 (Cost Accounting) . . . . . 3 units
Business 8 (Payroll Accounting) . . . . . 3 units
Business 11 (Governmental and Nonprofit Accounting) . . . . 3 units
Business 43 (Personal Financial Planning) . . . . . 3 units
Business 44 (Introduction to Investments) . . . . . 3-4 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.

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 three areas of emphasis: General Business, Management, or Marketing. Only one Associate in Science Degree in Business may be earned.

This program intends to prepare students for new employment or promotions in the fields of management, supervision, marketing, finance, international business, or other areas of business administration. While all classes in the program transfer to four-year universities at least as electives, the program is not intended to prepare a student for transfer. If your main goal is transfer to a four-year school, consider completing the AA in Business Administration instead.

FRESHMAN YEAR	FALL	SPRING
Business 1A (Financial Accounting) or Business 7 (Accounting for Small Business)	3-4	
Business 10 (Business Law)	4	
Business 12 (Introduction to Business)	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 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 A.S. degree in Business may be earned.		9
Total		**34–35**

GENERAL EDUCATION UNITS FOR A.S. DEGREE 19
For specific A.S. General Education courses refer to catalog section on

A.S. Graduation Requirements.
General Education Courses (Areas A-E) 16
Business GE Requirement. 3
Complete a minimum of 3 units
Business 14 (Business Communications)

Total minimum units required 60

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

Emphasis 2 - Management
Business 21 (Human Resource Management). . . . . 3 units
Select a minimum of 6 units from the following options:
Business 26 (Small Business Management). . . . . 3 units
Business 42 (Green Business Practices) . . . . . 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 50G (Negotiating Skills). . . . . 1 unit
Business 50H (Practical Business Ethics) . . . . . 1 unit
Business 50J (Time Management Skills). . . . . 1 unit
Business 50K (Listening Skills). . . . . 1 unit
Business 50L (Careers in Business) . . . . . 1 unit
Business 50M (Workplace Diversity) . . . . . 1 unit
Business 50N (Dealing with Difficult People). . . . . 1 unit
Business 50P (Quality Customer Service). . . . . 1 unit
Business 95/Work Experience 95 (Work Experience) . . . . 1–3 units
Business 96/Work Experience 96 . . . . . 1 unit
(Work Experience Seminar)
Entrepreneurship 1 (Introduction to Entrepreneurship) . . . . 3 units
Psychology 1 (General Psychology). . . . . 3 units

Emphasis 3 - Marketing
Business 34 (Introduction to Advertising). . . . . 3 units
Select a minimum of 6 units from the following options:
Business 26 (Small Business Management) . . . . . 3 units
Business 31 (Professional Selling) . . . . . 3 units
Business 32 (Retail Store Management) . . . . . 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 50G (Negotiating Skills). . . . . 1 unit
Business 50H (Practical Business Ethics) . . . . . 1 unit
Business 50J (Time Management Skills) . . . . . 1 unit
Business 50K (Listening Skills) . . . . . 1 unit
Business 50L (Careers in Business) . . . . . 1 unit
Business 50M (Workplace Diversity) . . . . . 1 unit
Business 50N (Dealing with Difficult People). . . . . 1 unit
Business 50P (Quality Customer Service) . . . . . 1 unit
Business 95/Work Experience 95 (Work Experience) . . . . . 1-3 units
Business 96/Work Experience 96 . . . . . 1 unit
(Work Experience Seminar)
Computer Application Systems 82 . . . . . 3 units
(Designing Web Pages)
Entrepreneurship 1 (Introduction to Entrepreneurship) . . . . 3 units
Entrepreneurship 2 (Marketing for Entrepreneurs) 2 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 ADMINISTRATION

ASSOCIATE IN SCIENCE FOR TRANSFER

This curriculum provides an opportunity to achieve an Associate in Science Degree in Business Administration for Transfer to the California State University System (CSU) while completing the first and second year requirements for transfer to a four-year institution. A baccalaureate degree is recommended preparation for those considering professional careers in business. Completion of this curriculum will demonstrate commitment to the field and provide comprehensive preparation for upper-division work. This program is designed specifically for the California State University system. Lower Division requirements for the University of California system and private four-year colleges vary by transfer school. Please see a counselor for transfer requirements for other institutions.

Students who intend to transfer must meet all current transfer requirements including minimum GPA. Students are strongly advised to meet with a counselor to discuss transfer requirements and lower division major preparation that is needed for their intended transfer school.

For more information about Associate in Arts for Transfer and Associate in Science for Transfer degrees, see page 24.

UNITS

REQUIRED CORE *(18 units)*
Business 1A (Financial Accounting)* 4
Business 10 (Business Law). 4
Economics 1 (Principles of Microeconomics) 3
Business 1B (Managerial Accounting) 4
Economics 2 (Principles of Macroeconomics). 3

LIST A *(choose one—3-5 units)*
Mathematics 1 (Calculus I) or Mathematics 15
(Applied Calculus) 3-5
Mathematics 43 (Introduction to Probability
and Statistics) 4
Mathematics 33 (Finite Mathematics) 4

LIST B ***(choose two—6-8 units)***

Any course from List A not used above. 3-5
Business 12 (Introduction to Business) or
Business 14 (Business Communication) 3
Computer Application Systems 50 (Introduction
to Computer Application Systems) or
Computer Science 8 (Computer Literacy) 3
Total 27-31
Required Major Courses: 27-31 units
CSU GE ou IGETC (CSU): 37-39 units
(Possible Double-counting: 12 units)
CSU transfer Electives as needed to reach 60 CSU transferable units
TOTAL UNITS: 60 units

All courses in the major or area of emphasis are required to have a grade of "C" or higher, and a cumulative GPA of 2.0 must be achieved.

*Business 7 (Accounting for Small Business) is strongly recommended before taking Business 1A

RETAIL MANAGEMENT

ASSOCIATE IN SCIENCE DEGREE

This program should be completed after a student earns a certificate in Retail Management. All major class requirements are a part of that certificate. To earn this degree, a student will complete additional General Education classes and possible electives to earn a minimum total of 60 units. The program was developed in accordance with the Western Association of Food Chains' 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. Although the program was developed by the food retail industry, its completion will help students to acquire necessary knowledge and skills to manage retail stores of any kind.

FRESHMAN YEAR	FALL	SPRING
Business 1A (Financial Accounting) or Business 7 (Accounting for Small Business)	3–4	
Business 15 (Business English) or 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 Science 8 (Computer Literacy) or Computer Application Systems 50 (Introduction to Computer Application Systems)	3	
Total	**27-28**	

GENERAL EDUCATION UNITS FOR A.S. DEGREE 19
For specific A.S. General Education courses refer to catalog section on A.S. Graduation Requirements.
General Education Courses (Areas A-E) 16
Retail Management GE Requirement 3
Complete a minimum of 3 units
Business 14 (Business Communications)
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 ACHIEVEMENT

The Accounting Technician certificate targets individuals interested in obtaining entry-level accounting positions within accounts receivable and accounts payable departments, payroll units, income tax firms, or financial services organizations. Students learn the theory and practice of Generally Accepted Accounting Principles (GAAP), as well as get exposure to International Financial Reporting Standards (IFRS). Graduates of the program will have skills and knowledge of preparing payroll documents, individual and business tax forms, basics of written and oral business communication, and accounting and payroll software. With the certificate in Accounting Technician, jobs are available in just about every corporate business and non-profit organization.

CORE COURSES	FALL	SPRING
Business 1A* (Financial Accounting)	4	
Business 8 (Payroll Accounting)	3	
Business 14 (Business Communications)	3	
Computer Application Systems 54A (Microsoft Excel I)	3	
Business 1B (Managerial Accounting)	4	
Computer Application Systems 58 (Introduction to Microsoft Access)	3	
Business 3 (Income Tax Accounting)	4	
Business 92 (Excel Spreadsheets for Accounting)	2	
Business 93 (QuickBooks)	2	
Total	**28**	

**Business 7 (Accounting for Small Business) is strongly recommended before taking Business 1A.*

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.

BOOKKEEPING
CERTIFICATE OF ACHIEVEMENT

The Bookkeeping program targets individuals willing to quickly enter the workforce. You will be employed in entry-level positions as bookkeepers, payroll clerks, and income tax clerks working for small businesses, including small accounting/taxation firms. Graduates of the program will have skills and knowledge of double-entry bookkeeping, completing journals, ledgers, payroll documents, tax forms, and bank statement reconciliations. In addition, the graduates will become proficient in various computer applications (Access, Excel, and Word) and accounting and payroll software, including QuickBooks.

CORE COURSES	FALL	SPRING
Business 7 (Accounting for Small Business)	3	
Computer Application Systems 54A (Microsoft Excel I)	3	
Business 93 (QuickBooks)	2	
Business 1A (Financial Accounting)** or Business 3 (Income Tax Accounting)	4	
Business 8 (Payroll Accounting)	3	
Business 92 (Excel Spreadsheets for Accounting)	2	
Option	1	
Total	**18**	

**Select any one unit from the following options:*

Computer Application Systems 72D (Introduction to Microsoft Word)	1 unit
Computer Application Systems 72G (Introduction to Microsoft Access)	1 unit
Computer Application Systems 72J (10-Key)	1 unit

*** If Business 1A is completed before Business 7, the Business 7 requirement cannot be waived for this program.*

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—TRANSFER
CERTIFICATE OF ACHIEVEMENT

This certificate is developed to prepare students for further study of business. All courses within the certificate are required for the AA in Business Administration. Thus, this curriculum completes more than half of the undergraduate business major requirements for transfer to the CSU system

CORE COURSES	FALL	SPRING
Business 1A (Financial Accounting)*	4	
Business 12 (Introduction to Business) or Business 14 (Business Communications)	3	
Economics 1 (Principles of Microeconomics) or Economics 2 (Principles of Macroeconomics) or Computer Application Systems 50 (Introduction to Computer Application Systems) or Computer Science 8 (Computer Literacy)	3	
Business 1B (Managerial Accounting)	4	
Business 10 (Business Law)	4	
Total	**18**	

**Business 7 (Accounting for Small Business is strongly recommended before taking Business 1A.*

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.

HEALTH CARE MANAGEMENT
CERTIFICATE OF ACHIEVEMENT

Chabot's Health Care Management program is the only program of its type among community colleges in the Bay Area. The program is specifically designed for those currently working in any health care position that would like to advance into management. The curriculum provides an introduction to key management and human resource concepts; law, finance, and leadership courses focused on the health care organization; and the development of communication skills required for management success. All courses in this certificate are offered online.

CORE COURSES	FALL	SPRING
Business 22 (Introduction to Management)	3	
Business 71 (Health Care Law)	3	
Business 14 (Business Communications)	3	
Business 21 (Human Resource Management)	3	
Business 70 (Health Care Financial Management)	3	
Business 72 (Leadership of Health Care Organizations)	3	
Total	**18**	

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.

HUMAN RESOURCES ASSISTANT
CERTIFICATE OF ACHIEVEMENT

Chabot's Human Resources Assistant program is the only program of its type among community colleges in the Bay Area. The program is specifically designed and focused to prepare you for an exciting entry-level career in human resources for profit, non-profit, or government organizations.

You will perform paraprofessional administrative support work in a human resources area.

CORE COURSES	FALL	SPRING
Business 7 (Accounting for Small Business)	3	
Business 21 (Human Resource Management)	3	
Computer Application Systems 50 (Introduction to Computer Application Systems) or Computer Application Systems 54A (Microsoft Excel I) or Computer Science 8 (Computer Literacy)	3	
Computer Application Systems 58 (Introduction to Microsoft Access)	3	
Business 8 (Payroll Accounting)	3	
Business 14 (Business Communications)	3	
Business 22 (Introduction to Management)	3	
Total	**21**	

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 ACHIEVEMENT

Chabot's Business Management programs will provide you with the people skills and business knowledge to succeed and advance in for-profit or non-profit organizations. Graduates of the program have secured new positions or gained promotions to general managers, supervisors, assistant HR managers, office managers, retail store managers, sales managers, distribution managers, business owners, production supervisors, training coordinators, recruiters, buyers, and purchasing agents.

The certificate may be completed either on campus or fully online. All classes within the program will also apply toward an AS degree in Business, Marketing emphasis.

CORE COURSES	FALL	SPRING
Business 12 (Introduction to Business)	3	
Business 21 (Human Resource Management)	3	
Business 22 (Introduction to Management)	3	
Business 1A (Financial Accounting) or Business 7 (Accounting for Small Business)	3–4	
Option*	6	
Total	**18–19**	

** Select any six units from the following options:*

Business 10 (Business Law) or Business 27 (Law for Small Business)	3-4 units
Business 14 (Business Communications)	3 units
Business 16 (Business Mathematics)	3 units
Business 36 (Introduction to Marketing)	3 units
Business 40 (International Business)	3 units
Business 42 (Green Business Practices)	3 units
Business 50A (Skills for Supervisors)	1 unit
Business 50B (Business Etiquette and 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 50G (Negotiating Skills)	1 unit
Business 50H (Practical Business Ethics)	1 unit
Business 50J (Time Management Skills)	1 unit
Business 50K (Listening Skills)	1 unit
Business 50L (Careers in Business)	1 unit
Business 50M (Workplace Diversity)	1 unit
Business 50N (Dealing with Difficult People)	1 unit
Business 50P (Quality Customer Service)	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.

MARKETING

CERTIFICATE OF ACHIEVEMENT

Research indicates that about one-third of the labor force is now employed in marketing. Career opportunities in marketing are also expected to grow rapidly in the future. Marketing careers offer flexibility, mobility, and pay to match your ability.

Graduates of the program have become marketing managers, professional sales and customer service representatives, small business owners, buyers and merchandisers in the retail community. They are also responsible for buying and selling product offerings, planning promotions and advertising and public relations campaigns. The certificate may be completed either on campus or fully online. All classes within the program will also apply toward an AS degree in Business, Marketing emphasis.

CORE COURSES	FALL	SPRING
Business 12 (Introduction to Business)	3	
Business 14 (Business Communications)	3	
Business 36 (Introduction to Marketing)	3	
Business 1A (Financial Accounting) or Business 7 (Accounting for Small Business)	3–4	
Business 34 (Introduction to Advertising)	3	
Option*	6	
Total	**21–22**	

** Select a minimum of six units from the following*

Business 16 (Business Mathematics)	3 units
Business 22 (Introduction to Management)	3 units
Business 31 (Professional Selling)	3 units
Business 32 (Retail Store Management)	3 units

Business 40 (International Business) . . . . . 3 units
Business 42 (Green Business Practices) . . . . . 3 units
Business 50A (Skills for Supervisors) . . . . . 1 unit
Business 50B (Business Etiquette and 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 50G (Negotiating Skills) . . . . . 1 unit
Business 50H (Practical Business Ethics) . . . . . 1 unit
Business 50J (Time Management Skills) . . . . . 1 unit
Business 50K (Listening Skills) . . . . . 1 unit
Business 50L (Careers in Business) . . . . . 1 unit
Business 50M (Workplace Diversity) . . . . . 1 unit
Business 50N (Dealing with Difficult People) . . . . . 1 unit
Business 50P (Quality Customer Service) . . . . . 1 unit
Business 95/Work Experience 95 (Work Experience) . . . . . 1–3 units
Business 96/Work Experience 96 (Work Experience Seminar) . 1 unit
Entrepreneurship 1 (Introduction to Entrepreneurship) . . . . . 3 units
Entrepreneurship 20 (Marketing for Entrepreneurs) . . . . . 2 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.

RETAIL MANAGEMENT

CERTIFICATE OF ACHIEVEMENT

This certificate is developed in accordance with the Western Association of Food Chains' *WAFC 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.

Although the program was developed by the food retail industry, its completion will help students to acquire necessary knowledge and skills to manage retail stores of any kind.

CORE COURSES	FALL	SPRING
Business 15 (Business English) or English 70 (Report Writing)	3	
Business 16 (Business Mathematics)	3	
Business 21 (Human Resource Management)	3	
Business 28 (Human Relations in the Workplace)	3	
Business 36 (Introduction to Marketing)	3	
Business 1A (Financial Accounting) or Business 7 (Accounting for Small Business)	3–4	
Business 14 (Business Communications)	3	
Business 22 (Introduction to Management)	3	
Business 32 (Retail Store Management)	3	
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.

SMALL BUSINESS MANAGEMENT

CERTIFICATE OF ACHIEVEMENT

CORE COURSES	FALL	SPRING
Business 26 (Small Business Management)	3	
Business 27 (Law for Small Businesses) or Business 10 (Business Law)	3–4	
Business 36 (Introduction to Marketing)	3	
Business 7 (Accounting for Small Business)	3	
Business 93 (QuickBooks)	2	
Option*	4	
Total	**18–19**	

* Option

*Select a minimum of **four** 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 42 (Green Business Practices) . . . . . 3 units
Business 50A (Skill for Supervisors) . . . . . 1 unit
Business 50B (Business Etiquette and 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 50G (Negotiating Skills) . . . . . 1 unit
Business 50H (Practical Business Ethics) . . . . . 1 unit
Business 50J (Time Management Skills) . . . . . 1 unit
Business 50K (Listening Skills) . . . . . 1 unit
Business 50L (Careers in Business) . . . . . 1 unit
Business 50M (Workplace Diversity) . . . . . 1 unit
Business 50N (Dealing with Difficult People) . . . . . 1 unit
Business 50P (Quality Customer Service) . . . . . 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 SKILLS
CERTIFICATE OF PROFICIENCY

Employers today look for both technical competency in your major field and a set of business skills, or "soft skills" that enable you to succeed in the workplace. This short certificate program develops the business skills and perspective that are in demand by employers. All courses in this certificate are offered online.

CORE COURSES	FALL	SPRING
Business 14 (Business Communications), or Business 12 (Introduction to Business), or Entrepreneurship 1 (Introduction to Entrepreneurship)	3	
Select a minimum of **2** units from the following courses. .	2	
Business 50A (Skill for Supervisors)		
Business 50B (Business Etiquette and Professionalism)		
Business 50C (Interviewing for Success)		
Business 50D (Resumes and Job Application Letters)		
Business 50E (Business Email)		
Business 50F (Developing a Business Plan)		
Business 50G (Negotiating Skills)		
Business 50H (Practical Business Ethics)		
Business 50J (Time Management Skills)		
Business 50K (Listening Skills)		
Business 50L (Careers in Business)		
Business 50M (Workplace Diversity)		
Business 50N (Dealing with Difficult People)		
Business 50P (Quality Customer Service)		
Select a minimum of 5 units from the following courses	5	
Business 50A (Skill for Supervisors)		
Business 50B (Business Etiquette and Professionalism)		
Business 50C (Interviewing for Success)		
Business 50D (Resumes and Job Application Letters)		
Business 50E (Business Email)		
Business 50F (Developing a Business Plan)		
Business 50G (Negotiating Skills)		
Business 50H (Practical Business Ethics)		
Business 50J (Time Management Skills)		
Business 50K (Listening Skills)		
Business 50L (Careers in Business)		
Business 50M (Workplace Diversity)		
Business 50N (Dealing with Difficult People)		
Business 50P (Quality Customer Service)		
Total	**10**	

PROGRAM MANAGEMENT
CERTIFICATE OF PROFICIENCY

The Project Management program prepares students to find employment as project managers. The focus is on developing the skills to run projects from start to finish. Students learn both methodology and best practices. They will complete a review course to prepare for a certification examination.

CORE COURSES	FALL	SPRING
Business 88 (Introduction to Project Management)	3	
Business 89 (Project Planning, Scheduling, and Control)	3	
Business 87 (Project Management Certification Exam Preparation)	3	
Business 94 (MS Project Fundamentals)	1	
Total	**10**	

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 PROFICIENCY

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.

Business (BUS)

1A FINANCIAL ACCOUNTING **4 UNITS**

Explores financial accounting, its importance and how it is used by internal and external users as a decision-making tool. Covers accounting information systems; application of Generally Accepted Accounting Principles (GAAP) and International Financial Reporting Standards (IFRS) to value assets, liabilities, and equity; preparation, interpretation, and analysis of financial statements. Includes topics on cash flow statement, cash and accrual accounting concepts, merchandising operation, internal controls and ethics, reporting and accounting for receivables, payables, long-term assets and liabilities, inventory, depreciation, stockholders' equity, stocks and bonds. Strongly recommended: Business 7. 4 hours. Transfer: CSU; UC.

1B MANAGERIAL ACCOUNTING 4 UNITS
Examines how managers use accounting information in decision-making, planning, directing, operating, and controlling. Emphasis on cost terms and concepts, cost structure, cost behavior, cost-volume-profit analysis, profit planning, budgeting, budgetary controls, cost controls, accounting for manufacturing costs and ethics. Prerequisite: Business 1A *(completed with a grade of "C" or higher).* 4 hours. Transfer: CSU; UC.

2 INTERMEDIATE ACCOUNTING 3 UNITS
Application of Generally Accepted Accounting Principles (GAAP) and International Financial Reporting Standards (IFRS) to value assets, liabilities, and equity. Topics include analysis of cash and cash flows, receivables, inventory, plant assets, and related revenues and expenses. Prerequisite: Business 1A *(completed with a grade of "C" or higher).* 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.

7 ACCOUNTING FOR SMALL BUSINESS 3 UNITS
Business practices for a sole proprietorship. 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. (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. Strongly recommended: Business 1A or Business 7 or equivalent. 3 hours lecture. Transfer: CSU.

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. 4 hours. Transfer: CSU; UC. AA.

11 GOVERNMENTAL AND NONPROFIT ACCOUNTING 3 UNITS
A study of accounting, budgeting, auditing, fiscal procedures and financial records of governmental agencies such as state, county and municipal governments, as well as universities and colleges, hospitals, and certain nonprofit organizations. Strongly recommended: Business 1A or Business 7 or equivalent. 3 hours. Transfer: CSU.

12 INTRODUCTION TO BUSINESS 3 UNITS
Survey of the private enterprise system and basic business concepts, business economics, types of business ownership, ethics, globalization, and organizational functions (management, marketing, accounting, and finance). 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. 3 hours lecture, 1 hour laboratory. Transfer: CSU.

15 BUSINESS ENGLISH 3 UNITS
Study of the English language from a business perspective, including grammar, punctuation, spelling, business vocabulary, and basic business document preparation. 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 banking, simple interest, compound interest, installment sales, trade and cash discounts, markup percents, pricing, discounting notes and drafts, payroll, insurance, statistics, stocks, bonds, and mutual funds. 3 hours. Transfer: CSU; AA/AS.

17 BUSINESS ETHICS AND SOCIETY 3 UNITS
Survey of past and current behavior of business in American society. Examines the ethical, political, social issues confronting organizations and the organizations' response and obligations in responding to these issues. Discusses the responsibility of business towards customers, employees, stockholders, competitors, suppliers, government and the community at large. 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. 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. 3 hours. Transfer: CSU.

23 BUSINESS STRATEGY 3 UNITS
Principles and concepts of strategic management, including analysis, formulation, and implementation of business strategies. 3 hours. Transfer: CSU.

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 and their solutions. Strongly recommended: Business 1A or 7. 3 hours. Transfer: CSU.

27 LAW FOR SMALL BUSINESSES 3 UNITS
Legal issues for the small business, with emphasis on credit and collections, consumer rights, taxes, e-commerce, property, and administrative law, and business liability insurance. 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 communications, employee leadership and interactions among people—including cultural diversity and its impact—are explored. 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.

36 INTRODUCTION TO MARKETING 3 UNITS
Survey of marketing, including consumer behavior, company and environmental analysis, market segmentation, product development, pricing, promotion, and distribution. 3 hours. Transfer: CSU; CSU/GE: D7; AA/AS.

40 INTERNATIONAL BUSINESS 3 UNITS
Exploration of major factors involved in developing international trade. An overview of globalization, its impact on both Western and non-Western societies, theories of global trade, monetary environment, foreign market analysis, sociocultural forces, global ethics, global political and economic institutions, and international operations. Emphasis on current events in the global business environment. 3 hours. Transfer: CSU, AA/AS.

42 GREEN BUSINESS PRACTICES 3 UNITS
Practical projects and activities to increase profitability and efficiency by becoming more socially and environmentally responsible and responding to changing cultural, economic, competitive, and legal imperatives embedded within the "green" initiatives. 3 hours. Transfer: CSU.

43 PERSONAL FINANCIAL PLANNING 3 UNITS
Focuses on the time value of money, budgeting, use of credit, investing, taxation of personal income and assets, types of insurance and risk management, health care planning, retirement planning, and estate planning. 3 hours. Transfer: CSU.

44 INTRODUCTION TO INVESTMENTS 4 UNITS
Application of investment principles and guidelines, including the various types of investments and asset classes. Securities markets, individual portfolio planning, basic risk and return considerations and basic investment alternatives, fundamental analysis, and a general overview of technical analysis. The course covers an overview of the corporate bond market, government securities, valuation of fixed-income securities, and investment companies. Course topics include basic calculations of the present and future time value of money and basic financial ratios. Strongly recommended: eligibility for Mathematics 65. (May not receive credit if Business 81 has been completed.) 4 hours. Transfer: CSU.

45 GREEN AND SOCIALLY RESPONSIBLE INVESTING 3 UNITS
Investment principles of Green and Socially Responsible Investing. Analysis of markets and firms with a focus on environmentally and socially responsible businesses. Study of investment basics including risk and return considerations. Equities and Mutual Funds. Creation of a Green and/or Socially Responsible investment portfolio. 3 hours. Transfer: CSU.

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. Transfer: CSU.

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. 1 hour. Transfer: CSU.

50C INTERVIEWING FOR SUCCESS 1 UNIT
(May be repeated 3 times)
Principles and techniques of successful employment interviews: interview preparation, selling your qualifications, managing difficult qualifications, following up on the interview. 1 hour. Transfer: CSU.

50D RESUMES AND JOB APPLICATION LETTERS 1 UNIT
(May be repeated 3 times)
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. 1 hour. Transfer: CSU.

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. 1 hour. Transfer: CSU.

50F DEVELOPING A BUSINESS PLAN **1 UNIT**
(May be repeated 3 times)
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. 1 hour. Transfer: CSU.

50G NEGOTIATING SKILLS **1 UNIT**
Negotiation theory and skills development for business negotiations. Negotiating goals, strategies, and styles. 1 hour. Transfer: CSU.

50H PRACTICAL BUSINESS ETHICS **1 UNIT**
Examination of real-world ethical issues in the business environment. Includes exploration of personal ethics, review of contemporary business ethics issues, and development of approaches to resolving ethical dilemmas. 1 hour. Transfer: CSU.

50J TIME MANAGEMENT SKILLS **1 UNIT**
Practical tips and tools to manage time in academic and business-related situations. Setting short-term and long-term goals. Prioritization of goals and activities. Developing plans; organizing your workplace. Typical time wasters/time leaks, including procrastination, and ways of overcoming them. 1 hour. Transfer: CSU.

50K LISTENING SKILLS **1 UNIT**
Examination of listening styles and skill development for the business environment. Includes exploration of the benefits of listening, listening attitudes, and tips for improving listening. 1 hour. Transfer: CSU.

50L CAREERS IN BUSINESS **1 UNIT**
Exploration of the wide variety of potential careers in business, and the educational preparation appropriate for those careers. 1 hour. Transfer: CSU.

50M WORKPLACE DIVERSITY **1 UNIT**
Tips and tools to value and manage diversity in the workplace. Overview of theoretical and legal perspectives, dimensions of diversity, the impact of diversity on the workplace. Case studies to acknowledge differences and successfully build relationships with people of diverse backgrounds. 1 hour. Transfer: CSU.

50N DEALING WITH DIFFICULT PEOPLE **1 UNIT**
Techniques for resolving and preventing interpersonal conflict in the workplace. 1 hour. Transfer: CSU.

50P QUALITY CUSTOMER SERVICE **1 UNIT**
Techniques and tools to understand customer expectations, and to exceed those expectations. Includes analysis of customer needs, delivery of quality customer service, and dealing with challenging customers to win customer loyalty. 1 hour. Transfer: CSU.

70 HEALTH CARE FINANCIAL MANAGEMENT **3 UNITS**
Overview of finance and accounting in health care organizations, including the financial structure of both for profit and non-profit health care organizations. Particular emphasis on private and third party payment systems, reporting requirements, accounts receivable management, budgeting, and resource allocation. Strongly recommended: Business 7. 3 hours. Transfer: CSU.

71 HEALTH CARE LAW **3 UNITS**
Survey of the unique legal issues in health care, including HIPAA (patient privacy laws and regulations), Medicare and Medicaid reimbursement requirements, negligence/malpractice issues, advance directives, and employment law for medical staff and independent contractors. 3 hours. Transfer: CSU.

72 LEADERSHIP OF HEALTH CARE ORGANIZATIONS **3 UNITS**
Survey of key issues and effective management approaches in health care organizations, including organizational structure and governance, information technology, facilities and guest services, planning, marketing and strategy. 3 hours. Transfer: CSU.

87 PROJECT MANAGEMENT CERTIFICATION EXAM PREPARATION **3 UNITS**
The Project Management Institute (PMI) offers two credentials for project managers who want formal recognition of their project knowledge, in particular, the Project Management Professional (PMP) certification for experienced project managers and the Certified Associate Project Manager (CAPM) credential for entry-level project managers. These are well-recognized credentials for project managers, both those in the job market and those who want to work in a formal business project management environment. Both credentials require that applicants complete a comprehensive description of their experience and pass a certification exam. This course prepares students to complete the test application, study for, and pass, either the PMP or the CAPM examination, both based on the Project Management Body of Knowledge (PMBOK). Strongly recommended. Business 88 and 89. 3 hours. Transfer: CSU.

88 INTRODUCTION TO PROJECT MANAGEMENT **3 UNITS**
Project management is the ability to define work efforts in terms of time, budget, and resource needs essential for business planning. Covers the forms, tools, and processes to plan and manage these efforts both efficiently and effectively. Strongly recommended: Computer Application Systems 50, or Computer Science 8 AND Computer Application Systems 54A. 3 hours. Transfer: CSU.

89 PROJECT PLANNING, SCHEDULING AND CONTROL **3 UNITS**
A successful Project Manager relies on an effective management plan, which provides a baseline for monitoring progress, identifying variances, and taking timely action to mitigate the impact of problems. In this course, you learn how to create such a plan and implement it through to project completion and evaluation. It explores in greater detail the tools and techniques presented in Business 88. Strongly recommended: Business 88. 3 hours. Transfer: CSU.

92 EXCEL SPREADSHEETS FOR ACCOUNTING **2 UNITS**
(May be repeated 3 times)
Fundamentals of using electronic spreadsheets (Microsoft Excel) for accounting principles. Focus on solving accounting problems and completing accounting projects with Microsoft Excel. Strongly recommended:

Business 1A, Business 7, or equivalent AND Computer Application Systems 54A or Computer Application Systems 72E. 1 hour lecture, 2 hours laboratory. Transfer: CSU.

93 QUICKBOOKS 2 UNITS

(May be repeated 3 times)

QuickBooks introduces the concepts of bookkeeping/accounting using the theory of double-entry bookkeeping. Learn to use the QuickBooks software for a set up, service business and merchandising business. Setting up chart of accounts, accounts receivable, accounts payable, inventory, payroll and preparation and analysis of financial statements. Strongly recommended: Business 1A, Business 7 or equivalent. 1 hour lecture, 2 hours laboratory. Transfer: CSU.

94 MS PROJECT FUNDAMENTALS 1 UNIT

This hands-on course provides an overview of MS Project and its functionality. Conducted in a PC Lab environment, students will get an opportunity to work with the tool while receiving support from an experienced and knowledgeable instructor/coach. Students will have an opportunity to develop a project schedule from scratch, get comfortable with entering information into MS Project, then use the base schedule to understand and manage resource allocations, task assignments, and the project labor budget. MS Project also offers a depth of reporting functionality, and students will learn how to create and modify reports for their project communication needs. Strongly recommended: Business 88. 1 hour. Transfer: CSU.

95 WORK EXPERIENCE◊ 1–3 UNITS

(Work Experience courses may be repeated up to a total of 16 units.)

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

(Work Experience courses may be repeated up to a total of 16 units.)

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. Transfer: CSU.

◊Refer to page 14 for program requirements.

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.

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 1)	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 UNITS FOR A.S. DEGREE 19
For specific A.S. General Education courses refer to catalog section on A.S. Graduation Requirements.
General Education Courses (Areas A-E) 16
Chemistry GE Requirement 3
Complete a minimum of 3 units from Graduation Requirements Area B (Natural Science)

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 I 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.

1B GENERAL COLLEGE CHEMISTRY II 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.

5 QUANTITATIVE ANALYSIS 4 UNITS

Emphasizes the theory and practice of gravimetric, volumetric, potentiometric, spectrophotometric and chromatographic methods of analysis. Focuses on calibration, standardization, method development and validation procedures, sampling and data handling. Intended for chemistry, biochemistry, chemical biology, chemical engineering, pharmacy, biology, molecular biology and microbiology majors. Prerequisite: Chemistry 1B *(completed with a grade of "C" or higher)*. 2 hours lecture, 6 hours laboratory. Transfer: CSU; UC; CSU/GE B1, B3; IGETC: Area 5A & Lab.

8 SURVEY OF ORGANIC CHEMISTRY 6 UNITS

Fundamental aspects of the structure, physical properties, chemical reactivity and synthesis of organic compounds with emphasis on topics of interest to students in the biological sciences. Laboratory experiments cover basic organic laboratory techniques using reactions or processes found in the biological sciences. Chemistry 8 is a one-semester course in Organic Chemistry designed for students majoring in biological sciences. No credit will be given for Chemistry 8 if taken after Chemistry 12A/B. 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. 3 hours lecture, 3 hours laboratory. Transfer: CSU; UC; CSU/GE: B1, B3; IGETC: Area 5A & Lab; AA/AS.

12A ORGANIC CHEMISTRY I 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 chromagraphic 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" of higher).* 3 hours lecture, 6 hours laboratory. Transfer: CSU; UC; CSU/GE: B1, B3; IGETC: Area 5A & Lab.

12B ORGANIC CHEMISTRY II 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.

30A INTRODUCTORY AND APPLIED CHEMISTRY I 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.

30B INTRODUCTORY AND APPLIED CHEMISTRY II 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; AA/AS.

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 (CHIN)

1A BEGINNING CHINESE 5 UNITS

Introduction to the Chinese cultures of the world featuring the study and practice of the four language skills (listening, speaking, reading, and writing) of Mandarin Chinese. Following an immersion instruction format, the class is entirely taught in the target world language of the selected course. Strongly recommended: eligibility for English 1A. 5 hours lecture, 1 hour laboratory. Transfer: CSU; UC; CSU/GE: C2; AA/AS.

1B ELEMENTARY CHINESE 5 UNITS

Further study of the Chinese cultures of the world featuring the acquisition of the four language skills (listening, speaking, reading, and writing) of Mandarin Chinese begun in Chinese 1A. Following an immersion

instruction format, the class is entirely taught in the target world language of the selected course. Prerequisite: Chinese 1A (*completed with a grade of "C" or higher*). 5 hours lecture, 1 hour laboratory. Transfer: CSU; UC; CSU/GE: C2; IGETC: Area 6A; AA/AS. (Corresponds to 2 years high school study.)

50A CHINESE CONVERSATION AND CULTURE I 3 UNITS
Development of a basic understanding of spoken Mandarin through pronunciation, vocabulary, and applied grammar. Introduction to the everyday culture of Chinese-speaking people. Following an immersion instruction format, the class is entirely taught in the target world language of the selected course. 3 hours lecture, 1 hour laboratory. Transfer: CSU.

50B CHINESE CONVERSATION AND CULTURE II 3 UNITS
Development of an understanding of spoken Mandarin through pronunciation, vocabulary, and applied grammar. Further study of the life and culture of the Chinese-speaking people. Following an immersion instruction format, the class is entirely taught in the target world language of the selected course. Prerequisite: Chinese 50A (completed with a grade of "C" or higher). 3 hours lecture, 1 hour laboratory. Transfer: CSU.

50C CHINESE CONVERSATION AND CULTURE III 3 UNITS
Continuation of skills developed in Chinese 50B. Continues to develop an understanding and application of conversational Chinese. Pronunciation, vocabulary, sentences and applied grammar will be covered. Introduces the everyday life and traditional culture of Chinese-speaking people. Following an immersion instruction format, the class is entirely taught in the target world language of the selected course. Prerequisite: Chinese 50B *(completed with a grade of "C" or higher)*. 3 hours lecture, 1 hour laboratory. Transfer: CSU.

50D CHINESE CONVERSATION AND CULTURE IV 3 UNITS
Continuation of skills developed in Chinese 50C. Continues to develop and apply conversational Chinese skills. Pronunciation, vocabulary, sentences and applied grammar will be covered. Introduces the daily life and cultural traditions of Chinese-speaking people. Following an immersion instruction format, the class is entirely taught in the target world language of the selected course. Prerequisite: Chinese 50C *(completed with a grade of "C" or higher)*. 3 hours lecture, 1 hour laboratory. Transfer: CSU.

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.

Communication Studies (COMM)

DEGREE:
AA-T—Communication Studies
AA—Speech Communication

Communication Studies explores the complexity of human interaction. A degree in Communication Studies is a valuable asset for people in every industry. The National Association of Colleges and Employers, in a 2010 survey, ranked the top five desired candidate skills/qualities: (1) communication skills; (2) analytical skills; (3) teamwork skills; (4) technical skills; and (5) strong work ethic. Because Communication Studies combines theoretical understanding with practical skills development, either of our Associate in Arts degrees can serve as a strong foundation for any upper division coursework or graduate training program.

From critical listening and thinking skills to intercultural communication competency; from performing business presentations to oral interpretation of literature; from understanding group dynamics to developing persuasive strategies, Communication Studies offers courses with contextual learning experiences for greater success in work, relationships, and society. Our graduates go on to careers in human resources, public relations, advertising, journalism, law, hospitality and customer service, corporate training and politics. Many continue their education at the graduate and doctoral levels.

Successful completion of the transfer degree in Communication Studies guarantees the student acceptance to a local California State University to pursue a baccalaureate degree with Junior status.

COMMUNICATION STUDIES
ASSOCIATE IN ARTS FOR TRANSFER DEGREE

UNITS

REQUIRED CORE *(6 units)*
Communication Studies 1
(Fundamentals of Speech Communication) 3
Communication Studies 50
(Introduction to Communication Studies) 3

CATEGORY A *(choose two–6 units)*
Communication Studies 3
(Group Communication) 3
Communication Studies 10
(Interpersonal Communication) 3
Communication Studies 46
(Argumentation and Debate) 3

CATEGORY B ***(choose one–3 units)***

Any Category A course not used above 3
Communication Studies 2A
(Oral Interpretation of Literature I) 3
Communication Studies 11 (Intercultural Communication) 3
Communication Studies 20 (Persuasion and Communication). 3
Communication Studies 48 (Activities in Forensics). 3

CATEGORY C ***(choose one–3 units)***

Any Category A or B course not used above 3
Communication Studies 5 (Readers' Theater). 3
Communication Studies 6
(Introduction to Performance Studies) 3
Anthropology 3 (Social and Cultural Anthropology) 3
Mass Communications 41
(Introduction to Mass Communications) 3
Psychology 1 (General Psychology). 3
Sociology 1 (Principles of Sociology) 3
Theater Arts 12 (Film as Art and Communication) 3
Business 14 (Business Communications) 3
Total 18

Required Major Courses: 18 units
CSU GE or IGETC (CSU) requirements: 37-39 units
(Possible Double-counting: 18 units)
CSU transfer Electives as needed to reach 60 CSU transferable units
TOTAL UNITS: 60 units

***All courses in the major or area of emphasis are required to have a grade of "C" or higher, and a cumulative GPA of 2.0 must be achieved.**

SPEECH COMMUNICATION

ASSOCIATE IN ARTS DEGREE

FRESHMAN YEAR	FALL	SPRING
Communication Studies 1 (Fundamentals of Speech Communication)	3	
Communication Studies 10 (Interpersonal Communication)	3	
Communication Studies 2A (Oral Interpretation of Literature 1)	3	
Communication Studies 46 (Argumentation and Debate)	3	
SOPHOMORE YEAR	FALL	SPRING
Option*	3	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 six units from the following:***

Mass Communications 44 (Radio and Television Announcing/Performance) . . . . . 3 units
Communication Studies 2B (Oral Interpretation of Literature II) . . . . . 3 units
Communication Studies 3 (Group Communication) . . . . . 3 units
Communication Studies 5 (Readers' Theater). . . . . 3 units
Communication Studies 11 (Intercultural Communication) . 3 units
Communication Studies 30 (Elements of Speech). . . . . 3 units
Communication Studies 48 (Activities in Forensics) . . . . . 1-4 units
Theater Arts 25 (Fundamentals of Stage Speech) . . . . . 3 units

COMMUNICATION STUDIES (COMM)

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.

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: Communication Studies 2A. 3 hours. Transfer: CSU; UC; AA/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.

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 presentations, television, and/or radio. 3 hours. Transfer: CSU; UC; CSU/GE: C2; AA/AS.

6 INTRODUCTION TO PERFORMANCE STUDIES 3 UNITS
Exploration of historically influential activist performances and contemporary performance art/installation pieces. Development of an understanding of basic interdisciplinary performance theories from everyday life, ritual, and on-stage. Emphasis on creating and observing performances as tools for social critique. 3 hours. Transfer: CSU; CSU/GE: C2; IGETC: Area 3B; AA/AS.

10 INTERPERSONAL COMMUNICATION 3 UNITS
Exploration, discussion, and evaluation of the components of verbal and non-verbal communication processes. Strongly recommended: Eligibility for English 1A or 52A. 3 hours. Transfer: CSU; UC; CSU/GE: E; AA/AS.

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. Particular attention to values and meanings reflected in American culture, specifically the crisscrossing dynamics of race, ethnicity, gender, religion and class. 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; IGETC: Area 4G; AA/AS; AC.

20 PERSUASION AND COMMUNICATION 3 UNITS
Investigation and development of persuasive techniques, strategies, and theories throughout ancient and modern times. Topics will include rhetoric, propaganda, and formal/informal argumentation. Strongly recommended: English 1A and Communication Studies 1. 3 hours. Transfer: CSU; UC; CSU/GE: A1; IGETC: Area 1C; 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.

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.

50 INTRODUCTION TO COMMUNICATION STUDIES 3 UNITS
A survey of the discipline of Communication Studies with emphasis on multiple epistemological, theoretical, and methodological issues relevant to the systematic inquiry and pursuit of knowledge about human communication. This course explores basic history, assumptions, principles, processes, variables, methods, and specializations of human communication as an academic field of study. Strongly recommended: Eligibility for English 1A. Transfer: CSU; CSU/GE: D7; IGETC: Area 4G; AA/AS.

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–Software Specialist
AS–Administrative Assistant

CERTIFICATE OF ACHIEVEMENT:
Administrative Assistant
Office Technology
Software Specialist

CERTIFICATE OF PROFICIENCY:
Business Graphics
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.

SOFTWARE SPECIALIST
ASSOCIATE IN SCIENCE DEGREE

FRESHMAN YEAR	FALL	SPRING
Computer Application Systems 50 (Introduction to Computer Application Systems) or Computer Science 8 (Computer Literacy)	3	
Computer Application Systems 72A (Elementary Computer Keyboarding I)	1	
Computer Application Systems 54A (Microsoft Excel I)	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 Application Systems 82 (Designing Web Pages) or Computer Application Systems 84 (Designing Business Graphics)	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	**24–27**	

**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 UNITS FOR A.S. DEGREE 19
For specific A.S. General Education courses refer to catalog section on A.S. Graduation Requirements.
General Education Courses (Areas A-E) 16
Computer Application Systems GE Requirement . . . 3
Complete a minimum of 3 units from
Business 14 (Business Communications)
Total minimum units required 60

ADMINISTRATIVE ASSISTANT
ASSOCIATE IN SCIENCE DEGREE

FRESHMAN YEAR	FALL	SPRING
Computer Application Systems 50 (Introduction to Computer Application Systems) or Computer Science 8 (Computer Literacy)	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	
Business 7 (Accounting for Small Business) or Business 1A (Financial Accounting)	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	
Computer Application Systems 72K (Business English Skills I)	1	
Computer Application 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	
Computer Application Systems 72L (Business English Skills II)	1	
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	**28–31**	

GENERAL EDUCATION UNITS FOR A.S. DEGREE 19
For specific A.S. General Education courses refer to catalog section on A.S. Graduation Requirements.
General Education Courses (Areas A-E) 16
Computer Application Systems GE Requirement 3
Complete a minimum of 3 units from
Business 14 (Business Communications)
Total minimum units required 60

ADMINISTRATIVE ASSISTANT
CERTIFICATE OF ACHIEVEMENT

CORE COURSES	FALL	SPRING
Computer Application Systems 50 (Introduction to Computer Application Systems) or Computer Science 8 (Computer Literacy)	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	
Business 14 (Business Communications) 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:*
Business 7 (Accounting for Small Business) . . . . . 3 units
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 Application Systems 50 (Introduction to Computer Application Systems) or Computer Science 8 (Computer Literacy)	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	
Business 14 (Business Communications) 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 72J (Ten Key) . . . . . 1 unit
Computer Applications Systems 72P (Introduction to Windows) . . . . . 1 unit
Computer Applications Systems 72Q (Microsoft Outlook) . . . 1 unit
Computer Applications Systems 82 (Designing Web Pages) . . 3 units
Computer Applications Systems 88B (Microsoft Word II) . . . 3 units

SOFTWARE SPECIALIST
CERTIFICATE OF ACHIEVEMENT

CORE COURSES	FALL	SPRING
Business 14 (Business Communications)	3	
Computer Application Systems 50 (Introduction to Computer Application Systems) or Computer Science 8 (Computer Literacy)	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 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

BUSINESS GRAPHICS
CERTIFICATE OF PROFICIENCY

CORE COURSES	FALL	SPRING
Computer Application Systems 50 (Introduction to Computer Application Systems) or Computer Science 8 (Computer Literacy)	3	
Computer Application Systems 84 (Designing Business Graphics)	3	
Computer Application Systems 72D (Introduction of Microsoft Word)	1	
Computer Application Systems 72F (Introduction to Microsoft PowerPoint)	1	
Computer Application Systems 82 (Designing Web Pages)	3	
Digital Media 31A (Photoshop I)	1½	
Digital Media 31B (Photoshop II)	1½	

Digital Media 32A (Illustrator I) 1½
Digital Media 32B (Illustrator II) 1½
Total 17

OFFICE TECHNOLOGY

CERTIFICATE OF PROFICIENCY

CORE COURSES	FALL	SPRING
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:		
Computer Application Systems 72A; 72B; 72C; 72F; 72G; 72J; 72P; 72Q	1	
Total	**10**	

Computer Application Systems (CAS)

50 INTRODUCTION TO COMPUTER APPLICATION SYSTEMS 3 UNITS

Introduction to computer applications systems as it relates to business and home use. Course introduces software topics in Microsoft Windows, Microsoft Office, internet, World Wide Web, electronic mail, file management, data communications and an introduction to basic computer programming. Hardware topics include PC system components and troubleshooting issues. Other topics include computer-based careers and trends, electronic computing issues, terminology, electronic communication skills, ethics, security, and netiquette in today's business computing environment. 3 hours lecture, 1 hour laboratory. Transfer: CSU; UC; CSU/GE: D7.

54A MICROSOFT EXCEL I 3 UNITS

Introduction to spreadsheet techniques using Microsoft Excel to create a variety of spreadsheets with emphasis on business application programs. Calculate data using functions and formulas. Create charts, link and consolidate worksheets. This course prepares students to take the Microsoft Office Specialists (MOS) core level certification. Strongly recommended: Computer Application Systems 50, 72E, or Computer Science 8. 2 hours lecture, 2 hours laboratory. Transfer: CSU.

54B MICROSOFT EXCEL II 3 UNITS

Advanced spreadsheet applications using Excel to create a variety of advanced spreadsheets with emphasis on business application programs. Prepares students to take the Microsoft Office Specialists (MOS) expert level certification. Strongly recommended: Computer Application Systems 50 or 54A. 2 hours lecture, 2 hours laboratory. Transfer: CSU.

55 MICROSOFT OFFICE INTEGRATION 3 UNITS

(May be repeated 2 times)

Develop a beginning/intermediate level of skills using the Microsoft Office features of Word, Excel, Access, and PowerPoint to design, produce and integrate: documents. worksheets, databases, and professional presentations. Course emphasizes workplace communications and information processing skills and standards. Students will complete integrated projects that apply technology to business tasks and represent what is required in an actual business environment using the components of Microsoft Office. Prerequisites: Computer Application Systems 50 or Computer Application Systems 54A and 88A, or Computer Application Systems 72D, 72E, 72F and 72G. (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 Microsoft Access, a computer program that is used to organize, store, and retrieve information. Understanding of data, file and database concepts using Microsoft Access for Windows with emphasis on business applications. Identify and evaluate client needs/requirements and translate those needs into a working database application model. Integrate Access data with other Microsoft applications, such as Word and Excel. Strongly recommended: Computer Application Systems 50 or 72G. 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 presentations. 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 3 times)
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 3 times)
Self-paced basic introduction to the computer keyboard skill for developing correct keyboarding skills. 3 hours laboratory. Transfer: CSU.

72C COMPUTER KEYBOARDING III **1 UNIT**
(May be repeated 3 times)
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 3 times)
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 3 times)
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 3 times)
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 3 times)
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.

72J 10-KEY **1 UNIT**
(May be repeated 3 times)
Self-paced ten-key course using the computer numeric keypad. 3 hours laboratory. Transfer: CSU.

72K BUSINESS ENGLISH SKILLS I **1 UNIT**
(May be repeated 2 times)
Self-paced introductory course focusing on English fundamentals as applied to business documents. 3 hours laboratory. Transfer: CSU.

72L BUSINESS ENGLISH SKILLS II **1 UNIT**
(May be repeated 2 times)
Continuation of self-paced business English course focusing on English fundamentals as applied to business documents. Strongly recommended: Computer Application Systems 72K. 3 hours laboratory. Transfer: CSU.

72M INTRODUCTION TO COMPUTING **1 UNIT**
(May be repeated 3 times)
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 3 times)
Basic introduction to learning the internet through the use of videos, animations, and hands-on activities. 3 hours laboratory. Transfer: CSU.

72P INTRODUCTION TO WINDOWS **1 UNIT**
Self-paced course focusing on the fundamentals of the latest version of Microsoft operating system; working with Windows programs; customizing the Desktop; and managing files and folders. Previous computer and keyboarding skills are highly desirable. 3 hours laboratory. Transfer: CSU.

72Q MICROSOFT TO OUTLOOK **1 UNIT**
(May be repeated 2 times)
Learn the basics of using Microsoft Outlook. Use Outlook email features to send, receive, reply to and forward email messages. Find out how to format, track messages and create auto-signatures. Learn to utilize the office clipboard, attach files to messages and open and save attached files. Discover how to use the calendar feature, manage contacts, and work with tasks. 3 hours laboratory. Transfer: CSU.

82 DESIGNING WEB PAGES **3 UNITS**
Design and enhance web pages using creative website design principles. Includes basic HTML formatting, use of Microsoft Office Suite applications, databases and style sheets in web page design. Includes internet search techniques, browsers, META tags, hyperlinks, inserting photos, graphics, and using shared borders, themes and tables. Students create a personal or business related website and learn to publish a website on the World Wide Web. Strongly recommended: Computer Application Systems 50 or Computer Science 8. 2 hours lecture, 2 hours laboratory. Transfer: CSU.

84 DESIGNING BUSINESS GRAPHICS **3 UNITS**
Design professional and customized business graphics for personal use or a small business. Create publications such as newsletters, brochures, calendars, logos, business cards, letterheads, envelopes, invoices, and mailing labels. Generate quality graphics to print at home, for a small business, or for commercial printer. Create business graphics to create a simple business web site. Strongly recommended: Computer Application Systems 50 or Computer Science 8. 2 hours lecture, 2 hours laboratory. Transfer: CSU.

88A MICROSOFT WORD I **3 UNITS**
Basic word processing using Microsoft Word to produce business letters, memos, reports, tables, and other documents. Includes Microsoft Office 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.) 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, long documents, table of contents; advanced document formatting, linking documents to other Microsoft Office applications, working with advanced graphic functions, saving documents as web pages, inserting hyperlinks and macros, creating indexes and bookmarks. Prepares students to take the Microsoft Office Specialist (MOS) expert level certification. Strongly recommended: Computer Application Systems 88A. 2 hours laboratory. Transfer: CSU.

92A NETWORKING FOR HOME AND SMALL BUSINESSES **3 UNITS**
First of four courses in the Cisco® Networking Academy® CCNA® Discovery program, providing career-oriented, IT-skills instruction. CCNA Discovery prepares the student for the Cisco Certified Entry Network Technician (CCENT™) and Cisco Certified Network Associate (CCNA™) exams. Students will plan, install, verify and troubleshoot a personal computer and home/small business network, configure Internet applications and services, and recognize and mitigate security threats. 2 hours lecture, 2 hours laboratory. Transfer: CSU.

92B NETWORKING FOR A SMALL—TO—MEDIUM BUSINESS OR ISP **3 UNITS**
Second of four courses in the Cisco® Networking Academy® CCNA® Discovery program, providing career-oriented, IT-skills instruction. CCNA Discovery prepares the student for the Cisco Certified Entry Network Technician (CCENT™) and Cisco Certified Network Associate (CCNA™) exams. Students will install, configure, and troubleshoot Cisco IOS® devices, plan a wired network infrastructure, implement basic WAN connectivity, demonstrate proper disaster recovery procedures, perform server backups, monitor network performance, isolate failures, and troubleshoot problems using logical application of the OSI model and the process of encapsulation. Prerequisite: Computer Application Systems 92A. 2 hours lecture, 2 hours laboratory. Transfer: CSU.

92C ROUTING AND SWITCHING IN THE ENTERPRISE **3 UNITS**
Third of four courses in the Cisco® Networking Academy® CCNA® Discovery program, providing career-oriented, IT-skills instruction. CCNA Discovery prepares the student for the Cisco Certified Entry Network Technician (CCENT™) and Cisco Certified Network Associate (CCNA™) exams. Students will implement, configure, and troubleshoot an enterprise LAN network utilizing VLANs, access control lists, WAN links and advanced routing protocols. Prerequisite: Computer Application Systems 92B. 2 hours lecture, 2 hours laboratory. Transfer: CSU.

92D DESIGNING AND SUPPORTING COMPUTER NETWORKS **3 UNITS**
Fourth of four courses in the Cisco® Networking Academy® CCNA® Discovery program, providing career-oriented, IT-skills instruction. CCNA Discovery prepares the student for the Cisco Certified Entry Network Technician (CCENT™) and Cisco Certified Network Associate (CCNA™) exams. Students will implement, configure, and troubleshoot an enterprise LAN network utilizing VLANs, access control lists, WAN links and advanced routing protocols. Prerequisite: Computer Application Systems 92C. 2 hours lecture, 2 hours laboratory. Transfer: CSU.

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 UNIT**
(May be repeated 3 times)
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 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 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)	4	
Computer Science 19A (Java Programming I)	4	

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

Computer Science 18A (The C Programming Language) 2 units
Computer Science 20 (Introduction to Data Structures) 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 29–31

GENERAL EDUCATION UNITS FOR THE A.A. DEGREE 25
For specific General Education courses refer to catalog section on Graduation requirements.

GENERAL EDUCATION UNITS FOR A.S. DEGREE 19
For specific A.S. General Education courses refer to catalog section on A.S. Graduation Requirements.
General Education Courses (Areas A-E) 16
Computer Science GE Requirement 3

Complete a minimum of 3 units from
Mathematics 1 (Calculus I)
Mathematics 2 (Calculus II)
Mathematics 3 (Multivariable Calculus)
Mathematics 4 (Elementary Differential Equations)
Mathematics 6 (Elementary Linear Algebra)
Mathematics 8 (Discrete Mathematics)
Mathematics 12 (Introduction to Logic)
Mathematics 20 (Pre-Calculus Mathematics)
Mathematics 31 (College Algebra)
Mathematics 33 (Finite Mathematics)
Communication Studies 1 (Fundamentals of Speech Communication)
Communication Studies 10 (Interpersonal Communication)
Communication Studies 11 (Intercultural Communication)
Chemistry 1A (General College Chemistry I)
Chemistry 10 (Introduction to Chemistry)
Physics 2A (Introduction to Physics I)
Physics 4A (General Physics I)
Physics 4B (General Physics II)
Physics 4C (General Physics III)
Physics 5 (Modern Physics)
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 breadth-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) or Computer Science 19A (Object-Oriented Programming Methods in Java)	4	
Computer Science 20 (Introduction to Data Structures)	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 UNITS FOR THE A.A. DEGREE 25
For specific General Education courses refer to catalog section on Graduation requirements.

GENERAL EDUCATION UNITS FOR A.S. DEGREE 19
For specific A.S. General Education courses refer to catalog section on A.S. Graduation Requirements.
General Education Courses (Areas A-E) 16
Computer Science GE Requirement. 3
Complete a minimum of 3 units from
Mathematics 3 (Multivariable Calculus)
Mathematics 4 (Elementary Differential Equations)
Mathematics 6 (Elementary Linear Algebra)
Mathematics 8 (Discrete Mathematics)
Mathematics 12 (Introduction to Logic)
Communication Studies 1 (Fundamentals of Speech Communication)
Communication Studies 10 (Interpersonal Communication)
Communication Studies 11 (Intercultural Communication)
Chemistry 1A (General College Chemistry I)
Chemistry 10 (Introduction to Chemistry)
Physics 2A (Introduction to Physics I)
Physics 4A (General Physics I)
Physics 4B (General Physics II)
Physics 4C (General Physics III)
Physics 5 (Modern Physics)
Physics 11 (Descriptive Physics)
Total minimum units required 60

*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)

5 TECHNOLOGY FOR ACADEMIC SUCCESS 1 UNIT
An introduction to computer-based tools and skills supporting academic success: document management, word processing, multimedia presentations, online research, time and information management, communication tools, menu-driven software and help systems. More broadly, how to approach technology as a way to improve the academic experience. 1 hour lecture, 1 hour laboratory. Transfer: CSU; AA/AS.

6 COMPUTER PROGRAMMING FOR VISUAL THINKERS 3 UNITS
Students work within 2D and 3D virtual worlds to create interactive games, stories and animations. Programs are assembled using a drag-and-drop interface to bypass the abstract syntax rules required by conventional languages. Topics covered include variables, data types, expressions, input/output, logic and control flow, loops, functions, parameters, arrays, recursion, flowcharts, graphics, animation, 3D modeling, and computer game design. 2 hours lecture, 2 hours laboratory. Transfer: CSU; AA/AS.

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. 3 hours lecture. 1 hour laboratory. Transfer: CSU; UC.

8 COMPUTER LITERACY 3 UNITS
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. 2 hours lecture, 2 hours laboratory. Transfer: CSU; UC; AA/AS.

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 *(completed with a grade of "C" or higher).* 3 hours lecture, 3 hours laboratory. Transfer: CSU; UC; AA/AS.

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. Prerequisite: Mathematics 55, 55B, 55L, 54, or 54L *(completed with a grade of "C" or higher)* or an appropriate skill level demonstrated through the Mathematics Assessment process, or Computer Science 7 *(completed with a grade of "C" or higher).* Strongly recommended: Eligibility for English 1A. 3 hours lecture, 3 hours laboratory. Transfer: CSU; UC; AA/AS.

15 OBJECT-ORIENTED PROGRAMMING METHODS 4 UNITS
Object-oriented programming methods employed to design, program, test and document intermediate level problems. Includes strings and string objects, multidimensional arrays, pointers, dynamic allocation, classes, overloaded functions, inheritance and polymorphism, introduction to linked lists. Designed to satisfy Association for Computing Machinery

(ACM) guidelines for CS I as required for computer Science and related transfer 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 THE C PROGRAMMING LANGUAGE 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. 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 *(completed with a grade of "C" or higher).* Strongly recommended: Eligibility for English 1A and Computer Science 41 or Computer Science 15 or equivalents *(either may be taken concurrently)*. 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 multidimensional 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).* 3 hours lecture, 3 hours laboratory. Transfer: CSU; UC; AA/AS.

20 INTRODUCTION TO DATA STRUCTURES 4 UNITS

Design and implementation of larger projects using object-oriented software engineering principles. Emphasis on definition and use of data structures. Includes specification of Abstract Data Types, recursion, dynamic memory allocation, stacks, linked lists, priority queues, graphs, binary trees, heaps, sorting and searching, algorithm analysis, hashing techniques, random access files. Prerequisite: Computer Science 15 *(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.

41 INTRODUCTION TO UNIX 2 UNITS

UNIX operating system capabilities, introduction to Perl, elementary batch programming and compilation of C. 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).* 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.

Construction Electricians Training Program (CELT)

31 BASIC STATE ELECTRICIAN CERTIFICATION PREPARATION 3½ UNITS

(May be repeated 3 times)

Develop math skills necessary for the success of electricians in the field. A chapter-by-chapter examination of the National Electrical Code to gain a deep understanding of the purpose and structure of the NEC. Introduction to OSHA Policy and Procedures. Prevention and initial care for breathing and cardiac emergencies along with basic first aid for both adults and children. 53 hours lecture, 27 hours laboratory.

32 STATE ELECTRICIAN CERTIFICATION PREPARATION—MODULE A 2 UNITS

(May be repeated 3 times)

Develop math skills necessary for the success of electricians in the field. Explore laws and theorems that are the bases for electrical theory, including the components and working of series and parallel circuits. A chapter-by-chapter examination of the National Electrical Code to gain a deep understanding of the purpose and structure of the NEC. Use the NEC to calculate conductors for various load and fill situations. Gain insight into equipment and wiring methods for special occupancies including hazardous locations. May not receive credit if Construction Electrician Training Program 31 has been completed. 27 hours lecture, 27 hours laboratory.

33 OSHA 10 CONSTRUCTION TRAINING—MODULE B 1 UNIT

(May be repeated 3 times)

Introduction to OSHA Policy and Procedures, employer and employee responsibilities, use of texts CFR 1910 and 1926, identification of jobsite hazards, removal, remediation or protection from hazards, safe work

practices and personal protective equipment for various construction site hazards. May not receive credit if Construction Electrician Training Program 31 has been completed. 18 hours lecture.

34 FIRST AID AND CPR—MODULE C **½ UNIT**

(May be repeated 3 times)

Prevention and initial care for breathing and cardiac emergencies along with basic first aid for both adults and children. May not receive credit if Construction Electrician Training Program 31 has been completed. 8 hours lecture, consisting of two four-hour modules.

36 ADVANCED STATE ELECTRICIAN CERTIFICATION PREPARATION **3½ UNITS**

(May be repeated 3 times)

Introduction to trainee program and regulations covering Electrician Trainee requirements. Overview of electrical tools, materials and meters. Introduction to OSHA Policy and Procedures including employer and employee responsibilities, use of texts CFR 1910 and 1926, identification of job-site hazards, removal, remediation or protection from hazards, safe work practices and personal protective equipment for various construction site hazards. Prevention and initial care for breathing and cardiac emergencies along with basic first aid for both adults and children. This class is recommended for electricians with a minimum of 8,000 hours of on-the-job experience who have not passed the California electrician certification test. 53 hours lecture, 27 hours laboratory.

37 ADVANCED STATE ELECTRICIAN CERTIFICATION PREPARATION—MODULE A **3 UNITS**

(May be repeated 3 times)

Introduction to trainee program and regulations covering Electrician Trainee requirements. Overview of electrical tools, materials and meters. Fundamentals of electricity including: units of electricity, sources and types of electricity, magnetism and electricity, and properties of conductors, insulators and semiconductors. Common circuit devices, i.e., resistors, circuit protection devices, relays, motors. Use of Ohm's Law to solve parallel, series and series-parallel DC circuit calculations. Introduction to Kirchhoff's Law. This class is recommended for electricians with a minimum of 8,000 hours of on-the-job experience who have not passed the California electrician certification test. May not receive credit if Construction Electrician Training Program 36 has been completed. 27 hours lecture, 27 hours laboratory.

38 ADVANCED STATE ELECTRICIAN CERTIFICATION PREPARATION—MODULE B **1 UNIT**

(May be repeated 3 times)

Introduction to OSHA Policy and Procedures, employer and employee responsibilities, use of texts CFR 1910 and 1926, identification of job-site hazards, removal, remediation or protection from hazards, safe work practices and personal protective equipment for various construction site hazards. This class is recommended for electricians with a minimum of 8,000 hours of on-the-job experience who have not passed the California electrician certification test. May not receive credit if Construction Electrician Training Program 36 has been completed. 18 hours lecture.

39 ADVANCED STATE ELECTRICIAN CERTIFICATION PREPARATION—MODULE C **½ UNIT**

(May be repeated 3 times)

Prevention and initial care for breathing and cardiac emergencies along with basic first aid for both adults and children. This class is recommended for electricians with a minimum of 8,000 hours of on-the-job experience who have not passed the California electrician certification test. May not receive credit if Construction Electrician Training Program 36 has been completed. 8 hours lecture consisting of two four-hour modules.

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. 1–12 hours. Transfer: CSU.

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.

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 20

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 go to the website: http://www.chabotcollege.edu/dhyg/.

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) Communication Studies 1, Psychology 1, Sociology 1 or equivalents *(completed with a grade of "C" or higher)* by June 30th of the year of application.

DENTAL HYGIENE

ASSOCIATE IN ARTS DEGREE

FRESHMAN YEAR	FALL	SPRING
Dental Hygiene 50A (Dental Hygiene Orientation I)	½	
Dental Hygiene 60 (Dental Anatomy and Morphology)		1½
Dental Hygiene 60S (Dental Anatomy and Morphology Independent Study)	½	
Dental Hygiene 61 (Head and Neck Anatomy)	2	
Dental Hygiene 61S (Head and Neck Anatomy Independent Study)	1	
Dental Hygiene 69A (Oral Health Education)	2	
Dental Hygiene 71A (Pre-Clinical Dental Hygiene)	4	
Dental Hygiene 71S ((Pre-Clinical Dental Hygiene Independent Study)	1	
Dental Hygiene 74A (Dental Radiography I)	3	
Health 60* (Responding to Emergencies)	1	
Health 70B** (Basic Life Support for Health Care Providers)		0.2
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	
Nutrition 1***(The Science of Nutrition)	3	

SOPHOMORE YEAR	FALL	SPRING
Dental Hygiene 50B (Dental Hygiene Orientation II)	½	
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 50C (Dental Hygiene Orientation III)	½	
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		**60.2**

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*

****Completion of Nutrition 1 is strongly recommended prior to entrance into the Dental Hygiene Program.*

*****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: Dental Hygiene 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: Communication Studies 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 1 ½ 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.

60S DENTAL ANATOMY AND MORPHOLOGY INDEPENDENT STUDY 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: Dental Hygiene 60. 1½ hours.

61 HEAD AND NECK ANATOMY 2 UNITS
Anatomy 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.

61S HEAD AND NECK ANATOMY INDEPENDENT STUDY 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 Dental Hygiene 61. 3 hours.

68 EXTENDED CLINICAL EXPERIENCE ½ UNIT
Clinical dental hygiene practice and screening for the California State Board Examination. Designed for Chabot College Dental Hygiene Program graduates who are not yet licensed in the State of California. Includes practice and screening of patients. Prerequisite: graduate of the Dental Hygiene Program. 9-27 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.

71C ADVANCED PERIODONTAL PROCEDURES ½ UNIT
Laboratory and lecture experiences in advanced instrumentation techniques; workshops on recognizing patients' medical needs and their relationship to dental treatment. Prerequisite: Dental Hygiene 71B *(completed with a grade of "C" or higher)*. 6 total hours lecture, 6 total hours laboratory.

71S PRE-CLINICAL DENTAL HYGIENE INDEPENDENT STUDY 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: Dental Hygiene 71A. 3 hours.

73 EDUCATIONAL THEORIES IN DENTAL HYGIENE CARE 1 ½ 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: Current enrollment in the Dental Hygiene Program. 2 hours lecture, 3 hours laboratory.

74B DENTAL RADIOGRAPHY II 1 ½ UNITS
Continuation of clinical experience in exposing films, group and individualized criticism of mounted films; principles of Panographic and Digital 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.

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.

Digital Media (DIGM)

CERTIFICATE: Digital Media

DIGITAL MEDIA
CERTIFICATE

FRESHMAN YEAR	FALL	SPRING
Digital Media 31A (Photoshop I)	1½	
Digital Media 31B (Photoshop II)	1½	
Digital Media 32A (Illustrator I)		1½
Digital Media 32B (Illustrator II)		1½
Digital Media 37 (Flash Actionscript)*		3

SOPHOMORE YEAR	FALL	SPRING
Digital Media 38 (Flash Animation)*	3	
Digital Media 40 (Individual Projects in Digital Media	1	
Digital Media 35A (Dreamweaver I)		1½
Digital Media 35B (Dreamweaver II)		1½
Digital Media 36A (Final Cut I)		1½
Digital Media 36B (Final Cut II)		1½
Total		**16**

*Students may choose between Digital Media 37 and Digital Media 38; they are not required to take both.

31A Photoshop I **1 ½ units**
Introduction to the use of Photoshop software for creating and editing digital images. Topics include retouching and restoration of photographs, color management, digital painting, and preparing images for printing. May not receive credit if Art/Architecture/Interior Design/Photography 31A has been completed. 1 hour lecture, 2 hours laboratory. Transfer: CSU.

31B Photoshop II **1 ½ units**
Continuation of the content and skills introduced in Digital Media 31A (Photoshop I). Topics include filters, advanced layer effects, preparing images for commercial printing, and preparing images for use on web pages. May not receive credit if Art/Architecture/Interior Design/Photography 31B has been completed. Prerequisite: Digital Media 31A *(completed with a grade of "C" or higher)*. 1 hour lecture, 2 hours laboratory. Transfer: CSU.

32A illustrator I **1 ½ units**
Introduction to the use of Adobe Illustrator software for digital illustration. Emphasis on the use of vector-based tools for artistic and technical drawing. Enhancement of illustrations through the addition of text, gradients, patterns, transparency, and effects. May not receive credit if Art/Architecture/Interior Design/Photography 32A has been completed. 1 hour lecture, 2 hours laboratory. Transfer: CSU.

32B illustrator II **1 ½ units**
Continuation of the content and skills introduced in Digital Media 32A (Illustrator I). Creation of custom brushes and patterns; masking and distorting objects; simulating light and shadow through use of gradients, blends, meshes, and 3D effects; preparing files for commercial printing. May not receive credit if Art/Architecture/Interior Design/Photography 31B has been completed. Prerequisite: Digital Media 32A *(completed with a grade of "C" or higher)*. 1 hour lecture, 2 hours laboratory. Transfer: CSU.

35A dreamweaver I **1 ½ 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 Dreamweaver software as a site design and management tool. 1 hour lecture, 2 hours laboratory. Transfer: CSU.

35B dreamweaver II **1 ½ 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. Prerequisite: Digital Media 35A *(completed with a grade of "C" or higher)*. Strongly recommended: Digital Media 31A, 32A or 36A *(all completed with a grade of "C" or higher)*. 1 hour lecture, 2 hours laboratory. Transfer: CSU.

36A final cut I **1 ½ units**
Introduction to video editing using Apple's Final Cut Pro software (or its simpler counterpart, Final Cut Express). Capturing digital video; combining video clips by means of cuts and transitions; adding titles and audio; outputting the finished product to disk. Each student must have a Firewire hard drive and a set of headphones or earbuds. 1 hour lecture, 2 hours laboratory. Transfer: CSU.

36B final cut II **1 ½ units**
Continuation of the content and skills introduced in Digital Media 36A (Final Cut I), with emphasis on creative imagery through use of video and audio filters, motion and speed effects, and compositing. Each student must have a Firewire hard drive and a set of headphones or earbuds. 1 hour lecture, 2 hours laboratory. Transfer: CSU.

37 flash actionscript **3 units**
Introduction to Adobe Flash, an authoring application for creating animation and user interfaces, with emphasis on using the ActionScript scripting language to add interactivity to web pages. Basic object-oriented programming techniques; importing and modifying images, sounds, and video clips; using interface elements such as menus, button groups, sliding controls, and text-input fields to control animation, sound, and other multimedia elements. 2 hours lecture, 4 hours laboratory. Transfer: CSU.

38 flash animation **3 units**
Introduction to Adobe Flash, an authoring application for creating animation and user interfaces, with emphasis on combining character animation, dialogue, and music into short animated cartoons suitable for broadcast or webcast. 2 hours lecture, 4 hours laboratory. Transfer: CSU.

40 INDIVIDUAL PROJECTS IN DIGITAL MEDIA 1 UNIT
(May be repeated 3 times)
Individual projects at the intermediate to advanced level. Development of knowledge and skills acquired in previous or current work with emphasis on current projects involving animation, interactive scripting, illustration, photo manipulation, video editing, website development, or some combination of these. Enrollment by portfolio or permission of instructor. 4 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 Chabot Web Services at (510) 723-7016.

Drama

(See Theater Arts)

Early Childhood Development (ECD)

degree:
AA–Early Childhood Development
AS-T–Early Childhood Development
AA–Early Childhood Intervention

certificate of achievement:
Early Childhood Development (Basic Teacher)
Early Childhood Intervention Assistant

certificate of proficiency: Early Childhood Development (Associate Teacher)

This two-year diploma program leads to an Associate in Arts Degree in Early Childhood Development which includes two Certificates: Early Childhood Development (Basic Teacher) Certificate of Achievement, and Early Childhood Development (Associate Teacher) Certificate of Proficiency. The early childhood development program provides students with a fundamental understanding of the principles of child growth and development, as well as experience in the application of these principles. The early childhood development courses and programs are designed to prepare students for employment working with young children. A broad range of employment opportunities are available by fulfilling the various certificate and degree requirements listed on the following pages. Completion of the appropriate courses or programs will allow employment in state supported or private programs as Associate Teacher, Teacher, Master Teacher, or Director of an early education and care center. Family child care providers can benefit from courses designed to advance their skills both as providers and entrepreneurs of their own in-home businesses.

Completion of certificate programs dovetails with the California Child Development Permit as well as the requirements of Community Care Licensing for Title 22 programs. The Child Development Permit is required for employees of California State Funded Programs. Title 22 Programs are those that are privately owned and operated either for-profit or non-profit. Many early childhood development units are transferable to four-year institutions for elective credit, but a counselor should be consulted for specific transfer information.

EARLY CHILDHOOD DEVELOPMENT
ASSOCIATE IN ARTS DEGREE

FRESHMAN YEAR	FALL	SPRING
Early Childhood Development 50 (Early Childhood Principles and Practices)	3	
Early Childhood Development 54 (Child Health, Safety and Nutrition)	3	
Early Childhood Development 56 (Child Growth and Development)	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 60 (Introduction to the Young Child with Exceptional Needs)	3	
Early Childhood Development 69 (Child Study: Observation and Assessment)	3	
Early Childhood Development 79 (Teaching in a Diverse Society)	3	
Early Childhood Development 90 (Practicum: Supervised Experience)	4	
Early Childhood Development 95 (Work Experience)	1	
Early Childhood Development 96 (Work Experience Seminar)	1	
Total	**31**	

Note: Students should review with Early Childhood Development instructors or Early Childhood Professional Development Coordinators 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

EARLY CHILDHOOD DEVELOPMENT

ASSOCIATE IN SCIENCE FOR TRANSFER DEGREE

	UNITS
Early Childhood Development 50 (Early Childhood Principles and Practices)	3
Early Childhood Development 54* (Child Health, Safety and Nutrition)	3
Early Childhood Development 56* (Child Growth and Development)	3
Early Childhood Development 62* (Child, Family, and Community)	3
Early Childhood Development 63 (Early Childhood Curriculum)	4
Early Childhood Development 69 (Child Study: Observation and Assessment)	3
Early Childhood Development 79 (Teaching in a Diverse Society)	3
Early Childhood Development 90 (Practicum: Supervised Experience)	4
Total	**26**

*These courses can be double counted for general education requirements and Early Childhood Development major.

Required Major Courses: 26 units
CSU GE or IGETC (CSU) requirements: 37-39 units
(Possible Double-counting: 9 units)
CSU transfer Electives as needed to reach 60 CSU transferable units
TOTAL UNITS: 60 units

All courses in the major or area of emphasis are required to have a grade of "C" or higher, and a cumulative GPA of 2.0 must be achieved.

For more information about Associate in Arts for Transfer and Associate in Science for Transfer degrees, see page 24.

EARLY CHILDHOOD INTERVENTION

ASSOCIATE IN ARTS DEGREE

FRESHMAN YEAR	FALL	SPRING
Early Childhood Development 50 (Early Childhood Principles and Practices)	3	
Early Childhood Development 51 (Prenatal to Early Childhood Development)	3	
Early Childhood Development 62 (Child, Family, and Community)	3	
Early Childhood Development 54 (Child Health, Safety and Nutrition)		3
Early Childhood Development 63 (Early Childhood Curriculum)		4
Early Childhood Development 79 (Teaching in a Diverse Society)		3

SOPHOMORE YEAR	FALL	SPRING
Early Childhood Development 40 (Social and Emotional Foundations for Early Learning)	3	
Early Childhood Development 60 (Introduction to the Young Child with Exceptional Needs)	3	
Early Childhood Development 69 (Child Study: Observation and Assessment)	3	
Early Childhood Development 90 (Practicum: Supervised Experience)	4	
Early Childhood Development 67 (Infant and Toddler Development and Caregiving)		3
Early Childhood Development 91 (Adaptive Curriculum for Children with Exceptional Needs)		3
Total		**38**

Note: Students should review with Early Childhood Development instructors or Early Childhood Professional Development Coordinators 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

EARLY CHILDHOOD DEVELOPMENT (BASIC TEACHER)

CERTIFICATE OF ACHIEVEMENT

FRESHMAN YEAR	FALL	SPRING
Early Childhood Development 50 (Early Childhood Principles and Practices)	3	
Early Childhood Development 56 (Child Growth and Development)	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 60 (Introduction to the Young Child with Exceptional Needs)	3	
Early Childhood Development 90 (Practicum: Supervised Experience)	4	
Early Childhood Development 95 (Work Experience)	1	
Early Childhood Development 96 (Work Experience Seminar)	1	
Option*	**3**	
Total	**25**	

**One course to be selected from the following:*

- Early Childhood Development 40 (Social and Emotional Foundation for Early Learning) . . . . . 3 units
- Early Childhood Development 54 (Child Health, Safety and Nutrition) . . . . . 3 units
- Early Childhood Development 69 (Child Study: Observation and Assessment) . . . . . 3 units
- Early Childhood Development 79 (Teaching in a Diverse Society) . . . . . 3 units

EARLY CHILDHOOD INTERVENTION ASSISTANT

CERTIFICATE OF ACHIEVEMENT

FRESHMAN YEAR	FALL	SPRING
Early Childhood Development 50 (Early Childhood Principles and Practices)	3	
Early Childhood Development 56 (Child Growth and Development)	3	
Early Childhood Development 62 (Child, Family, and Community)	3	
Early Childhood Development 54 (Child Health, Safety and Nutrition)	3	
Early Childhood Development 63 (Early Childhood Curriculum)	4	

SOPHOMORE YEAR	FALL	SPRING
Early Childhood Development 40 (Social and Emotional Foundations for Early Learning)	3	
Early Childhood Development 60 (Introduction to the Young Child with Exceptional Needs)	3	
Early Childhood Development 90 (Practicum: Supervised Experience)	4	
Early Childhood Development 67 (Infant and Toddler Development and Caregiving)	3	
Early Childhood Development 91 (Adaptive Curriculum for Children with Exceptional Needs)	3	
Total	**32**	

EARLY CHILDHOOD DEVELOPMENT (ASSOCIATE TEACHER)

CERTIFICATE OF PROFICIENCY

CORE COURSES	FALL	SPRING
Early Childhood Development 50 (Early Childhood Principles and Practices)	3	
Early Childhood Development 56 (Child Growth and Development)	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 56 and 62. 3 hours. Transfer: CSU; AA/AS.

50 EARLY CHILDHOOD PRINCIPLES AND PRACTICES 3 UNITS

Historical and contemporary systems of Early Childhood group care, career opportunities, licensing requirements, professional qualifications, differing orientations to early childhood education, developmental stages of young children as related to quality programs that have developmentally appropriate and inclusive curriculum. 3 hours. Transfer: CSU.

52 CHILDHOOD AND ADOLESCENCE 3 UNITS
Concentrating on the portions of the lifespan from middle childhood continuing through adolescence and addressing both typical and atypical children. Biological changes such as puberty, brain, cognitive development, changes in family and peer relationships, and identity development will be explored. Includes an understanding of the various contexts in which this age group develops, such as family, peer groups, school, and work. Emphasis on the continuity, observation, scientific methods, and stages of development. 3 hours. Transfer: CSU; UC; CSU/GE: D7; IGETC: Area 4G; AA/AS.

54 CHILD HEALTH, SAFETY AND NUTRITION 3 UNITS
Aspects of nutrition, health and safety that promote and maintain the health and wellbeing of all children and adults who work with young children. Topics include health and nutritional guidelines, maintaining safe and healthy learning environments, state regulations, policies and procedures, common childhood illnesses, infectious diseases, school-family collaboration and emergency preparedness, first aid and injury prevention. 3 hours. Transfer: CSU; CSU/GE: E; AA/AS.

56 CHILD GROWTH AND DEVELOPMENT 3 UNITS
Major physical, psychosocial, and cognitive/language developmental milestones for children both typical and atypical from conception through adolescence. Emphasis on interactions between maturational processes and environmental factors. While studying developmental theory and investigative research methodologies, students will observe children, evaluate individual differences and analyze characteristics of development at various stages. Transfer: CSU; CSU/GE: D7, E; IGETC: Area 4G; AA/AS.

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 56. 3 hours. Transfer: CSU.

60 INTRODUCTION TO THE YOUNG CHILD WITH EXCEPTIONAL NEEDS 3 UNITS
Introduction to educational philosophies for educating infants and children with exceptional needs. Typical and atypical developmental characteristics and abilities in infants and preschoolers. Assessments, interventions, and learning environments for the infant and preschooler with exceptional needs. Prerequisite: Early Childhood Development 56 *(completed with a grade of "C" or higher).* 3 hours. Transfer: CSU.

61 LITERATURE FOR THE YOUNG CHILD 3 UNITS
An introduction to young children's literature, the development of speech and language and the exploration of teaching techniques which promote language, literacy and literature for the young child. Selection, evaluation and use of fiction, non-fiction, prose and poetry from existing written and/or recorded children's literature in the early childhood classroom. Approaches to reading books, storytelling, story writing, and use of puppets, flannel boards and props to facilitate children's language and appreciation of literature. 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, economic, and developmental factors affecting family life and their implications; relationship of the family to early care and education and to community resources. 3 hours. Transfer: CSU; CSU/GE: D7; AA/AS.

63 EARLY CHILDHOOD CURRICULUM 4 UNITS
Professional application of the principles of human growth and development in: the study of play based inclusive curriculum, the physical environment and learning experiences including program content, the use of materials, the facilitation and guidance of all children's experiences based on developmentally appropriate principles, the methods used to meet all children's physical, social, emotional, cognitive, and creative needs within cultural context. Prerequisite: Early Childhood Development 50 and 56 *(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 children birth through early elementary. The selection and development of play materials and environments that are developmentally, culturally, and age appropriate. Prerequisite: Early Childhood Development 56 *(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; including 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 *(both completed with a grade of "C" or higher).* 3 hours. Transfer: CSU.

67 INFANT AND TODDLER DEVELOPMENT AND CAREGIVING 3 UNITS
Analysis of infant and toddler development and care, birth through 36 months. Study of current caregiving practices in infant/toddler centers and family day care homes. Examination of best practices, responsive caregiving techniques, environments, infant/toddler learning foundations, health, safety, and licensing requirements. Prerequisite: Early Childhood Development 56 *(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 *(both completed with a grade of "C" or higher).* 3 hours. Transfer: CSU.

69 CHILD STUDY: OBSERVATION AND ASSESSMENT 3 UNITS
Current approaches for observing and recording the behavior of infants and young children using various scientific techniques. Effective observations that build on respecting and fostering all children's competence, striving for objectivity and individualizing programs to meet individual children's learning and developmental assessment. Direct observational experience and application of methods is required weekly. Prerequisite: Early Childhood Development 56 *(completed with a grade of "C" or higher).* 3 hours. Transfer: CSU; AA/AS.

79 TEACHING IN A DIVERSE SOCIETY 3 UNITS
Critical examination of societal and personal attitudes and beliefs, values, assumptions and biases about culture, race, language, identity, family structures, ability, socio-economic status and other issues influenced by systemic oppression. Ethnic/cultural groups referenced within course from the United States of America, including African American, Asian American, Chicano/Latino, European American, Indigenous People of the Americas and Americans of Middle Eastern origin. Recognize and confront barriers that interfere with one's ability to work effectively with diverse populations of children and families. Enhance teacher's skills for educating children in a pluralistic society. 3 hours. Transfer: CSU; AA/AS; AC.

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

85 MENTOR SEMINAR FALL ½ UNIT
This seminar is part of the statewide California Early Childhood Mentor Teacher program. Beginning early childhood Mentor teachers attend monthly seminars to explore issues related to their new role as supervisors of early childhood student teachers. Seminar content will be individualized to meet the needs of each Mentor. Prerequisite: Early Childhood Education 83. This seminar is only open to current California Early Childhood Mentor Teachers. 9 hours total. Transfer: CSU.

86 MENTOR SEMINAR SPRING ½ UNIT
This seminar is part of the statewide California Early Childhood Mentor Teacher program. Continuing early childhood Mentors attend monthly seminars to further explore issues begun in Mentor Seminar Fall and related to their role as early childhood professionals. Seminar content will be individualized to meet the needs of each Mentor. This seminar is only open to current California Early Childhood Mentor Teachers. 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; AA/AS.

88 EARLY CHILDHOOD ENVIRONMENTS ½ 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. Transfer: CSU.

89 ISSUES IN EARLY CHILDHOOD EDUCATION 1–3 UNITS
(May be repeated 3 times)
Series of workshops offered on a variety of topics, which are current and relevant to early childhood professionals. *(Specific topic to appear in schedule of classes.)* 1–3 hours. Transfer: CSU.

90 PRACTICUM: SUPERVISED EXPERIENCE 4 UNITS
(May be repeated 1 time)
Direct practicum experience working with young children. Observation and evaluation of individual children, group activities, and roles of adults in the program. Planning appropriate learning experiences, developing educational plans, planning family conferences, and discussion of on-site experiences. Prerequisite: Early Childhood Development 63 (*completed with a grade of "C" or higher*). 2 hours lecture, 6 hours laboratory. Transfer: CSU.

91 ADAPTIVE CURRICULUM FOR CHILDREN WITH EXCEPTIONAL NEEDS 3 UNITS
Direct experience working with young children in special day classes or inclusive settings: application of best practices of both the fields of early childhood development and special education in adapting curriculum to meet the individual needs of children within an inclusive classroom setting. Observation of the assessment process by the special education team and assisting in the implementation of the educational plan. Prerequisite: Early Childhood Development 60 and 90 *(each completed with a grade of "C" or higher*). 2 hours lecture, 3 hours laboratory. Transfer: CSU.

95 WORK EXPERIENCE◊ 1–3 UNITS
(Work Experience courses may be repeated up to a total of 16 units.)
College supervised on-the-job training in early childhood programs. Cooperative effort between student, supervisor and instructor to accomplish professional work objectives and broaden experiences. Corequisite: Early Childhood Development 96. 5–15 hours experience per week. Transfer: CSU.

96 WORK EXPERIENCE SEMINAR◊ 1 UNIT
(Work Experience courses may be repeated up to a total of 16 units.)
Discussion and analysis of typical problems encountered by employees at the workplace. Application of National Association for the Education of Young Children (NAEYC) Code of Ethical Conduct to difficult situations that occur at the job site. Develop and complete measurable developmentally appropriate goals in early care and education settings. Corequisite: Early Childhood Development 95. 1 hour. Transfer: CSU.

◊Refer to page 14 for program requirements.

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. Prerequisite: 54, 55, 55B, 55L (*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: D2; IGETC: Area 4B; AA/AS.

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. Prerequisite: 54, 55, 55B, 55L (*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: D2; IGETC: Area 4B; AA/AS.

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 4B; 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. 3 hours. Transfer: CSU; UC; CSU/GE: D2; IGETC: Area 4B; 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.

Electronic Systems Technology (ESYS)

DEGREE:
AS–Electronic Systems Technology

CERTIFICATE OF ACHIEVEMENT:
Consumer Technology
Industrial Technology

Chabot offers three programs in Electronic Systems Technology: A.S. degree in Electronic Systems Technology and Certificates of Achievement in Consumer Technology and Industrial Technology. The A.S. degree prepares you for entry-level positions in a wide range of industries that use electronics technician skills, including biotechnology, manufacturing, entertainment, automotive and consumer products. Electronic Systems Technology is a key enabler of all of these contemporary industries.

With multiple courses offered in eight-week accelerated sessions, the Electronics Systems Technology program offers the option of choosing your own pace as you progress through the program. A typical full-time student will take four courses per semester, two in the first eight-week session, and two in the second. You may take more or fewer courses to match your personal schedule and learning style.

ELECTRONIC SYSTEMS TECHNOLOGY
ASSOCIATE IN SCIENCE DEGREE

FRESHMAN YEAR	FALL	SPRING
Electronic Systems Technology 50 (Introduction to Electronic Systems Technology)	2	
Electronic Systems Technology 51 (Fabrication Techniques for Electronic Systems Technology)	2	
Electronic Systems Technology 63A (IT Essentials: PC Hardware and Software I)	2	
Electronic Systems Technology 63B (IT Essentials: PC Hardware and Software II)	2	
Electronic Systems Technology 52 (Electronic Systems Measurement and Troubleshooting)		2
Electronic Systems Technology 54 (Analog Circuits and Semiconductor Devices)		2
Electronic Systems Technology 55A (Microcontroller Systems)		2
Electronic Systems Technology 55B (Digital Logic Systems)		2

SOPHOMORE YEAR	FALL	SPRING
Electronic Systems Technology 56A (Electronic Power Systems I)	2	
Electronic Systems Technology 56B (Electronic Power Systems II)	2	
Electronic Systems Technology 57A (Process Control Systems)	2	

Electronic Systems Technology 57B
(PLC and Robotic System Components) 2
Electronic Systems Technology 58
(Wireless Communication Systems) 2
Electronic Systems Technology 60
(Electronic Systems Analysis) 2
Electronic Systems Technology 61
(Electronic Systems Project Management) 2
Electronic Systems Technology 62
(Home Technology Systems). 2
Total 32

GENERAL EDUCATION UNITS FOR A.S. DEGREE 19
For specific A.S. General Education courses refer to catalog section on A.S. Graduation Requirements.
General Education Courses (Areas A-E) 16
Electronic Systems Technology GE Requirement . . . 3
Complete a minimum of 3 units from
Business 14 (Business Communications)
Computer Application Systems 92A
(Networking for Home and Small Businesses)
Computer Application Systems 92B
(Networking for a Small-to-Medium Business or ISP)
English 70 (Report Writing)
Industrial Technology 74 (Measurements and Calculations)
Mathematics 36 (Trigonometry)
Mathematics 37 (Trigonometry with an Emphasis on its Geometric Foundations))
Physics 11 (Descriptive Physics)
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.

CONSUMER TECHNOLOGY
CERTIFICATE OF ACHIEVEMENT

FRESHMAN YEAR . . . . . FALL SPRING SUMMER
Electronic Systems Technology 50
(Introduction to Electronic Systems Technology). 2
Electronic Systems Technology 51
(Fabrication Techniques for Electronic Systems Technology). 2
Electronic Systems Technology 63A
(IT Essentials: PC Hardware and Software I) 2
Electronic Systems Technology 63B
(IT Essentials: PC Hardware and Software II). 2
Electronic Systems Technology 52
(Electronic Systems Measurement and Troubleshooting) 2
Electronic Systems Technology 54
(Analog Circuits and Semiconductor Devices) . . . 2
Electronic Systems Technology 62
(Home Technology Systems). 2
Electronic Systems Technology 56A
(Electronic Power Systems I). 2
Total 16

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.

INDUSTRIAL TECHNOLOGY
CERTIFICATE OF ACHIEVEMENT

FRESHMAN YEAR FALL SPRING
Electronic Systems Technology 50
(Introduction to Electronic Systems Technology) . . . 2
Electronic Systems Technology 52
(Electronic Systems Measurement and Troubleshooting) 2
Electronic Systems Technology 57A
(Process Control Systems). 2
Electronic Systems Technology 57B
(PLC and Robotic System Components) 2
Electronic Systems Technology 51
(Fabrication Techniques for Electronic Systems Technology) 2
Electronic Systems Technology 55A
(Microcontroller Systems). 2
Electronic Systems Technology 55B
(Digital Logic Systems). 2
Electronic Systems Technology 58
(Wireless Communication Systems) 2
Electronic Systems Technology 56A
(Electronic Power Systems I). 2
Total 18

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.

ELECTRONIC SYSTEMS TECHNOLOGY (ESYS)

50 INTRODUCTION TO ELECTRONIC SYSTEMS TECHNOLOGY 2 UNITS
Introduction to electronic systems and circuits. Overview of career opportunities and job duties with electronic systems technology. Direct current and alternating current circuits including Ohm's law and Kirchhoff's laws. Measurement and characterization of electronic systems at the block diagram level. Laboratory practice includes the proper use of standard test instruments. 1 hour lecture, 2 hours laboratory. Transfer: CSU.

51 FABRICATION TECHNIQUES FOR ELECTRONIC SYSTEMS TECHNOLOGY 2 UNITS
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. 1 hour lecture, 2 hours laboratory. Transfer: CSU.

52 ELECTRONIC SYSTEMS MEASUREMENT AND TROUBLESHOOTING 2 UNITS

Measurement and characterization of electronic systems, data collection, and reporting results in industry-accepted formats. Comparing system and component performance to published specifications and developing troubleshooting techniques. Laboratory practice includes the proper use of standard test instruments. Prerequisite: Electronic Systems Technology 50 or equivalent. 1 hour lecture, 2 hours laboratory. Transfer: CSU.

53 PERSONAL COMPUTER SYSTEMS 2 UNITS

Preparation for the CompTIA A+ Essentials certification exam. Basic computer hardware and operating systems, covering skills such as installation, building, upgrading, repairing, configuring, troubleshooting, optimizing, diagnosing and preventive maintenance, with additional elements of security and softskills. The Essentials Exam validates the basic skills needed by any entry-level service technician regardless of job environment. 1 hour lecture, 2 hours laboratory. Transfer: CSU.

54 ANALOG CIRCUITS AND SEMICONDUCTOR DEVICES 2 UNITS

Analog circuits, including amplifiers, oscillators, and filters, using single-chip analog devices, operational amplifiers, field-effect transistors, bipolar transistors. Prerequisite: Electronic Systems Technology 52 or equivalent. 1 hour lecture, 2 hours laboratory. Transfer: CSU.

55A MICROCONTROLLER SYSTEMS 2 UNITS

Architecture, programming, application and troubleshooting of single-chip microcontroller electronic systems. Digital building blocks, number systems, programming in high-level and assembly language. Interfacing the microcontroller for practical applications, measurement techniques and instrumentation, troubleshooting techniques. Corequisite: Electronic Systems Technology 50 or equivalent. 1 hour lecture, 2 hours laboratory. Transfer: CSU.

55B DIGITAL LOGIC SYSTEMS 2 UNITS

Architecture, programming, application and troubleshooting of complex programmable logic device (CPLD) electronic systems. Includes programming in VHDL. Digital building blocks, number systems, Boolean algebra, combinational and sequential logic, integrated logic families, digital circuit measurement techniques and instrumentation, troubleshooting techniques. Prerequisite: Electronic Systems Technology 55A or equivalent. 1 hour lecture, 2 hours laboratory. Transfer: CSU.

56A ELECTRONIC POWER SYSTEMS I 2 UNITS

Switching power supply systems. Alternative energy systems. Advanced power bus management and control systems. Prerequisite: Electronic Systems Technology 52 or equivalent. 1 hour lecture, 2 hours laboratory. Transfer: CSU.

56B ELECTRONIC POWER SYSTEMS II 2 UNITS

Power supply transformer, rectifier and filtering circuits. Measurement of line and load regulation, ripple, and efficiency in linear and switching power supply systems. Linear regulation techniques and troubleshooting. Prerequisite: Electronic Systems Technology 56A or equivalent. 1 hour lecture, 2 hours laboratory. Transfer: CSU.

57A PROCESS CONTROL SYSTEMS 2 UNITS

Programmable logic control systems; function, interrelationship, and troubleshooting of systems components. PLC input/output systems and requirements. Ladder logic programming using basic I/O instructions, logic instructions, timers, counters, and comparison functions. Prerequisite: Electronic Systems Technology 50 (may be taken concurrently). 1 hour lecture, 2 hours laboratory. Transfer: CSU.

57B PLC AND ROBOTIC SYSTEM COMPONENTS 2 UNITS

Integration of sensors, indicators, controllers and final control elements for Programmable Logic Control and robotic systems. Control loop theory, PID, loop tuning, and control loop troubleshooting Process control system design and tuning. Prerequisite: Electronic Systems Technology 57A. 1 hour lecture, 2 hours laboratory. Transfer: CSU.

58 WIRELESS COMMUNICATION SYSTEMS 2 UNITS

Introduction to wireless communications concepts and data communications, including modulation techniques, antenna and wave propagation. Digital data communication fundamentals and digital modulation techniques. Fiber optic and laser technology. Prerequisite: Electronic Systems Technology 52 or equivalent. 1 hour lecture, 2 hours laboratory. Transfer: CSU.

59 COMMUNICATION NETWORK SYSTEMS 2 UNITS

Introduction to communications concepts, data communications, networking, and internetworking. Includes part, but not all, of the objectives for the Network+ certification exam. Review of major network components: hardware, software, protocols (TCP/IP), topologies, and cabling. Overview of LAN administration, setup, and installation. 1 hour lecture, 2 hours laboratory. Transfer: CSU.

60 ELECTRONIC SYSTEM ANALYSIS 2 UNITS

Analysis of electronic systems and circuits using modern software tools and mathematical formulae. Reactive circuits, active devices, amplifier, oscillator, and filter circuits. Includes many, but not all, of the objectives for the ETA and ISCET Certified Electronic Technician exam. Prerequisite: Electronic Systems Technology 54 and Industrial Technology 74 or equivalent or eligibility for Mathematics 55. 1 hour lecture, 2 hours laboratory. Transfer: CSU.

61 ELECTRONIC SYSTEMS PROJECT MANAGEMENT 2 UNITS

Planning, tracking, and completing electronics prototype projects; includes chassis, printed circuit board layout, 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: Electronic Systems Technology 51 and 54 or equivalent. 1 hour lecture, 2 hours laboratory. Transfer: CSU.

62 HOME TECHNOLOGY SYSTEMS 2 UNITS

Hands-on training in digital home networking and systems integration. Home network design and configuration; home network central components and low-voltage wiring; video and audio fundamentals; audio/video installation and setup; wiring standards, testing and certification; troubleshooting. Prerequisite: Electronic Systems Technology 50 or equivalent. 1 hour lecture, 2 hours laboratory. Transfer: CSU.

63A IT ESSENTIALS: PC HARDWARE AND SOFTWARE I 2 UNITS
First of two courses of the Cisco Networking Academy IT Essentials program. Students will describe the internal components of a computer, assemble a computer system, install an operating system, and troubleshoot using system tools and diagnostic software. Students will also connect to the internet and share resources in a network environment. Additional topics covered include laptops and portable devices, wireless connectivity and basic implementation skills, Voice over Internet Protocol (VoIP), security, safety and environmental issues, applied network configuration and troubleshooting skills, and communication skills. 1 hour lecture, 2 hours laboratory.

63B IT ESSENTIALS: PC HARDWARE AND SOFTWARE II 2 UNITS
Second of two courses of the Cisco Networking Academy IT Essentials program. Students will describe the process for upgrading computer hardware, assemble a computer system, upgrade, configure, and optimize an operating system, and troubleshoot using system tools and diagnostic software. Students will also connect to the internet and share resources in a network environment. Additional advanced topics covered include laptops and protable devices, wireless connectivity, Voice over Internet Protocol (VoIP), security, applied network configuation and troubleshooting skills. Prerequisite: Electronic Systems Technology 63A. 1 hour lecture, 2 hours laboratory.

Engineering (ENGR)

DEGREE: AS–Engineering

The Associate in Science degree is designed to provide the foundation for subsequent transfer to a CSU or UC Engineering program. The core courses listed below fulfill most of the lower division requirements for the majority of CSU and UC engineering majors. The Associate in Science degree, as well as putting students on the path to transfer, ensures that students develop a strong foundation in engineering, mathematics, and the sciences.

Students should note that transfer-course requirements vary among universities, and between majors in the different branches of engineering. Students seeking to transfer with an engineering major are strongly advised to consult with Chabot Counseling. Counselors will assist the student with development of a Student Educational Plan (SEP) that prepares the student for transfer to the desired university in the engineering major of his/her choice. Students are also encouraged to consult the *ASSIST* webpage (*www.assist.org)* for more information on engineering tranfer-course agreements between Chabot College and the CSU/UC Colleges of Engineering.

ENGINEERING DEGREE RESIDENCY REQUIREMENT
Eligibility for the Engineering Degree requires completion at Chabot College of the courses: ENGR 25, ENGR 36, ENGR 43, and ENGR 45.

ENGINEERING
ASSOCIATE IN SCIENCE DEGREE

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 (Electrical Circuits and Devices)		4
Engineering 45 (Materials of Engineering)		3
Physics 4B (General Physics II)	5	

Plus One (1) Course from the Following:

Biology 2A[1] (Principles of Biology I)	5	
Chemistry 1B[2] (General College Chemistry II)		5
Engineering 10 (Introduction to Engineering)	2	
Engineering 11 (Engineering Design and Analysis)		2
Engineering 22[3] (Engineering Design Graphics)	3	
Mathematics 4[4] (Elementary Differential Equations)		3
Mathematics 6[4] (Elementary Linear Algebra)		3
Physics 4C (General Physics III)		5
Total		**40-43**

GENERAL EDUCATION UNITS FOR A.S. DEGREE 19
For specific A.S. General Education courses refer to catalog section on A.S. Graduation Requirements.
General Education Courses (Areas A-E) 16
Engineering GE Requirement 3
Complete a minimum of 3 units from
Business 40 (International Business)
Computer Science 14 (Introduction to Structured Programming in C++)
Communication Studies 1 (Fundamentals of Speech Communication)
Economics 1 (Principles of Microeconomics)
Total minimum units required 60

[1] *Bio Engineering, Biomedical Engineering, and Biomechanical Engineering majors should take Biology 2A.*

[2] *Chemical Engineering and Materials Engineering majors should take Chemistry 1B.*

[3] *Civil, Industrial, and Mechanical Engineering majors should take Engineering 22.*

[4] *Engineering Science majors, and students interested in applied mathematics, should take Mathematics 4 and 6.*

Students should note that General Education requirements vary significantly among CSU/UC Colleges of Engineering. In particular, most CSU/UC Engineering programs discourage the use of the IGETC GE pattern in favor of program-specific courses. The GE courses listed above satisfy many, but perhaps not all, of the GE requirements of a specific

university engineering program. In these cases students complete any remaining GE courses at the university after transfer.

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)

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.

11 ENGINEERING DESIGN AND ANALYSIS 2 UNITS
An introduction to the engineering design process from a practical and professional perspective. Student teams work on a term-long engineering project that entails the creation of a design for a useful object with moving parts that requires the application of some external power source. Conceptual and Critical/Final design reviews require teams to describe and justify the effectiveness, and likely customer-acceptance, of the design. The student designers: select materials, components, sources of supply; produce detailed parts-lists; create using CAD-tools detailed and dimensioned production and assembly drawings; create formal electrical and fluid-control component interconnection schematics; provide a detailed estimate for the production-cost. When needed students use engineering software tools (such as MATLAB) to assess and predict the kinematical, structural, thermal, electrical, fluid-flow, wear/corrosion, optical and magnetic performance of the proposed design. Students are encouraged to build from the design plans a form-and-fit mock-up, or if possible a fully functioning prototype. Strongly recommended: Engineering 22. 1 hour lecture, 3 hours laboratory. 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 37 and eligibility for English 1A. 2 hours lecture, 3 hours laboratory. Transfer: CSU; UC.

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 Science 8. May not receive credit if Mathematics 25 or Physics 25 has been completed. 2 hours lecture, 3 hours laboratory. Transfer: CSU; UC.

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.

43 ELECTRICAL CIRCUITS AND DEVICES 4 UNITS
Introduction to basic electrical engineering circuit-analysis and devices. DC, transient and AC circuit analysis methods, Kirchoff's laws, nodal/mesh analysis, network theorems, voltage and current sources, resistors, capacitors and inductors. Thévenin/Norton equivalent circuits. Natural and forced response of first and second order circuits. Steady-state sinusoidal circuit voltage/current analysis, and power calculations. Frequency response, phasors, Bode plots and transfer functions. Low/High/Band pass filters. Operational Amplifiers in DC, transient, and AC circuits. Diode and NMOS/PMOS FET characteristics. Diode and MOSFET circuits. Introduction to basic integrated-circuit technology and layout. Digital signals, logic gates, switching. Combinatorial logic circuits using AND/NAND OR/NOR gates. Sequential logic circuits using RS, D, and JK Flip-Flop gates. Computer based circuit-operation simulation using SPICE and MATLAB software. Electronics laboratory exercises demonstrating basic instruments, and experimental techniques in Electrical Engineering: DC current/voltage supplies, Digital MultiMeters (DMM), RLC Meters, oscilloscopes, and AC function generators. Measurements of resistance, inductance, capacitance, voltage, current, transient response, and frequency response. Prerequisites: 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.

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 transformations. The physical, chemical, mechanical and optical properties of ceramics, composites, and polymers. Operation and use of materials characterization instruments and methods. Prerequisite: Physics 4A, Engineering 25, and Chemistry 1A (*all completed with a grade of "C" or higher*). 2 hours lecture, 3 hours laboratory. Transfer: CSU; UC.

English (ENGL)

DEGREE:
AA—English (Emphasis in Literature)

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.

ENGLISH (EMPHASIS IN LITERATURE)
ASSOCIATE IN ARTS DEGREE

FRESHMAN YEAR	FALL	SPRING
English 1A (Critical Reading and Composition)	3	
English 45 (Studies in Fiction)	3	
English 4 (Critical Thinking and Writing About Literature)	3	
English 20 (Studies in Shakespeare)	3	

SOPHOMORE YEAR	FALL	SPRING
Choose one from the following:		
English 22 (Mexican American/Latino Literature of the U.S.)	3	
English 25 (Asian American Literature)	3	
English 28 (Classic and Contemporary Youth Literature)	3	
English 30 (Survey of U.S. Literature)	3	
English 21 (The Evolution of the Black Writer)	3	
English 26 (Literature of Immigration and Migration)	3	
English 32 (U.S. Women's Literature)	3	
Choose one from the following:		
English 7 (Critical Thinking and Writing Across Disciplines)	3	
English 12 (The Craft of Writing—Fiction)	3	
Communication Studies 2A (Oral Interpretation of Literature I)	3	
English 13 (The Craft of Writing—Poetry)	3	
English 33 (HerStory: Women's Autobiographical Writing in Multicultural America)	3	
English 38 (Survey of Modern British Literature)	3	
English 48 (The Literature of the Holocaust)	3	
Total		**18**
General Education Courses		
For specific General Education courses refer to catalog section on Graduation Requirements.		
Total minimum units required		**60**

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 (HerStory: 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 and 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 42 (Writing for Broadcasting)** 3
Mass Communications 1 (Journalism: Newswriting and Information Gathering)*** 3
Business 14 (Business Communications)* 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 and 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. 3 hours. Transfer: CSU; UC; CSU/GE: A2, IGETC: Area 1 Group A; AA/AS.

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.)* 3 hours. Transfer: CSU; UC; CSU/GE: A3; IGETC: Area 1 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 non-fiction 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; CSU/GE: C2; AA/AS.

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. 3 hours. Transfer: CSU; CSU/GE: C2; AA/AS.

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 3B; AA/AS.

21 THE EVOLUTION OF THE BLACK WRITER 3 UNITS
Introduction to America black writers of fiction, poetry, drama and the essay, beginning with the African experience as it relates to storytelling, to the "Slave Narratives" and continuing to the present. Emphasis on the 20th and 21st 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 3B; 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, 20th and 21st centuries. Strongly recommended: Eligibility for English 1A. 3 hours. Transfer: CSU; UC; CSU/GE: C2, D3; IGETC: Area 3B; AA/AS.

24 STORYTELLING IN MODERN AMERICAN NOVELS AND FILMS 3 UNITS
A critical comparison of storytelling in modern American novels and films. Examines how each genre uses its unique form and methods to convey narrative, integrating elements of contemporary culture and history. Explores the works of diverse novelists and filmmakers in light of

particular periods and themes, as well as connections and adaptations between the two genres. Strongly recommended: Eligibility for English 1A. 3 hours. Transfer: CSU; UC; CSU/GE: C2; IGETC: Area 3B; AA/AS.

25 ASIAN-AMERICAN LITERATURE 3 UNITS
Introduction to literary works of fiction, poetry, drama and the essay that reflect and explore the diversity of the Asian-American experience. Analysis of literature in the context of the historical growth of Asian-American identities with a focus on the 20th century. Strongly recommended: Eligibility for English 1A. 3 hours. Transfer: CSU; UC; CSU/GE: C2; IGETC: Area 3B; AA/AS.

26 THE LITERATURE OF IMMIGRATION AND MIGRATION 3 UNITS
Exploration of literature that reflects the diverse experience of immigrating to and migrating within the United States. Focus on historical, political, social, and cultural background and issues of assimilation and identity drawn from the work of Asian Americans, Hispanic Americans, European Americans, African Americans, Native Americans, Arab Americans, among other groups. Strongly recommended: Eligibility for English 1A. 3 hours. Transfer: CSU; CSU/GE: C2; IGETC: Area 3B; AA/AS; AC.

28 CLASSIC AND CONTEMPORARY YOUTH LITERATURE 3 UNITS
Social-historical context and tools for analyzing literature directed toward young readers. Emphasizes contemporary U.S. texts, classic works, and the origins of youth literature (including fables, folk tales and fairy tales). Explores subgenres and literary elements common to children's and young adult literature, including fantasy, journeys, and animal characters. Emphasizes literature from diverse authors and communities, and the impact of this literature on the psychological, sociological, and cultural growth of young readers. Strongly recommended: Eligibility for English 1A. 3 hours. Transfer: CSU; CSU/GE: C2; IGETC: Area 3B; AA/AS.

30 SURVEY OF U.S. LITERATURE 3 UNITS
Survey of U.S. literature 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: eligibility for English 1A. 3 hours. Transfer: CSU; UC; CSU/GE: C2; IGETC: Area 3B; AA/AS.

31 INTRODUCTION TO GAY AND LESBIAN LITERATURE 3 UNITS
Introduction to novels, poems, plays, and essays by and about gay men and lesbians. Analysis of the literature in the context of the gay and lesbian social and political movements of the 19th, 20th, and 21st centuries and evolving societal attitudes toward homosexuality. Strongly recommended: eligibility for English 1A. 3 hours. Transfer: CSU; AA/AS.

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 3B; AA/AS; AC.

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 works 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; IGETC: Area 3B; AA/AS; AC.

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, the collapse of the British Empire and contemporary events. Strongly recommended: Eligibility for English 1A. 3 hours. Transfer: CSU; UC; CSU/GE: C2; IGETC: Area 3B; 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 3B; 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; IGETC: Area 3B; 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.

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 analytical and argumentative writing in response to reading. Some research required. Prerequisite: English 52A or 1A (*completed with a grade of "C" or higher*). 3 hours. Transfer: CSU.

70 REPORT WRITING 3 UNITS
Preparation of reports in business, industrial and technical fields, including explanations, instructions, argumentation 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
Academic reading, critical thinking, and writing expected in transfer and associate-degree classes. First semester of a two-semester sequence. Strongly recommended: participation in the English placement process. 3 hours lecture, 2 hours individualized instruction.

101B READING, REASONING AND WRITING II 4 UNITS
Second semester study of academic reading, reasoning, and writing skills. Preparation for academic reading, critical thinking, and writing expected in transfer and associate-degree classes. Prerequisite: Successful completion of English 101A. 3 hours lecture, 2 hours individualized instruction.

102 READING, REASONING, AND WRITING—ACCELERATED COURSE 4 UNITS
Preparation for academic reading, critical thinking, and writing expected in transfer and associate-degree classes. Strongly recommended: participation in the English placement process. 3 hours lecture, 2 hours individualized instruction.

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 FACULTY-STUDENT TUTORIAL: WRITING AND READING ACROSS THE CURRICULUM ½—3 UNITS
(See also General Studies 115; English 115 and General Studies 115 may be repeated for a combined total of 3 times)
Self-paced, individualized instruction in reading and writing effectiveness. 2–6 hours laboratory.

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. 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: WRITING/READING 3 UNITS
(May be repeated 1 time)
Elements of the writing process including prewriting, 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 118A. 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.

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 and nonfiction; reinforces fluency in reading and writing. 6 hours.

110B INTERMEDIATE READING AND WRITING 6 UNITS
Logical paragraph development; reading both fiction and nonfiction; emphasis on the development of vocabulary and grammatical structures of written English. Prerequisite: A grade of pass in ESL 110A (or eligibility for ESL 110B demonstrated through the ESL Placement Process). 6 hours.

110C HIGH INTERMEDIATE READING AND WRITING 6 UNITS
Expository paragraphs and short essays; fiction and nonfiction reading; emphasis on the development of vocabulary and grammatical structures of written English. Prerequisite: A grade of pass in ESL 110B (or eligibility for ESL 110C demonstrated through the ESL Placement Process). 6 hours.

110D ADVANCED READING AND WRITING 6 UNITS
Expository essays; critical reading; emphasis on advanced development of vocabulary and grammatical structures of written English. Prerequisite: A grade of pass in ESL 110C (or eligibility for ESL 110D demonstrated through the ESL Placement Process). 6 hours.

111A PRONUNCIATION 2 UNITS
Oral English with emphasis on strategies for clear pronunciation. 1 hour lecture, 3 hours laboratory.

111B ACADEMIC LISTENING AND SPEAKING 2 UNITS
Group and individual practice producing and responding to oral English in the academic environment. 1 hour lecture, 3 hours laboratory.

112 ENGLISH GRAMMAR: 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 110C. 3 hours.

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. Strongly recommended: eligibility for ESL 110D or eligibility for English 101A demonstrated through the English Placement Process. 2 hours.

127 ESL PRONUNCIATION LAB ½ UNIT
(May be repeated 1 time)
Individual practice producing and responding to oral English with emphasis on clear pronunciation. 1½ hours laboratory.

128 FACULTY-STUDENT TUTORIAL—ESL ½—1 UNIT
(May by repeated 2 times)
Self-paced, individualized instruction in academic English oral and written communication skills for students who speak English as a second language. Focus on writing, reading, listening, and speaking skills needed in college courses. 1½-3 hours laboratory.

129 VOCABULARY USAGE FOR ESL: IDIOMATIC EXPRESSIONS 1 UNIT
Designed to provide ESL students practice with idiomatic expressions. Strategies for identifying, defining and using a variety of idiomatic expressions. Strongly recommended: eligibility for ESL 110B and/or completion of ESL 109. 3 hours laboratory.

Entrepreneurship (ENTR)

certificate of proficiency:
Administrative Assistant Entrepreneur
Automotive Technology Entrepreneur
Entrepreneurship
Music Industry Entrepreneur
Real Estate Entrepreneur

ADMINISTRATIVE ASSISTANT ENTREPRENEUR
CERTIFICATE OF PROFICIENCY

The Administrative Assistant Entrepreneurship program prepares students to start a small home-based administrative support business. The focus is on building core administrative assisting capabilities supplemented with entrepreneurship and business planning courses. All courses in this certificate are offered online.

CORE COURSES	FALL	SPRING
Entrepreneurship 1 (Introduction to Entrepreneurship)	3	
Computer Application Systems 88A (Microsoft Word I)	3	
Computer Application Systems 54A (Microsoft Excel I)	3	
Computer Application Systems 58 (Introduction to Microsoft Access)	3	

Computer Application Systems 72F
(Introduction to Microsoft PowerPoint) 1
Computer Application Systems 82 (Designing Web Pages). 3
Business 50F (Developing a Business Plan) 1
Total 17

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 ENTREPRENEUR

CERTIFICATE OF PROFICIENCY

The Automotive Technology Entrepreneurship program prepares students to start an automotive repair business. The focus is on developing core automotive technology skills, and key business start-up skills.

CORE COURSES	FALL	SPRING
Automotive Technology 50 (Automotive Fundamentals)	2½	
Automotive Technology 60 (Automotive Electrics/Electronics)	4	
Entrepreneurship 1 (Introduction to Entrepreneurship)	3	
Entrepreneurship 30 (The Business Plan)	3	
Elective*	2½–4	
Total	**15–16½**	

*Elective
Choose any one of the following:
Automotive Technology 61 (Fuel Induction Systems) . . . . . 4 units
Automotive Technology 62 (Automotive Air Conditioning, Cooling and Heating Systems) . . . . . 2½ units
Automotive Technology 63A (Introduction to Engines and Machining Processes) . . . . . 3 units
Automotive Technology 64A (Manual Drive Train and Axle Assemblies) . . . . . 3 units
Automotive Technology 64B (Automatic Transmission/ Transaxle Assemblies) . . . . . 3 units
Automotive Technology 65 (Automotive Braking Systems). . . . 3 units
Automotive Technology 66 (Automotive Steering, Suspension, and Alignment Systems) . . . . . 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.

ENTREPRENEURSHIP

CERTIFICATE OF PROFICIENCY

The Entrepreneurship program prepares students to start a new business or to make an existing small business more successful. The focus is on identifying and evaluating business opportunities, developing in-depth marketing and business plans, building the skills needed to operate a small business, and developing detailed business launch plans. All courses in this certificate are offered online.

FRESHMAN YEAR	FALL	SPRING
Entrepreneurship 1 (Introduction to Entrepreneurship)	3	
Entrepreneurship 10 (Identifying and Analyzing New Business Opportunities)	2	
Business 14 (Business Communications) or Business 10 (Business Law)	3–4	
Entrepreneurship 20 (Marketing for Entrepreneurs)	2	
Entrepreneurship 30 (The Business Plan)	3	

SOPHOMORE YEAR	FALL	SPRING
Entrepreneurship 40 (Business Incubation and Launch)	2	
Total	**15-16**	

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.

MUSIC INDUSTRY ENTREPRENEUR

CERTIFICATE OF PROFICIENCY

This certificate provides students interested in self-employment in the music industry with the essential music business knowledge, a core music recording technology background AND essential entrepreneurship skills they will need to succeed in self-employment and/or operating a music business.

CORE COURSES	FALL	SPRING
Entrepreneurship 1 (Introduction to Entrepreneurship)	3	
Entrepreneurship 10 (Evaluating New Business Opportunities) or Entrepreneurship 20 (Marketing for Entrepreneurs)	2	
Music Recording Technology 21 (Audio Recording I) or Music Recording Technology 22A (Electronic Music Production I)	3	
Music Recording Technology 26 (Music Business and the Law)	3	
Music Recording Technology 28 (Music Industry Career Development)	3	
Entrepreneurship 30 (The Business Plan)	3	
Total	**17**	

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 ENTREPRENEUR

CERTIFICATE OF PROFICIENCY

The Real Estate Entrepreneurship program prepares students for success as realtors. The focus is on building the core real estate capabilities required for licensing supplemented with an entrepreneurship course to develop business skills. All courses in this certificate are offered online.

CORE COURSES	FALL	SPRING
Entrepreneurship 1 (Introduction to Entrepreneurship)	3	
Real Estate 80 (Real Estate Principles)	3	
Real Estate 84 (Real Estate Practice)	3	
Elective*	3–4	
Business 50F (Developing a Business Plan)	1	
Total	**13–14**	

*Elective

Choose any one of the following:

- Business 7 (Accounting for Small Business) . . . 3 units
- Business 10 (Business Law) . . . 4 units
- Real Estate 81A (Legal Aspects of Real Estate) . . . 3 units
- Real Estate 82A (Real Estate Appraisal) . . . 3 units
- Real Estate 83 (Real Estate Finance) . . . 3 units
- Real Estate 85 (Real Estate Economics) . . . 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

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.

Entrepreneurship (ENTR)

1 INTRODUCTION TO ENTREPRENEURSHIP 3 UNITS

Introduction to the key concepts and skill requirements for new business creation. Evaluation of personal entrepreneurship skills. Emphasis on identifying viable business opportunities, and the process of planning for new venture start-up. 3 hours. Transfer: CSU; AA/AS.

10 EVALUATING NEW BUSINESS OPPORTUNITIES 2 UNITS

Evaluation of new business ideas for future entrepreneurs to find an opportunity that matches an individual's passions, skills, and talents, as well as market needs. Feasibility testing of preliminary ideas. 2 hours. Transfer: CSU.

20 MARKETING FOR ENTREPRENEURS 2 UNITS

Marketing strategy and techniques for start-up and small businesses. Focus on low-cost, flexible, innovative marketing tools. 2 hours. Transfer: CSU.

30 THE BUSINESS PLAN 3 UNITS

Development and presentation of a "ready to take to the bank for funding," realistic, and ready to implement business plan. Business plan components will include a business concept, industry and market analysis, a marketing and organizational plan, operations plan, funding plan, and financial projections. Prerequisite: Entrepreneurship 1 *(completed with a grade of "C" or higher)*. 3 hours. Transfer: CSU; AA/AS.

40 BUSINESS INCUBATION AND LAUNCH 3 UNITS

(May be repeated 1 time)

The transition from a business plan to successful business launch. Key emphasis areas are development of plans for legal structure, accounting, financing/funding and implementation, as well as contingency planning. Prerequisite: Entrepreneurship 30. 1.3 hours lecture, 2 hours laboratory. Transfer: CSU.

Environmental Science

(See Biological Sciences)

Environmental Studies

DEGREE: AA–Environmental Studies

Chabot College offers an associate in Arts Degree in Environmental Studies to provide students with a multi-disciplinary overview of relationships between humans and the physical world. Contemporary environmental issues are examined from the vantage points of natural systems and ecology, human culture and cultural diversity, and modern political economy. The program enables the student to place emphasis on one of four approaches to the study of environment: the social/behavioral environment, social issues and ethics, environment and human health, or the physical/ecological environment.

ENVIRONMENTAL STUDIES

ASSOCIATE IN ARTS DEGREE

CORE

FRESHMAN YEAR:	FALL	SPRING
Geography 1 (Introduction to Physical Geography)	3	
Economics 1 (Principles of Microeconomics) or Economics 10 (General Economics) or Political Science 20 (Comparative Politics) or Political Science 30 (International Relations)	3	
Anthropology 1 (Biological/Physical Anthropology)	3	

SOPHOMORE YEAR: FALL SPRING

Geography 2 (Cultural Geography) or
Anthropology 3 (Social and Cultural Anthropology) or
Anthropology 7 (Introduction to Globalization) or
Sociology 1 (Principles of Sociology) 3
Emphasis options (Select from the emphasis option list below) 9-12
Total 21-24

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

Emphasis 1 - The Social/Behavioral Environment
History 4 (World History: 1500 to the Present) . . . . . 3 units
Psychology 1 (General Psychology) or
Psychology 3 (Introduction to Social Psychology) or
Early Childhood Development 62 (Child, Family and Community) or
Sociology 2 (Social Problems) . . . . . 3 units
If core course taken was Economics 1 or Economics 10:
Political Science 20 (Comparative Politics) or
Political Science 30 (International Relations)
If core course taken was Political Science 20 or Political Science 30:
Economics 1 (Principles of Microeconomics) or
Economics 10 (General Economics) . . . . . 3 units

Emphasis 2 - Social Issues and Ethics
Philosophy 60 (Introduction to Philosophy: Ethics) or
Business 42 (Green Business Practices). . . . . 3 units
Sociology 2 (Social Problems) or
Sociology 4 (Marriage and Family Relations) or
Administration of Justice/Political Science 45 (Law and Democracy) or
Political Science 12 (Introduction to California State and Local Government). . . . . 3 units
Psychology-Counseling 4 (Multiethnic/Cultural Communication) or
Psychology-Counseling 13 (Multicultural Issues in Contemporary America) or
Communication Studies 11 (Intercultural Communication) . 3 units

Emphasis 3 - Environment and Human Health
Geography 10 (Global Environmental Problems) . . . . . 3 units
Environmental Science 11 (Humans and the Environment with Laboratory) . . . . . 4 units
Psychology 25 (Stress Management and Health Psychology) or
Nutrition 1 (The Science of Nutrition) or
Early Childhood Development 54 (Child Health, Safety and Nutrition). . . . . 2-3 units

Emphasis 4 - The Physical/Ecological Environment
Geography 10 (Global Environmental Problems) . . . . . 3 units
Environmental Science 11 (Humans and the Environment with Laboratory) or
Biology 10 (Introduction to the Science of Biology) or
Biology 4 (Principles of Animal Biology and Evolution) or
Biology 6 (Principles of Plant Biology and Ecology) . . . . . 4 units
Chemistry 10 (Introduction to Chemistry) or
Chemistry 31 (Introduction to College Chemistry) or
Chemistry 1A (General College Chemistry I) . . . . . 4-5 units

Ethnic Studies (ES)

DEGREE: AA—Ethnic Studies

The Ethnic Studies Program, interdisciplinary in scope, will begin with a focus on the history, literature and cultures of African-Americans, Asian/Pacific Islander-Americans, Chicano-Latinos, Native Americans and Middle Eastern Americans.

ETHNIC STUDIES
ASSOCIATE IN ARTS DEGREE

CORE COURSES FALL SPRING

Ethnic Studies 1 (Introduction to Ethnic Studies) 3
Anthropology 5 (Cultures of the U.S. in Global Perspective) or
Sociology 3 (American Cultural and Racial Minorities) 3

Select 15 units from the following. At least three different racial or ethnic groups must be studied.

Anthropology 8 (Native American Cultures) 3
English 21 (The Evolution of the Black Writer) 3
English 22 (Mexican American/Latino Literature of the U.S.). 3
Ethnic Studies 2 (Contemporary Ethnic Minority Families in the U.S.) 3
Ethnic Studies 3 (Introduction to Muslim-American Studies). 3
History 20 (The African-American Experience in U.S. History Through Reconstruction). 3
History 21 (The African-American Experience in U.S. History Since Reconstruction) 3
History 22 (Mexican American History and Culture) 3
History 25 (American Indian History and Culture) 3
Psychology Counseling 4 (Multiethnic/Cultural Communication) 3

Psychology Counseling 13 (Multicultural Issues in Contemporary America) 3
Psychology Counseling 17 (Intercultural Studies) 3
Sociology 10 (Introduction to Asian American Studies) 3
Total 21

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

Ethnic Studies (ES)

1 INTRODUCTION TO ETHNIC STUDIES 3 UNITS
An introduction to the historical and socio-cultural experiences of racial and ethnic groups in the United States. Focus will be on key issues such as immigration, political stratification, employment discrimination, Americanization, class, racial and ethnic identity, and gender roles that have shaped relations in American society. Study is inter- and multi-disciplinary. A comparative approach covering African American, Mexican American, Asian American, Native American and Middle Eastern American. 3 hours. Transfer: CSU; UC; CSU/GE: D3; IGETC: Area 4C; AA/AS; AC.

2 CONTEMPORARY ETHNIC MINORITY FAMILIES IN THE U.S. 3 UNITS
Examination of the diversity of contemporary United States ethnic minority families with an emphasis on comparison and contrast. Family dynamics and processes will be the primary focus within the context of ethnicity. Adaptation and responses to dominant group social constructs and social structures will also be examined. Groups to include: African American; Asian American; Mexican, Central and Latin American; Native American; Middle Eastern American. 3 hours. Transfer: CSU; UC; CSU/GE: D3; IGETC: Area 4C; AA/AS.

3 INTRODUCTION TO MUSLIM-AMERICAN STUDIES 3 UNITS
An examination of the diversity of Muslim communities in the United States with an emphasis on comparing and contrasting their histories, cultures and experiences. Topics include: patterns of migration; religious beliefs and practice; acculturation and assimilation; political involvement; education and employment; 9/11 and its aftermath; relations with the broader Muslim world. 3 hours. Transfer: CSU; UC; CSU/GE: D3; IGETC: Area 4C; AA/AS.

Film (FILM)

9 FILM PRODUCTION COLLOQUIA 1 UNIT
(May be repeated 3 times)
Explorations in CV film production and presentation. Analysis of skills acquired through production assistance including research, budgets, permits, clearances, releases, location scouting, film crewing, post-production, marketing, screenings, festivals, or some combination of these. 1 hour lecture, 1 hour TBA. Transfer: CSU.

14 FILM PRE-PRODUCTION 3 UNITS
The pre-production process for film, as well as traditional and contemporary forms of visual media, including key participants and their job functions. Proposal pitches, log lines, script formats, and fundamentals of story, dialogue, and character development for pre-production planning. Examination of the roles and influence of audiences, clients, distributors, and studio executives on project financing and the script development phase. Strongly recommended: Eligibility for English 1A. 3 hours. Transfer: CSU; AA/AS.

50 BEGINNING FILM PRODUCTION 3 UNITS
(May be repeated 3 times)
Introduction to the history and theory of filmmaking as an artistic medium through lectures, screenings, demonstrations, and hands-on practicum. Critical analysis and appreciation of production elements and development of skills in pre-production planning, digital cinematography, direction of actors, sound design, art direction, and post-production. 3 hours lecture, 1 hour activity. Transfer: CSU; UC; CSU/GE: C1; AA/AS.

60 DOCUMENTARY FILM 3 UNITS
(May be repeated 3 times)
Introduction to the historical development of documentary film and current techniques of documentary DV filmmaking. Story basics, research, structure, objective/subjective approach, simple shooting setups, interviewing, and rough-cut editing. Strongly Recommended: Film 50. 3 hours lecture, 1 hour activity. Transfer: CSU; UC; CSU/GE: C1; AA/AS.

89 SPECIAL STUDIES IN FILM ½–5 UNITS
(May be repeated 3 times)
Individual projects in Digital Video (DV) film production at the intermediate to advanced level. Development of knowledge and skills acquired in previous or current work with emphasis on current projects involving writing, producing, directing, cinematography, sound recording/sound design, lighting, art direction, production design, editing, or some combination of these. Prerequisites: Two of the following courses: Film 14, Film 50, Film 60 *(completed with a grade of "B" or higher).* 1½–5 hours. Transfer: CSU

Fire Technology (FT)

DEGREE:
AA–Fire Technology
AS–Fire Technology
AA–Fire Prevention Inspector
AS–Fire Prevention Inspector

CERTIFICATE OF ACHIEVEMENT:
Fire Technology
Fire Prevention Inspector

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 PREVENTION INSPECTOR

The Fire Prevention Inspector program is also based on the Uniform Fire Technology curriculum and offers general courses in applied physics and chemistry, as well as specialized courses in fire prevention, public safety, building construction and fire protection system design.

FIRE TECHNOLOGY
ASSOCIATE IN ARTS OR
ASSOCIATE IN SCIENCE 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 Survival)	3	
Health 61 (Emergency Response)	2½	
Physical Education 2FSC (Fire Science Conditioning)	1	
Fire Technology 53 (Fire Behavior and Combustion)	3	
Fire Technology 55 (Fire Protection Equipment and Systems)	3	
Health 81 (Emergency Medical Technician—Basic)	6½	
Health 83 (Patient Stabilization, Extrication and Triage)	½	

SOPHOMORE YEAR	FALL	SPRING
Fire Technology 54 (Fire Prevention Technology)	3	
Fire Technology 56 (Building Construction for Fire Protection)	3	
Fire Technology 89 (Firefighter-1 (Academy Introduction)	½	
Fire Technology 90A* (Firefighter-1 Certification Preparation I/Basic)	2	
Fire Technology 90B* (Firefighter-1 Certification Preparation II/Intermediate)	2	
Fire Technology 90C* (Firefighter-1 Certification Preparation III/Advanced)	2	
Fire Technology 91 A (CAL FIRE Wildland Firefighter Basic Training)	3	
Fire Technology 91 B (Hazardous Materials First Responder—Operational Level)	1½	
Fire Technology 91C (I-200 Basic ICS Incident Command System)	1½	
Fire Technology 91D (Fire Fighter Survival)	½	
Total	**22**–44½**	

**Fire Technology 50, 51, 52 and Health 81 must be completed with a "C" or higher grade before acceptance to the Firefighter-I Academy (Fire Technology 89, 90A, 90B, 90C). A current EMT certificate will be accepted in lieu of Health 81. Fire Technology 89 must be completed with P before student may register for 90A, 90B, 90C.*

***Students pursuing the Associate Degree, who are currently employed by a Fire Department in the rank of Firefighter or higher, may have the following classes waived with proof of equivalent or higher certification: Fire Technology 89, 90A, 90B, 90C, 91A, 91B, 91C and Health 61, 81, 83. These students may opt for an alternate Physical Education course in lieu of the PE2FSC (Fire Science Conditioning) course.*

GENERAL EDUCATION COURSES FOR THE A.A. DEGREE . . 25
For specific General Education courses refer to catalog section on Graduation requirements.

GENERAL EDUCATION UNITS FOR A.S. DEGREE 19
For specific A.S. General Education courses refer to catalog section on A.S. Graduation Requirements.
General Education Courses (Areas A-E) 16
Fire Technology GE Requirement 3
Complete a minimum of 3 units from
English 70 (Report Writing)

Total minimum units required 60

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 Survival)	3	
Health 61 (Emergency Response)	2½	
Physical Education 2FSC (Fire Science Conditioning)	1	
Fire Technology 53 (Fire Behavior and Combustion)	3	
Fire Technology 55 (Fire Protection Equipment and Systems)	3	
Health 81 (Emergency Medical Technician—Basic)	6½	
Health 83 (Patient Stabilization, Extrication and Triage)	½	

SOPHOMORE YEAR	FALL	SPRING
Fire Technology 54 (Fire Prevention Technology)	3	
Fire Technology 56 (Building Construction for Fire Protection)	3	
Fire Technology 89 (Firefighter-1 (Academy Introduction)	½	

Fire Technology 90A* (Firefighter-1 Certification Preparation I/Basic) 2
Fire Technology 90B* (Firefighter-1 Certification Preparation II/Intermediate) 2
Fire Technology 90C* (Firefighter-1 Certification Preparation III/Advanced) 2
Fire Technology 91 A (CAL FIRE Wildland Firefighter Basic Training). 3
Fire Technology 91 B (Hazardous Materials First Responder—Operational Level) 1½
Fire Technology 91C (I-200 Basic ICS Incident Command System). 1½
Fire Technology 91D (Fire Fighter Survival). . . . . ½
Total 22–44½**

**Fire Technology 50, 51, 52 and Health 81 must be completed with a "C" or higher grade before acceptance to the Firefighter-I Academy (Fire Technology 89, 90A, 90B, 90C). A current EMT certificate will be accepted in lieu of Health 81. Fire Technology 89 must be completed with P before student may register for 90A, 90B, 90C.*

***Students pursuing the Associate Degree, who are currently employed by a Fire Department in the rank of Firefighter or higher, may have the following classes waived with proof of equivalent or higher certification: Fire Technology 89, 90A, 90B, 90C, 91A, 91B, 91C and Health 61, 81, 83. These students may opt for an alternate Physical Education course in lieu of the PE2FSC (Fire Science Conditioning) course.*

FIRE PREVENTION INSPECTOR

ASSOCIATE IN ARTS OR
ASSOCIATE IN SCIENCE DEGREE

FRESHMAN YEAR	FALL	SPRING
Fire Technology 50 (Fire Protection Organization)	3	
Fire Technology 54 (Fire Prevention Technology)	3	
Fire Technology 52 (Firefighter Safety and Public Education)	3	
Fire Technology 55 (Fire Protection Equipment and Systems)	3	

SOPHOMORE YEAR	FALL	SPRING
Fire Technology 53 (Fire Behavior Combustion)	3	
Fire Technology 56 (Building Construction for Fire Protection)	3	
Industrial Technology 74 (Measurements and Calculations)	3	
Business 22 (Introduction to Management)	3	
Total	**24**	

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.

GENERAL EDUCATION COURSES FOR THE A.A. DEGREE 25
For specific General Education courses refer to catalog section on Graduation requirements.

GENERAL EDUCATION UNITS FOR A.S. DEGREE 19
For specific A.S. General Education courses refer to catalog section on A.S. Graduation Requirements.
General Education Courses (Areas A-E) 16
Fire Technology GE Requirement. 3
Complete a minimum of 3 units from
English 70 (Report Writing)
Total minimum units required 60

FIRE PREVENTION INSPECTOR

CERTIFICATE OF ACHIEVEMENT

FRESHMAN YEAR	FALL	SPRING
Fire Technology 50 (Fire Protection Organization)	3	
Fire Technology 54 (Fire Prevention Technology)	3	
Fire Technology 52 (Firefighter Safety and Public Education)	3	
Fire Technology 55 (Fire Protection Equipment and Systems)	3	

SOPHOMORE YEAR	FALL	SPRING
Fire Technology 53 (Fire Behavior Combustion)	3	
Fire Technology 56 (Building Construction for Fire Protection)	3	
Industrial Technology 74 (Measurements and Calculations)	3	
Business 22 (Introduction to Management)	3	
Total	**24**	

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.

Fire Technology (FT)

Fire Technology courses may be scheduled alternating years. Students may be required to take day and evening classes to complete the 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. Strongly recommended: eligibility for English A. 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; multi=agency coordinating systems; support and regulatory agencies; strategy and tactics applied to structural fire fighting; wildland fire fighting and hazardous material emergencies; and safety conditions to be considered. 3 hours lecture, plus a total of 6 hours laboratory for the semester. Transfer: CSU.

52 FIREFIGHTER SAFETY AND SURVIVAL 3 UNITS
Basic principles and history related to the national firefighter life safety initiatives, focusing on the need for cultural and behavior change throughout the emergency services; assessing fire dangers and handling common fire situations; risk abatement and personal preparation for unforeseen fire emergencies; roles and responsibilities in educating the public on fire safety; development of a survival attitude using problem-solving techniques for increased situational awareness and self-reliance in an emergency. 3 hours lecture plus a total of 12 hours laboratory for the semester. Transfer: CSU.

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. Transfer: CSU.

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 I and Fire Inspector I. 3 hours. Transfer: CSU.

55 FIRE PROTECTION EQUIPMENT AND SYSTEMS 3 UNITS
Features of design and operation of fire alarm systems, smoke detection systems, water-based fire suppression systems, special hazard fire suppression 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 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 firefighter and 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.

71A FIRE COMMAND 1A: COMMAND OPERATIONS FOR THE COMPANY OFFICER 2 UNITS
Provides first-in incident commander and fire company officers with an introduction to the principles of command; overview of the concept of command safety and the risk management process; pre-incident planning considerations; command considerations at structure fire incidents; company officer initial actions at an incident including the development of incident priorities, strategy, and tactics; information on the roles and responsibilities of a company officer for post-incident actions; and the opportunity to gain experience in a controlled environment through structure fire incident simulations. Satisfies part of the California Office of State Fire Marshal Certification Training Standards for Company Officer. Prerequisite: Fire Technology 91C or successful completion of I-200 (Basic Incident Command System). 30 total hours lecture, 10 total hours laboratory. Transfer: CSU.

71B FIRE COMMAND 1B: ALL-RISK COMMAND OPERATIONS FOR THE COMPANY OFFICER 2 UNITS
Provides first-in incident commander and fire company officers with an overview of considerations specific to incidents where the Incident Command System (ICS) may be used to manage a first alarm structure fire, multiple casualties, hazardous materials, and urban search and rescue (USAR); and the opportunity to gain experience in a controlled environment through incident simulations. Satisfies part of the California Office of State Fire Marshal Certification Training Standards for Company Officer. Prerequisites: Fire Technology 71A, or successful completion of Fire Command 1A (Command Operations for the Company Officer), and Fire Technology 91C, or successful completion of I-200 (Basic Incident Command System). 30 total hours lecture, 10 total hours laboratory. Transfer: CSU.

72 FIRE MANAGEMENT I: MANAGEMENT FOR THE COMPANY OFFICER 2 UNITS
Prepares or enhances the first line supervisor's ability to supervise subordinates; introduces key management concepts and practices utilized, and includes discussions about decision-making, time management, leadership styles, personnel evaluations, and counseling guidelines. Satisfies part of the California Office of State Fire Marshal Certification Training Standards for Company Officer. 30 total hours lecture, 10 total hours laboratory. Transfer: CSU.

73A FIRE PREVENTION 1A: INTRODUCTION TO THE CALIFORNIA FIRE CODE BRIDGE (2009) 2 UNITS
Provides a broad, technical overview of fire prevention codes and ordinances, inspection practices, and key hazards. Satisfies part of the California Office of State Fire Marshal Certification Training Standards for Fire Officer, Fire Prevention Officer, and Public Education Officer I. 30 total hours lecture, 10 total hours laboratory. Transfer: CSU.

73B FIRE PREVENTION 1B: INSPECTION OF FIRE PROTECTION SYSTEMS AND SPECIAL HAZARDS BRIDGE (2009) 2 UNITS
Provides fire prevention professionals with the base level knowledge necessary to inspect fire protection systems and special hazards. Satisfies part of the California Office of State Fire Marshal Certification Training Standards for Fire Officer, Fire Prevention Officer, and Public Education Officer I. Prerequisite: Fire Technology 73A, or successful completion of Fire Prevention 1A (Introduction to the California Fire Code). 30 total hours lecture, 10 total hours laboratory. Transfer: CSU.

74A FIRE INVESTIGATION 1A: FIRE ORIGIN AND CAUSE DETERMINATION **2 UNITS**

Provides firefighters, fire investigators and law enforcement officers assigned to a fire investigation with an introduction and basic overview of fire scene investigation; focus of the course is on fire scene indicators and to determine the fire's origin. Satisfies part of the California Office of State Fire Marshal Certification Training Standards for Company Officer. 30 total hours lecture, 10 total hours laboratory. Transfer: CSU.

76A TRAINING INSTRUCTOR 1A: COGNITIVE LESSON DELIVERY **2 UNITS**

Provides company officers, state fire training registered instructors and training officers with methods and techniques for training in accordance with the latest concepts in career education; selecting, adapting, organizing, and using instructional materials appropriate for teaching cognitive lessons; criteria and methods to evaluate teaching and learning efficiency; and an opportunity to apply major principles of learning or teaching demonstrations. Two (2) student instructor teaching demonstrations are required of all. Satisfies part of the California Office of State Fire Marshal Certification Training Standards for Company Officer and Training Officer. 30 total hours lecture, 10 total hours laboratory. Transfer: CSU.

76B TRAINING INSTRUCTOR 1B: PSYCHOMOTOR LESSON DELIVERY **2 UNITS**

Provides company officers, state fire training registered instructors and training officers with methods and techniques for training in accordance with the latest concepts in career education; selecting, adapting, organizing, and using instructional materials appropriate for teaching psychomotor lessons; criteria and methods to evaluate teaching and learning efficiency; and an opportunity to apply major principles of learning or teaching demonstrations. Two (2) student instructor teaching demonstrations are required of all. Satisfies part of the California Office of State Fire Marshal Certification Training Standards for Company Officer and Training Officer. Prerequisite: Fire Technology 76A, or successful completion of Training Instructor 1A (Cognitive Lesson Delivery). 30 total hours lecture, 10 total hours laboratory. Transfer: CSU.

89 FIREFIGHTER–1 ACADEMY INTRODUCTION **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. 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. Prerequisites: Fire Technology 50, 51, 52; Physical Education 2FSC or equivalent firefighter physical conditioning training; Health 81 (or proof of enrollment in an EMT program at another institution. *(All courses completed with a grade of "C" or higher)*. Strongly recommended: Mathematics 65 or 65A and eligibility for English 1A. 4 hours total lecture, 12 hours total laboratory.

90A FIREFIGHTER–1 CERTIFICATION PREPARATION I (BASIC) **2 UNITS**

(May be repeated once if Fire Technology 90B not completed)

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. Students will be required to pass a physical examination by a licensed medical professional and provide the Fire Academy Physical Verification forms and proof of current completion of an Emergency Medical Technician program by the first class meeting. Prerequisites: Fire Technology 50, 51, 52 and 89; Physical Education 2FSC or equivalent firefighter physical conditioning training. (All courses completed with a grade of "C" or higher; Fire Technology 89 completed with P before student may register for 90A.) 24 total hours lecture, 40 total hours laboratory. Transfer: CSU.

90B FIREFIGHTER–1 CERTIFICATION PREPARATION II (INTERMEDIATE) **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 III (ADVANCED) **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 CAL FIRE WILDLAND FIREFIGHTER BASIC TRAINING **3 UNITS**

(May be repeated once if Fire Technology 91A was taken before Fall 2009)

Provides a basic wildland firefighter course oriented toward entry-level employment opportunities within agencies responsible for wildland fire mitigation and interface I-Zone protection, with emphasis on the equipment utilized on California Department of Forestry and Fire Protection (CAL FIRE) engines. The course is structured with a maximum emphasis on demonstration, student application and performance examinations. Fundamentals of wildland fire control and techniques of controlling other emergency incidents are covered with a strong safety perspective. A live fire exercise is provided for application of fire control and suppression techniques. Provides S130 and S190 equivalency under National Wildfire Coordinating Group (NWCG), IS-700.a under the Emergency Management Institute, and CAL FIRE Wildland Firefighter Basic Training certification requirements. Course complies with the State Board of Fire Services Wildland Fire Fighting requirements for Firefighter I Certification. Prerequisite: current enrollment in, or successful completion of either Fire Technology 90C *(completed with a grade of "C" or higher)* or a California Accredited Fire Fighter 1 Academy. 2.25 hours lecture, 1.75 hours laboratory. Transfer: CSU.

91B HAZARDOUS MATERIALS FIRST RESPONDER—OPERATIONAL LEVEL 1 ½ UNITS
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 I—200 BASIC ICS (INCIDENT COMMAND SYSTEM) 1 ½ UNITS
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.

91D FIREFIGHTER SURVIVAL ½ UNIT
Orientation to causes of firefighter injuries and fatalities and how to avoid committing fatal errors on the fireground using problem-solving techniques for developing self-reliance in an emergency. Physical techniques emphasized for performing critical individual and team rescue skills to access, extricate and remove trapped or downed firefighters. Prerequisite: current enrollment in, or successful completion of either Fire Technology 90C (completed with a grade of "C" or higher) or a California Accredited Fire Fighter 1 Academy. 4 total hours lecture, 12 total hours laboratory.

95 WORK EXPERIENCE 1—3 UNITS
(May be repeated four times in combination with Fire Technology 96, not to exceed 16 total accumulated units)
College-supervised on-the-job training while working in a fire service related occupation. Student Firefighters will need to provide proof of current EMT-Basic or Paramedic license, as well as current CPR certification and medical vaccinations before riding along with host fire agencies. Student Firefighter Prerequisite: Completion of an Accredited California Firefighter 1 Academy. Student Fire Inspector Prerequisite: Completion of Certificate of Achievement Program for Fire Prevention Inspector. Corequisite: Fire Technology 96. 5-15 hours. Transfer: CSU.

96 WORK EXPERIENCE SEMINARS 1 UNIT
(May be repeated four times in combination with Fire Technology 95, not to exceed 16 total accumulated units)
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 coworkers. Student Firefighters will need to provide proof of current EMT-Basic or Paramedic license, as well as current CPR certification and medical vaccinations before riding along with host fire agencies. Student Firefighter Prerequisite: Completion of an Accredited California Firefighter 1 Academy. Student Fire Inspector Prerequisite: Completion of Certificate of Achievement Program for Fire Prevention Inspector. Corequisite: Fire Technology 95. 1 hour. Transfer: CSU.

French (FRNC)

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 (FRNC)

1A BEGINNING FRENCH 5 UNITS
Introduction to the French-speaking cultures of the world featuring study and practice in the four language skills (listening, speaking, reading, and writing) of French. Following an immersion instruction format, the class is entirely taught in the target world language of the selected course. Strongly recommended: Eligibility for English 1A.-5 hours lecture, 1 hour laboratory. Transfer: CSU; UC; CSU/GE: C2; AA/AS.

1B ELEMENTARY FRENCH 5 UNITS
Further study of French-speaking cultures of the world featuring the acquisition of the four language skills (listening, speaking, reading, and writing) of French begun in French 1A. Following an immersion instruction format, the class is entirely taught in the target world language of the selected course. Prerequisite: French 1A (*completed with a grade of "C" or higher*). 5 hours lecture, 1 hour laboratory. Transfer: CSU; UC; CSU/GE: C2; IGETC: 6A-LOTE; AA/AS. (Corresponds to 2 years high school study.)

2A INTERMEDIATE FRENCH 4 UNITS
Review of grammar; reading of works of modern authors; practice in conversation and composition. Following an immersion instruction format, the class is entirely taught in the target world language of the selected course. Prerequisite: French 1B (*completed with a grade of "C" or higher*). 4 hours lecture, 1 hour laboratory. Transfer: CSU; UC; CSU/GE: C2; IGETC: Area 3B, 6A-LOTE; AA/AS.

2B ADVANCED FRENCH 4 UNITS
Reading of Francophone authors; advanced review of grammar; emphasis on speaking and composition. Following an immersion instruction format, the class is entirely taught in the target world language of the selected course. Prerequisite: French 2A (*completed with a grade of "C" or higher*). 4 hours lecture, 1 hour laboratory. Transfer: CSU; UC; CSU/GE: C2; IGETC: Area 3B, 6A-LOTE; AA/AS.

50A FRENCH CONVERSATION AND CULTURE I 3 UNITS
Development of a basic understanding of spoken French through pronunciation, vocabulary, and applied grammar. Introduction to the everyday culture of Francophone people. Following an immersion instruction format, the class is entirely taught in the target world language of the selected course. 3 hours lecture, 1 hour laboratory. Transfer: CSU.

50B FRENCH CONVERSATION AND CULTURE II 3 UNITS
Development of skills learned in French 50A. Understanding of spoken French through pronunciation, vocabulary, and applied grammar. Further study of the life and culture of the Francophone people. Following an immersion instruction format, the class is entirely taught in the target world language of the selected course. Prerequisite: French 50A *(completed with a grade of "C" or higher).* 3 hours lecture, 1 hour laboratory. Transfer: CSU.

50C FRENCH CONVERSATION AND CULTURE III 3 UNITS
Development of skills learned in French 50B. Understanding of spoken French through pronunciation, vocabulary, and applied grammar. Further study of the culture and everyday life activities of the Francophone people. Following an immersion instruction format, the class is entirely taught in the target world language of the selected course. Prerequisite: French 50B *(completed with a grade of "C" or higher).* 3 hours lecture, 1 hour laboratory. Transfer: CSU.

50D FRENCH CONVERSATION AND CULTURE IV 3 UNITS
Development of skills learned in French 50C. Understanding of spoken French through pronunciation, vocabulary, and applied grammar. Further study of the culture and everyday life activities of the Francophone people. Following an immersion instruction format, the class is entirely taught in the target world language of the selected course. Prerequisite: French 50C *(completed with a grade of "C" or higher).* 3 hours lecture, 1 hour laboratory. Transfer: CSU.

General Studies (GNST)

1 INTRODUCTION TO ONLINE LEARNING ½ UNIT
Introduction to the Blackboard course management system used in online courses, and an overview of how online courses work. Review of strategies for success as an online student, including time management techniques. ½ hour. Transfer: CSU.

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. Math and Science teaching methods will be addressed. 2 hours lecture, 3 hours laboratory. 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 3B; AA/AS.

66 LIFE SKILLS FOR THE ADOLESCENT 3½ UNITS
Educational Preparation for life for the young adult. Includes drug and alcohol education, nutrition education, disease prevention, college preparation, basic career goal setting, and risk factor reduction related to the prevention of obesity at an early age. Fitness component involves activity participation in team sports, along with basic fitness education in heart rate monitoring and physical fitness training. Designed for the adolescent learner interested in developing college preparatory skills and life-long learning strategies in the area of health and fitness. 27 total hours lecture, 108 total hours of laboratory. Total weeks = 5.

115 FACULTY-STUDENT TUTORIAL: WRITING AND READING ACROSS THE CURRICULUM ½–3 UNITS
(See also English 115; 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 ½—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

CERTIFICATE OF PROFICIENCY: Geographic Information Systems

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 Graduation 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 10 (Global Environmental Problems) . . . . . 3 units
Geography 12 (Geography of California) . . . . . 3 units

GEOGRAPHIC INFORMATION SYSTEMS

CERTIFICATE OF PROFICIENCY

CORE COURSES	FALL	SPRING
Geography 1 (Introduction to Physical Geography)	3	
Geography 1L (Introduction to Physical Geography Laboratory)	1	
Geography 20 (Introduction to Geographic Information Systems)	3	
Geography 21 (Spacial Analysis with Geographic Information Systems (GIS))	3	
Geography 22 (Advanced GIS Applications)	3	
Geography 95/Work Experience 95 (Work Experience)	1-3	
Geography 96/Work Experience 96 (Work Experience Seminar)	1	
Total	**15–17**	

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.

Geography (GEOG)

1 INTRODUCTION TO PHYSICAL GEOGRAPHY 3 UNITS

Earth's natural environments, with emphasis on spatial characteristics, change over time, interactions between environmental components, and human-environment interactions. Physical processes, techniques, and tools by which Earth's climates, soils, vegetation, water resources, and land forms are linked into integrated global patterns. 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.

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 4E; AA/AS.

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 4E; 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: D5; IGETC: Area 4E; 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 Niño, 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: B1; IGETC: Area 5A; AA/AS.

10 GLOBAL ENVIRONMENTAL PROBLEMS 3 UNITS
Essential concepts of the interaction between human activities and the changing global environment, with emphasis on a multidisciplinary approach. Causes of environmental change, including ecosystem processes, the history of human population growth and demand for natural resources, fossil fuel consumption, land use change, and pollution sources. Economic and public policy issues pertaining to the sustainability of environments. Discussion of the dynamics of participation and leadership in promoting improved stewardship of the environment. 3 hours. Transfer: CSU; CSU/GE: D5, D7; IGETC: Area 4G; 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 4E; AA/AS.

19 GEOGRAPHIC INFORMATION SYSTEMS FOR THE SOCIAL SCIENCES 1 UNIT
An introduction to the techniques, theory, and practical experience necessary to acquire, convert, and create digital spatial data. Hands-on training in the acquisition of existing Geographic Information Systems (GIS) data, metadata, formatting and conversion of GIS data, utilization of remotely sensed data, and use of Global Positioning Systems (GPS). Computer-based information technology tools and techniques that analyze spatial relationships between locations and attributes of human activities and behaviors that occur over space. Emphasis is on visualization of geographic relationships to support decision-making in the social sciences. 3 hours laboratory. Transfer: CSU.

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, databases, 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.

21 SPATIAL ANALYSIS WITH GEOGRAPHIC INFORMATION SYSTEMS (GIS) 3 UNITS
GIS facilitates visualization of spatial relationships and decision-making by means of interactive linkages between vector and raster data formats. Addresses real-world application of GIS principles, industry-standard software tools and quantitative techniques to multi-layered thematic data. Students will acquire advanced hands-on GIS experience in managing, editing, merging, intersecting, and statistically analyzing spatial data from many diverse sources, and in preparing high-quality cartographic presentations. Field trips may be required. Prerequisite: Geography 20 *(completed with a grade of "C" or higher)*. 3 hours. Transfer: CSU; AA/AS.

22 ADVANCED GIS APPLICATIONS 3 UNITS
Practical, hands-on survey of some of the more advanced applications of GIS, integrating vector, grid, and digital image data formats. Emphasizes environmental applications of GIS industry-standard software tools to analyze spatial problems quantitatively, including network analysis, watershed modeling, digital elevation modeling, digital image processing, and digital rectification of multi-layered thematic data. Includes integration of Global Positioning System (GPS) operational characteristics, collection and interfacing GPS data with GIS. Field trips may be required. Prerequisite: Geography 20 *(completed with a grade of "C" or higher).* 3 hours. Transfer: CSU; AA/AS.

95 GEOGRAPHY WORK EXPERIENCE 1-3 UNITS
(Work experience courses may be repeated up to a total of 16 units.)
College supervised on-the-job training in Geographic Information Systems (GIS). Applications of principles, methodologies, and skills in using GIS to analyze real-world spatial problems and aid in decision-making.

Cooperative effort between student, work supervisor, and instructor to broaden the student's experience with GIS tools and functionality in many professional endeavors. Corequisite: Geography 96. 5-15 hours of employment per week. Transfer: CSU.

96 GEOGRAPHY WORK EXPERIENCE SEMINAR 1 UNIT

(Work experience courses may be repeated up to a total of 16 units.)

Discussion and analysis of experiences on-the-job in applying Geographic Information Systems (GIS) techniques and methodologies to projects in a business or governmental agencies. Review of essential skills and management issues in using GIS to analyze real-world spatial problems and aid in decision-making. Discussion of ways to broaden experience with GIS tools and functionality in many professional endeavors, with emphasis on building strong working relationships with supervisors and coworkers. Corequisite: Geography 95. 1 hour. Transfer: CSU.

German (GERM)

1A BEGINNING GERMAN 5 UNITS

Introduction to the German-speaking cultures of the world featuring the study and practice of the four language skills (listening, speaking, reading, and writing) of German. Following an immersion instruction format, the class is entirely taught in the target world language of the selected course. Strongly recommended: Eligibility for English 1A. 5 hours lecture, 1 hour laboratory. Transfer: CSU; UC; CSU/GE: C2; AA/AS.

1B ELEMENTARY GERMAN 5 UNITS

Further study of German-speaking cultures of the world featuring the acquisition of the four language skills (listening, speaking, reading, writing) of German begun in German 1A. Following an immersion instruction format, the class is entirely taught in the target world language of the selected course. Prerequisite: German 1A *(completed with a grade of "C" or higher).* 5 hours lecture, 1 hour laboratory. Transfer: CSU; UC; CSU/GE: C2; IGETC: 6A-LOTE; AA/AS. (Corresponds to 2 years high school study.)

2A INTERMEDIATE GERMAN 4 UNITS

Review of grammar; reading of works of modern authors; practice in conversation and composition. Following an immersion instruction format, the class is entirely taught in the target world language of the selected course. Prerequisite: German 1B *(completed with a grade of "C" or higher).* 4 hours lecture, 1 hour laboratory. Transfer: CSU; UC; CSU/GE: C2; IGETC: Area 3B, 6A-LOTE; AA/AS.

2B ADVANCED GERMAN 4 UNITS

Reading of German authors; advanced review of grammar; emphasis on speaking and composition. Following an immersion instruction format, the class is entirely taught in the target world language of the selected course. Prerequisite: German 2A *(completed with a grade of "C" or higher).* 4 hours lecture, 1 hour laboratory. Transfer: CSU; UC; CSU/GE: C2; IGETC: Area 3B, 6A-LOTE; AA/AS.

50A GERMAN CONVERSATION AND CULTURE I 3 UNITS

Development of a basic understanding of spoken German through pronunciation, vocabulary, and applied grammar. Introduction to the everyday culture of German-speaking people. Following an immersion instruction format, the class is entirely taught in the target world language of the selected course. 3 hours lecture, 1 hour laboratory. Transfer CSU.

50B GERMAN CONVERSATION AND CULTURE II 3 UNITS

Development of skills learned in German 50A. Understanding of spoken German through pronunciation, vocabulary, and applied grammar. Further study of the life and culture of the German-speaking people. Following an immersion instruction format, the class is entirely taught in the target world language of the selected course. Prerequisite: German 50A (*completed with a grade of "C" or higher*). 3 hours lecture, 1 hour laboratory. Transfer CSU.

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. 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.

16 HEALTHY WEIGHT LOSS 3 UNITS

Physical, emotional, and spiritual perspectives of healthy weight loss. Emphasis on acquiring knowledge and developing life skills required to achieve a healthy weight for improved wellness. 3 hours. Transfer: CSU; CSU/GE: E.

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, anatomical, disease, diagnostic, medical, surgical, and additional terms as they relate to each body system. 4 hours. Transfer: CSU.

51B DISEASE PROCESS AND ADVANCED MEDICAL TERMINOLOGY **4 UNITS**

Introduction to the nature of disease and to 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.

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. Transfer: CSU.

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 heath 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 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 EMERGENCY MEDICAL TECHNICIAN—BASIC REFRESHER **1 ½ UNITS**

(May be repeated 3 times)

Provides training in the foundation skills and knowledge required of the EMT-Basic scope of practice. The EMT-B certification is the minimum requirement for ambulance attendants and most entry level Firefighter positions. EMT certification is also required for entry into Paramedic school. Prerequisite: current EMT certification. 24 total hours accredited by the Alameda County Emergency Medical Services Agency.

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

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. 3 hours. Transfer: CSU; UC; CSU/GE: C2, D6; IGETC: Area 3B, 4F; AA/AS.

2 HISTORY OF WESTERN CIVILIZATION SINCE 1600 3 UNITS
History of the Modern Western World; Romanticism and the Industrial Revolution to the present. 3 hours. Transfer: CSU; UC; CSU/GE: C2, D6; IGETC: Area 3B, 4F; AA/AS.

3 WORLD HISTORY: BEGINNINGS TO 1500 3 UNITS
A survey of world history from the beginning of civilization and ancient cultures to 1500 C.E. Interconnections and divergence among cultures and civilizations in a global context will be emphasized. During the classical period, up to 500 C.E., similarities and differences as civilizations developed will be examined. The postclassical period, 500 to 1500, will look specifically at contact and interaction among peoples. Broader forces that affect civilizations such as trade patterns, migration, nomadism, syncretism, and disease patterns will be studied. 3 hours. Transfer: CSU; UC; CSU/GE: C2 or D6; IGETC: Area 3B or 4F; AA/AS.

4 WORLD HISTORY: 1500 TO THE PRESENT 3 UNITS
A survey of world history from 1500, including the early modern and modern eras. Interconnections and exchange will be emphasized. Similarities and differences among cultures will be examined. Cultural, intellectual, and technological developments and exchange will be explored. Broader forces that affect civilizations such as borderlands, exploration and travel, gender and class will be studied. 3 hours. Transfer: CSU; UC; CSU/GE: C2 or D6; IGETC: Area 3B or 4F; AA/AS.

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; AC.

7 U.S. HISTORY THROUGH RECONSTRUCTION 3 UNITS
A survey of United States history from its pre-colonial, indigenous origins through the end of Reconstruction. Emphasis on (1) distinctively American patterns of political, economic, social, intellectual and geographic developments, (2) the interaction amongst and the experiences of diverse racial, ethnic and socioeconomic groups in American history, and (3) the evolution of American institutions and ideals including the U.S. Constitution, representative democratic government, the framework of California state and local government, and the relationships between state/local government and the federal government. 3 hours. Transfer: CSU; UC; CSU/GE: D6, U.S. Hist; IGETC: Area 4F, U.S. Hist; AA/AS; AC.

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. 3 hours. Transfer: CSU; UC; CSU/GE: D6, U.S. Hist; IGETC: Area 4F, U.S. Hist; AA/AS; AC.

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, U.S. Hist; IGETC: Area 4F, U.S. Hist; AA/AS; AC.

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 4F, 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, U.S. Hist; IGETC: Area 4F, U.S. Hist; 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, U.S. Hist; IGETC: Area 4F, U.S. Hist; 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, U.S. Hist; IGETC: Area 4F, U.S. Hist; 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, U.S. Hist; IGETC: Area 4F, U.S. Hist; 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, U.S. Hist; IGETC: Area 4F, U.S. Hist, Area 4G; AA/AS; AC.

28 SUPPLEMENTAL INSTRUCTION IN U.S. WOMEN'S HISTORY 1 UNIT
Introduction to and review of context-based skills for effective participation and completion of U.S. Women's History. Emphasis on building skills to succeed in a history survey course. Corequisite: History 27. 1 hour.

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
Art History 4 (Art History—Ancient to Gothic)	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	FALL	SPRING
History 2 (History of Western Civilization Since 1600)		3
Art History 5 (Art History—Renaissance to Modern)		3
Humanities 65 (The American Style) or Humanities 68 (World Mythology) or Humanities 72 (Contemporary Humanities)		3
Philosophy 60 (Introduction to Philosophy: Ethics) or Philosophy 65 (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)

50 THE ARTFUL LIFE 3 UNITS
A broad range of the arts, from a variety of historical periods and cultures, 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. Students will learn how to respond critically as well as to articulate their experience of great works of the human imagination. Explore foundational principles and theories in the various humanities disciplines. 3 hours. Transfer: CSU; UC; CSU/GE: C2; AA/AS.

60 CREATIVITY AND THE COMMUNITY 3 UNITS
The Arts as an expression of the community; the relationship between creativity and community; the artist as the conscience of society and the role of the audience in completing an artwork. Themes include the artist as prophet, art as transformative experience, the arts and social justice, and the shock of the new. 3 hours. Transfer: CSU; UC; CSU/GE: C2; IGETC: Area 3B; AA/AS.

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. 3 hours. Transfer: CSU; UC; CSU/GE: C2; AA/AS; AC.

68 WORLD MYTHOLOGY 3 UNITS
Introduction to mythic themes recurring in global 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: C2; IGETC: Area 3B; AA/AS.

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. 3 hours. Transfer: CSU; UC; CSU/GE: C2; AA/AS.

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. 3 hours. Transfer: CSU; UC; CSU/GE: C2; IGETC: Area 3B; AA/AS.

Independent Study

INDEPENDENT STUDY ½–2 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. Transfer CSU.

Industrial Technology (INDT)

DEGREE:
AS–Industrial Technology

INDUSTRIAL TECHNOLOGY
ASSOCIATE IN SCIENCE DEGREE

FRESHMAN YEAR	SUMMER	FALL	SPRING
Machine Tool Technology 70 (Introduction to Machine Shop)		2	
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	
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 (Financial Accounting)	4	
Computer Science 10 (Introduction to Programming Using Visual BASIC.NET)	4	
Machine Tool Technology 65 (Production Practices)	4	
Business 1B (Managerial Accounting)	4	
Business 10 (Business Law)	4	
Total	**36-38**	

GENERAL EDUCATION UNITS FOR A.S. DEGREE 19
For specific A.S. General Education courses refer to catalog section on A.S. Graduation Requirements.
General Education Courses (Areas A-E) 16
Industrial Technology GE Requirement 3
Complete a minimum of 3 units from
Industrial Technology 74 (Measurements and Calculations)
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)

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 industry. 3 hours. Transfer: CSU; AA/AS.

94 OCCUPATIONAL WORK EXPERIENCE 3-4 UNITS
(Work experiences courses may be repeated up to a total of 16 units)
College supervised on-the-job training. Apprenticeship work experience in an occupation related to student's apprenticeship program. Cooperative effort of the work supervisor, student, Joint Apprenticeship Training Council (JATC) or Program Sponsor, and instructor to achieve work-based learning objectives. Student must be enrolled in an apprenticeship program. Each unit of credit requires 75 hours of paid work experience.

Interior Design (INTD)

degree:
AS–Interior Design

certificate of achievement:
Interior Design
Kitchen and Bath 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 55 (Introduction to Textiles)	3	
Interior Design 54 (Principles of Interior Design)		3
Interior Design 56 (Professional Practice)		3

SOPHOMORE YEAR	FALL	SPRING
Interior Design 60 (Materials and Resources)	3	
Interior Design 62 (Kitchen and Bathroom Design)	3	
Interior Design 58 (Fundamentals of Lighting)		3
Interior Design 66 (Special Needs Design)		3
Interior Design 68 or Architecture 68 (CAD for Architecture and Interior Design)		3
Interior Design 72 (Commercial Interior Design)		3
Total		**33**

GENERAL EDUCATION UNITS FOR A.S. DEGREE 19
For specific A.S. General Education courses refer to catalog section on A.S. Graduation Requirements.
General Education Courses (Areas A-E) 16
Interior Design GE Requirement 3
Complete a minimum of 3 units from
Art 23 (2-D Foundations)
Total minimum units required 60

INTERIOR DESIGN
CERTIFICATE OF ACHIEVEMENT

CORE COURSES	FALL	SPRING
Art 23 (2-D Foundations)	3	
Interior Design 50 (Residential Space Planning)	3	
Interior Design 52 (History of Interiors and Furnishings)	3	
Interior Design 55 (Introduction to Textiles)	3	
Interior Design 62 (Kitchen and Bathroom Design) or Interior Design 66 (Special Needs Design)	3	
Interior Design 68 (CAD for Architecture and Interior Design) or Architecture 68 (CAD for Architecture and Interior Design)	3	
Interior Design 72 (Commercial Interior Design)	3	
Interior Design 54 (Principles of Interior Design)		3
Interior Design 56 (Professional Practices)		3
Interior Design 58 (Fundamentals of Lighting)		3
Interior Design 60 (Materials and Resources)		3
Total		**33**

KITCHEN AND BATH DESIGN
CERTIFICATE OF ACHIEVEMENT

FRESHMAN YEAR	FALL	SPRING
Interior Design 50 (Residential Space Planning)	3	
Interior Design 52 (History of Interiors and Furnishings)	3	
Interior Design 62 (Kitchen and Bathroom Design)	3	
Interior Design 54 (Principles of Interior Design)		3
Interior Design 56 (Professional Practice)		3
Interior Design 58 (Fundamentals of Lighting)		3
Interior Design 60 (Materials and Resources)		3

SOPHOMORE YEAR	FALL	SPRING
Interior Design 66 (Special Needs Design)	3	
Interior Design 68 or Architecture 68 (CAD for Architecture and Interior Design)	3	
Interior Design 70 (Advanced Kitchen and Bathroom Design)		3
Business 95/Work Experience 95 (Work Experience)		2
Business 96/Work Experience 96 (Work Experience Seminar)		1
Total		**33**

To become National Kitchen and Bath Association certified, 120 hours of internship are required.

Interior Design (INTD)

50 RESIDENTIAL SPACE PLANNING 3 UNITS
Basic techniques in planning space for interiors. Private and group living spaces, support systems, functional planning of interior space, and color in space planning. 2 hours lecture, 3 hours laboratory. 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. Transfer: CSU.

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
The textile industry and its effects on the apparel and home furnishing markets. Fiber identification, yarn and fabric construction, and decoration. Emphasis on consumer information, fabric performance, care and labeling, and legal responsibilities of the industry. 3 hours. Transfer: CSU.

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. Transfer: CSU.

58 FUNDAMENTALS OF LIGHTING 3 UNITS
Residential and commercial lighting systems as they apply to what constitutes a well-lit interior space. Includes an investigation of current lighting fixtures and lighting resources. 3 hours. Transfer: CSU.

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. Transfer: CSU.

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. Transfer: CSU.

66 SPECIAL NEEDS DESIGN 3 UNITS
Design of interior space which encourages self-esteem and independence for the elderly or physically impaired. The American with 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. Transfer: CSU.

68 CAD FOR ARCHITECTURE AND INTERIOR DESIGN 3 UNITS
(May be repeated 3 times) (See also Architecture 68)
Introduction to computer-aided drafting. 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. (Combined credit for Architecture 68 and Interior Design 68 may not exceed 12 units.) 2 hours lecture, 4 hours studio. Transfer: CSU.

70 ADVANCED KITCHEN AND BATH DESIGN 3 UNITS
National Kitchen and Bath (NKBA) planning guidelines and NKBA Access Standards for kitchen and bath. Emphasis on designing a universal kitchen and universal bath. Creation of working documents to design a kitchen and bath from its beginning to completion. Prerequisite: Interior Design 62. 3 hours. Transfer: CSU.

72 COMMERCIAL INTERIOR DESIGN 3 UNITS
Introduction to the field of commercial design. Emphasis on the design of interior spaces such as offices, restaurants and hotels. Topics will include space planning, interior specifications and costing out jobs. Prerequisite: Interior Design 50. 3 hours. Transfer: CSU.

International Studies

DEGREE: AA–International Studies

INTERNATIONAL STUDIES
ASSOCIATE IN ARTS DEGREE

FRESHMAN YEAR	FALL	SPRING
Foreign Language*	4-5	
Option Course	3	
Geography 2 (Cultural Geography) or Anthropology 3 (Social and Cultural Anthropology)	3	

SOPHOMORE YEAR	FALL	SPRING
Foreign Language*	4-5	
Option Course	3	
Political Science 30 (International Relations)	3	
Economics 1 (Principles of Microeconomics) or Economics 2 (Principles of Macroeconomics)	3	
Total	**23–26**	

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

** Select from individual foreign languages (units may be from multiple languages); up to 5 foreign language units may be waived with demonstrated proficiency (see: Language Arts Division Advanced Level Competency form.).*

Options *(Choose six units from the following. Choices must come from two different disciplines.)*
Anthropology 7 (Introduction to Globalization: An Anthropological Perspective) . . . . . 3 units
Business 40 (International Business) . . . . . 3 units
Communication Studies 6 (Introduction to Performance Studies) . . . . . 3 units

Communication Studies 11 (Intercultural Communication) . 3 units
English 26 (Literature of Immigration) . . . . . 3 units
English 48 (The Literature of the Holocaust) . . . . . 3 units
Geography 3 (Economic Geography) . . . . . 3 units
Geography 5 (World Regional Geography) . . . . . 3 units
General Studies 31 (Women's Spirituality) . . . . . 3 units
History 4 (World History: 1500 to the Present) . . . . . 3 units
Political Science 10 (Selected Topics in Comparative Politics) . . . . . 3 units
Political Science 20 (Comparative Politics) . . . . . 3 units
Religious Studies 50 (Religions of the World) . . . . . 3 units

Italian (ITAL)

1A BEGINNING ITALIAN 5 UNITS
Introduction to the Italian-speaking cultures of the world featuring the study and practice of the four language skills (listening, speaking, reading, and writing) of Italian. Following an immersion instruction format, the class is entirely taught in the target world language of the selected course. Strongly recommended: Eligibility for English 1A. 5 hours lecture, 1 hour laboratory. Transfer: CSU; UC; CSU/GE: C2; AA/AS..

1B ELEMENTARY ITALIAN 5 UNITS
Further study of Italian-speaking cultures of the world featuring the study and practice of the four language skills (listening, speaking, reading, and writing) of Italian begun in Italian 1A. Following an immersion instruction format, the class is entirely taught in the target world language of the selected course. Prerequisite: Italian 1A (*completed with a grade of "C" or higher*). 5 hours lecture, 1 hour laboratory. Transfer: CSU; UC; CSU/GE: C2; IGETC: 6A-LOTE; AA/AS. (Corresponds to 2 years high school study.)

2A INTERMEDIATE ITALIAN 4 UNITS
Review of grammar; reading of works of modern authors; practice in conversation and composition. Following an immersion instruction format, the class is entirely taught in the target world language of the selected course. Prerequisite: Italian 1B (*completed with a grade of "C" or higher*). 4 hours lecture, 1 hour laboratory. Transfer: CSU; UC; CSU/GE: C2; IGETC: Area 3B, 6A-LOTE; AA/AS.

2B ADVANCED ITALIAN 4 UNITS
Reading of Italian authors; advanced review of grammar; emphasis on speaking and composition. Following an immersion instruction format, the class is entirely taught in the target world language of the selected course. Prerequisite: Italian 2A (*completed with a grade of "C" or higher*). 4 hours lecture, 1 hour laboratory. Transfer: CSU; UC; CSU/GE: C2; IGETC: Area 3B, 6A-LOTE; AA/AS.

50A ITALIAN CONVERSATION AND CULTURE I 3 UNITS
Development of a basic understanding of spoken Italian through pronunciation, vocabulary, and applied grammar. Introduction to the everyday culture of Italian-speaking people. Following an immersion instruction format, the class is entirely taught in the target world language of the selected course. 3 hours lecture, 1 hour laboratory. Transfer CSU.

50B ITALIAN CONVERSATION AND CULTURE II 3 UNITS
Development of skills learned in Italian 50A. Understanding of spoken Italian through pronunciation, vocabulary, and applied grammar. Further study of the life and culture of the Italian-speaking people. Following an immersion instruction format, the class is entirely taught in the target world language of the selected course. Prerequisite: Italian 50A (*completed with a grade of "C" or higher*). 3 hours lecture, 1 hour laboratory. Transfer: CSU.

Japanese (JAPN)

1A BEGINNING JAPANESE 5 UNITS
Introduction to the Japanese cultures of the world featuring the study and practice of the four language skills (listening, speaking, reading, and writing) of Japanese. Following an immersion instruction format, the class is entirely taught in the target world language of the selected course. Strongly recommended: eligibility for English 1A. 5 hours lecture, 1 hour laboratory. Transfer: CSU; UC; CSU/GE: C2; AA/AS.

1B ELEMENTARY JAPANESE 5 UNITS
Further study of Japanese cultures of the world featuring the acquisition of the four language skills (listening, speaking, reading, and writing) of Japanese begun in Japanese 1A. Following an immersion instruction format, the class is entirely taught in the target world language of the selected course. Prerequisite: Japanese 1A (*completed with a grade of "C" or higher*). 5 hours lecture, 1 hour laboratory. Transfer: CSU; UC; CSU/GE: C2; IGETC: 6A-LOTE; AA/AS. (Corresponds to 2 years high school study.)

50A JAPANESE CONVERSATION AND CULTURE I 3 UNITS
Development of an understanding of spoken Japanese through pronunciation, vocabulary, and applied grammar. Introduction to the everyday culture of Japanese-speaking people. Following an immersion instruction format, the class is entirely taught in the target world language of the selected course. 3 hours lecture, 1 hour laboratory. Transfer: CSU.

50B JAPANESE CONVERSATION AND CULTURE II 3 UNITS
Development of skills learned in Japanese 50A. Development of an understanding of spoken Japanese through pronunciation, vocabulary, and applied grammar. Further study of the life and culture of Japanese-speaking people. Following an immersion instruction format, the class is entirely taught in the target world language of the selected course. Prerequisite: Japanese 50A (*completed with a grade of "C" or higher*). 3 hours lecture, 1 hour laboratory. Transfer: CSU.

50C JAPANESE CONVERSATION AND CULTURE III 3 UNITS
Continuation of skills developed in Japanese 50B. Continues to develop an understanding and application of conversational Japanese. Pronunciation, vocabulary, sentences and applied grammar will be covered. Introduces the everyday life and culture of Japanese-speaking people. Following an immersion instruction format, the class is entirely taught in the target world language of the selected course. Prerequisite: Japanese 50B (*completed with a grade of "C" or higher*). 3 hours lecture, 1 hour laboratory. Transfer: CSU.

50D JAPANESE CONVERSATION AND CULTURE IV 3 UNITS
Continuation of skills developed in Japanese 50C. Continues to develop and apply conversational Japanese skills. Pronunciation, vocabulary, sentences and applied grammar will be covered. Further study of the everyday life and cultural traditions of Japanese-speaking people. Following an immersion instruction format, the class is entirely taught in the target world language of the selected course. Prerequisite: Japanese 50C (*completed with a grade of "C" or higher*). 3 hours lecture, 1 hour laboratory. Transfer: CSU.

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
Mass Communications 1 (Journalism: News Writing and Information Gathering)	3	
Mass Communications 41 (Introduction to Mass Communications)	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
Photography 65 (Graphic Techniques)		3
Total		**22**

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

Total minimum units required 60

Liberal Arts

(See Psychology-Counseling)

Liberal Studies

(See Psychology-Counseling)

Library Studies (LIBS)

2 LIBRARY RESEARCH AND INFORMATION LITERACY SKILLS VIA POPULAR CULTURE 2 UNITS
(May be repeated 2 times)
Introduction to research techniques using Chabot College library resources. Teaches the skills needed to successfully find, evaluate, and document information in print, electronic, and Internet formats. Covers plagiarism, the ethical and legal aspects of information use, and the critical thinking skills necessary for successful college research, 2 hours. Transfer: CSU.

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, woodworking 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	
Machine Tool Technology 60A (Machine Tool Technology I)	4	
Welding Technology 70 (Introduction to Welding)	2	
Machine Tool Technology 60B (Machine Tool Technology II)		4

SOPHOMORE YEAR	FALL	SPRING
Machine Tool Technology 65 (Production Practices)	4	
Machine Tool Technology 71A (Numerical Control Programming I)	4	
Machine Tool Technology 66 (Basic Toolmaking)		4
Machine Tool Technology 81B (Surfcam) or Machine Tool Technology 81C (Mastercam X)		3
Total		**28**

GENERAL EDUCATION UNITS FOR A.S. DEGREE 19
For specific A.S. General Education courses refer to catalog section on A.S. Graduation Requirements.
General Education Courses (Areas A-E) 16
Machine Tool Technology GE Requirement 3
Complete a minimum of 3 units from
Industrial Technology 74 (Measurements and Calculations)
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.

NUMERICAL CONTROL

ASSOCIATE IN SCIENCE DEGREE

FRESHMAN YEAR	FALL	SPRING
Machine Tool Technology 50 (Blueprint Reading, Sketching, and CAD)	3	
Machine Tool Technology 60A (Machine Tool Technology I)	4	
Machine Tool Technology 71A (Numerical Control Programming I)	4	
Machine Tool Technology 60B (Machine Tool Technology II)		4
Machine Tool Technology 71B (Numerical Control Programming II)		4

SOPHOMORE YEAR	FALL	SPRING
Machine Tool Technology 65 (Production Practices)	4	
Machine Tool Technology 81A (SolidWorks for Machine Shops)	3	
Machine Tool Technology 71C (Numerical Control Programming III)		4
Machine Tool Technology 81B (Surfcam) or Machine Tool Technology 81C (Mastercam X)		3
Total		**33**

GENERAL EDUCATION UNITS FOR A.S. DEGREE 19
For specific A.S. General Education courses refer to catalog section on A.S. Graduation Requirements.
General Education Courses (Areas A-E) 16
Numerical Control GE Requirement 3
Complete a minimum of 3 units from
Industrial Technology 74 (Measurements and Calculations)
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.

MACHINIST

CERTIFICATE OF ACHIEVEMENT

CORE COURSES	FALL	SPRING
Machine Tool Technology 60A (Machine Tool Technology I)	4	
Machine Tool Technology 63A (Individual Projects)	2	
Machine Tool Technology 71A (Numerical Control Programming I)	4	
Machine Tool Technology 50 (Blueprint Reading, Sketching, and CAD)	3	
Industrial Technology 74 (Measurements and Calculations)	3	
Machine Tool Technology 60B (Machine Tool Technology II)		4

Machine Tool Technology 63B
(Advanced Individual Projects) 2
Machine Tool Technology 81B (Surfcam) or
Machine Tool Technology 81C (Mastercam X) 3
Welding Technology 70
(Introduction to Welding) 2
Total 27

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 71A (Numerical Control Programming I)	4	
Machine Tool Technology 60B (Machine Tool Technology II)	4	
Machine Tool Technology 71B (Numerical Control Programming II)	4	

SOPHOMORE YEAR	FALL	SPRING
Machine Tool Technology 65 (Production Practices)	4	
Machine Tool Technology 81A (SolidWorks for Machine Shops)	3	
Machine Tool Technology 71C (Numerical Control Programming III)	4	
Machine Tool Technology 81B (Surfcam) or Machine Tool Technology 81C (Mastercam X)	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 65 (Production Practices)	4	
Industrial Technology 74 (Measurements and Calculations)	3	
Machine Tool Technology 71A (Numerical Control Programming I)	4	
Welding Technology 70 (Introduction to Welding)	2	
Machine Tool Technology 50 (Blueprint Reading, Sketching, and CAD)	3	
Machine Tool Technology 60B (Machine Tool Technology II)	4	
Machine Tool Technology 66 (Basic Toolmaking)	4	
Machine Tool Technology 81B (Surfcam) or Machine Tool Technology 81C (Mastercam X)	3	
Total	**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.

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). Focus on subject matter relevant to Machine Tool Technology and Industrial Technology applications and local industry requirements. 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 manufacturing 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 *(completed with a grade of "C" or higher)*. 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. Strongly recommended: Machine Tool Technology 60A. 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. Strongly recommended: Machine Tool Technology 60A. 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 *(completed with a grade of "C" or higher)*. 2 hours lecture, 6 hours laboratory. Transfer: CSU.

66 BASIC TOOLMAKING **4 UNITS**

Toolroom grinding, precision measurement, precision boring, steels and heat treating, carbide cutting tools, job estimating, and basic die-making theory. Prerequisite: Machine Tool Technology 65 *(completed with a grade of "C" or higher)*. 2 hours lecture, 6 hours laboratory. Transfer: CSU.

70 INTRODUCTION TO MACHINE SHOP **2 UNITS**

Introduction to machine shop practice. Includes measuring tools, benchwork, 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 machining centers. Instruction includes the standard XYZ Cartesian Coordinate system, manual and automatic machining center operation, absolute and incremental positioning, program coding and preparation, fabrication of basic three-axis drill and mill parts, and laboratory "first article" inspection reports. Strongly recommended: Industrial Technology 74. 2 hours lecture, 6 hours laboratory. Transfer: CSU.

71B NUMERICAL CONTROL PROGRAMMING II **4 UNITS**

(May be repeated 3 times)

Intermediate programming and operating three-axis computer numerical controlled drilling and milling machining centers. Instruction includes intermediate contouring, helical interpolation, thread milling, sub programs, basic macro programming, conversational programming, programming with DXF files, program coding and preparation, process planning, fabrication of intermediate three-axis drill and mill parts, and laboratory "first article" inspection reports. Prerequisite: Machine Tool Technology 71A *(completed with a grade of "C" or higher)*. 2 hours lecture, 6 hours laboratory. Transfer: CSU.

71C NUMERICAL CONTROL PROGRAMMING III **4 UNITS**

(May be repeated 3 times)

Basic programming and operating of two-axis and live tooling computer numerical controlled lathes. Instruction includes lathe programming using constant surface speeds, internal and external turning, live tool drilling, tapping, milling, sub spindle operation, and laboratory "first article" inspection reports. Strongly recommended: Industrial Technology 74. 2 hours lecture, 6 hours laboratory. Transfer: CSU.

75 NUMERICAL CONTROL OPERATOR **4 UNITS**

(May be repeated 3 times)

Introduction to operating computer numerical controlled drilling and milling machining centers, two-axis lathes, and mill-turn machining centers. Instruction includes the XYZ Cartesian Coordinate system, manual and automatic machining center setup and operation, 2-axis lathe setup and operation, mill-turn machining center setup and operation, basic program editing, run programmed mill and lathe parts, laboratory "first article" inspection, and creating lab inspection reports. 2 hours lecture, 6 hours laboratory.

81A SOLIDWORKS FOR MACHINE SHOPS **3 UNITS**

(May be repeated 3 times)

The fundamentals of SolidWorks design software as it pertains to machine shop use and requirements. Instruction includes theory and laboratory practice on the use of the SolidWorks design software environment to create solid models, drawings, assemblies and how to interface SolidWorks models with CAD/CAM software. PhotoWorks Cosmos Express, eDrawings, and other third party "add-ins" will be touched on briefly. Strongly recommended: Machine Tool Technology 71A. 2 hours lecture, 3 hours laboratory.

81B SURFCAM **3 UNITS**

(May be repeated 3 times)

The fundamentals of Surfcam CAD/CAM manufacturing software as it pertains to machine shop use and requirements. Instruction includes theory and laboratory practice on the use of the Surfcam software environment to create 2½ and 3 axis, lathe, and wire edm tool paths. Instruction includes part drawing, dimensioning, importing electronic files (DXF, IGES, Sldprt, and Dwg), lathe and mill tool path construction, geometry and tool path transformations, tool path editing, and post processors. Strongly recommended: Machine Tool Technology 71A. 2 hours lecture, 3 hours laboratory.

81C MASTERCAM X **3 UNITS**

(May be repeated 3 times)

The fundamentals of the latest version of Mastercam X CAD/CAM manufacturing software as it pertains to machine shop use and requirements. Instruction includes theory and laboratory practice on the use of the Mastercam X software environment to create 2 ½ and 3 axis, lathe, and wire edm tool paths. Instruction includes part drawing, dimensioning, importing electronic files (DXF, IGES, Sldprt, and Dwg), lathe and mill tool path construction, geometry and tool path transformations, tool path editing, and post processors. Strongly recommended: Machine Tool Technology 71A. 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 40 (Introduction to Broadcasting)	3	
Mass Communications 41 (Introduction to Mass Communications)	3	
Mass Communications 1 (Journalism: Newswriting and Information Gathering)	3	
Mass Communications 3 (Journalism: Magazine and Newspaper Feature Writing)		3
Mass Communications 42 (Writing for Broadcasting)		3
Photography 50 (Introduction to Photography)		3

SOPHOMORE YEAR	FALL	SPRING
Mass Communications 15 (Publications: Editorial Leadership and Production)	3	
Business 34 (Introduction to Advertising)	3	
Mass Communications 60 (Introduction to Television Studio Techniques)	3	
Mass Communications 43 (Advertising Sales and Media Management)		4
Mass Communications 44 (Radio and Television Announcing/Performance)		3
Mass Communications 61 (Intermediate Television Studio Techniques)		3
Mass Communications Option*		3
Total		**40**

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 identify a compelling story, gather information, organize, write, rewrite and deliver in the chosen format, according to professional standards of traditional print journalism and online journalism, supported by multimedia. 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.

3 JOURNALISM: MAGAZINE AND NEWSPAPER FEATURE WRITING 3 UNITS
Feature writing, freelance journalism and how to get published in newspapers and magazines and online opportunities. 3 hours. Transfer: CSU.

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. Transfer: CSU.

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.

40 INTRODUCTION TO BROADCASTING 3 UNITS
A survey of radio, television, film, and multimedia and their impact on culture and society; includes economics, technological development, programming, ratings, legal aspects, and social control of broadcasting in America, and cross-cultural, international comparisons. (May not receive credit if Mass Communications 31 has been completed.) 3 hours. Transfer: CSU; UC; CSU/GE: D7; AA/AS

41 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. The social and cultural impact of the media and its role in shaping public perception. An overview of the news process and job opportunities in the media. Strongly recommended: Eligibility for English 1A. (May not receive credit if Mass Communications 5 has been completed.) 3 hours. Transfer: CSU; UC; CSU/GE: D7; IGETC: Area 4G; AA/AS.

42 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. (May not receive credit if Mass Communications 35 has been completed.) 3 hours. Transfer: CSU.

43 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. (May not receive credit if Mass Communications 8 has been completed.) 4 hours. Transfer: CSU; AA/AS.

44 RADIO AND TELEVISION ANNOUNCING/ PERFORMANCE 3 UNITS
Projection of personality, voice control and pronunciation necessary for communication of ideas in radio and television broadcasting under simulated studio circumstances. (May not receive credit if Mass Communications 32 has been completed.) 3 hours. Transfer: CSU; AA/AS.

50 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. (May not receive credit if Mass Communications 34 has been completed.) 3 hours lecture, 1 hour laboratory. Transfer: CSU.

58 KCRH RADIO EXPERIENCE 3 UNITS
(May be repeated 3 times)
Practical experience in KCRH radio station operations including programming, music, audio production techniques, promotions, news, live sports, and underwriting sales. Experience in broadcast operation of KCRH-FM. Prerequisite: Mass Communications 50 *(completed with a grade of "C" or higher)*. (Mass Communications 38 and 58 may be taken a combined total of four times.) 2 hours lecture, 3 hours laboratory. Transfer: CSU.

59 ADVANCED KCRH RADIO EXPERIENCE 3 UNIT
(May be repeated 3 times)
Advanced practical experience in KCRH radio station operations including running programming, music, audio production, promotions, news, live sports, and underwriting sales departments. Experience in broadcast operation of KCRH-FM. Strongly recommended: Mass Communications 58. 2 hours lecture, 3 hours laboratory. Transfer: CSU.

60 TELEVISION STUDIO TECHNIQUES I 3 UNITS
Introduction to studio practices. Hands-on experience in television studio operations, control room procedures, and basic program production. (Mass Communications 33A and 60 may be taken a combined total of four times.) 2 hours lecture, 3 hours laboratory. Transfer: CSU.

61 TELEVISION STUDIO TECHNIQUES II 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 television programs. Prerequisite: Mass Communications 60. 2 hours lecture, 3 hours laboratory. Transfer: CSU.

62 TELEVISION SPORTS PRODUCTION 2 UNITS
(May be repeated 3 times)
Introduction to the exciting field of television sports production. This course offers hands-on experience in LIVE broadcast of Chabot College home games and production of the *Chabot Sports Show,* both of which are broadcast on Chabot Television on Comcast cable channel 27. Other topics include: shooting and editing sports highlights and features, field production, sports field reporting, interviewing athletes, and news writing. Strongly recommended: Mass Communications 60. (Mass Communications 72 and 62 may be taken a combined total of 4 times). 1 hour lecture, 4 hours laboratory. Transfer: CSU.

63 CABLE TELEVISION STATION OPERATION 2 UNITS
(May be repeated 3 times)
Practical experience in cable television station operation including: programming the television line up, content development, community outreach, underwriting and sales, soliciting clients, and proper equipment maintenance. Experience in the broadcast operation of Chabot Television on Comcast cable 27. Strongly recommended: Mass Communications 60. (Mass Communications 73 and 63 may be taken a combined total of four times.) 1 hour lecture, 4 hours laboratory. Transfer: CSU.

68 KCTH TELEVISION EXPERIENCE 3 UNITS
(May be repeated 3 times)
Practical experience in television production and programming. Prerequisite: Mass Communications 60. (Mass Communications 73 and 63 may be taken a combined total of four times.) 2 hours lecture, 3 hours laboratory. Transfer: CSU.

69 ADVANCED KCTH TELEVISION EXPERIENCE 3 UNITS
(May be repeated 3 times)
Advanced practical experience in television production and programming. Prerequisite: Mass Communications 60 *(completed with a grade of "C" or higher)*. Strongly recommended: Mass Communications 68 *(completed with a grade of "C" or higher)*. 2 hours lecture, 3 hours laboratory. Transfer: CSU.

Mathematics (MTH)

DEGREE:
AA–Mathematics
AS–Mathematics
AS-T–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 1 (Calculus I)	5	
Mathematics 2 (Calculus II)		5
Choose at least one other course from the following	3–5	
Computer Science 14 (Introduction to Structured Programming In C++)		
Computer Science 15 (Object-Oriented Programming Methods)		
Computer Science 20 (Introduction to Data Structures)		
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)		
Mathematics 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
Choose two Mathematics courses from the following:	6	
Mathematics 4 (Elementary Differential Equations)		
Mathematics 6 (Elementary Linear Algebra)		
Mathematics 8 (Discrete Mathematics)		
Total		**24–26**

GENERAL EDUCATION COURSES FOR A.A. DEGREE 25
For specific General Education courses refer to catalog section on Graduation Requirements.
Total minimum units required 60

GENERAL EDUCATION UNITS FOR A.S. DEGREE 19
For specific A.S. General Education courses refer to catalog section on A.S. Graduation Requirements.
General Education Courses (Areas A-E) 16
Mathematics GE Requirement 3
Complete a minimum of 3 units from
Anatomy 1
Anthropology 1, 1L, 2, 3, 5, 8, 12
Architecture 2A, 2B, 4A, 4B, 8A, 8B, 12, 14, 16
Astronomy 1, 10, 20, 30
Biology 2A, 2B, 5, 10, 31, 50
Chemistry 1A, 8, 10, 30A, 30B, 31
Computer Science 8, 10, 14, 15, 19A
Economics 1, 2, 5, 10, 12
Environmental Science 10, 11, 12
Geography 1, 1L, 8, 20
Geology 1, 10, 10L
Mathematics 12, 33, 43
Microbiology 1
Physics 2A, 4A, 4B, 4C, 5, 11
Physiology 1
Psychology 5
Total minimum units required 60

MATHEMATICS

ASSOCIATE IN SCIENCE FOR TRANSFER

This curriculum provides an opportunity to achieve an Associate in Science Degree in Mathematics for Transfer to the California State University System (CSU) while completing the first and second year requirements for transfer to a four-year institution. A baccalaureate degree is recommended preparation for those considering professional careers in business. Completion of this curriculum will demonstrate commitment to the field and provide comprehensive preparation for upper-division work. This program is designed specifically for the California State University system. Lower Division requirements for the University of California system and private four-year colleges vary by transfer school. Please see a counselor for transfer requirements for other institutions.

Students who intend to transfer must meet all current transfer requirements including minimum GPA. Students are strongly advised to meet with a counselor to discuss transfer requirements and lower division major preparation that is needed for their intended transfer school.

For more information about Associate in Arts for Transfer and Associate in Science for Transfer degrees, see page 24.

	UNITS
REQUIRED CORE *(15 units)*	
Mathematics 1 (Calculus I)	5
Mathematics 2 (Calculus II)	5
Mathematics 3 (Multivariable Calculus)	5
LIST A *(choose one—3-4 units)*	
Mathematics 4 (Elementary Differential Equations)	3
Mathematics 6 (Elementary Linear Algebra)	3
Mathematics 8 (Discrete Mathematics)	4

LIST B ***(choose one—3-5 units)***

Any course from List A not used above. 3-4
Computer Science 14 (Introduction to Structured Programming in C++). 4
Computer Science 15 (Objected-Oriented Programming Methods) 4
Computer Science 20 (Introduction to Data Structures) 4
Engineering 36 (Engineering Mechanics—Statics) 3
Engineering 43 (Engineering Circuit Analysis). 4
Engineering 45 (Materials of Engineering) 3
Mathematics 43 (Introduction to Probability and Statistics). 4
Physics 4A (General Physics I) 5
Total 21-24

Required Major Courses: 21-23 units
CSU GE or IGETC (CSU) requirements: 37-39 units
(Possible Double-counting: 9 units)
CSU transfer Electives as needed to reach 60 CSU transferable units
TOTAL UNITS: 60 units

All courses in the major or area of emphasis are required to have a grade of "C" or higher, and a cumulative GPA of 2.0 must be achieved.

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

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. Transfer: CSU; UC; CSU/GE: B4; IGETC: Area 2A; AA/AS.

1W CALCULUS I WORKSHOP ¼—½ UNIT
Laboratory, study group, collaborative workshop or computer laboratory time for Calculus 1. 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. Transfer: CSU; UC; CSU/GE: B4; IGETC: Area 2A; AA/AS.

2W CALCULUS II WORKSHOP ¼—½ 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 2A.

3W MULTIVARIABLE CALCULUS WORKSHOP ¼—½ 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 2A.

4W ELEMENTARY DIFFERENTIAL EQUATIONS WORKSHOP ¼—½ 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" of higher*). 3 hours. Transfer: CSU; UC; CSU/GE: B4; IGETC: Area 2A.

6W ELEMENTARY LINEAR ALGEBRA WORKSHOP ¼—½ UNIT
Laboratory, study group, collaborative workshop or computer laboratory time for Elementary Linear Algebra. Corequisite: Mathematics 6. 1–2 hours laboratory.

8 DISCRETE MATHEMATICS 4 UNITS
Sets, relations and functions; logic, methods of proof, induction; combinatorics, recursion, recurrence relations and complexity of algorithms; graphs and trees; logic circuits; automata. Designed for majors in mathematics and computer science. Prerequisite: Mathematics 1 (*completed with a grade of "C" or higher*). 4 hours. Transfer: CSU; UC; CSU/GE: B4; IGETC: Area 2A.

8W DISCRETE MATHEMATICS WORKSHOP ¼—½ 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
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. 3 hours. Transfer: CSU; UC; CSU/GE: A3; AA/AS.

15 APPLIED CALCULUS I 3 UNITS

Differential calculus of algebraic, exponential, and logarithmic functions; introduction to integral calculus. Applications in business, economics and the life and social sciences. Prerequisite: Mathematics 31 *(completed with a grade of "C "or higher)* or Mathematics 20 *(completed with a grade of "C " or higher)* or an appropriate skill level demonstrated through the Mathematics Assessment process. 3 hours lecture, 0-1 hour laboratory. Transfer: CSU; UC; CSU/GE: B4; IGETC: Area 2A; AA/AS.

16 APPLIED CALCULUS II 3 UNITS

Techniques of integration; multivariable calculus; calculus of trigonometric functions; differential equations; Taylor polynomials. Applications in business, economics and the life and social sciences. Prerequisite: Mathematics 36 or 37 *(completed with a grade of "C "or higher)* and Mathematics 15 *(completed with a grade of "C " or higher)* or an appropriate skill level demonstrated through the Mathematics Assessment process. 3 hours lecture, 0-1 hour laboratory. Transfer: CSU; UC; CSU/GE: B4; IGETC: Area 2A; AA/AS.

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 2A; AA/AS.

20W PRE-CALCULUS WORKSHOP ¼—½ 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. Transfer: CSU; UC.

31 COLLEGE ALGEBRA 3 UNITS

Preparation for Calculus for Business and Social Science students. 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. Prerequisite: Mathematics 54, 54L, 55, 55L 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 2A; AA/AS.

31W COLLEGE ALGEBRA WORKSHOP ¼—½ UNIT

Laboratory, study group, collaborative workshop or computer laboratory time for College Algebra. Corequisite: Mathematics 31. 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, 55L 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 2A; AA/AS.

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.

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, 55L 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.

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, 55L 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; AA/AS.

37W TRIGONOMETRY WITH AN EMPHASIS ON ITS GEOMETRIC FOUNDATIONS WORKSHOP ¼—½ UNIT

Laboratory, study group, collaborative workshop or computer laboratory time for Trigonometry with an Emphasis on its Geometric Foundations. 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, 55L 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 2A; AA/AS.

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, 55L or 55B or the equivalent (*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 not receive credit if Mathematics 35 has been completed. 4 hours lecture, 1 hour laboratory. Transfer: CSU; UC; CSU/GE: B4; IGETC: Area 2A; AA/AS.

43W INTRODUCTION TO PROBABILITY AND STATISTICS WORKSHOP ¼—½ UNIT
Laboratory, study group, collaborative workshop or computer laboratory time for Introduction to Probability and Statistics. Corequisite: Mathematics 43. 1–2 hours laboratory.

47 MATHEMATICS FOR LIBERAL ARTS 3 UNITS
An introduction to a variety of mathematical concepts for students interested in liberal arts. Focus is on using mathematics to help make informed decisions. Applications include voting practices, apportionment and personal finance. Prerequisite: Mathematics 54, 54L, or 55B or equivalent *(completed with a grade of "C" or higher)* or an appropriate skill level demonstrated through the mathematics assessment process. 3 hours. Transfer: CSU; AA/AS.

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. AA/AS.

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. AA/AS.

55 INTERMEDIATE ALGEBRA 5 UNITS
Concepts involving complex numbers, quadratic equations, parabolas and circles, functions and their graphs, systems of equations, rational exponents, radical equations, absolute value equations and inequalities, exponential and logarithmic functions and equations. 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 or Mathematics 55L have been completed. 5 hours lecture, 0–1 hour laboratory. AA/AS.

55L INTERMEDIATE ALGEBRA WITH LABORATORY 5½ UNITS
Concepts involving complex numbers, quadratic equations, parabolas and circles, functions and their graphs, systems of equations, rational exponents, radical equations, absolute value equations and inequalities, exponential and logarithmic functions and equations. Includes laboratory time designed to reinforce concepts and enhance problem-solving skills. 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 Mathematics 55B or Mathematics 55 have been completed. 5 hours lecture, 1 hour laboratory. AA/AS.

55W INTERMEDIATE ALGEBRA WORKSHOP ¼—½ 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 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 55 has been completed. 3 hours. AA/AS.

55AW INTERMEDIATE ALGEBRA A WORKSHOP ¼—½ 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 or 55L has been completed. 3 hours lecture, 0–1 hour laboratory. AA/AS.

55BW INTERMEDIATE ALGEBRA B WORKSHOP ¼—½ 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. AA/AS.

57W PLANE GEOMETRY WORKSHOP **¼—½ UNIT**
Laboratory, study group, collaborative workshop or computer laboratory time for Plane Geometry. Corequisite: Mathematics 57. 1–2 hours laboratory.

62 APPLIED ALGEBRA AND DATA ANALYSIS **6 UNITS**
Equations and formulas; linear exponential, logarithmic and variation functions; measurement and conversion of units, exponents and scientific notation; introduction to descriptive statistics including graphical methods; introduction to probability; measures of risk. Intended for students not majoring in mathematics, science, or engineering. Prerequisite: Mathematics 104 *(completed with a grade of "C" or higher)* or an appropriate skill level demonstrated through the Mathematics Assessment process. 6 hours lecture, 1 hour 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 equations. Prerequisite: Mathematics 104 (*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. 5 hours. 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, linear equations and inequalities; introduction to graphs; set theory. Designed for those with no previous algebra background. Prerequisite: Mathematics 104 *(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. 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 an introduction to polynomials, factoring, rational expressions and complex fractions; quadratic and rational equations; solving quadratic equations. 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.

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 104 *(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. 1½ hours laboratory. AA/AS.

103 BASIC MATHEMATICS **3 UNITS**
Fundamental concepts in arithmetic, including fractions, decimals, ratios, proportions, percents; order of operations, measurement, and geometric formulas. 3 hours lecture, 1 hour laboratory.

104 PREALGEBRA **3 UNITS**
Brief review of arithmetic, including fractions, decimals, percents; order of operations, and geometric formulas. Introduction to algebraic concepts, including signed numbers, properties of real numbers, algebraic expressions, linear equations, and graphs. Prerequisite: Mathematics 103 *(completed with a grade of "C" or higher)* or an appropriate skill level demonstrated through the Mathematics Assessment process. 3 hours lecture, 1 hour laboratory.

104W PREALGEBRA WORKSHOP **¼—½ UNIT**
Laboratory, study group, collaborative workshop or computer laboratory time for Prealgebra. Corequisite: Mathematics 104. 1–2 hours laboratory.

122 MATH LABORATORY **½—1 UNIT**
(May be repeated 3 times.)
Provides mathematics students an opportunity to study a mathematics course with tutorial assistance from an instructor, student tutors, and fellow classmates. Students may also use a software program and work on problems at their own pace. 1½–3 hours laboratory.

Medical Assisting (MEDA)

DEGREE: AA—Medical Assisting

CERTIFICATE OF ACHIEVEMENT: Medical Assisting

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 31.7 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 51A (Basic Medical Terminology)	4	
Psychology 1 (General Psychology)	3	
Health 60 (Responding to Emergencies)	1	
Biology 50 (Anatomy and Physiology)		4
Business 7 (Accounting for Small Business)		3
Computer Application Systems 50 (Introduction to Computer Application Systems) or Computer Application Systems 88A (Microsoft Word I) or Computer Science 8 (Computer Literacy)		3

SOPHOMORE YEAR	FALL	SPRING
Health 51 B (Disease Process and Advanced Medical Terminology)	4	
Health 70A (Community Cardiopulmonary Resuscitation)	½	
Health 70B (Professional Cardiopulmonary Resuscitation)	0.2	
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)	3	
Medical Assisting 70B* (Clinical Skills for the Medical Assistant II)		3
Medical Assisting 71B (Medical Administrative Skills II)		2
Medical Assisting 73 (Clinical Experience (Externship))		4
Medical Assisting 74 (Clinical Experience Seminar)		1
Total		**40.7**

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 (MEDA 73), the student must submit medical, dental and immunization records. A background check is also required. 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 73.*

MEDICAL ASSISTING
CERTIFICATE OF ACHIEVEMENT

The Certificate Program in Medical Assisting is accredited by the Commission on Accreditation of Allied Health Education Programs (CAAHEP), 1361 Park Street, Clearwater, Florida 33756, (727) 210-2350, www.caahep.org, on recommendation of the Curriculum Review Board (CRB) 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 31.7 units for the accredited Medical Assisting Certificate program are eligible to sit the American Association of Medical Assistants (AAMA) Certified Medical Assistant (CMA®) exam.

CORE COURSES	FALL	SPRING
Health 51A (Basic Medical Terminology)	4	
Health 70A (Community Cardiopulmonary Resuscitation)	½	
Health 70B (Professional Cardiopulmonary Resuscitation)	0.2	
Computer Application Systems 50 (Introduction to Computer Application Systems) or Computer Application Systems 88A (Microsoft Word I) or Computer Science 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)	3	
Health 51B (Disease Process and Advanced Medical Terminology)		4
Medical Assisting 70B* (Clinical Skills for the Medical Assistant II)		3
Medical Assisting 71B (Administrative Skills II)		2
Medical Assisting 73 (Clinical Experience (Externship))		4
Medical Assisting 74 (Clinical Experience Seminar)		1
Total		**29.7**

Prior to placement at Clinical Sites (MEDA 73), the student must submit medical, dental and immunization records. A background check is also required. 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 73.*

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. Prerequisite: 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, Medical Assisting 70A and Medical Assisting 75 (*all 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 and theory to include the health-care industry, the medical assisting profession, interpersonal skills and human behavior, law and ethics, computer concepts, telephone techniques, scheduling appointments, patient reception and processing office/clinic environment and daily operations, written communication and mail processing, medical record management. Corequisite: Health 51A. 1 hour lecture, 3 hours laboratory. Transfer: CSU.

71B ADMINISTRATIVE SKILLS II **2 UNITS**

Administrative Medical Assisting skills which include medical coding, health insurance, billing, collections, practice finances, confidentiality and development of life skills. Prerequisite: Medical Assisting 71A (*completed with a grade of "C" or higher*) 1 hour lecture, 3 hours laboratory. Transfer: CSU.

73 CLINICAL EXPERIENCE (PRACTICUM) **4 UNITS**

Application of principles and skills through participation in a simulated employment experience. Assisting the physician under close supervision in a health maintenance organization, or physician's office or clinic. Prerequisite: Medical Assisting 70A, 71A, 75. Corequisite: Medical Assisting 74. 16 hours per week. Total weeks—13.

74 CLINICAL EXPERIENCE SEMINAR **1 UNIT**

Discussion and analysis of clinical experience in a clinic setting or private physician's office. Corequisite: Medical Assisting 73. 1 hour. Transfer: CSU.

75 ADMINISTRATION OF MEDICATIONS FOR THE MEDICAL ASSISTANT **3 UNITS**

Medication administration including study of medications, 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 71A. 2 hours lecture, 3 hours laboratory. Transfer: CSU.

Microbiology

(See Biological Sciences)

Music

DEGREE: AA—Music

MUSIC
ASSOCIATE IN ARTS DEGREE

FRESHMAN YEAR	FALL	SPRING
Music (MUSL) 2A (Harmony and Musicianship I)	3	
Music (MUSA) 40 (Applied Lessons)	1	
Music Performance Option*	1	
Music (MUSL) 2B (Harmony and Musicianship II)		3
Music (MUSA) 40 (Applied Lessons)		1
Music (MUSA) 21M (Class Piano for Major)		1
Music Performance Option*		1

SOPHOMORE YEAR	FALL	SPRING
Music (MUSL) 2C (Harmony and Musicianship III)	3	
Music (MUSA) 40 (Applied Lessons)	1	
Music Performance Option*	1	
Music (MUSL) 2D (Harmony and Musicianship IV)		3
Music (MUSA) 40 (Applied Lessons)		1
Music (MUSL) 3 (World Music)		3
Music Performance Option*		1
Total		**24**

***Major Ensemble Option:**
Music (MUSP) 12 (Wind Ensemble)
Music (MUSP) 13 (Wind Symphony)
Music (MUSP) 14A (Jazz Lab I)
Music (MUSP) 14A (Jazz Lab II)
Music (MUSP) 15 (Jazz Ensemble)
Music (MUSP) 16 (Jazz Orchestra)
Music (MUSP) 44 (Concert Choir)
Music (MUSP) 45 (Chamber Choir)

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

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 is required. 3 hours lecture, 1 hour laboratory. Transfer: CSU; UC; CSU/GE: C1; IGETC: Area 3A; AA/AS.

2A HARMONY AND MUSICIANSHIP I 3 UNITS
Study of the fundamentals of Western music applicable to both classical and popular styles: notation; fundamental theoretical concepts; musicianship skills including sight singing, rhythmic training, ear training, dictation, and keyboard realization; and basic compositional skills. Strongly recommended: MUSL 6 or equivalent skills. 2 hours lecture; 4 hours laboratory. Transfer: CSU; UC; AA/AS.

2B HARMONY AND MUSICIANSHIP II 3 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: MUSL 2A (*completed with a grade of "C" or higher*). 2 hours lecture, 4 hours laboratory. Transfer: CSU; UC; AA/AS.

2C HARMONY AND MUSICIANSHIP III 3 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: MUSL 2B (*completed with a grade of "C" or higher*). 2 hours lecture, 4 hours laboratory. Transfer: CSU; UC; AA/AS.

2D HARMONY AND MUSICIANSHIP IV 3 UNITS
Study of advanced chromatic harmony, 20th century harmonic practices, large musical structures, style composition, harmonic, structural, and stylistic analysis, and musicianship skills including sight singing, rhythmic training, dictation, and keyboard realization. Prerequisite: MUSL 2C (*completed with a grade of "C" or higher*). 2 hours lecture, 4 hours laboratory. Transfer: CSU; UC; AA/AS.

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. 3 hours. Transfer: CSU; UC; CSU/GE: C1; IGETC: Area 3A; AA/AS.

4 JAZZ STYLES 3 UNITS
History, trends, and influences of the phenomenon of jazz beginning with pre-Dixieland early 1900's covering the various eras including Swing, Be-Bop and post Be-Bop to present day. Attendance at concerts and listening to a variety of music is required. 3 hours lecture, 1 hour laboratory. Transfer: CSU; UC; CSU/GE: C1; IGETC: Area 3A; 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; CSU/GE: C1; IGETC: Area 3A.

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. 1 hour lecture, 4 hours laboratory. Transfer: CSU; UC.

8 HISTORY OF ROCK AND ROLL AND POPULAR MUSIC 3 UNITS
A cultural survey of original American music traditions, forms and trends influenced by cultural, socio-economic, socio-political and economic changes including blues, jazz, early rock, the "British invasion," rap, hip hop culture, Latino rock, heavy metal, jazz-rock fusion, electronic, modern rock, and pop. 3 hours lecture, 1 hour laboratory. Transfer: CSU; UC; CSU/GE: C1; IGETC: Area 3A; AA/AS; AC.

28 MUSICAL STRUCTURE AND SONGWRITING 2 UNITS
Study of contemporary rock and popular music theory. Common chord progressions, harmonic development, song forms, lyric structure and analysis, orchestration and analysis of studio recording effects on important popular music styles of the mid to late 20th Century. Prerequisite: MUSL 6. 1 hour lecture, 3 hours laboratory. Transfer: CSU

Music

Performance (MUSP)

10 COMMUNITY CONCERT BAND ½ UNIT
(May be repeated 3 times)
The Community Concert Band is open to community instrumental musicians wishing to continue their musical growth. This ensemble offers its members an opportunity for musical expression and fellowship along with making a lasting contribution to musical life locally. In addition, the ensemble seeks to broaden performance skills through the programming of quality literature while fostering an interest in mentoring and education. 2½ hours laboratory.

12 WIND ENSEMBLE 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; AA/AS.

13 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. Transfer: CSU.

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: MUSP 14A *(completed with a grade of "C" or higher)*. 4 hours laboratory. Transfer: CSU; UC.

15 JAZZ ENSEMBLE 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.

16 JAZZ ORCHESTRA I **1 UNIT**

(May be repeated 3 times.)

Jazz Orchestra 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 orchestra plays various concerts and festivals. Opportunities to rehearse the orchestra as well as conduct. Enrollment by audition only. 4 hours laboratory. Transfer: CSU.

18 PERCUSSION ENSEMBLE **1 UNIT**

(May be repeated 3 times)

Open to any percussionist wishing to experience ensemble playing. Topics include a variety of styles and techniques used in percussion performance. Basic music reading is required. Strongly recommended: MUSP 12A or equivalent skills. 4 hours laboratory. Transfer: CSU; UC.

41 CHAMBER WINDS **1 UNIT**

(May be repeated 3 times)

Chamber Winds is open to any instrumental musician wishing to experience chamber ensemble playing. Topics will include a variety of styles and techniques used in chamber performance. Enrollment subject to a standardized audition by the instructor demonstrating musical ability and technical proficiency at a level suitable to the course level. Corequisite: MUSP 12A, 12B, 13A, 13B, or 13C. 4 hours laboratory. Transfer: CSU.

44 CONCERT CHOIR **1 UNIT**

(May be repeated 3 times)

Development of vocal and musical ability to interpret and perform the highest calibre of choral literature. 4 hours laboratory. Transfer: CSU; UC; AA/AS.

45 CHAMBER CHOIR **1 UNIT**

(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. 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; AA/AS.

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.

MUSIC
APPLIED (MUSA)

11A JAZZ IMPROVISATION I **1 UNIT**

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. Enrollment by audition or permission of instructor. 4 hours laboratory. Transfer: CSU; UC.

11B JAZZ IMPROVISATION II **1 UNIT**

(May be repeated 2 times.)

Exotic scales, altered chord construction, and development of modal and intervalic concepts used in avant garde jazz improvisation. Techniques used in composing and arranging for small ensembles. Prerequisite: MUSA 11A (*completed with a grade of "C" or higher*). 4 hours laboratory. Transfer: CSU; UC.

20A GUITAR I **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: MUSL 6. 4 hours laboratory. Transfer: CSU; UC.

20B GUITAR II **1 UNIT**
Continued study and practice of the fundamentals for playing the six-string acoustic guitar. An expanded repertoire of popular songs, classical solo and ensemble music, and styles will be examined. Prerequisite: MUSA 20A *(completed with a grade of "C" or higher)* or equivalent. 4 hours laboratory. 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. 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: MUSA 21A (*completed with a grade of "C" or higher*) or equivalent. 4 hours laboratory. Transfer: CSU; UC.

21M CLASS PIANO FOR MAJORS **1 UNIT**
(May be repeated 3 times)
Skills development for music majors and minors in playing major and minor scales, diatonic chord progressions, treble and bass clef reading, and simple hands together part playing. Strongly recommended: concurrent enrollment in MUSL 2A. 4 hours laboratory. Transfer: CSU.

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, MUSL 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: MUSA 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: MUSL 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: MUSA 23A (*completed with a grade of "C" or higher*). 4 hours laboratory. Transfer: CSU; UC.

40 APPLIED LESSONS **1 UNIT**
(May be repeated 3 times)
Individualized study of the appropriate techniques and repertoire for the specific instrument or voice being studied. The emphasis is on the progressive development of skills needed for solo performance. Achievement is evaluated through a juried performance. Enrollment subject to a standardized audition demonstrating basic competencies in technique and musicianship in their major performance medium. Corequisite: MUSP 12 or 13 or 14 or 15 or 16 or 44 or 45. 4 hours laboratory. Transfer: CSU.

MUSIC
RECORDING AND TECHNOLOGY (MURT)

21 AUDIO RECORDING I **3 UNITS**
(May be repeated 3 times)
Fundamentals of audio recording and the digital audio workstation. Basic acoustics, principles of analog and digital audio basics, studio set-up, microphone technique, basic mixing techniques and digital audio workstation fundamentals. 2 hours lecture, 4 hours laboratory. Transfer: CSU.

22A ELECTRONIC MUSIC PRODUCTION I **3 UNITS**
(May be repeated 3 times)
Fundamentals of electronic music production and MIDI sequencing. Principles of synthesis, survey of electronic music instruments and their development, MIDI sequencing, drum machines and beat making, and multitrack electronic music production. 2 hours lecture, 4 hours laboratory. Transfer: CSU.

22B ELECTRONIC MUSIC PRODUCTION II **3 UNITS**
(May be repeated 3 times)
Advanced electronic music production. Projects will include audio for film and video, theatrical productions, video games, advertisements, sound effects and sound installations. Prerequisite: MURT 22A. 2 hours lecture, 4 hours laboratory. Transfer: CSU.

23 AUDIO RECORDING II **3 UNITS**
(May be repeated 3 times)
Advanced studio recording techniques. Highly specific and refined microphone selection and implementation, complex multichannel signal flow, analog and digital signal processing, and multitrack mixing in the digital audio workstation. Student-produced, hands-on recording sessions in both the studio and live-concert settings. Prerequisite: MURT 21A. Corequisite: MURT 23. 2 hours lecture, 4 hours laboratory. Transfer: CSU.

24 ADVANCED MIXING TECHNIQUES **3 UNITS**
(May be repeated 3 times)
Advanced multitrack mixing techniques. Implementation of signal processing to a multichannel audio mix using outboard and virtual signal processors, submixing, busing and summing mixes, complex signal flow, advanced mixer automation, and selected topics in mastering. Prerequisite: MURT 21A. 2 hours lecture, 4 hours laboratory. Transfer: CSU.

25 LIVE CONCERT SOUND 1 UNIT
(May be repeated 3 times)
Sound design and amplification management for live music events. Management and manipulation of audio signal flow, interconnected amplification hardware, stage monitoring, and real-time audio signal processing for live audio events. Hands-on participation in on-campus live audio events. 4 hours laboratory. Transfer: CSU.

26 MUSIC BUSINESS AND THE LAW 3 UNITS
(May be repeated 3 times)
Legal issues in the music industry, with a focus on music publishing and licensure, the role of the record label, and distribution and retailing. 3 hours lecture, 1 hour laboratory. Transfer: CSU.

(28 MUSIC INDUSTRY CAREER DEVELOPMENT 3 UNITS
(May be repeated 3 times)
Career opportunities and business practices in the music industry. Focus on career options and development, artist management, unions, music merchandising, and concert promotion. 3 hours lecture, 1 hour laboratory. Transfer: CSU.

Nursing (NURS)

DEGREE:
AA—Nursing
AA—LVN to RN Nursing Program

The Nursing Program is approved by the California Board of Registered Nursing. Upon completion of the major, the graduate is eligible to take the Registered Nurses Licensing examination (NCLEX-RN).

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.

SPECIAL APPLICATION REQUIRED: Go to www.chabotcollege.edu/nurs for details.

NURSING
ASSOCIATE IN ARTS DEGREE

FRESHMAN YEAR	FALL	SPRING
Nursing 55 (Fundamentals of Nursing Practice)	8½	
Nursing 56 (Essentials of Human Growth and Development)	½	
Nursing 58 (Nursing Care for Patients with Infectious Disease)	1	
Nursing 61 (Clinical Nutrition)	1½	
Nursing 69 (Gerontological Nursing)	1	
Nursing 59* (Nursing Care of the Childbearing Family)	8½	
Nursing 75 (Fluids and Electrolytes)	1	
Nursing 88** (Pathophysiology)	3	
Nursing 88L** (Physical Assessments)	1	
Psychology 1 (General Psychology)	3	or 3

SOPHOMORE YEAR	FALL	SPRING
Communication Studies 1*** (Fundamentals of Speech Communication) or Communication Studies 10 (Interpersonal Communication) or Communication Studies 30(Elements of Speech)	3	
Nursing 60A* (Adult Health 1)	8½	
Nursing 64** (Pharmalogical Basis of Therapeutics)	2½	
Sociology 1 (Principles of Sociology)	3	
Nursing 60B (Adult Health II)	6	
Nursing 60C (Adult Health III)	3½	
Nursing 73* (Intravenous Therapy)	1	
Total	**56½**	

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

**Nursing courses offered each semester*
***Must be completed before second year clinical sequence.*
****Must be completed by the end of the third semester.*

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 total 76½ units including 43½ units in the nursing major.

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 Health, Physical Education and Athletics.

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.

LVN PATHWAY FOR
ASSOCIATE IN ARTS DEGREE
NON-DEGREE
AND 30-UNIT OPTION

The Registered Nursing Program for Licensed Vocational Nurses meets the requirements of Section 2736.6 of the

Nursing Practice Act and Section 1429 of the California Board of Registered Nursing Rules and regulations. Upon completion of any of the curriculum options herein listed, the student is eligible to take the National Council Licensing Examination for Registered Nurses (NCLEX-RN).

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.

LVNs who enter into the second year of the Nursing Program may opt for one of the three following: A.A. in Nursing, Non-Degree option, or 30-unit option. **The 30-unit option is offered and accepted only in the State of California.** Graduates of any of these options are eligible to take the National Council Licensing Examination for Registered Nurses (NCLEX-RN). However, unlike the A.A. graduate, whose eligibility to practice as a Registered Nurse is recognized by a process called "endorsement" in all of the United States, the licenses of graduates who choose the Non-Degree or 30-unit option **may not be recognized in other states.** Please see the Nursing Program Coordinator regarding the latter two options.

ASSOCIATE DEGREE AND NON-DEGREE

PREREQUISITE COURSES

Physiology 1 (Human Physiology). 5
Microbiology 1 (Microbiology) 5
Nursing 70 (Nursing Theory: LVN-RN Transitions) 1½
Nursing 70L (Clinical Skills Practice and Assessment Lab). . . . . ½

The above courses must be completed with a "C" or better before validation or admission to the Nursing Program.

CLINICAL SEQUENCE: The LVN must complete the following curriculum with a "C" or better in each course regardless of the option chosen:

SOPHOMORE YEAR	FALL	SPRING
Nursing 53 (Psychiatric Nursing)	4	
Nursing 69* (Gerontological Nursing)	1	
Nursing 88* (Pathophysiology)	3	
Nursing 88L* (Physical Assessments)	1	
Nursing 60B (Adult Health II)	6	
Nursing 60C (Adult Health III)	3½	
Total Program Units	**30½**	

Prerequisites for admission to the program include: (1) completion of special application; (2) validation of previous nursing knowledge, required for counseling/assessment purposes.

For the AA Degree in Nursing, Psychology 1, Sociology 1, and Communication Studies 1, 10, or 30 must be completed in addition to all General Education requirements as outlined in Associate in Arts requirements.

30-UNIT OPTION

PREREQUISITE COURSES

Physiology I (Human Physiology). 5
Microbiology I (Microbiology). 5
Nursing 70 (Nursing Theory: LVN-RN Transitions) 1½

The above courses must be completed with a "C" or better before validation or admission to the Nursing Program.

CLINICAL SEQUENCE

The LVN must complete the following curriculum with a "C" or better in each course regardless of the option chosen:

SOPHOMORE YEAR	FALL	SPRING
Nursing 53 (Psychiatric Nursing)	4	
Nursing 69* (Gerontological Nursing)	1	
Nursing 88* (Pathophysiology)	3	
Nursing 88L* (Physical Assessments)	1	
Nursing 60B (Adult Health II)	6	
Nursing 60C (Adult Health III)	3½	
Total Program Units	**30**	

**Theory Courses*

Prerequisites for admission to the program include: (1) completion of Advanced Standing application; (2) validation of previous nursing knowledge, required for counseling/assessment purposes.

SPECIAL APPLICATION REQUIRED:

Prerequisites for admission to this program include: (1) completion of Advanced Standing application; (2) completion of Physiology 1 (Human Physiology) and Microbiology 1 (each of which includes a lab). Student must receive a "C" or higher in these prerequisites; (3) Completion of Nursing 70 (bridging) course **after having completed Physiology and Microbiology**. In order to register for Nursing 70 the student must attend a mandatory orientation meeting. Specific dates and times are published on www.chabotcollege.edu/nurs.

Advanced Standing Status is granted to students who have previously completed any portion of the defined nursing curriculum or its equivalent as determine by the Nursing Program Director and the Nursing Program Counselor.

Note: The Board of Registered Nursing requirements supersede catalog rights for graduation.

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. Transfer: CSU.

51 NURSING OF THE CHILDBEARING FAMILY (OBSTETRICAL NURSING) 4 UNITS

Nursing care of the childbearing and childrearing families: The focus is on the physiological and psychological needs of families as they are affected by pregnancy, labor and birth, postpartum, and newborn stages. Common health issues and problems of infants, children, and adolescents are addressed. Theory and clinical practice include integration of assessment skills, growth and development, family abuse issues, nutrition, pharmacological concepts, ethical issues, and teaching strategies unique to childbearing and childrearing families. 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, 6¾ hours laboratory. Transfer: CSU.

52 NURSING OF THE CHILDREARING 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 childrearing family; theory and clinical highlight the coping mechanisms for childrearing 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, 6¾ hours clinical. Transfer: CSU.

53 MENTAL HEALTH NURSING 4 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 include integration of biopsychosocial assessment skills, nutrition, pharmacological and crisis intervention concepts, legal-ethical issues, and anger management. Concepts related to the California Nursing Practice Act, as well as principles of safe clinical practice will be included. 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, 6¾ hours laboratory. Transfer: CSU.

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. Transfer: CSU.

55 FUNDAMENTALS OF NURSING PRACTICE 8½ UNITS

Introduction to fundamental concepts and practices in nursing care across the life span. Application of the nursing process to the care of adult clients with acute and chronic disorders. Fundamental nursing skills are presented. 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. Concepts related to the California Nursing Practice Act, as well as principles of safe clinical practice will be included. Prerequisite: Acceptance into the Nursing Program. Corequisites: Nursing 69, Nursing 61, Nursing 58, Nursing 56. 4 hours lecture; 11½ hours clinical practice, 2 hours laboratory. 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. 1 hour. Total weeks: 9. Transfer: CSU.

58 NURSING CARE FOR PATIENTS WITH INFECTIOUS DISEASE 1 UNIT

Nursing processes in the care of clients with infectious diseases with an emphasis on HIV and Hepatitis including pathophysiology, psychosocial and pharmacological issues, and preventive measures. Significance of specific nursing care measures, therapeutic health care giver attitudes and behaviors, and community resources available for caregivers and patients. Prerequisites: Satisfactory completion of or concurrent enrollment in Nursing 55 or 70, or equivalent. 1 hour lecture. Transfer: CSU.

59 NURSING CARE OF THE CHILDBEARING FAMILY 8½ UNITS

Nursing care of the childbearing and child rearing families: The focus is on the physiological and psychological needs of families as they are affected by pregnancy, labor and birth, postpartum, and newborn stages. Common health issues and problems of infants, children, and adolescents are addressed. 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 child rearing families. Prerequisites: Completion of Nursing 55, 56, 61, 69, with a "C" or higher. Requires satisfactory completion of or concurrent enrollment in Nursing 57, 58, 64 and 75. 4 hours lecture; 13½ hours/week clinical. Transfer: CSU.

60A ADULT HEALTH I **8½ UNITS**

Emphasis 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 includes integration of biopsychosocial assessment skills, nutrition, pharmacological and crisis intervention concepts, legal-ethical issues, and anger management. Concepts related to the California Nursing Practice Act, as well as principles of safe clinical practice will be included. Prerequisites: Completion of Nursing 55, 56, 61, and 69 with a "C" or higher. Satisfactory completion of or concurrent enrollment in Nursing 57, 58, 64, 75. 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 and critical care. setting. Concepts related to the California Nursing Practice Act, as well as principles of safe clinical practice will be included. Prerequisites: all prior nursing courses in the Associate Degree Nursing program (all completed with a grade of "C" or higher). 4 hours lecture, 15½ hours clinical practice. Total weeks - 12. Transfer: CSU.

60C ADULT HEALTH III **3½ UNITS**

Advanced nursing skills needed by the nursing student who is completing the nursing program. Presentation of 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, principles of case management, delegation of assignments, prioritization of client care, and organizational structure in the health care organization. Prerequisite: All prior courses in the Associate Degree Nursing program *(all completed with a grade of "P", "C" or higher).* 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, or satisfactory completion of equivalent. 1½ hours. Transfer: CSU.

64 PHARMACOLOGY FOR PROFESSIONAL NURSES **2½ UNITS**

Introduction to the principles of clinical pharmacology, the administration of drugs as therapeutic agents, and the interactions of drugs and body tissues. The purpose, action, and expected physiological responses of therapeutic agents and dosage forms currently used in treating pain, infectious processes and selected acute and chronic disease states in the cardiovascular, endocrine, respiratory, autonomic nervous and central nervous system is explored as well as the integration of the concepts in the nursing process. Prerequisite: Satisfactory completion of courses in the first two semesters of the nursing curriculum and concurrent enrollment (or satisfactory completion of) Nursing 59 or Nursing 60A or possession of a valid California RN or LVN license. 2½ hours. 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 completion of Nursing 70. 1 hour. Transfer: CSU.

70 NURSING THEORY: LVN-RN TRANSITIONS **1½ UNITS**

Emphasis on nursing topics that prepare the LVN adult learner for advanced standing in an Associate Degree RN Nursing Program. Includes roles transition, survival skills for the nontraditional student, theoretical foundations of nursing, communicating effectively, critical thinking in nursing practice, nursing process, educator role of the registered nurse, legal - ethical components of nursing, functions of the California Board of Registered Nursing, and selected skills used by the registered nurse in the delivery of patient care. For LVN students desiring admission to Chabot College Nursing Program with Advanced Standing, Nursing 70 and 70L, provide a framework for satisfying selected nursing content and skills offered during year one of associate degree nursing curriculum. Prerequisite: Valid California LVN license, at least one-year work experience as LVN in an acute care client agency, completion of Physiology 1 and Microbiology 1 with a grade of "C" or higher, and attendance at LVN-RN orientation. Corequisite: Working at least part-time as LVN for an acute care agency. 1½ hours. Transfer: CSU.

70L CLINICAL SKILLS PRACTICE AND ASSESSMENT LAB **½ UNIT**

Clinical skills practice lab provides framework for satisfying selected nursing content and skills offered during first year of associate degree nursing curriculum. Designed for LVN students desiring admission to Chabot Nursing Program with Advanced Standing. Corequisite: Nursing 70. 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. Transfer CSU.

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: Satisfactory completion of all required nursing courses in the first and second semester of the nursing curriculum (Nursing 55, Nursing 56, Nursing 58, Nursing 59, Nursing 61, Nursing 69, Nursing 75, Nursing 88 and Nursing 88L or their equivalents. Nursing 70 is a prerequisite for LVNs joining the program.) Concurrent enrollment in the third or fourth semester of the nursing program (Nursing 60A, Nursing 60B and Nursing 64). 12 total hours lecture, 12 total hours laboratory. 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 grades of "C" or higher and concurrent enrollment in Nursing 59 or 60A. 1 hour.

78 FUNDAMENTALS OF CALCULATIONS FOR MEDICATION ADMINISTRATION ½ UNIT

Development of skills needed to accurately calculate drug dosages. Review of fractions, decimals, percentages, ratios, proportions included. Discussion of the metric and household system of measurement. Key concepts of safe drug dosages are presented. Corequisite: Nursing 55. 9 hours 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.

81 OBSTETRICAL NURSING THEORY 2 UNITS

Nursing interventions that assist the family with adaptation during the childbearing cycle including assessments and management of the mother and newborn during the antepartal, intrapartal, and postpartal periods; emphasis on the involvement of the total family; reproductive related health care problems of women. Designed to assist Licensed Vocational Nurses in preparation for the Registered Nurse Licensing examination. Prerequisite: Valid California LVN license. 2 hours. lecture, Transfer: CSU.

82 PEDIATRIC NURSING THEORY 2 UNITS

Emphasis is placed on the nursing interventions that assist the child and family with adaptive processes necessary to cope with acute and chronic conditions affecting infants, children, and adolescents. The focus is also on medical/surgical illnesses, child abuse, and cultural diversity as they affect child care. It includes application of principles of growth and development, physical assessment skills, and pharmacological concepts unique to the child. Prerequisite: Valid California LVN license. 2 hours. Transfer: CSU.

84 PRESCRIPTIVE CLINICAL NURSING SKILLS PRACTICE ½—1 UNIT

(May be repeated 3 times)

Emphasis is on gaining experience in practicing and refining selected clinical skills used in the delivery of nursing care to a client in the acute care or community based setting. Prerequisite: Satisfactory completion of Nursing 55 or the equivalent *(completed with a grade of "C" or higher).* 27 to 54 total hours Skills Laboratory. Transfer: CSU.

85 REGISTERED NURSE REFRESHER (THEORY AND CLINICAL) 7 UNITS

For United States-educated Registered Nurses whose licenses have expired, or who have not worked as a Registered Nurse in the Unites States for at least three years, or those foreign-educated nurses with authorization to work in the United States and who are required by the California Board of Registered Nursing to complete additional coursework in a pre-licensure nursing program. Theory and clinical practice focuses on preparing the Registered Nurse for employment as an entry-level staff nurse in the United States. Prerequisites: Possession of a California Registered Nurse license which has either expired or in which the holder has not been employed as a Registered Nurse for at least three years; or possession of a valid California LVN license and who has six months' recent work experience as an LVN in a health care facility; and possession of an American Heart Association certification which is valid through the last day of the course. 4 hours lecture, 19 hours laboratory. Total weeks: twelve. Transfer: CSU.

86 ESSENTIALS OF MEDICAL TERMINOLOGY 2 UNITS

Core concepts focus on comprehending the standard word roots, suffixes, prefixes, common abbreviations, and selected medical terms not built from word parts. Emphasis on spelling, definitions, pronunciation, and the application of anatomical and diagnostic terms, common disease processes, and pharmaceutical terms in written and oral communication. Designed for nursing majors who wish to acquire basic medical terminology typically used in health care. May not be taken if Health 51A (or equivalent) has been completed with a "C" or better. 2 hours.

87 PREPARING FOR THE TEAS EXAMINATION 1 UNIT

Core concepts focus on strategies for successful test-taking and study in the nursing program. Preparation for the required TEAS examination prior to admission to the nursing program. Application of critical thinking and problem solving in on-line multiple choice tests. Students must have access to a Windows compatible computer. 1 hour. Transfer: CSU.

88 PATHOPHYSIOLOGY 3 UNITS

Pathophysiological processes in selected disease states in the following systems of the human body: endocrine, renal, cardiovascular, pulmonary, gastrointestinal, 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 will be explored. Critical thinking exercises, case studies and examinations. Prerequisites: Satisfactory completion of Human Physiology 1 and Microbiology 1 (or equivalent) and: satisfactory completion of (or concurrent enrollment in) Nursing 70 and possession of a valid California LVN license, or possession of a valid California RN license, or satisfactory completion of all required nursing courses in the first semester of the nursing curriculum

(Nursing 55, Nursing 56, Nursing 58, Nursing 61 or their equivalents) with a "C" or better and concurrent enrollment in the second semester of the nursing program (Nursing 75, Nursing 59 or Nursing 60A or possession of a valid California LVN or RN license). 3 hours.

88L PHYSICAL ASSESSMENT **½—1 UNIT**

Methodologies employed in physical assessment in the clinical setting. Focus is on physical assessment techniques and advanced techniques 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 analyses, pulse oximetry, and basic cardiac dysrhythmia interpretation). Health data base interviewing. Prerequisites: Satisfactory completion of Nursing 68 and Microbiology 1 (or equivalent) and 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 second semester of the nursing program and Nursing 68, or possession of a valid California RN license. Concepts related to the California Nursing Practice Act, as well as principles of safe clinical practice will be included. ½ - 3 hours laboratory.

Nutrition (NUTR)

1 THE SCIENCE OF NUTRITION **3 UNITS**

The science of nutrition including the nutrients, their functions, sources and recommended intakes. Nutritional assessment and the role of nutrition in the maintenance of health. For students majoring in the science and/or health fields. Strongly Recommended: Chemistry 30A and Mathematics 65 (completed with a grade of "C" or higher). 3 hours. Transfer: CSU; UC; CSU/GE: E.

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 will be presented along with training utilizing a heart rate monitor. Students will learn to assess current fitness levels and design a personal fitness and nutritional plan. (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 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)

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. 3 hours. Transfer: CSU; UC; CSU/GE: C2; IGETC: Area 3B; AA/AS.

60 INTRODUCTION TO PHILOSOPHY: ETHICS **3 UNITS**

Problems of good and evil, right and wrong, individual and/or social action; 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; UC; CSU/GE: C2; IGETC: Area 3B; AA/AS.

65 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; IGETC: Area 3B; AA/AS.

70 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 3B; AA/AS.

Photography (Phot)

DEGREE: AA—Photography

CERTIFICATE OF PROFICIENCY: 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 History 1 (Introduction to Art)	3	
Art 23 (2-D Foundations)	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		**25–26**

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

PHOTOGRAPHY
CERTIFICATE OF PROFICIENCY

CORE COURSES	FALL	SPRING
Art 23 (2-D Foundations)	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		**12**

Photography (PHOT)

10 ARTISTS' RIGHTS AND THE LAW 3 UNITS
Copyright issues affecting artists. Particular emphasis on the visual arts and media. Constitutional underpinnings of copyright law. Concepts underlying copyright protections. Copyrights distinguished from patents and trademarks. Creation and ownership of works of art. Rights associated with copyright ownership. Licensing, assigning, and selling rights to others. Collaboration between artists and ownership of rights. Work for hire and work done on commission. Fair use and first amendment issues. Effect of digital technology and the internet on copyright ownership. Copyright infringement and remedies. Moral Rights. 3 hours. Transfer: CSU.

20 HISTORY OF PHOTOGRAPHY 3 UNITS
(See also Art History 20)
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 History 20, Art 67, or Photography 67 has been completed. 3 hours. Transfer: CSU; UC; CSU/GE: C1; IGETC: Area 3A; AA/AS.

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.

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*). 4 hours laboratory. 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. Transfer: CSU.

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. Transfer: CSU.

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. 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. 2 hours lecture, 4 hours 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 multitoned 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. Transfer: CSU.

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. Strongly recommended: Photography 50. 2 hours lecture, 4 hours laboratory. Transfer: CSU.

80 PHOTO SILKSCREEN PRINTING 3 UNITS

(May be repeated 3 times)

Origins and history of printmaking with particular emphasis on serigraphy (silk screen). Uses of printmaking in industry, art, and politics. Basic materials and methods involved in producing a screen print, using traditional and digital photographic methods. Printing techniques for single- and multi-color prints. Creation of high contrast and continuous tone images. Color theory related to the production and printing of images. 2 hours lecture. 4 hours laboratory. Transfer: CSU.

81 PHOTO ETCHING AND GRAVURE 3 UNITS

(May be repeated 3 times)

Origins and history of printmaking with particular emphasis on intaglio and gravure printing processes. Uses of printmaking in industry, art, and politics. Basic materials and methods involved in producing an intaglio print, using traditional and digital photographic methods. Printing techniques for single- and multi-color prints. Creation of high contrast and continuous tone images. Color theory related to the production and printing of images. Strongly recommended: At least one photography or other studio art course. 2 hours lecture. 4 hours laboratory. Transfer: CSU.

Physical Education (PHED)

DEGREE:
AA—Physical Education

CERTIFICATE OF ACHIEVEMENT:
Aquatics
Coaching
Fitness Instructor
Sports Injury Care

CERTIFICATE OF PROFICIENCY:
Aquatics
Coaching
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The Physical Education A.A. 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 A.S. 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
*Biology 31 (Introduction to College Biology)	4	
*Physical Education 1, 2, 3 (Physical Education Activity)	1	

Physical Education 6 (Physical Fitness Assessments) or
Physical Education 62 (Introduction to Personal Fitness Training) ½–3
Physical Education 20 (Introduction to Physical Education) 3
Anatomy 1 (General Human Anatomy) 4
Physical Education 17 (Introduction to Athletic Training) 4

SOPHOMORE YEAR FALL SPRING
Chemistry 30A (Introductory and Applied Chemistry) 4
Physiology 1 (Human Physiology) 5
Physical Education 8 (Sport in Contemporary Society) or
Physical Education 15 (Peak Performance Through Mental Training) 3
Total 28½–31

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

**Meets General Education requirement.*

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.

AQUATICS
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 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 (Healthcare Provider CPR) 0.2–1
Total 22.2–23

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 (Healthcare Provider CPR) 0.2–1
Total 21.2–23

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) or
Physical Education 62 (Introduction to Personal Fitness Training) 3
Health 1 (Introduction to Health) or
Physical Education 18 (Health and Fitness for Your Disability) 3
Physical Education 28 (Components of Physical Fitness–the Human Body) 3
*Physical Education 1, 2, 3 (Physical Education Activity) 1. 1
Physical Education 4 (Basic Heart Rate Training) or
Physical Education 6 (Physical Fitness Assessments) ½–1
Health 60 (Responding to Emergencies) or
Health 70B (Healthcare Provider CPR) 0.2–1
Nutrition 1 (The Science of Nutrition) 3
Biology 50 (Anatomy and Physiology) 4
Physical Education 17 (Introduction to Athletic Training) 4
Total 25.7–27

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 28 (Components of Physical Fitness–the Human Body)	3	
Health 60 (Responding to Emergencies) or Health 70B (Healthcare Provider CPR)	0.2–1	
Health 1 (Introduction to Health) or Physical Education 18 (Health and Fitness for Your Disability)	3	
Nutrition 1 (The Science of Nutrition) or 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	**21.2–23**	

AQUATICS
CERTIFICATE OF PROFICIENCY

	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 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 (Healthcare Provider CPR)	0.2–1	
Total	**16.2–17**	

COACHING
CERTIFICATE OF PROFICIENCY

	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 (Healthcare Provider CPR)	0.2–1	
Total	**15.2–17**	

FITNESS INSTRUCTOR
CERTIFICATE OF PROFICIENCY

	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) or Physical Education 62 (Introduction to Personal Fitness Training)	3	
Health 1 (Introduction to Health) or Physical Education 18 (Health and Fitness for Your Disability)	3	
Physical Education 28 (Components of Physical Fitness–the Human Body)	3	
*Physical Education 1,2,3 (Physical Education Activity)	1	1
Health 60 (Responding to Emergencies) or Health 70B (Healthcare Provider CPR)	0.2–1	
Nutrition 1 (The Science of Nutrition)	3	
Total	**14.2–15**	

SPORTS INJURY CARE
CERTIFICATE OF PROFICIENCY

	FALL	SPRING
Biology 50 (Anatomy and Physiology) or Physiology 1 (Human Physiology)	4–5	
Physical Education 17 (Introduction to Athletic Training)	4	

Physical Education 28 (Components of Physical Fitness–the Human Body). 3
Health 70B (Health 70B (Healthcare Provider CPR) 0.2
Health 1 (Introduction to Health) or Physical Education 18 (Health and Fitness for Your Disability) 3
Physical Education 1,2,3 (Physical Education Activity) 2
Total 16.2–17.2

**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, wrestling, 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: 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: aquacalisthenics, 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: E; AA/AS.

2FSC FIRE SCIENCE CONDITIONING 1 UNIT
This is a physical conditioning and lecture course designed to prepare the Fire Technology student for Fire Technology 89 and the Chabot Fire Academy. It is a requirement for entry into Fire Technology 89, the Chabot Fire Academy, and to receive Firefighter I certification. Students to receive instruction and information relevant to the Candidate Physical Ability Test (CPAT), and fitness and wellness principles specific to the Fire Service. Course sessions to address aerobic and strength training, proper lifting, warm-up and flexibility techniques, training principles and elements of wellness. Specific ladder technique, including the 24 foot extension ladder, to be addressed and evaluated Classes take place indoors and out and include ladder, knot and hydrant instruction as well as aerobic conditioning, muscular endurance and physical agility tasks. Students to undergo physical assessment at the onset and conclusion of the semester. Strongly suggested: ability to run 1.5 miles and lift 30 pounds overhead prior to enrollment.

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; CSU/GE: E; AA/AS.

4 BASIC HEART RATE TRAINING: FITNESS 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. 3 hours. Transfer: CSU; UC; 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.

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, economics, politics and the mass media. 3 hours lecture. Transfer: CSU.

10 GET FIT WITH TECHNOLOGY 2 UNITS

Designed to help students attain a greater understanding of fitness and wellness while utilizing Global Positioning Technology (gps). Designed to develop fitness and well-being in a flexible manner utilizing technology as a guide in the process. Students will utilize global positioning technology along with online learning to develop and implement a solid personal cardiovascular fitness and wellness program. Strong computer skills and the access to a handheld global positioning device are required. 1 hour lecture, 3 hours laboratory. Transfer: CSU.

13 AMERICAN RED CROSS LIFEGUARDING 2 UNITS

(May be repeated to maintain certification)

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; CSU/GE: E; AA/AS.

13R AMERICAN RED CROSS LIFEGUARDING REVIEW/CHALLENGE ½ UNIT

(May be repeated to maintain certification)

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 Professional Rescuer, and First Aid. 8 hours lecture, 8 hours laboratory total. Transfer: CSU; UC; CSU/GE: E; 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. Provides Water Safety certification. 1½ hours lecture, 1½ hours laboratory. Transfer: CSU; UC; CSU/GE: E; 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: 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. 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; 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. 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.

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 AND TECHNIQUE 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 AND TECHNIQUE 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*). 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. 3 hours. Transfer: CSU.

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: 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: 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— MEN'S 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— MEN'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.

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; AA/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 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.

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 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 not receive credit if Nutrition 58 has been completed.) 3 hours. Transfer: CSU; CSU/GE: E.

59 LIFETIME FITNESS **3 UNITS**

Designed for students to take control of their personal health and cope with the changes that will occur in their physical abilities as they age. Includes skills, techniques and information to help adapt activity through the aging process with emphasis on physical activity appropriate for age group. 3 hours. Transfer: CSU.

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. 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. 3 hours. Transfer: CSU.

62 INTRODUCTION TO PERSONAL FITNESS TRAINING **3 UNITS**

Includes the areas of physical activity and health, fitness evaluation, exercise prescription, exercise for special populations, exercise programming and the fundamentals of functional anatomy and exercise physiology as they pertain to personal training. Upon successful completion of the course students will be eligible for the National Certification Board Exam to attain certification in Personal Training through the National Council on Strength and Fitness. 3 hours. Transfer: CSU.

65 FIT FOR DUTY: HEALTH AND FITNESS FOR LAW ENFORCEMENT **3 UNITS**

Physical fitness, health and wellness are examined from a global and occupational perspective. Psychosocial, environmental and physiological aspects delivered in an interactive format. Emphasis on formulation, maintenance and development of a broad base of information, with emphasis on physical readiness and lifetime fitness. Designed for individuals who are currently employed in or intend to enter the law enforcement field. 3 hours. Transfer: CSU; CSU/GE: Area E; AA/AS.

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; UC; CSU/GE: B1, B3; IGETC: Area 5A & Lab).

Physics (PHYS)

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*). 3 hours-lecture, 3 hours laboratory. Transfer: CSU; UC; CSU/GE: B1, B3; IGETC Area 5A & Lab; AA/AS.

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.

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 I (*completed with a grade of "C" or higher*). 4 hours lecture, 3 hours laboratory. Transfer: CSU; UC; CSU/GE: B1, B3; IGETC: Area 5A & Lab; AA/AS.

4B GENERAL PHYSICS II **5 UNITS**

Electric fields, electric currents, magnetic fields, induced currents, alternating circuits, Maxwell's equations, Electromagnetic waves. Prerequisite: Physics 4A and Mathematics 2 (*both completed with a grade of "C" or higher*). 4 hours lecture, 3 hours laboratory. Transfer: CSU; UC; CSU/GE: B1, B3; IGETC: Area 5A Lab.

4C GENERAL PHYSICS III **5 UNITS**

Oscillations, fluids, sound waves, thermodynamics, electromagnetic spectrum, optics including reflection, refraction, diffraction, interference, polarization. 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.

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; IGETC: Area 5A; AA/AS.

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.

22A CALCULUS APPLICATIONS FOR COLLEGE PHYSICS I 1 UNIT
First of a two-part sequence using calculus as a tool for understanding topics covered in college level physics. Taken concurrently with Physics 2A to satisfy the physics requirement for life science majors at universities that require a calculus-based physics sequence. Prerequisite: Mathematics 15 and Mathematics 36 or 37, or Mathematics 1 and concurrent enrollment in Physics 2A. 1 hour. Transfer: CSU; UC.

22B CALCULUS APPLICATIONS FOR COLLEGE PHYSICS II 1 UNIT
A supplementary course using calculus as a tool for understanding topics covered in college level physics Taken concurrently with Physics 2B to satisfy the physics requirements for life science majors at universities that require a calculus-based physics sequence. Prerequisite: Mathematics 16 or Mathematics 2 *(completed with a grade of "C" or higher);* Physics 22A *(completed with a grade of "C" or higher)* and concurrent enrollment in Physics 2B. 1 hour. 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 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 (POSC)

DEGREE: AA-T—Political Science

Political science majors evaluate societal, national, and global events by learning about forms of political organization and political processes. Political science is consistently a top ten major because of its versatility and applicability to today's world. The Political Science degree provides students with a strong foundation in American government, political theory, and comparative and international politics for those who wish to pursue a Bachelor of Arts degree in political science and for those who seek careers in public service, education, law, or business.

For more information about Associate in Arts for Transfer and Associate in Science for Transfer degrees, see page 24.

POLITICAL SCIENCE
ASSOCIATE IN ARTS FOR TRANSFER DEGREE

	UNITS
REQUIRED CORE ***(3 units)***	
Political Science 1 (Introduction to American Government)	3
LIST A ***(select three–9-10 units)***	
Political Science 20 (Comparative Politics)	3
Political Science 25 (Introduction to Political Theory)	3
Political Science 30 (International Relations)	3
Mathematics 43 (Introduction to Probability and Statistics)	4
LIST B ***(select two–6 units)***	
Any List A course not used above	3-4
Political Science 10 (Seminar in Comparative Politics)	3
Political Science 12 (Introduction to California State and Local Government)	3

Political Science/Administration of Justice 45 (Law and Democracy) . 3
Geography 2 (Cultural Geography) 3
Anthropology 3 (Social and Cultural Anthropology) 3
Anthropology 5 (Cultures of the U.S. in Global Perspective) 3
Sociology 2 (Social Problems) 3
Sociology 3 (American Cultural and Racial Minorities) 3
Communication Studies 11 (Intercultural Communication) 3
Economics 1 (Principles of Microeconomics) 3
Economics 2 (Principles of Macroeconomics) 3
Total 18-19

Required Major Courses: 18-19 units
CSU GE or IGETC (CSU) requirements: 37-39 units
(Possible Double-counting: 12 units)
CSU transfer Electives as needed to reach 60 CSU transferable units
TOTAL UNITS: 60 units
All courses in the major or area of emphasis are required to have a grade of "C" or higher, and a cumulative GPA of 2.0 must be achieved.

Political Science (POSC)

1 INTRODUCTION TO AMERICAN GOVERNMENT 3 UNITS
Introduction to the historical development and current structure of American political ideals and institutions, including the Federal and California Constitutions, civil liberties and civil rights, political parties, campaigns and elections, and citizenship duties. Strongly recommended: Eligibility for English 1A. 3 hours. Transfer: CSU; CSU/GE: D8; IGETC: Area 4H; AA/AS.

10 SEMINAR IN COMPARATIVE POLITICS 3 UNITS
General introduction to a major subfield of comparative politics, or intensive exploration of a contemporary theme, topic, or region. Strongly recommended: Eligibility for English 1A. 3 hours. Transfer: CSU.

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 California public policy. 3 hours. Strongly recommended: Eligibility for English 1A and Political Science 1. Transfer: CSU; CSU/GE: D8; AA/AS.

20 COMPARATIVE POLITICS 3 UNITS
Introduces basic concepts and methods of comparative analysis. Covers contemporary forms of government and institutions; survey of political regimes and political problems of selected governments. Strongly Recommended: Eligibility for English 1A and Political Science 1. 3 hours. Transfer: CSU; UC; CSU/GE: D8; IGETC: Area 4H; AA/AS.

25 INTRODUCTION TO POLITICAL THEORY 3 UNITS
An introduction to various theoretical approaches to politics, including selected political thinkers from ancient times to the present, and the application of political theory to current political realities. Strongly recommended: Eligibility for English 1A and completion of Political Science 1. 3 hours. Transfer: CSU; UC; CSU/GE: D8; IGETC: Area 4H; AA/AS.

30 INTERNATIONAL RELATIONS 3 UNITS
An introduction to international politics, theories and global institutions, focusing on international actors and their interactions with one another. Emphasis on current events. 3 hours. Transfer: CSU; UC; CSU/GE: D8; IGETC: Area 4H; AA/AS.

40 CONTEMPORARY ISSUES IN AMERICAN POLITICS 3 UNITS
An introduction to current political issues, their historical, and economic causes, and the public policies advanced to solve them. Emphasis on government decision-making processes and civic engagement. 3 hours. Transfer: CSU; UC; CSU/GE: D8; IGETC: Area 4H; AA/AS.

45 LAW AND DEMOCRACY 3 UNITS
(See also Administration of Justice 45)
The Law and Democracy course is an interdisciplinary exploration of themes such as equality, citizenship, participation, access, and social justice. We will look critically at how law structures as well as limits democracy and examine the idea of democracy as a universal value. Strongly recommended: eligibility for English 1A. Prerequisite: Political Science 1 or Administration of Justice 50 *(completed with a grade of "C" or higher).* (May not receive credit if Administration of Justice 45 has been completed.) 3 hours. Transfer: CSU; CSU/GE: D8; IGETC: Area 4H; AA/AS.

50 STUDENT LEADERSHIP 2 UNITS
Training in student leadership and governance. Processes and methods of effective leadership and communication in group situations. Theories of leadership, the roles and responsibilities of student leaders, parliamentary procedures and policies. Fundamentals of successful meetings, public communication and event coordination. 2 hours. Transfer: CSU.

51 STUDENT LEADERSHIP LABORATORY 1-2 UNITS
Practical application of effective student leadership skills. Includes, but is not limited to, conducting and attending meetings, holding office hours, sitting on committees, and planning and attending campus events. Students will attend and participate in Associated Student meetings, club, or shared governance meetings to receive credit for this course. Prerequisite (may be taken concurrently): Political Science 50. 3-6 hours laboratory. Transfer: CSU.

Portuguese (PORT)

50A PORTUGUESE CONVERSATION AND CULTURE I 3 UNITS
Development of a basic understanding of spoken Portuguese through pronunciation, vocabulary, and applied grammar. Introduction to the everyday culture of Portuguese-speaking people. Following an immersion instruction format, the class is entirely taught in the target world language of the selected course. 3 hours lecture, 1 hour laboratory. Transfer: CSU.

50B PORTUGUESE CONVERSATION AND CULTURE II 3 UNITS
Development of skills learned in Portuguese 50A. Understanding of spoken Portuguese through pronunciation, vocabulary, and applied grammar. Further study of the life and culture of the Portuguese-speaking people. Following an immersion instruction format, the class is entirely taught in the target world language of the selected course. Prerequisite: Portuguese 50A (*completed with a grade of "C" or higher*). 3 hours lecture, 1 hour laboratory. Transfer: CSU.

50C PORTUGUESE CONVERSATION AND CULTURE III 3 UNITS
Development of skills learned in Portuguese 50B. Understanding of spoken Portuguese through pronunciation, vocabulary, and applied grammar. Further study of the culture and everyday life activities of Portuguese-speaking people. Following an immersion instruction format, the class is entirely taught in the target world language of the selected course. Prerequisite: Portuguese 50B (*completed with a grade of "C" or higher*). 3 hours lecture, 1 hour laboratory. Transfer: CSU.

50D PORTUGUESE CONVERSATION AND CULTURE IV 3 UNITS
Development of skills learned in Portuguese 50C. Understanding of spoken Portuguese through pronunciation, vocabulary, and applied grammar. Further study of the culture and everyday life activities of Portuguese-speaking people. Following an immersion instruction format, the class is entirely taught in the target world language of the selected course. Prerequisite: Portuguese 50C (*completed with a grade of "C" or higher*). 3 hours lecture, 1 hour laboratory. Transfer: CSU.

Psychology (PSY)

1 GENERAL PSYCHOLOGY 3 UNITS
Introduces students to the scientific study of behavior and mental processes. Provides an overview of major psychological concepts and theories in such areas as consciousness, learning, memory, motivation, perception, personality, stress, and social behavior. Strongly recommended: Eligibility for English 1A. 3 hours. Transfer: CSU; UC; CSU/GE: D9; IGETC: Area 4I; AA/AS.

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: D9; IGETC: Area 4I; AA/AS.

3 INTRODUCTION TO SOCIAL PSYCHOLOGY 3 UNITS
Introduction to theories and concepts that explain individual behavior in social settings. Topics include research methods, social perception, social cognition, beliefs, prejudice/discrimination, interpersonal relationships, aggression, and group behavior. Strongly recommended: Psychology 1. 3 hours. Transfer: CSU; UC; CSU/GE: D9; IGETC: Area 4I; 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
An overview of the field of abnormal psychology. Introduces students to the major classifications of mental health disorders from the perspective of symptoms and behavior, causes, diagnosis and treatment. Examines historical, socio-cultural and contemporary understanding of mental illness. Includes disorders of mood, anxiety, psychosis, substance abuse, personality and other disorders in adults and children. Strongly recommended: Eligibility for English 1A. 3 hours. Transfer: CSU; UC; CSU/GE: D9; IGETC: Area 4I; 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 sociohistorical 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; UC; CSU/GE: D9, E; IGETC: Area 4I; AA/AS.

25 STRESS MANAGEMENT AND HEALTH PSYCHOLOGY 2 UNITS
Analysis of the psychological, physiological and psychosocial 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. 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. 1½ hours 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, adjustive and maladjustive behavior and group and individual interaction. Strongly recommended: English 1A or 52A. 3 hours. Transfer: CSU; UC; CSU/GE: D9; IGETC Area 4I; AA/AS.

45 PSYCHOLOGY OF CREATIVITY AND INNOVATION 3 UNITS
Introduction to psychological processes involved in creativity, innovation and problem solving. Survey of current theories and research on creativity and innovation. Emphasis on improving creative and problem solving abilities. 3 hours. Transfer: CSU; AA/AS.

Psychology–Counseling (PSCN)

degree:
AA–Human Services
AS–Human Services
AA–Liberal Arts

AA–Liberal Studies
Elementary Teacher Preparation

certificate of achievement:
California State University General Education–Breadth (CSU GE Breadth)
Intersegmental General Education transfer Curriculum (IGETC)

certificate of proficiency:
Case Management for Human Services
Multicultural Awareness/ relations for the service provider
Multicultural Awareness/ self reflection

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 Communication Studies 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 UNITS FOR THE A.A. DEGREE 25
For specific General Education courses refer to catalog section on Graduation requirements.

GENERAL EDUCATION UNITS FOR A.S. DEGREE 19
For specific A.S. General Education courses refer to catalog section on A.S. Graduation Requirements.
General Education Courses (Areas A-E) 16
Human Services GE Requirement 3
Complete a minimum of 3 units from
Psychology-Counseling 1, 4, 13

Total minimum units required 60

Select a total of 3 units from the following self-assessment/self-reflection courses:

Psychology-Counseling 10 (Career and Educational Planning) . . . . . 2 units
Psychology-Counseling 12 (Self-Esteem for Success) . . . . . 2 units
Psychology-Counseling 15 (College Study Skills) . . . . . 2 units
Psychology-Counseling 20 (The College Experience) . . . . . 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. in Global Perspective) . . 3 units
Early Childhood Development 60 (Introduction to the Young Child with Exceptional Needs) . . . . . 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
Ethnic Studies 1 (Introduction to Ethnic Studies) . . . . . 3 units
Ethnic Studies 2 (Contemporary Ethnic Minority Families in the U.S.) . . . . . 3 units
Ethnic Studies 3 (Introduction to Muslim-American Studies) . 3 units
Foreign Language 1A (Beginning Foreign Language) . . . . . 3 units
Health 4 (Women and Health) . . . . . 3 units
Health 8 (Human Sexuality) . . . . . 3 units
Music 5 (American Cultures in Music) . . . . . 3 units
Psychology 6 (Abnormal Psychology) . . . . . 3 units
Psychology 8 (Human Sexuality) . . . . . 3 units
Psychology 12 (Life Span Psychology) . . . . . 3 units
Religious Studies 50 (Religions of the World) . . . . . 3 units
Religious Studies 70 (Spiritual Traditions of Contemporary Voices) . . . . . 3 units
Sign Language 64 (Beginning Sign Language) . . . . . 3 units
Sign Language 65 (Intermediate Sign Language) . . . . . 3 units
Sociology 3 (American Cultural and Racial Minorities) . . . . . 3 units
Sociology 4 (Marriage and Family Relations) . . . . . 3 units
Sociology 8 (Human Sexuality) . . . . . 3 units
Sociology 10 (Introduction to Asian American Studies) . . . . . 3 units

LIBERAL ARTS

ASSOCIATE IN ARTS DEGREE

The Associate in Arts Liberal Arts Degree is designed for students who wish a broad knowledge of liberal arts and sciences plus additional coursework in an "Area of Emphasis." The Associate in Arts Liberal Arts Degree would be an ideal choice for those students planning on transferring to the California State University or University of California as the student can satisfy general education requirements, plus focus on transferable course work that relates to majors at CSU or UC.

- Choose either Option I or II or III for the General Education pattern related to your educational goal.
- Complete 18 units in one **"Area of Emphasis"** from those outlined below. (Note: Where appropriate, courses in the "area of emphasis" may also be counted for a GE area.) Only one AA Degree in Liberal Arts may be earned.
- For ALL OPTIONS: complete necessary Chabot Graduation and Proficiency requirements *(see pages 19-21).*
- Courses from other colleges need to satisfy CSU/GE or IGETC requirements, or satisfy a similar GE area at the transfer college, or satisfy the Area of Emphasis criteria. *(See a counselor or the Articulation Officer for assistance.)*
- All classes listed below transfer to CSU. Courses in **BOLD** also are transferable to UC. Refer to www.assist.org for transfer details.
- Complete 60 degree-applicable units overall. Options II and III will require 60 CSU (Option II) or UC (Option III) transferable units to meet transfer requirements.

GE UNITS

I. ASSOCIATE IN ARTS DEGREE

Intended for students who are not planning on transferring to a university as an academic goal.
General Education, Graduation and Proficiency Requirements *(see pages 19-21).* 26

II. CSU—GENERAL EDUCATION BREADTH

Designed for students planning to transfer to one of the California State Universities (CSU).
Minimum units necessary to meet CSU/GE Certification requirements. 33-39
Complete Chabot Graduation and Proficiency requirements (see pages 19-21).

III. IGETC—INTERSEGMENTAL GENERAL EDUCATION TRANSFER CURRICULUM

Designed for students planning to transfer to a UC or CSU university.
Minimum units necessary to meet IGETC Certification requirements. Complete Chabot Graduation and Proficiency requirements *(see pages 19-21).* 34-37

AREAS OF EMPHASIS

- 18 units from one Area of Emphasis listed below.
- When appropriate, courses selected can be used to also fulfill GE areas.
- For depth, include a minimum of two courses from a single discipline; for breadth, include courses from at least two disciplines.
- All courses listed below transfer to CSU.
- Courses in **BOLD** also transfer to UC.
- Courses from other colleges need to satisfy CSU/GE or IGETC requirements, or satisfy a similar GE area at the transfer college, or satisfy the Area of Emphasis criteria.

ELECTIVE UNITS

Electives may be necessary to total 60 overall units required for the Associate degree. Note: Options II and III will require 60 CSU (Option II) or UC (Option III) transferable units to meet transfer requirements. *(See a counselor for assistance.)*

AREAS OF EMPHASIS

Emphasis 1 - Arts and Humanities: *Select a minimum of 18 units from the following Arts and Humanities courses. For depth, include a minimum of two courses from a single discipline; for breadth, include courses from at least two disciplines. When appropriate, courses can also be counted toward completion of General Education requirements.*

These courses emphasize the study of cultural, literary, humanistic activities and artistic expression of human beings. Students will evaluate and interpret the ways in which people through the ages in different cultures have responded to themselves and the world around them in artistic and cultural creation. Students will also learn to value aesthetic understanding and incorporate these concepts when constructing value judgments.

Art **2A, 2B, 3A, 3B, 3C, 3D, 7A, 7B, 7C, 7D, 12A, 12B, 12C, 12D, 13A, 13B, 13C, 13D, 16A, 16B, 16C, 16D, 17, 18, 20,** 22, 23, 24
Art History **1, 4, 5, 6, 20,** 51
Chinese **1A, 1B**
English 11, 12, 13, **20, 21, 22, 24, 25, 26, 28, 30, 32, 33, 38, 45, 48**
French **1A, 1B, 2A, 2B**
General Studies **31**
History **1, 2, 3, 4**
Humanities **50, 60, 65, 68,** 72, **75**
Italian **1A, 1B, 2A, 2B**
Japanese **1A, 1B**
Music (MUSL) **1, 2A, 2B, 2C, 2D,** 3, **4, 5, 6, 8; (MUSP) 12A, 12B, 14A, 14B, 15A, 15B, 18, 41, 44, 45, 47; (MUSA) 20A, 20B, 21A, 21B, 22A, 22B, 23A, 23B, 24A,** 24B
Photography **20, 50, 60,** 61, 64A, 65, 66
Philosophy **50, 60, 65, 70**
Religious Studies **50, 64, 65, 72**
Sign Language **64, 65, 66**
Spanish **1A, 1B, 2A, 2B**
Theater Arts **1, 2, 4, 5,** 6, **7,** 8, **10, 11, 12,** 16, **30, 40, 47, 48, 50**

Emphasis 2 - Communication in the English Language: *Select a minimum of 18 units from the following Communication in the English Language courses. For depth, include a minimum of two courses from a single discipline; for breadth, include courses from at least two disciplines. When appropriate, courses can be counted toward completion of General Education requirements.*

These courses emphasize the content of communication as well as the form and should provide an understanding of the psychological basis and social significance of communication. Students will be able to assess communication as the process of human symbolic interaction. Students will also develop skills in the areas of reasoning and advocacy, organization, accuracy, reading and listening effectively. Students will be able to integrate important concepts of critical thinking as related to the development of analysis, critical evaluation, the ability to reason inductively and deductively that will enable them to make important decisions regarding their own lives and society at large.

Communication Studies **1, 2A, 2B,** 3, 5, 6, **10, 11, 20, 30, 46,** 48, 50
English **4, 7,** 11, 12, 13, 70
History **5**
Mass Communication 1, 3, 14, 42
Mathematics **12**
Philosophy **60, 65, 70**
Psychology-Counseling **4**

Emphasis 3 - Social and Behavioral Sciences: *Select a minimum of 18 units from the following Social and Behavioral Science courses. For depth, include a minimum of two courses from a single discipline; for breadth, include courses from at least two disciplines. When appropriate, courses can be counted toward completion of General Education requirements.*

These courses emphasize the perspective, concepts, theories and methodologies of the disciplines typically found in the vast variety of disciplines that comprise study in the Social and Behavioral Sciences. Students will study about themselves and others as members of a larger society. Topics and discussion to stimulate critical thinking about ways people have acted in response to their societies will allow students to evaluate how societies and social subgroups operate.

Administration of Justice **45, 50, 60**
Anthropology **1, 2, 3, 4, 5, 8, 12, 13**
Business **10, 12,** 17, 36
Communication Studies **11**
Early Childhood Development **52, 56,** 67
Economics **1, 2, 5, 10, 12**
Ethnic Studies **1, 2, 3**
General Studies **31**
Geography **2, 3, 5, 10, 12, 20**
Health **8**
History **1, 2 , 3, 4, 7, 8, 12, 19, 20, 21, 22, 25, 27**
Mass Communications **40, 41**
Political Science **1,** 10, **12, 20, 25, 30, 40, 45**
Psychology **1, 3, 6, 12, 33,** 45
Psychology-Counseling **1, 4, 13**
Sociology **1, 2, 3, 4,** 5, 6, **10, 30**

Emphasis 4 - Mathematics and Science: *Select a minimum of 18 units from the following Mathematics and Science courses. For depth, include a minimum of two courses from a single discipline; for breadth, include courses from at least two disciplines. When appropriate, courses can be counted toward completion of General Education requirements.*

These courses emphasize the natural sciences which examine the physical universe, its life forms and its natural phenomena. Courses in Mathematics emphasize the development of mathematical and quantitative reasoning skills beyond the level of intermediate algebra. Students will be able to demonstrate an understanding of the methodologies of science as investigative tools. Students will also examine the influence that the

acquisition of scientific knowledge has on the development of the world's civilizations.

Mathematics (beyond the Intermediate Algebra level) **1, 2, 3, 4, 6, 8, 15, 16, 20, 31, 33, 35**, 36, 37, **40, 43**
Anatomy **1**
Anthropology **1, 1L, 13**
Astronomy **1, 10, 20, 30** (Lab)
Biology **2**, **2A, 2B, 4, 6, 10, 25, 31, 50**
Biotechnology 20, 30
Chemistry **1A, 1B, 8, 10, 12A, 12B, 30A, 30B, 31**
Environmental Science **10, 11**
Geography **1, 1L, 8**
Microbiology **1**
Physical Science **15**
Physics **2A, 2B, 4A, 4B, 5, 11**
Physiology **1**

Emphasis 5 - Kinesiology and Wellness: *Select a minimum of 18 units from the following three Kinesiology and Wellness Clusters. Cluster 1 (6 units), Cluster 2 (3 units), Cluster 3 (3 units) and an additional 3 units chosed from Clusters 1, 2 or 3 for a total of 18 units. For depth, include a minimum of two courses from a single discipline; for breadth, include courses from at least two disciplines. When appropriate, courses can also be counted toward completion of General Education requirements.*

These courses emphasize study in the disciplines that comprise Kinesiology and Wellness. This Area of Emphasis provides the student with an understanding of physical education, health promotion and the mechanics of human bodily movement. In addition to the foundational Physical Education and Movement courses, students will also examine Kinesiology and Wellness from scientific, nutritional and behavioral development as well as those elements that are included in the diversity cluster.

Cluster 1: Physical Education and Movement
(Minimum 6 units selected from the following)
Health 60, 61
Physical Education **17, 20, 23, 25, 26, 27, 28** *(unit limits on UC transfer)*

Cluster 2: Scientific and Nutrition Background
(Minimum 3 units selected from the following)
Anatomy **1**
Biology **10**, **31**, **50**
Chemistry **10**, **30A**, **30B**
Health **1** *(unit limits on UC transfer with Physical Education 18)*
Microbiology **1**
Nutrition **1**
Physical Education **18** *(unit limits on UC transfer with Health 1)*
Physics **2A**, **2B**, **11**
Physiology **1**

Cluster 3: Behavioral Development and Diversity
(Minimum 3 units selected from the following)
Health **8**
Physical Education 16
Psychology-Counseling 1, 10, 22
Psychology **1**, **2**, **8**, 12
Sociology **1**, **3**, **8**

Plus additional units taken from any courses in Clusters 1, 2, or 3 above for a total of at least 18 units.

Strongly recommended: Students who are getting the AA degree with an emphasis in Kinesiology and Wellness are encouraged to take a minimum of three activity courses in at least three different PE areas: Aquatics, Fitness, Individual Sports, Team Sports, and Dance.

LIBERAL STUDIES: ELEMENTARY TEACHER PREPARATION

ASSOCIATE IN ARTS

The following degree enables the student to prepare to transfer, primarily to a CSU school with a major in Elementary Teacher Preparation, typically called Liberal Studies at the CSU institution. **While this particular pattern of courses is specific to transfer to CSU East Bay, other CSU institutions, who also follow California State guidelines for Elementary Teacher Credentialing preparation include many, if not all of these requirements.** The student is advised to consult ASSIST (www.assist.org) for CSU schools other than CSU East Bay and see a counselor for assistance.

This pattern encompasses the new multiple subject matter program standards adopted by the California Commission on Teacher Credentialing. CSU General Education-Breadth and other university requirements are subsumed in the Liberal Studies major. Not all lower division courses for the Liberal Studies major at CSUEB are available at Chabot; you may need to take additional lower division classes after transfer. Areas below that have a (*) indicate that there may be additional lower division requirements after transfer.

No single course may be applied to more than one major requirement in this pattern.

WRITTEN COMMUNICATION

(Two courses, each completed with a grade of "C" or higher)

ENGLISH COMPOSITION

English 1A 3

SECOND COMPOSITION COURSE AND CRITICAL THINKING COURSE
English 4 or 7 3

ORAL COMMUNICATION

(One course completed with a grade of "C" or higher)

PUBLIC SPEAKING
Communication Studies 1 3

PHYSICAL SCIENCE

(Two courses)

SURVEY OF CHEMISTRY
Chemistry 10 or 31 **and** 4

PHYSICS WITH LABORATORY
Physics 11 4

LIFE SCIENCE

(One course)

INTRODUCTION TO BIOLOGY WITH LABORATORY
Biology 10 or 31 4

QUANTITATIVE REASONING

(One course completed with a grade of "C" or higher)

QUANTITATIVE REASONING
Mathematics 1, 2, 3, 4, 6, 8, 15, 16, 20, 31, 33, 35, 36, 37, 40 or 43 3-5

ARTS*

NO COURSES ARTICULATED
Note: Students wanting full CSU GE Breadth Certification will need to complete an Area C1 course (see FLYER #101).

HUMANITIES*

A SURVEY COURSE IN LITERATURE THAT HAS EITHER A CULTURAL OR GEOGRAPHIC SCOPE
English 20, 21, 22, 24, 25, 30, 32, 38 or 48 3
Note: Students wanting full CSU GE Breadth Certification will need to complete an Area C1 course and another Area C course (see FLYER #101).

WORLD CIVILIZATIONS*

WORLD HISTORY
History 3 3
History 4 3

SOCIAL SCIENCES*

CULTURAL GEOGRAPHY
Geography 2 3

INTRODUCTION TO SOCIOLOGY
Sociology 1 3
Note: Students wanting full CSU GE Breadth Certification will need to complete another Area D course (see FLYER #101), which can be satisfied with an American Institutions course from item #3 below.

FIELD EXPERIENCE AND HEALTH

INTRODUCTION TO EDUCATION
General Studies 11 3
Note: Course or documented experience (30 hours) in a position as a teacher's aide, tutor, or volunteer in the elementary (K-6) school classroom with children of elementary school age.)

HEALTH: MAINTENANCE OF WELLNESS
Health 1 3

Total 45-47

For the AA Degree General Education and Chabot Graduation requirements, students will also need to:

1. complete one unit of Physical Education activity.
2. satisfy the American Cultures requirement, *which can be met with Sociology 1 taken at Chabot College from this major pattern or any other course approved for American Cultures.*
3. satisfy the American Institutions requirement.
4. satisfy the Wellness requirement, *which can be met with Health 1 taken at Chabot College from this major pattern or any other course approved for Wellness in the GE pattern.*
5. complete a total of 60 Associate Degree applicable units, 12 units in residence at Chabot College.
6. complete a total of 60 CSU transferable units

Total minimum units required 60

CALIFORNIA STATE UNIVERSITY GENERAL EDUCATION BREADTH (CSU/GE BREADTH)

CERTIFICATE OF ACHIEVEMENT

Students transferring to the California State University system have the opportunity to complete their lower division general education requirements at Chabot College. This pattern of general education is typically 39-45 semester units. Earning a CSU/GE Breadth Certificate of Achievement will enable Chabot College to officially acknowledge a significant educational achievement the student has completed at Chabot

College. For more detailed course information, consult the "CSU GE Breadth" transfer information page in the catalog or the current FLYER #101 in the Counseling Division. Counselor assistance is advised.

Complete the required number of units/courses in each category:

Area A: Communications in the English Language . .9 semester units

Area B: The Physical and Life Sciences and Mathematics . . . . . .9 semester units

Area C: Arts, Literature, Philosophy and Foreign Languages . . . . . .9 semester units

Area D: Human Social, Political and Economic Institutions and Behavior . . . . . .9 semester units

Area E: Understanding and Self Development . . . . . .3 semester units

Area F: US History, Constitution and American Ideals . . . . . .6 semester units *

(*) Courses completed in Area F can be counted in Area D)

Total minimum units required 39-45

Earning this Certificate of Achievement **will not replace** the CSU/GE Certification document. The "Certification of CSU General Education Breadth" **is a separate process**. The student must request CSU/GE Certification at the time he/she requests a final Chabot transcript to be sent to the CSU school he/she plans on attending. File this request with the Office of Admissions and Records.

CASE MANAGEMENT FOR HUMAN SERVICES

CERTIFICATE OF PROFICIENCY

This certificate has been designed to provide students an introduction to case management skills needed to work effectively with consumers in a human services environment. Students will develop multicultural awareness and cultural competence needed to work in a social service setting, along with computer literacy and medical terminology. Students earning this Certificate of Proficiency will investigate multicultural issues and concepts which can affect social service delivery, learn computer applications skills, complete an introductory medical terminology course, and complete course work in the fundamentals of human services and case management to document intake, assessment, evaluation, and ongoing delivery of service(s).

CORE COURSES	FALL	SPRING
Psychology Counseling 1 (Introduction to Psychology-Counseling in a Multicultural Environment)	3	
Psychology-Counseling 2 (Introduction to Case Management for Human Services)	3	
Computer Application Systems 88A (Microsoft Word I) or Computer Science 8 (Computer Literacy)	3	
Psychology-Counseling 4 (Multiethnic/cultural Communication) or Psychology-Counseling 13 (Multicultural Issues in Contemporary America)	3	
Health 51A (Basic Medical Terminology)	4	
Total	**16**	

INTERSEGMENTAL GENERAL EDUCATION TRANSFER CURRICULUM (220IGETC)

CERTIFICATE OF ACHIEVEMENT

Students transferring to the University of California or the California State University system have the opportunity to complete their lower division general education requirements at Chabot College. This pattern of general education is typically 34-47 semester units. Earning an IGETC Certificate of Achievement will enable Chabot College to officially acknowledge a significant educational achievement the student has completed at Chabot College. For more detailed course information, consult the IGETC information page in the catalog or current IGETC flyers (FLYER #129) in the Counseling Division. Counselors are available to assist you in determining if using IGETC for CSU or UC fits your academic transfer plans.

OPTION I: CSU Transfer
Complete the required number of units/courses in each category:

Area 1: English Communications
Group A: English Composition
Group B: Critical Thinking
Group C: Oral Communication. . . . . .9 semester units

Area 2: Mathematical Concepts and Quantitative Reasoning . . . . . .3 semester units

Area 3: Arts, and Humanities . . . . . .9 semester units

Area 4: Social and Behavioral Sciences . . . . . .9 semester units

Area 5: Physical and Biological Sciences. . . . . .7-9 semester units

US History, Constitution and American Ideals . . . . .6 semester units *

Total minimum units required . . . . . 39-46 semester units

OPTION II: UC Transfer
Complete the required number of units/courses in each category:

Area 1: English Communications
Group A: English Composition
Group B: Critical Thinking . . . . . 6 semester units

Area 2: Mathematical Concepts and Quantitative Reasoning . . . . . 3 semester units

Area 3: Arts, and Humanities . . . . . 9 semester units

Area 4: Social and Behavioral Sciences . . . . . 9 semester units

Area 5: Physical and Biological Sciences . . . . . 7-9 semester units

Area 6A: Language Other Than English (LOTE)* . 0-10 semester units

Total minimum units required . . . . . 39-46 semester units

(*)LOTE: This UC IGETC requirement can be satisfied in a number of ways. See Page 25 in the front of the Catalog for a detailed explanation.

Earning this Certificate of Achievement **will not replace** the IGETC Certification document. The "Certification of IGETC" **is a separate process**. The student must request IGETC Certification at the time he/she requests a final Chabot transcript to be sent to the UC or CSU school he/she plans on attending. File this request with the Office of Admissions and Records.

MULTICULTURAL AWARENESS/RELATIONS FOR THE SERVICE PROVIDER

CERTIFICATE OF PROFICIENCY

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 Proficiency 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 Communication Studies 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 12 (Self Esteem for Success) . . . . . 2 units
- Psychology-Counseling 15 (College Study Skills) . . . . . 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. in Global Perspective) . . 3 units
- Early Childhood Development 60 (Introduction to the Young Child with Exceptional Needs) . . . . . 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. Women's Literature) . . . . . 3 units
- English 38 (Survey of Modern British Literature) . . . . . 3 units
- Ethnic Studies 1 (Introduction to Ethnic Studies) . . . . . 3 units
- Ethnic Studies 2 (Contemporary Ethnic Minority Families in the U.S.) . . . . . 3 units
- Ethnic Studies 3 (Introduction to Muslim-American Studies) . 3 units
- Foreign Language 1A (Beginning Foreign Language) . . . . . 3 units
- Health 4 (Women and Health) . . . . . 3 units
- Health 8 (Human Sexuality) . . . . . 3 units
- Music 5 (American Cultures in Music) . . . . . 3 units
- Psychology 6 (Abnormal Psychology) . . . . . 3 units
- Psychology 8 (Human Sexuality) . . . . . 3 units
- Psychology 12 (Life Span Psychology) . . . . . 3 units
- Religious Studies 50 (Religions of the World) . . . . . 3 units
- Religious Studies 70 (Spiritual Traditions of Contemporary Voices) . . . . . 3 units
- Sign Language 64 (Beginning Sign Language) . . . . . 3 units

Sign Language 65 (Intermediate Sign Language) . . . . . 3 units
Sociology 3 (American Cultural and Racial Minorities) . . . . . 3 units
Sociology 4 (Marriage and Family Relations) . . . . . 3 units
Sociology 8 (Human Sexuality) . . . . . 3 units
Sociology 10 (Instruction to Asian-American Studies) . . . . . 3 units

MULTICULTURAL AWARENESS/ SELF-REFLECTION

CERTIFICATE OF PROFICIENCY

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 Proficiency 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 Communication Studies 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 12 (Self-Esteem for Success) . . . . . 2 units
Psychology-Counseling 15 (College Study Skills) . . . . . 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. in Global Perspective) . . 3 units
Early Childhood Development 60 (Introduction to the Young Child with Exceptional Needs) . . . . . 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
Ethnic Studies 1 (Introduction to Ethnic Studies) . . . . . 3 units
Ethnic Studies 2 (Contemporary Ethnic Minority Families in the U.S.) . . . . . 3 units
Ethnic Studies 3 (Introduction to Muslim-American Studies) . 3 units
Foreign Language 1A (Beginning Foreign Language) . . . . . 3 units
Health 4 (Women and Health) . . . . . 3 units
Health 8 (Human Sexuality) . . . . . 3 units
Music 5 (American Cultures in Music) . . . . . 3 units
Psychology 6 (Abnormal Psychology) . . . . . 3 units
Psychology 8 (Human Sexuality) . . . . . 3 units
Psychology 12 (Life Span Psychology) . . . . . 3 units
Religious Studies 50 (Religions of the World) . . . . . 3 units
Religious Studies 70 (Spiritual Traditions of Contemporary Voices) . . . . . 3 units
Sign Language 64 (Beginning Sign Language) . . . . . 3 units
Sign Language 65 (Intermediate Sign Language) . . . . . 3 units
Sociology 3 (American Cultural and Racial Minorities) . . . . . 3 units
Sociology 4 (Marriage and Family Relations) . . . . . 3 units
Sociology 8 (Human Sexuality) . . . . . 3 units
Sociology 10 (Introduction to Asian-American Studies) . . . . . 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; AC.

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 communication behavior of individuals in relationships and/or groups, personal identity formation in the American context, historical development of culturally influenced communication styles, and evolution of new, American inter- and intra-group communication. Will examine social science research models, including single subject case study, in three (3) of the five (5) follow-

ing groups: African-Americans, Asian-Americans, Native/Indigenous Americans, Pacific Islander-Americans, Hispanic-Americans. Students will attend Bay Area cultural events. 3 hours. Transfer: CSU; UC; 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.

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. 3 hours. Transfer: CSU; UC; CSU/GE: D7; IGETC: Area 4I; AA/AS; AC.

15 COLLEGE STUDY SKILLS 2 UNITS

Review of study skill techniques for success in college. Emphasis on time management, personal learning style, active listening, note-taking and test-taking strategies. Includes modeling, practice, and evaluation of study skill techniques. 2 hours. 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. ½–1 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.) 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)

Workshop format focusing on practical strategies for success in college; workshop topics may include 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; plus other topics as student needs are identified. Designed for all students to maximize their potential with emphasis on enhancing the new student's transition into college. 9–27 total hours. Transfer: CSU.

23 COLLEGE READINESS 3 UNITS

Introduction to academic survival skills and strategies, campus resources and activities, career decision making and planning, college policies and procedures, interpersonal communications, self-exploration and goal setting, student rights and responsibilities, and campus visitation to a University of California or private institution and to a California State University. Designed for the first-year student to ease transition into college. 3 hours. Transfer CSU.

25 TRANSITION TO COLLEGE 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. Transfer: CSU.

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.

80 OCCUPATIONAL COMMUNITY SERVICE IN HUMAN SERVICES 2 UNITS

Community service 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 service site supervisor to accomplish agreed upon work objective and broaden experiences for the term enrolled. Student provides verification of service experience hours during the term. Student will make arrangements for hours and duties directly with site supervisor, after getting site approved by PSCN faculty. Community service hours will be provided on a volunteer basis unless other arrangements are made between the student and site supervisor. 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. Transfer: CSU.

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

FRESHMAN YEAR	FALL	SPRING
Mass Communications 40 (Introduction to Broadcasting)	3	
Mass Communications 41 (Introduction to Mass Communications)	3	
Mass Communications 44 (Radio and Television Announcing/Performance)	3	
Mass Communications 50 (Radio Studio Techniques)	3	
Mass Communications 60 (Television Studio Techniques I)	3	

SOPHOMORE YEAR	FALL	SPRING
Mass Communications 43 (Advertising Sales and Media Management)	4	
Mass Communications 61 Television Studio Techniques II)	3	
Mass Communications 58 (KCRH Radio Experience) or Mass Communication 68 (KCTH Television Experience)	2–3	
Mass Communications 42 (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 (Financial Accounting) or Business 7 (Accounting for Small Business)	3–4	
Business 31 (Professional Selling) or Business 36 (Introduction to Marketing)	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
- Computer Application Systems 50 (Introduction to Computer Application Systems) . . . . . 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.

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 (Financial Accounting) or Business 7 (Accounting for Small Business)	3–4	
Real Estate 83 (Real Estate Finance)	3	
Real Estate 84 (Real Estate Practice)	3	
Option*	9	
Total	**27–28**	

Option select 9 units from 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 (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
- Business 31 (Professional Selling) or Business 36 (Introduction to Marketing) . . . . . 3 units
- Computer Application Systems 50 (Introduction to Computer Application Systems) . . . . . 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.

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. Strongly recommended: 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 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. Strongly recommended: 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. Strongly recommended: 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. Strongly recommended: 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. Strongly recommended: 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. Strongly recommended: 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. Strongly recommended: 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. Strongly recommended: 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. Strongly recommended: Real Estate 80. 3 hours. Transfer: CSU.

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. Strongly recommended: Real Estate 80. 3 hours. Transfer: CSU.

90 EXAM PREPARATION: STATE OF CALIFORNIA REAL ESTATE LICENSING EXAM 2 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. 2 hours.

Recreation and Rehabilitation Therapies (RECR)

67 ACTIVITY DIRECTORS TRAINING 4 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. 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. 4 hours. Transfer: CSU.

Religious Studies (RELS)

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. 3 hours. Transfer: CSU; UC; CSU/GE: C2; IGETC: Area 3B; 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. 3 hours. Transfer: CSU; UC; CSU/GE: C2; IGETC: Area 3B; 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. 3 hours. Transfer: CSU; UC; CSU/GE: C2; IGETC: Area 3B; AA/AS.

70 SPIRITUAL TRADITIONS AND CONTEMPORARY VOICES 3 UNITS
Selected themes in spirituality. Contemporary and global spirituality will be read in view of how they expand on and/or reinterpret traditional themes. What does it mean to live a spiritual life in the 21st century? How would contemporary people and major issues of our day benefit from a spiritual approach? Themes and practices will be explored. 3 hours. Transfer: CSU; UC; 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. 3 hours. Transfer: CSU; UC; CSU/GE: C2; IGETC: Area 3B; 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. Transfer: CSU.

Sign Language (SL)

64 BEGINNING SIGN LANGUAGE 3 UNITS

Introduction to beginning communication skills through the language of sign, with emphasis on American Sign Language (ASL). Following an immersion instruction format, the class is entirely taught in the target world language of the selected course. 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 INTERMEDIATE SIGN LANGUAGE 3 UNITS

Further development of skills and knowledge learned in Beginning Sign Language 64, with emphasis on American Sign Language (ASL). Following an immersion instruction format, the class is entirely taught in the target world language of the selected course. 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: Area 6A-LOTE; AA/AS.

66 ADVANCED SIGN LANGUAGE 3 UNITS

Further development of American Sign Language (ASL) receptive/expressive skills and knowledge learned in Sign Language 65. Following an immersion instruction format, the class is entirely taught in the target world language of the selected course. Emphasis on conversational skills in functional situations, continued vocabulary expansion and knowledge of Deaf culture and the Deaf community. Prerequisite: Sign Language 65 *(completed with a grade of "C" or higher)*. 3 hours. Transfer: CSU; UC.

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)	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)

A major in Sociology offers students the opportunity to learn about human social interaction in groups as small as two or as large as a society. Sociologists study the properties of groups and their influence on human behavior. Sociology is a science whose principles are based on theory and empirical research. As a large discipline with over 100 specializations, Sociology offers students the opportunity

to pursue interests in fields as diverse as medical sociology, social psychology, criminology, family studies, social problems, gerontology, deviance, disabilities, peace studies, and child development.

Majoring in Sociology at Chabot College provides one with the introductory knowledge and skills that are required for an upper division major in Sociology as well as a large number of related fields including Social Work, Human Development, Liberal Studies, and Ethnic Studies. Majors in Sociology are often found in a diversity of careers including urban planning, social work, law, consulting, evaluation research, international relations, college level teaching, government administration, industrial relations, counseling, demography, and journalism.

DEGREE: AA-T—Sociology

SOCIOLOGY

ASSOCIATE IN ARTS FOR TRANSFER DEGREE

UNITS

REQUIRED CORE ***(3 units)***

Sociology 1 (Principles of Sociology) 3

LIST A ***(select two–6-7 units)***

Sociology 2 (Social Problems) 3
Sociology 5 (Introduction to Social Research Methods) 3
Mathematics 43 (Introduction to Probability and Statistics) 4

LIST B ***(select two–6 -7 units)***

Any List A course not used above 3-4
Sociology 3 (American Cultural and Racial Minorities) 3
Sociology 4 (Marriage and Family Relations) 3
Sociology 6 (Introduction to Gender) 3

LIST C ***(select one–3 units)***

Any List A or B course not used above 3
Sociology 8 or Psychology 8 or Health 8 (Human Sexuality) 3
Sociology 10 (Introduction to Asian American Studies) 3
Sociology 30 (Social Gerontology) 3
Psychology 1 (General Psychology)) 3
Anthropology 3 (Social and Cultural Anthropology) 3
Geography 2 (Cultural Geography) 3
Ethnic Studies 3 (Introduction to Muslim-American Studies) 3
History 21 (The African-American Experience in U.S. History Since Reconstruction) 3
History 22 (Mexican American History and Culture) 3
History 25 (American Indian History and Culture) 3
Total 18-19

Required Major Courses: 18-19 units
CSU GE or IGETC (CSU) requirements: 37-39 units
(Possible Double-counting: 9 units)
CSU transfer Electives as needed to reach 60 CSU transferable units
TOTAL UNITS: 60 units

All courses in the major or area of emphasis are required to have a grade of "C" or higher, and a cumulative GPA of 2.0 must be achieved.

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. 3 hours. Transfer: CSU; UC; CSU/GE: D0; IGETC: Area 4J; AA/AS; AC.

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. 3 hours. Transfer: CSU; UC; CSU/GE: D0; IGETC: Area 4J; AA/AS.

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. 3 hours. Transfer: CSU; UC; CSU/GE: D0; IGETC: Area 4J; AA/AS; AC.

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. 3 hours. Transfer: CSU; UC; CSU/GE: D0; IGETC: Area 4J; AA/AS.

5 INTRODUCTION TO SOCIAL RESEARCH METHODS 3 UNITS
Introduction to the primary research methods used by social scientists with an emphasis on the research methodologies of sociology. An integrative approach which includes an understanding of theory, sociological paradigms and scientific logic as these apply to the methodologies

used in conducting empirical research. Focus will be on how social research is designed, conducted and analyzed both qualitatively and quantitavely. Major sociological research studies will be critiqued. Strongly recommended: Sociology 1. 3 hours. Transfer: CSU; UC; CSU/GE: D0; IGETC: Area 4J; AA/AS.

6 INTRODUCTION TO GENDER 3 UNITS

A sociological analysis of the social construction of masculinity and femininity through history and cultures. Examines the debates on sex and gender. Analyzes the impact of economic and political change on gender expectations and practices. Focuses microanalysis of how institutions shape gender and microanalysis of how individuals are socialized and how they "do" and practice gender. 3 hours. Transfer: CSU; UC; CSU/GE: D0, D4; IGETC: Area 4D, 4J; 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. 3 hours. Transfer: CSU; UC; CSU/GE: D3; IGETC Area 4C; 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 4J; AA/AS; AC.

Spanish (SPA)

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 (SPA)

1A BEGINNING SPANISH 5 UNITS

Introduction to the Spanish-speaking cultures of the world featuring the study and practice in the four language learning skills (listening, speaking, reading, and writing) of Spanish. Following an immersion instruction format, the class is entirely taught in the target world language of the selected course. Strongly recommended: eligibility for English 1A. 5 hours lecture, 1 hour laboratory. Transfer: CSU; UC; CSU/GE: Area C; AA/AS.

1B ELEMENTARY SPANISH 5 UNITS

Further study of the Spanish-speaking cultures of the world featuring the acquisition of the four language learning skills (listening, speaking, reading, and writing) of Spanish begun in Spanish 1A. Following an immersion instruction format, the class is entirely taught in the target world language of the selected course. Prerequisite Spanish 1A (*completed with a grade of "C" or higher*). 5 hours lecture, 1 hour laboratory. Transfer: CSU; UC; CSU/GE: Area C2; IGETC: 6A-LOTE; AA/AS. (Corresponds to 2 years high school study.)

2A INTERMEDIATE SPANISH 4 UNITS

Review of grammar; reading of works of modern authors; practice in conversation and composition. Following an immersion instruction format, the class is entirely taught in the target world language of the selected

course. Prerequisite: Spanish 1B (*completed with a grade of "C" or higher*). 4 hours lecture, 1 hour laboratory. Transfer: CSU; UC; CSU/GE: Area C2; IGETC: Area 3B, 6A-LOTE; AA/AS.

2B ADVANCED SPANISH 4 UNITS
Reading of Hispanic authors; advanced review of grammar; emphasis on speaking and composition. Following an immersion instruction format, the class is entirely taught in the target world language of the selected course. Prerequisite: Spanish 2A (*completed with a grade of "C" or higher*). 4 hours lecture, 1 hour laboratory. Transfer: CSU; UC; CSU/GE: Area C2; IGETC: Area 3B, 6A-LOTE; AA/AS.

5 FIELD WORK RELATIONS 1 UNIT
(May be repeated 3 times)
Practice of Spanish language in a real setting and involvement in local Hispanic culture through volunteer field work in a local Hispanic community organization. Three class meetings in addition to approximately 4 hours per week of volunteer work. Strongly recommended: completion of or concurrent enrollment in Spanish 2A. 4 hours laboratory. Transfer: CSU; CSU/GE: C2.

50A SPANISH CONVERSATION AND CULTURE I 3 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. Following an immersion instruction format, the class is entirely taught in the target world language of the selected course. 3 hours lecture, 1 hour laboratory. Transfer: CSU.

50B SPANISH CONVERSATION AND CULTURE II 3 UNITS
Development of skills learned in Spanish 50A. Understanding of spoken Spanish through pronunciation, vocabulary, and applied grammar. Further study of life and the culture of the Spanish-speaking people. Following an immersion instruction format, the class is entirely taught in the target world language of the selected course. Prerequisite: Spanish 50A (*completed with a grade of "C" or higher*). 3 hours lecture, 1 hour laboratory. Transfer: CSU.

50C SPANISH CONVERSATION AND CULTURE III 3 UNITS
Development of skills learned in Spanish 50B. Understanding of spoken Spanish through pronunciation, vocabulary, and applied grammar. Further study of the culture and everyday life activities of Spanish-speaking people. Following an immersion instruction format, the class is entirely taught in the target world language of the selected course. Prerequisite: Spanish 50B *(completed with a grade of "C" or higher.)* 3 hours lecture, 1 hour laboratory. Transfer: CSU.

50D SPANISH CONVERSATION AND CULTURE IV 3 UNITS
Development of skills learned in Spanish 50C. Understanding of spoken Spanish through pronunciation, vocabulary, and applied grammar. Further study of the culture and everyday life activities of Spanish-speaking people. Following an immersion instruction format, the class is entirely taught in the target world language of the selected course. Prerequisite: Spanish 50C *(completed with a grade of "C" or higher.)* 2 hours. Transfer: CSU.

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. Transfer: CSU.

Speech (SPCH)

(See Communication Studies)

Theater Arts (THTR)

DEGREE: AA—Theater Arts

An AA in Theater Arts will give students experience and knowledge in the broad range of skills required for the successful production of both original and published theatrical material. All majors must complete courses in acting, technical theater and production of original student work. Beyond that, students can focus more intensely on a given area, such as acting, directing, playwrighting or technical theater. The department produces a full array of theatrical genres including musicals, Shakespeare, contemporary American dramas and original student written pieces.

THEATER ARTS
ASSOCIATE IN ARTS DEGREE

FRESHMAN YEAR	FALL	SPRING
Theater Arts 1 (Introduction to Acting)	3	
Theater Arts 10 (Introduction to Theater Arts)	3	
Theater Arts 20 (Introduction to Design for the Theater)		3
Theater Arts 30 (Emerging Work)		3

SOPHOMORE YEAR	FALL	SPRING
Theater Arts 48 (College Theater Technical)	3	
Option*	3	
Option*		3
Total		**21**

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

** Select any six units from the following options:*

Theater Arts 2 (Intermediate Acting) . . . . . 3 units
Theater Arts 3 (Improvisation for the Theater) . . . . . 3 units
Theater Arts 4 (Acting on Camera) . . . . . 3 units
Theater Arts 5 (Theater for Young Audiences) . . . . . 3 units
Theater Arts 6 (Advanced Improvisation and Movement for Actors) . . . . . 3 units
Theater Arts 7 (Voice for the Actor) . . . . . 3 units
Theater Arts 8 (Audition Technique) . . . . . 3 units
Theater Arts 11 (Stage to Film) . . . . . 3 units
Theater Arts 12 (Film as Art and Communication) . . . . . 3 units
Theater Arts 16 (Dramatic Writing I) . . . . . 3 units
Theater Arts 47 (College Theater Acting) . . . . . 3 units
Theater Arts 50 (Production Management) . . . . . 1-6 units

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. Development of critical thinking skills associated with viewing and analyzing performances of others. Lab hours are required for rehearsal of scenes and attendance of on campus theater productions. 3 hours lecture, 1 hour laboratory. Transfer: CSU; UC; CSU/GE: C1; AA/AS.

2 INTERMEDIATE ACTING 3 UNITS
A continuation of Theater Arts 1. Exploration of the theory and practice of acting, focusing on more complex characterization and character analyses. Theatrical styles and period acting with emphasis on monologues, scenes, and audition technique. Voiceover concepts. Development of critical thinking skills associated with viewing and analyzing performances of others. Laboratory hours are required for rehearsal of scenes and attendance of on campus theater productions. 3 hours lecture, 1 hour laboratory. Transfer: CSU; UC.

3 IMPROVISATION FOR THE THEATER 3 UNITS
Introduction to the techniques and theories of improvisation and its various uses in theater. Development of the ability to think quickly, develop characters, work in an ensemble and create spontaneously through various exercises. Recommended for non-drama as well as drama majors. 3 hours lecture, 1 hour laboratory. Transfer: CSU; UC.

4 ACTING ON CAMERA 3 UNITS
Introduction to the principles and techniques of acting on camera. Different techniques for work with three cameras, commercials, acting for film and acting for television. Work with technique for various on camera types of auditions, i.e., commercials, film and television. Prerequisite: Theater Arts 1. Strongly recommended: Theater Arts 2. 3 hours. Transfer: CSU; UC; AA/AS.

5 THEATER FOR YOUNG AUDIENCES 3 UNITS
(May be repeated 3 times)
Participate in a theater production to be performed for local K-12 students. Plays will be cast by audition; however, everyone who enrolls will be part of the production. 3 hours. Transfer: CSU; CSU/GE: C1.

6 ADVANCED IMPROVISATION AND MOVEMENT FOR ACTORS 3 UNITS
Builds on skills that have been introduced in beginning improvisation or acting courses. Focus is on development of character and story telling through physical expression. Improving an actor's ability to make bold, interesting and specific physical choices. 3 hours lecture, 1 hour laboratory. Transfer: CSU.

7 VOICE FOR THE ACTOR 3 UNITS
Development of the awareness of and access to the natural voice for use in theatrical production, and in life. Increase emotional availability and ability to communicate text clearly through breath control and articulation. 3 hours. Transfer: CSU; UC; CSU/GE: C1; AA/AS.

8 AUDITION TECHNIQUE 3 UNITS
Work on monologues and showcase scenes, cold reading technique. Students with interest in pursuing acting beyond the community college setting will work on what it takes to audition for theater, film and four-year schools. Students will be expected to have a headshot taken at their own expense. 3 hours

10 INTRODUCTION TO THEATER ARTS 3 UNITS
Enjoyment and appreciation of the art of live theater through looking at plays of various genres, time periods and from differing parts of the world. Includes viewing and discussing live theater. 3 hours. Transfer: CSU; UC; CSU/GE: C1; IGETC: Area 3A; 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 vary from semester to semester. 3 hours. Transfer: CSU; UC; CSU/GE: C1; IGETC: Area 3A.

12 FILM AS ART AND COMMUNICATION 4 UNITS
Introduction to film as art and communication. Analysis of films from various genres, with an emphasis on both technical aspects of filmmaking and story-telling. 4 hours. Transfer: CSU; UC; CSU/GE: C1; IGETC: Area 3A; 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: C1.

20 INTRODUCTION TO DESIGN FOR THE THEATER 3 UNITS
(May be repeated 3 times)
Introduction to the techniques and theories of designing for theatrical productions. Each semester course will focus on some of the major

areas of design in theater, i.e., lighting, sets, costumes, sound, make-up. Recommended for non-drama as well as drama majors. 3 hours lecture, 1 hour laboratory. Transfer: CSU.

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. 3 hours. Transfer: CSU; UC.

40 INTRODUCTION TO TECHNICAL THEATER 3 UNITS
Introduction to technical production of theater; scenic design and construction, scenic painting, costume design, lighting design and organization for production; laboratory experience in preparing plays for public performance. 2 hours lecture, 4 hours laboratory. Transfer: CSU; UC; CSU/GE: C1.

47 COLLEGE THEATER ACTING 3 UNITS
(May be repeated 3 times)
Participation in main season production or project. Enrollment is for the duration of the production. Enrollment by audition only. 9 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. Development of skills in the various technical areas involved in the presentation of a theatrical production. 3–18 hours laboratory. Transfer: CSU; UC; AA/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. Transfer: CSU; UC; AA/AS.

Tutoring (TUTR)

1A TUTORING THEORY AND PRACTICE ½ UNIT
(May be repeated 3 times)
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 Chabot College Learning Connection tutoring programs. Corequisite: Tutoring 1B or equivalent. ½ hour/week or 9 hours total.

1B CONTENT-AREA TRAINING FOR TUTORS ½ UNIT
(May be repeated 3 times)
Training for college tutors to acquire skills and techniques for tutoring in specific content areas. Required course for tutors participating in Chabot College Learning Connection tutoring programs. Corequisite: Tutoring 1A. ½ hour per week or 9 hours total.

31 CHABOTLINK PEER ADVISOR TRAINING 1 UNIT
(May be repeated 3 times)
Skills, techniques, leadership training, and information needed by peer advisors to help students gather information and explore practical strategies for academic success. College policies, campus resources, programs and services, student rights and responsibilities, general education planning (including graduation and transfer requirements), major offerings, public speaking, listening strategies. Required for all peer advisors participating in the ChabotLink Program. 1 hour.

200 SUPERVISED TUTORING NON-CREDIT
(May be repeated 3 times)
Reading, mathematics, language arts, speaking, decision making, and problem-solving skills necessary for academic and technical training success. Self-paced, one-on-one and small group instruction tailored to students' individual needs. Variable hours laboratory.

Welding Technology (WELD)

DEGREE:
AS–Welding Technology

CERTIFICATE OF PROFICIENCY:
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
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 26		

GENERAL EDUCATION UNITS FOR A.S. DEGREE 19
For specific A.S. General Education courses refer to catalog section on A.S. Graduation Requirements.
General Education Courses (Areas A-E) 16
Welding Technology GE Requirement 3
Complete a minimum of 3 units
Industrial Technology 74 (Measurements and Calculations)
Total minimum units required 60

**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 PROFICIENCY

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		

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 PROFICIENCY

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 Proficiency** and the **Inspection and Pipe Welding Certificate of Proficiency,** 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 applications of welding blueprints on welded assemblies and subassemblies. Welding power source identification and classification, welding processes identification and selection, assessment of welding joint discontinuities and defects identified by the AWS standards and codes, techniques of stress and distortion control such as proper use of jigs, fixtures and holding devices, the use of welding sequences techniques to control welding distortion and the implementation of the correct methods of straightening and dimension restoration of finished products. Laboratory includes the use of the following welding processes: SMAW, GMAW, GTAW, and FCAW and plasma and fuel cutting practice. Strongly recommended: Welding Technology 64A, Welding Technology 65A and 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: Shielded Metal Arc Welding (SMAW) and Flux-Core Arc Welding (FCAW) in 1G, 2G, 1F, and 2F positions, 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, OSHA hazardous materials regulation, general shop equipment usage and maintenance, 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)

Advanced theory and practical application of: Shielded Metal Arc Welding (SMAW) and Flux-Core Arc Welding (FCAW) in 3G, 4G, 3F, and 4F positions, 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 Welding Technology 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 ferrous and non-ferrous metals and their alloys using GTAW (Gas Tungsten Arc Welding) and GMAW (Gas Metal Arc Welding) processes, oxyacetylene brazing, flame and plasma cutting 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)

Advanced theory and skill development of GTAW and GMAW processes with applications including ferrous and non-ferrous metals and their alloys in the both 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, advanced 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 Welding Technology 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 testing using destructive and non-destructive methods (dye penetration method, magnetic particle, radiographic, ultrasonic, and metallographic inspection), AWS (American Welding Society) welding codes and specification, analysis of joint configuration, wire and electrodes selections, tensile strength, bend and hardness testing. 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 processes. Preparation for welding solidification in 1G, 2G 1F and 2F positions. 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, GMAW and GTAW in the 1G, 2G, 3G, 4G, 1F, 2F, 3F and 4F positions. 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 process preparation for certification exams including the 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. 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, 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 or equivalent. 1 hour lecture, 6 hours laboratory.

69B ADVANCED PIPE WELDING 3 UNITS

(May be repeated 3 times)

Advanced theory and practical applications 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 joint 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 processes, oxyacetylene and braze welding, plasma and fuel gas cutting, general shop equipment usage, welding electricity fundamentals, shop safety, identification of welding consumables, hazardous materials regulation, introduction to blueprint reading as applied in manufacturing industry. 1 hour lecture, 3 hours laboratory. Transfer: CSU.

71 WELDING FOR ARTISTS **2 UNITS**

(May be repeated 3 times)

Welding essentials and conventional shop instruction and skills that artistically disposed individuals need to attain in order to proficiently perform 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, oxy-acetylene and braze welding, plasma and fuel gas cutting, general shop equipment usage, welding electricity fundamentals, shop safety, welding consumable identification, and hazardous materials regulation. 1 hour lecture, 3 hours laboratory. Transfer: CSU

World Languages (WORL)

1L WORLD LANGUAGES LAB **½ - 1 UNIT**

(May be repeated 3 times)

World language grammar, pronunciation, conversation. Exploration of cultural components related to the target language. Corequisite: concurrent enrollment in a World Language course: 1A, 1B, 2A, or 2B. 1½ -3 hours laboratory.

Work Experience◊ (WEXP)

95 WORK EXPERIENCE◊ **1—3 UNITS**

(Work Experience courses may be repeated up to a total of 16 units.)

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**

(Work Experience courses may be repeated up to a total of 16 units.)

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. Transfer: CSU.

◊ *Refer to page 14 for program requirements.*

Chabot-Las Positas Community College District

5020 Franklin Drive,
Pleasanton, CA 94588

Academic Administrators

KINNAMON, JOEL L., 2002; B.S., Oklahoma State University; M.B.A., Oklahoma City University; Ed.D., Nova Southeastern University; Chancellor

Non-Academic Administrators

AGUSTIN, KENNEDY	Manager, Network Systems & Services
ANDREWS, JAMES W.	Manager, Employment, Diversity, & Employee Relations
BENETTI, LORI A.	Payroll Manager
NELSON, TIM C.	Director, Maintenance & Operations
RAMOS, R. FRANK	Manager, Emergency Preparedness & Workplace Safety
YESNOSKY, BARBARA A.	Director, Business Services

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

CARTER, GARY M., 2008; B.S., Weber State University; M.A., University of New Mexico; M.Ed., University of San Diego, Dean, School of the Arts.

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.

IRVIN, HOWARD J., 2011; A.A., San Diego Mesa College; B.A., M.S., San Diego State University; M.A., Ph.D., Fielding Graduate University; Vice President, Student Services.

KRITSCHER, MATTHEW D., 2008; B.S., California Polytechnic State University; M.A., California Polytechnic State University; Ed.D., San Francisco State University; Dean, Counseling.

RAILEY, GEORGE A., JR., 2009; B.M.E., M.M.E., Eastern Kentucky University; Ed.D., University of the Pacific; Vice President, Academic Services

SHIMADA, GERALD A., 2000; B.A., University of California, Berkeley; M.A., San Francisco State University; Dean, Special Programs & Services.

SPERLING, SUSAN S., 1987; A.B., M.A., Ph.D., University of California, Berkeley; President.

VO-KUMAMOTO, TRAM, 2000; B.A., University of California, Berkeley; M.S., California State University, Hayward; Dean, Science and Mathematics.

WAGONER, DALE J., 1989; A.A., Chabot College; B.S., California State University, Chico; M.A., University of California, Berkeley; Dean, Health, Physical Education & Athletics

Non-Academic Administrators

BROWN, RITA H., Interim Vice President, Administrative Services.
CORMIER, VANESSA, Manager, Children's Center
GIRARDELLI, DAWNALYNN E., Director, Off-Campus Programs
LINO, PAULETTE, Director, Admissions and Records
LINZMEYER (GREENWALD), KATHRYN A., Director, Financial Aid.
PRECIADO, DANIELLE M. C., Director, Student Life

Faculty

Faculty Senate—Kathy Kelley, President

ABSHER, MICHAEL S., 2002; A.A., Chabot College; Machine Tool Technology.

ALARCON, LAURA J., 2010, B.A., University of California, Berkeley; M.S. San Francisco State University; Counselor

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., Chabot College; B.A., California State University, Hayward; M.A., San Francisco State University; Disabled Students Programs and Services (DSPS).

AMES, JASON M., 2005; B.A., University of San Francisco; M.A., California State University, Hayward; Speech/Forensics.

ARNOLD, CAROLYN L., 1992; A.B., Smith College; Ph.D., Stanford University; M.S., Stanford University; M.A., San Francisco State University; Institutional Research.

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.

BAIARDI, ELAINE; 2011; A.A., El Camino College; B.S., State University of New Your, Stony Brook, M.S., California Coast University; Nursing.

BATCHELOR, EGL T., 1991; B.S., M.S., California State University, Hayward; Mathematics.

BAUM, JAMES G., 2005; Automotive Technology.

BHANGAL, JASWINDER K., 2004; A.A., B.A., Bundelkhand University; M.A., University of Phoenix; Business.

BLACKWELL, KIMBERLY S., 2007; B.A., Spelman College; M.A., John F. Kennedy University; Counseling.

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.

BUELL, WILLIAM R., 2006; A.A. Chabot College; Fire Technology.

BUTI, DEBORAH A., 2007; B.A., California State University East Bay; MLIS, San Jose State University; 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.

CHAUDHURI, INDRANI, 2000; B.S., M.S., Calcutta University, India; M.A., San Francisco State University; Mathematics.

CHEUNG, NANCY L., 2010; B.S., University of California, San Francisco; M.S., California Coast University; Dental Hytgene.

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 D., 1992; A.B., San Diego State College; M.S., National University; M.S., San Diego State University; Counselor/ Articulation Officer.

CIRERA-PEREZ, BEGOÑA, 2007; A.A., Las Positas College; B.S. San Jose State University; M.S., San Jose State University; Health.

COCKERHAM, RUDOLPH C., 2002; B.A., Humbolt State University; B.S.N., M.S.N., Samuel Merritt College; Nursing.

CREW, JAMES D., 2002, A.A., Chabot College; B.S., M.S., California State University, Hayward; Mathematics.

CRISTOBAL, KIMBERLY B., 2006; B.S.N., San Jose State University; M.S.N., California State University Dominguez Hills; Nursing.

DALE, ValJEAN, 1998; B.A., M.A., John F Kennedy University; Counseling.

D'ALOISIO, MICHAEL J., 2003; B.A., M.A., Indiana University; Counselor.

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.

DERMODY, MARY E., 2006; B.A., SUNY Genesco; M.A., San Francisco State Unversity; Computer Application Systems.

DeWIT, 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.

EGUSA, JERRY R., 1977; B.S., M.A., Santa Clara University; M.A.T, College of Notte Dame; M.A., Ed.D., University of San Francisco; Learning Skills.

ENRIQUEZ, CARLOS E., 2006; B.S., National Autonomous University of Mexico; B.S., Murdoch University; Ph.D., University of Arizona; Biology.

ESQUIERDO, EUGENE J., 1991; B.F.A., M.F.A., California College of Arts and Crafts, Oakland; Art.

ESTEPA, ALDRIAN N., 2008; B.A., M.A., Humboldt State University; Psychology.

FOTH, HOMEIRA, 2009; B.S., San Francisco State University; M.A., San Jose State University; English Composition.

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.

GENERA, SANDRA F., 2004; A.A., Mills College; B.A., University of California, Berkeley; M.A., California State University, Hayward; Counselor.

GERTON, CONNIE J., 2007; A.A., Chabot College; Nursing.

GIBSON DONNA, 1993; B.S., Stockton State College; M.S., Cornell University; Chemistry.

GILLIS, CHRISTINE A., 1989, B.S., University of New Mexico; M.S.N., San Jose State University; Nursing.

GIOVANOLA, MIREILLE R., 2010; demi-licence, Universite de Lausanne, Switzerland, B.A., M.A., University of California, Berkeley; Anthropology.

GLEN, CHAD M., 1993; A.A., Chabot College; B.A., M.A., San Francisco State University; Mass Communications.

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.

GREENE, DARA S., 2006; B.A., University of California Santa Barbara; M.S., San Francisco State University; Counseling.

HANHAN, DORIS F., 2004; B.A., California State University, Hayward; M.A., University of California, Santa Cruz; Mathematics.

HANSON, WILLIAM H., 2010; B.A., University of California, Berkeley; J.D., Columbia University School of Law; Administration of Justice.

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.
HASSAN, DOV A., 2006; B.A., University of California Los Angeles; M.F.A, University of Missouri; Technical Theater.
HERN, KATHLEEN M., 2004; B.A., New York University; B.A., Mills College; M.A., Bowling Green 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.
HINTZ, HISAKO E., 2009; A.A., Chabot College; B.A., M.A., California State University, Hayward; ESL.
HO, MING-LUN, 2004; B.S., M.A., University of California, Berkeley; Mathematics.
HOBBS, ANGELA K.; 2010; B.A., Hope College, Holland, Michigan; M.A., San Francisco State University; English as a Second Language.
HOLLANDER, BENJAMIN B., 1993; B.A., M.A., San Francisco State University; English.
HOWELL, DEBRA I., 1991; A.B., University of California, Berkeley; Teaching Credentials, Dominican College of San Rafael; M.S., Arizona State University; Biology.
HUANG, WEI-CHIN, 2009; B.A., University of California, Berkeley; M.S., Cal Poly San Luis Obispo; Architecture.
IGWE, ANTHONY O., 2002; B.A., University of San Francisco; M.S., San Francisco State University; Physical Education.
JACOBSEN, SHARI L., 1985; B.A., M.S., California State University, Hayward; Counseling.
JOHNSTON, CARMEN J., 2006; B.A., M.A., San Francisco State University; English.
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.
KELLEY, KATHY G., 1993; B.A., University of California, Los Angeles; M.S., California State University, Hayward; Human Development.
KLEIN, LYNN K., 2010; B.S., M.B.A., California State University, Hayward; Business.
KLEVENS, ALISA T., 2005; B.A., University of California, Berkeley; M.A., New York University; English.
KOLB, MARCIA S., 2002; B.A., University of California, Berkeley; M.A., University of California, San Diego; Mathematics.
KUBICKI, GREG C., 2004; B.A., California State University, Hayward; M.A., St. Mary's college; Physical Education/Water Polo Coach.
KUNKEL, DEONNE M., 2010; B.S., Brigham Young University; M.A., Mills College; English.
LAND, KRISTIN A., 2010; B.A., University of California, Los Angeles; M.A., University of California, Berkeley; English.
LANGDON, MICHAEL R., 2005; B.A., University of North Carolina, Charlotte; M.A., Portland State University; English.
LANGE, JENNIFER E., 2006, B.S., University of California, Los Angeles; M.A., Stanford University; M.S., University of California Los Angeles; Biology.
LEACH, LARRY R., 2010; B.A., California State University, Fullerton; M.A., California State University, Fresno; Mass Communications.
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.
LOPEZ YANEZ, ARTURO, 2010; A.A., College of the Sequoias; B.A., California State University, Fresno; M.A., Gallaudet University; American Sign Language.
MAGALLÓN, ANGIE F., 2002; A.A., Chabot College; B.A., California State University, Hayward; M.A., San Francisco State University; English.
MARAWALA, ZARIR, G., 1994; A.S., City College of San Francisco; B.A., University of California, Berkeley; M.A., San Francisco State University; D.PM., California College of Pediatric Medicine; Biology.
MARTINEZ, VERONICA, 2008; B.A., M.A., California State University, Hayward; Speech
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.
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.
MEHL, KEITH H., 2000; B.A., University of Texas, Austin; M.S., California State University, Hayward; Computer Science.
MENDOZA, CHRISTINA, 2010; B.A., San Diego State University; B.A., University of Texas at San Antonio; M.A., Ph.D., University of Michigan; Sociology.
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 (Pahlaui) University, M.S.N., Indiana University School of Nursing; Nursing.
MOLINA, PATRICIA G., 2008; B.A., Indiana University; M.S., California State University, Hayward; Counselor.
MONIZ, RICK G., 1991; A.A., Chabot College; B.A., M.A., California State University, Hayward; History.
MOON, CRISTINA J., 2006; B.A., M.A., University of California Berkeley; Ph.D., University of California Los Angeles; Spanish.
MORRIS, RICHARD A., 2010; B.S., M.S., California State University, Hayward; Physical Education.
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.
NIJJAR, RANI, 2008; B.A., M.A., San Diego State University; Psychology.

NOVAK, JANICE V., 2004; B.A., M.A., University of Illinois, Urbana; Business.
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.
OTTO, REBECCA A., 2004; B.A., Michigan State University; M.A., Central Michigan University; Biology.
OZDEMIR, HILAL H., 2004; 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.
PAPAS, NICOLE R., 2004; B.A., University of San Francisco; Dental Hygiens.
PARKER, SARA L., 2009; B.A., University of California, Davis; M.A., Ph.D., University of Delaware; Political Science.
PARRISH, CAREN M., 2008;B.A., M.A., University Stendhal, France; Ph.D., University of California, Davis; French.
PEJMAN, SHIRLEY A., 2007; A.A., Chabot College; B.A., M.S., California State University East Bay; Counseling
PHILLIPS, WAYNE A., 2001; A.A., Chabot College; B.A., Saint Mary's College of California; Electronics.
PIERSON, ANDREW B., 2006; B.S., SUNY University; M.A., Dusquesne University; Ph.D., University of Buffalo; Psychology.
PINKAS, CATHERINE, 2007; A.A., City College of San Francisco, B.S., University of the State of New York; M.B.A., John F. Kennedy University; Business.
PITCHER, WAYNE H., III, 2006; B.S., Massachusetts Institute of Technology.; PhD. Stanford University; Chemistry.
PLAZA, REBECCA S., 2010; A.A., Modesto Junior College; B.A., University of California, Los Angeles; M.Ed., Grand Canyon University; M.S., University of La Verne; Counselor.
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; Ph.D., California Institute of Integral Studies; English.
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.
REYNOSO, PEDRO, 2009; B.S., Cal Poly San Luis Obispo; M.L.I.S. San Jose State University; Ph.D., University of Texas at Austin; Librarian.
RUIZ, NORBERTO, 1983; A.A., Chabot College; B.S., California State University, Hayward; M.B.A., St. Mary's College; Electronics Technology.
SAMMONS, AMBER R., 2005; B.A., University of Maine; M.A., California Polytechnical 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.
SCHULTZ, ERIC W., 2009; B.M., Southwest Missouri State University; M.M., Arizona State University; Music Technology.
SCHUMACHER, MARGARET A., 2000; B.S., University of Wisconsin, Parkside; M.S., University of Wisconsin, Madison; Chemistry.
SEGEDY, JULIE A., 1988; B.A., Sonoma State University; M.A., San Francisco State University; English.
SHADBOLT, KURT W., 2011; A.A., Sequoia Institute; B.S., Florida Metropolitan University; Automotive Technology.
SHANNON, PATRICIA D., 2002; B.A., Michigan Technological University; M.A., Graduate Theological Union; Humanities and Religious Studies.
SHERBURNE, MICHAEL H., 2010; A.S., Sequoia Institute; Automotive Technology.
SHERRY, MICHELLE, 1997; A.A., Merritt College; B.A., San Jose State University; M.A., University of San Francisco; Early Childhood Development.
SIROY, STEVEN, 1993; B.A., San Francisco State University; M.A., University of San Francisco; Physical Education.
SMALL, STEPHEN A., 2003; A.A., Chabot College; Automotive Technology.
STEPHENS, MARK D., 2007; B.A., Bridgewater College; M.A., California State University East Bay; History.
STUBBLEBINE, CYNTHIA S., 1991; B.S., California State University, Hayward; M.S., Purdue University; Mathematics.
SYMES, JESSICA D.K., 2010; B.S., Pensacola Christian College; M.S., University of Phoenix; Medical Surgical Nursing.
TAVIS, WILLIAM E., 2008; B.A., Metro State College of Denver; M.S., National University California; Physical Education.
TELLES, 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.
TRAUGOTT, JONATHAN C., 2002; B.A., B.S., M.S., Stanford University; Computer Science.
TRIPP, FELICIA L., 2010; B.A., M.A., University of Michigan; M.S., San Francisco State University; Counselor.
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.
WAH, ANITA J., 2000; B.A., Oberlin College; M.S., Harvard University; Mathematics.

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.
WARDA, CHRISTINE M., 2007; B.A., M.A.,San Francisco State University; Speech.
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; Ph.Ed., Mills College, Counselor.
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; Business.
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.
WU, PATRICIA P., 2006; B.A., University of California Berkley; M.S., Georgetown University; Biology.
YEAGER, SHERRI A., 1993; B.A., American University; M.A., San Francisco State University; History.
YEST, ROBERT L., 2008; B.S., M.S., The University of Michigan; PhD., Arizona State University; Mathematics.
ZAPPA, STEPHANIE A., 1999; B.A., California State University, Hayward; M.F.A., Mills College; English.
ZERMEÑO, 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.

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
CHESTER A. 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
ROBERT T. WHALEN, Instructor 1961–81
BERT P. JAMISON, Instructor 1961–82
EDWIN F. QUINNELL, Librarian 1969–82
MISCHA SCHWARTZMANN, Instructor 1963–82
VIVIAN BORKGREN, Instructor 1972–83
DOLORES E. CYSEWSKI, Instructor 1965–83
WARREN B. HICKS, Associate Dean of Instruction
Learning Resources 1963–83
DAVID P. HILL, Instructor-Counselor 1965–83
MARGUERITE P. HOPE, Instructor 1967–83
ARTHUR L. LARSON, Dean of Student Personnel 1967–83
BATES L. BRIAN, Instructor 1968–84
R. WAYNE CREWS, Instructor 1965–84
JACK CRIQUI, Instructor 1963–84
THOMAS H. DRISCOLL, Instructor 1965–84
STUART J. INGLIS, Instructor 1965–84
L. JACK FISHBAUGH, Instructor 1961–85
EUGENE F. MARKER, Instructor 1964–85
DAVID M. MINOR, Instructor 1965–85
GEORGIA E. OWENS, Instructor 1964–85
BARAY-REYES, MARGUERITE, Instructor-Counselor 1973–85
WILLIAM H. HOPPER, Instructor 1964–86
ELEANOR B. MEYER, Instructor-Counselor 1963–86
LAWRENCE D. MOSHER, Instructor 1966–86
JAMES T. DAVIS, Instructor 1962–87
MARK C. JONES, Instructor 1962–87
JAMES F. COOVELIS, Instructor 1963–87
FREDERICK B. AUGUSTINE, Instructor 1965–87
BEVERLY J. LEVINE, Instructor 1965–87
BETSY M. MAHLE, Instructor 1966–87
JOY L. SANDERSON, Instructor 1971–87
GEORGE A. SAGE, Instructor 1961–88
MARY M. BOUBEL, Instructor-Librarian 1962–88
PAUL E. BECKETT, Instructor 1963–88
ROBERT E. KELLY, Instructor 1963–88
KAYE C. KENNETT, Chair-Instructor 1964–88
AMY E. AWTREY, Instructor 1965–88
ELSIE G. KENT, Instructor 1966–88
BARBARA W. GARFINKLE, Counselor 1967–88
WALDEN A. LEECING, Instructor 1967–88
MARVIN D. THOMPSON, Instructor-Counselor 1968–88
BEVERLY R. SKLUEFF, Instructor 1977–88
TRUMAN FISHER, Instructor 1961–89
JACKSON CONLEY, Instructor 1966–89
MELVIN EDWARDS, Instructor 1966–89
ROBERT J. FORESTER, Counselor 1968–89
HAROLD B. FRASER, Instructor 1969–89
HERBERT B. KENNEDY, Instructor 1969–89

HARRISON J. HANNON, Instructor 1972–89
GEORGE ANNA TOW, Counselor 1975–89
PHOEBE E. CORTESSIS, Instructor 1976–89
STEPHEN I. MALTZ, Instructor 1963–90
MARY LOU FITZGERALD, Instructor 1964–90
JOHN C. NEWELL, Instructor 1964–90
FRANK C. DENNEY, Instructor 1965–90
GLENYS W. WILSON, Instructor 1965–90
RICHARD D. YEO, Executive Dean 1965–90
WILL A. DICKHUTH, Director of Counseling & Guidance 1968–90
CLAIRE E. CHAPIN, Instructor 1971–90
RAY J. EDWARDS, Instructor 1962–91
JOHN D. YARBROUGH, Instructor/Counselor 1962–91
JOHN L. MAXWELL, Instructor 1964–91
DAVID S. BURTON, Instructor 1965–91
JAMES E. WICKENS, Instructor 1966–91
GERALD D. FRIEDEL, Instructor 1967–91
IRVING BATZ, Dean of Student Services 1968–91
DONALD V. NILSON, Instructor 1974–91
ROBERT G. BROWN, Instructor 1964–92
JOSEPH E. GRAVES, Instructor 1964–92
DORET R. KOLLERER, Instructor 1965–92
JOHN T. HEALEY, Instructor 1966–92
GORDON T. RANDALL, Instructor 1967–92
MARILYN M. RHODES, Instructor 1971–92
BARBARA L. SHORT, Instructor 1971–92
STANLEY C. LICHTENSTEIN, Instructor 1975–92
KATHLEEN R. CONNEELY, Instructor 1961–93
VITTORIO VALENZA, Instructor 1961–93
JOHNN T. MILLER, Instructor 1962–93
RAY STANFANSON, Instructor 1962–93
NEIL R. COLEY, Instructor 1963–93
GORDON R. PEAK, Instructor 1965–93
FRANK E. WEST, Instructor 1969–93
DIANE M. SIVERS, Instructor 1973–93
MARGARET C. EMERY, Instructor 1975–93
PETER G. MADSEN, Instructor 1982–93
JOHN L. WAGONER, Chair, Division of Physical Education 1962–94
GENE R. WELLMAN, Director of Athletics 1962–94
DON C. EATON, Instructor 1963–94
GLENN A. MALCOLM, Instructor 1963–94
EZRA A. MEYER, Instructor 1964–94
GRETA V. WEAVER, Instructor-Counselor 1964–94
CLYDE T. ALLEN, Instructor 1965–94
DAVID L. GARNHART, Instructor 1965–94
JOHN E. CLEARY, Instructor 1966–94
LEE HINCKLEY, Counselor 1967–94
OTTO E. MIELENZ, Chair-Instructor 1967–94
ROBERT L. HARRIS, Instructor 1968–94
GORDON W. LOCKLEAR, Instructor 1968–94
NICK L. SINGARES, Instructor 1969–94
WILLIE J. JACKSON, Instructor 1970–94
MARION A. SANCHEZ, Instructor-Counselor 1970–94
GEORGE B. IMMISCH, Instructor 1975–94
MASON C. LAYMAN, Instructor-Counselor 1975–94
DONALD CHRISTIANSEN, Instructor 1976–94
MILDRED J. COLLINS, Instructor 1977–94
HOWARD B. LARSEN, Instructor 1985–94
JUANITA R. FOCHA, Instructor 1967–95
EDWARD G. CATES, Instructor 1970–95
CONSTANTINE MASTROYANNIS, Instructor 1965–95
JERALD T. BALL, Instructor 1964–96
ROBERT G. HUNTER, Dean of Academic Services, Vocational and Applied Technology 1966–96
ROBERT E. DAHL, Instructor 1967–96
ELIZABETH O. VICIAN, Counselor/Instructor 1967–96
NORMAN V. OLSON, Instructor 1970–96
JIMMY G. S. ONG, Instructor 1971–96
JUDY U. PORTA, Instructor 1975–96
JANICE M. ALBERT, Instructor 1962–97
BILLY A. SMITH, Instructor 1965–97
HELEN P. BRIDGE, Instructor 1975–97
DONALD CAPPA, Instructor 1975–97
JAMES A. HEALEY, Instructor 1965–97
KINMONT T. HOITSMA, Instructor 1970–97
JOHN BRUNN, Instructor 1961–98
ELLEN L. McILROY, Instructor 1966–98
ELAIN T. DIAS, Instructor 1975–98
MARK N. WAYNE, Instructor 1965–98
GILBERT J. RIBERA, Instructor 1964–98
GEORGIE A. CHIVINGTON, Instructor 1965–98
LEONARD I. BLAU, Instructor 1966–98
MARY L. EVANS 1967–98
DIANE B. KERRICK, Instructor 1967–98
DAVID J. PERRY, Instructor 1967–98
CHARLES T. GOETSCHEL, Instructor 1975–98
LELAND F. KENT, Dean of Academic Services 1975–98
RUTHIE L. SELF, Vice-President of Student Services 1983–98
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
JOHN H. SHAW, Instructor 1968–02

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
ROBERT W. COLLINS, Instructor	1968–06
DIANA IMMISCH, Instructor	1990–06
HELENE J. LOOZE, Instructor	1975–06
GAILA A. MOORE, Instructor	1977–06
LOIS MACHADO, Instructor	1976–06
CHARLES R. NATSON, Instructor	1990–06
ORLANDO S. PASCOA, Instructor	1989–06
SUSAN A. COTA, Chancellor	1991–07
ROSS E. SHOEMAKER, Instructor	1968–07
DONALD K. SKILES, Instructor	1988–07
DAVID E. AROVOLA, Instructor	1970–08
KENNETH R. EBERHARD, Instructor	1969–08
EUGENE P. GROPPETTI, Dean of Arts & Humanities/ Instructor	1975–08
ROBERT L. HUGHES, Instructor	1995–08
GAIL C. JOHNSON-MURPHY, Counselor	1973–08
THERESA M. LEBEIKO, Instructor	1988–08
DANIEL J. LEONARDI, Instructor	1974–08
WILLIAM A. McDONALD, Counselor/Instructor	1992–08
CAROL W. MURRAY, Instructor	1988–08
FE L. BARAN, Instructor	1989–09
LINDA J. BARDE, Instructor	1995–09
CAROL A. BAUMANN, Librarian	1990–09
JANE C. BERG, Instructor	1979–09
CEINWEN L. CARNEY, Instructor	1989–09
DENNIS C. CHOWENHILL, Instructor	1977–09
NANCY L. COWAN, Instructor	1975–09
CAROL J. GOLDEN, Instructor	1993–09
FREDERICK G. HODGSON, Instructor	1988–09
JOHN L. HOLLOWAY, Instructor	1988–09
GAYLE J. HUNT, Instructor	1990–09
WILLIAM B. JOHNSON, Instructor	1973–09
JOSEPH KUWABARA, JR., Instructor	1974–09
RACHEL M. MALDONADO-AZIMINIA, Instructor	1980–09
CHRISTINE L. McDANIEL, Instructor	1985–09
GUADALUPE S. ORTIZ, Instructor	1985–09
ZACK G. PAPACHRISTOS, Instructor	1969–09
JEANETTE G. PAZ, Instructor	1989–09
JULEE J. RICHARDSON, Instructor	1985–09
SALLY STICKNEY, Instructor	1994–09
LINDA L. SWANSON, Instructor	1987–09
LINDA J. ZWEIFEL, Instructor	1983–09
E. DESRE ANDERES SOLOMON. Instructor	1995-11
JOSEPH H. BERLAND, Instructor	1989-11
STEVEN L. DAPRATO, Instructor	2001-11
MELVA Y. GARCIA, Instructor	1992-11
SUSAN GILL, Instructor	1988-11
CYNTHIA G. HICKS, Instructor	1985-11
PATRICIA A. KEELING-HAINES, Instructor	1978-11
GLORIA M. MEADS, Instructor	1991-11
JUDITHANN O'TOOLE, Instructor	2001-11
RAMON C. PARADA, Instructor	1986-11
SUSAN A. TONG, Instructor	1989-11
CHRISTOPHER L. WALDO, Instructor	1992-11
MAURICE NGO, Instructor	1975-12
JOHN A. KOMISAR, Instructor	1981-12
MILTON I. RUBE, Instructor	1985-12

Classified Staff

Classified Senate—Yvonne Wu-Craig, President

ABRAMI, DAN R..	Employment Coordinator
ADAMS, NOELL E.	Student Records Evaluator
ADAMS-BAILEY, TRACEY C.	Physical Education/Athletics Assistant
ALDANA, NANETTE F.	Telephone Operator/Receptionist
ALY, HAFISA A.	Bookstore Cashier
AMONS, JONATHAN R.	Bookstore Cashier
AUZENNE, JODI L.	Early Childhood Specialist
AVILA, TRISHA	Student Services Specialist II
BALANGITAO, DOLORES B.	Coordinator, International Student Programs
BARBOZA, ARTHUR	Student Services Assistant (EOPS)
BLAIR-KEENEY, RICHARD A.	Counselor Assistant II
BOLICH, KATHERINE A.	Early Childhood Specialist
BONGARD, LORA M.	Admissions and Records Assistant II
BONONCINI, KIMBERLY A.	Administrative Assistant II
BOOKER, MICHAEL D.	Counselor Assistant II (EOPS)
BROUDY, GLORIA J.	Children's Center Cook
CAAMPUED, ROZEN F.	Veterans Benefits Specialist
CACH, DAVID J.	Security Officer
CAO, KIM-UYEN T.	Administrative Assistant II
CARLSEN, LISA D.	Instructional Assistant II
CASAREZ, MIGUEL A.	Laboratory Technician III
CASILLAS, MARIA D.	Dental Hygiene Clinical Assistant
CEREFICE, JOANN	Administrative Assistant II
CLARK, ALEXANDER P.	Computer Network Support Specialist

COOK, KAREN M.	Early Childhood Specialist
CRAIG, YVONNE W.	Grant Developer/Writer
DANAHER, EDNA E.	Student Records Evaluator
DANIELS, SHARRON V.	Bookstore Course/General Book Buyer
DAZHAN, JOSEPH A.	Security Officer
DAZHAN, SHIRLEY J.	Security Communication Dispatcher
DECKER, RONALD L.	Laboratory Technician III
DE ENRIQUEZ, VERONICA E.	Laboratory Technician IV
DEL AGUILA, ANA M.	ECD Professional Development Coordinator
DIAZ CUBILLOS, TATIANA D.	Mailroom Clerk
DICKERSON, CHRISTOPHER	Security Officer
DELOS SANTOS, IRENEO R.	College Administrative Services Officer
DOMIRE, CRYSTAL A.	Early Childhood Specialist
DURAN, ROCHELLE M.	Security Officer
DUTRA, LAUREEN M.	Student Services Specialist II
EARNEY, DONNA M.	Locker Room Attendant
EMANUELE, LINDA S.	Student Services Assistant
FIELD, KATRIN M.	Assessment Specialist
FISCUS, SUSAN M.	Student Services Specialist II
FRANCO, REFUGIO	Student Services Specialist I
FRANCO, PHILOMENA	Student Services Specialist II
FULLER, DONALD A.	Instructional Systems Technician
GALLARDO, ARTHUR	Bookstore Shipping/Receiving Specialist
GENTILUOMO, CATHERINE	Administrative Assistant II
GENTILUOMO, JOSEPH M.	Intercollegiate Athletics Technician
GHIASSY, HAKIM	Security Officer
GUTIERREZ, ANA A.	Early Childhood Specialist
HADFIELD, BREEANN N.	Staff Assistant
HALE, EUGENE	Stage Technician
HAN, PAMELA P.	Fiscal and Administrative Services Technician
HANSEN, LYNN J.	Laboratory Technician II
HENRY, WILLIAM A.	Counselor Assistant II
HERNANDEZ, HEATHER A.	Library services Specialist
HUGEL, THOMAS A.	Library Technician II
IRIARTE, LORENZO	Reprographics Systems Technician II
IRIARTE, MICHELLE M.	Counselor Assistant I EOPS
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
LASSE, DEDEBORAH I.	Counselor Assistant II
LEWIS, BLAKE V.	Library Technician I
LOPEZ, JOSE D.	Physical Education/Athletic Assistant
LOVENDUSKY, DEBRA D.	Administrative Assistant II
LOWERY, CHARLES S.	Security Officer
McALLISTER, KARI S.	Theater Manager
McGREGOR, MICHELLE A.	Early Childhood Specialist
McGUIRE, SEAN T.	Stage Technician
MARTINEZ, TAMI A.	Administrative Services Technician
MENDEZ, ROBERTO	Program Director, Educational Talent Search
METCALF, KAREN S.	Instructional Assistant II
MOGLE, ROSEMARY L.	Executive Assistant to the Vice President
MONTANEZ, LUIS M.	Security Officer
MONTOUTH, STEFANIE M.	Student Counseling Assistant I
MOORE, NATHAN M.	Security Officer
MOORE, STACY R.	Counselor Assistant II
MORALES, ELIZABETH A.	Outreach Specialist
MUJAHID, HANIYYAH F.	Early Childhood Specialist
NAHINU, YVETTE L.	Administrative Assistant II
NICHOLSON, SHEELA M.	Early Childhood Specialist
OLSON, NANCY B.	Early Childhood Specialist
OROZCO, MARIO R.	Health Science Admissions Specialist
OSIKOMAIYA, YETUNDE O.	Student Services Specialist II
OWYOUNG, GINA L.	Instructional Assistant II
PATCHIN, THERESA M.	Administrative Assistant II
POSADA, PATRICIA	Articulation Specialist
POWELL, CATHERINE V.	Instructional Assistant III
RAMIREZ, SYLVIA M.	Student Services Assistant Special Programs
REYES, LETICIA	Counselor Assistant II
RICE, NATHANIEL L.	Alternative Media Specialist
RIPPLINGER, VIRGINIA P.	Administrative Assistant II
ROBERTS, CYNTHIA M.	Admission and Records Assistant II
ROLDAN-SUN, CRESALI Y.	Student Services Specialist II
ROSA, CYNTHIA	Student Records Evaluator
SANNEBECK, CHERYL L.	Administrative Assistant II
SEATON, MICHAEL J.	Senior Instructional Network Specialist
SHEPHERD, JEAN	Laboratory Technician IV
SILVA, KAREN	Executive Assistant to College President
SIMS, JOHN H.	Instructional Systems Technician
SMITH, LYDIA G.	College Clerk II
SMITH-CRAWFORD, TINA L.	Bookstore Textbook Purchising Assistant
ST. GERMAINE, MICHELLE E.	Early Childhood Specialist
STEVENSON, VERNON L.	Bookstore General Merchandise Buyer
SULLIVAN, JAMES	Admissions and Records Assistant II
TARBET, BARRY B.	Security Officer
THOMAS, MAGUERITE	Academic Services Curriculum and Scheduling Specialist II
THOMPSON, TERRANCE M.	Career Transfer Center Specialist
TRAN, SANDY D.	Learning Resources Technician I
TRAN, TUAN QUOC	Laboratory Technician IV
TSAI, MAYA H.	International Admissions Specialist
TSUBAMOTO, VIRGINIA M.	Early Childhood Specialist
TUPPER-EOFF, RACHEL M.	Administrative Assistant II
ULIBARRI-SPONSEL, LISA R.	Instructional Designer-Developer I
VAN, SHELIA	Bookstore Accounting Specialist
VANNI, YVONNE M.	Dental Hygiene Clinical Assistant
VERARDE, CHRISTIE	ECD Professional Development Coordinator
VETTERS, JUDITH A.	Community Education Specialist

VILLASANA, ANGELA R.	Academic Services Curriculum and Scheduling Specialist II
VO, MELLISSA G.	Early Childhood Specialist
WATT, GORDON J.	Computer Network Support Specialist II
WEBB, PHYLLIS R.	Reprographics Assistant I
WHITESIDE, CHASITY C.	Administrative Assistant II
WINSOR, MINTA F.	Distance Education Coordinator
WITT, BELLA B.	Executive Assistant to the Vice President
WONG, SISLEY	Financial Aid Systems Coordinator
WRIGHT, JUDY ANNE	Admissions and Records Assistant III
YASAKI, JOHN K.	Computer Network Support Specialist II
YOW, ISABEL	Admissions and Records Assistant II

Chabot-Las Positas Community College District Classified Staff Assigned to Chabot College

ABLAZA, ALVIN	Custodian I
AGUINALDO, REYDANTE H.	Custodian I
AGUIRRE, MIGUEL A.	Electrician
APOSTOL, RODOLFO V.,	Custodian I
BARATTINO, ROBERT D.	Maintenance Mechanic
BATAC, ALEJANDRO	Custodian I
BILL, ALTON J.	Lead Wardhouse Worker
BORLAGDAN, LYNN A.	Custodian I
BURNSIDE, HENRY	Lead Maintenance Worker
CALIXTO, VIRGILIO D.	HVAC Maintenance Engineer
CERVANTES, MARTHA	Custodian I
CORREA, GREGORY L.	Maintenance Technician
DAVIS, GABRIAL	Custodian II
DELEON, ELIZABETH V.	Custodial Supervisor
DOUGLAS, KIRK R.	Grounds Worker I
DUCHSCHERER, RICHARD R.	Custodial Manager
ELLIS, JESSE	Hardware Maintenance Specialist
ERESTAIN, ANTONIO	Custodian I
ESPIRITU, VIRGILIO L.	Custodian I
FORD, TIMOTHY	Custodian I
FRANCO, LINDA E.	Lead Custodian
GUERRERO, JUAN J.	Custodian I
HALL, WILLIAM	Maintenance Engineer
HERNANDEZ, DAVID H.	Custodian I
HERNANDEZ, MARTHA M.	Custodian I
HOLLEMAN, ROBERT M.	HVAC Maintenance Engineer
JENNINGS, HARRY H.	Grounds Mechanic
KLAMM, MIKE	Custodian II
LIVINGS, OSCAR H.	Custodian II
MAHABALI, VICTOR	Grounds Worker I
MILLS, EDNA J.	Custodian I
MONTANA, NATHAN P.	Custodian II
MONTEZ, LUIS	Security
NAPAGAPO, ALLAN	Custodian I
PATCHIN, STEVE D.	Grounds Supervisor
PERRY, KEITH A.	Custodian II
PICHT, ROBERT O.	Lead Custodian
PIMENTAL, JOSEPH	Custodian I
PUGH, MARVIN L.	Custodian I
REXROAD, WALTER	Grounds Worker I
RICH, GERALD L.	Custodian II
RIVERA, SCOTT	Storekeeper
ROBINSON, JAMES	Custodian I
ROLLE II, JAMES N.	Grounds Supervisor
SALAS, ELIZABETH	Custodian I
SANCHEZ, GREGORY R.	Custodian
SARKAR, SUJOY K.	Broadcasting/Cablecasting Technician
SOLES, JAMES B.	Maintenance Manager
TAYLOR, PATRICK B.	Grounds Worker II
WILLIAMS, ELVIS B.	Custodian I
WOOD, ROYCE A.	Custodial Supervisor

Classified Staff Emeriti

JOSEPH H. BUNIO	1968–1986	Groundsworker
CHARLES DEAN, JR.	1968–1986	Custodian I
MAXINE CALLERI	1973–1986	Personnel Technician II
VIRGINIA 1. 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. McSWEENY	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. BOKUVKA	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
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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
NATHANAEL 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 Supervicor
JOHN F. CORRIGAN	1991–2004 HVAC Maintenance Engineer
STEVEN J. SILVA	1976–2004 Custodial Manager
HEIDI SPEARER	1991–2004 Administrative Assistant
JAMES W. LYONS	1989–2005 Lead Custodian
JIMMY A. RUMELHART	1988–2005 Laboratory Technician-Electronics
LOISANNE M. SELLARS	1994–2005 Bookstore Textbook Purchasing Clerk
SARILEE JANGER	1988–2006 Administrative Assistant II
MARILYN H. MANSOURIA	1979–2006 Executive Assistant to the Vice President
HORTENCIA FRANCO	1975–2007 Administrative Assistant II
JOAN E. FRANCO	1991–2007 Instructional Computer Lab Specialist
ROBERTA F. PRATT	1988–2007 Security Communications Dispatcher
THOMAS P. FULLER	1981–2007 Grounds Manager
DONALD R. BENSON	1991–2008 Lead Custodian
JACK W. BISHOP	1982–2008 Security Officer
MARY L. DIAZ	1995–2008 Custodian I
KAREN K. HASHIMOTO	1984–2008 Administrative Assistant II
NINA J. KIGER	1991–2008 Student Life Operations Coordinator
BARBARA L. LAWRENCE	1970–2008 Library Services Specialist
NAN V. McDONNELL	1979–2008 Counselor Assistant II
ANNIE P. ONG	1996–2008 Staff Assistant - Children's Center
ARLENE L. ADAMSON	1993–2009 Instructional Assistant II
VICTORIA A. BELTRAN	1994–2009 Administrative Assistant II
SARAH L. BLACK	1986–2009 Security Communications Dispatcher

KEVAN A. CABRAL	1975–2009	Lead Storekeeper
ADRIENNE HODSON	1996–2009	Children's Center Assistant Manager
ALICE HSU	1984–2009	College Business Office Supervisor
JOHN L. McHUGH	1987–2009	Network Services Specialist II
ROGER C. NOYES	1977–2009	Theater Manager
TALAHIVA PAHULU	1974–2009	Academic Services Curriculum and Scheduling Specialist II
COLIN H. PEJMAN	1990–2009	Graphic Arts Technician III
JULIET A. POLIZZI	1987–2009	Administrative Assistant II
ISABEL G. POLVOROSA	1979–2009	Computer Operator
MADILYN RICE	1983 -2009	Instructional Assistant Ii
CYNTHIA A. SILVA	1975–2009	Administrative Assistant I.
SVETLANA SULTAN	1993–2009	Laboratory Technician II
LINDA K. ZUIDEMA	1984–2009	Security Officer
BHARATI K. BHATT	1996-2010	Early Childhood Specialist
ALICE P. LO	1985-2011	Administrative Assistant II
ARLENE K. DeLEON	1972-2011	Instructional Computer Lab Specialist
DARRELL L. DOLIN	1999-2011	Security Officer
MIYO T. HARVEY	2001-2011	Student Counseling Assistant
RUBEN HERNANDEZ	1974-2011	Student Services Assistant II
KATHLEEN P. KASER	1994-2011	Manager, Bookstore
MARY M. MINO	1990-2011	Admissions and Records Assistant II
WAYNE K. NAKANO	1998-2011	Assistant Manager, Bookstore
ERNA G. WIEMER	1975-2011	Admissions and Records Assistant III

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