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DE ANZA COLLEGE

Academic Calendar 2012-2013

Fall Quarter

September 24 through December 14, 2012

Last day for international students to apply
for admission: June 30
Instruction begins: September 24
Final examinations: December 11-14

Holidays:

Veterans Day: November 12
Thanksgiving recess: November 22-25
Winter recess: December 17-January 4

Winter Quarter

January 7 through March 29, 2013

Last day for international students to apply
for admission: October 31
Instruction begins: January 7
Final examinations: March 26-29

Holidays:

Martin Luther King's birthday: January 21
Presidents' Day weekend: February 15-18
Spring recess: April 1-5

Spring Quarter

April 8 through June 28, 2013

Last day for international students to apply
for admission: January 31
Instruction begins: April 8
Final examinations: June 25-28

Holiday:

Memorial Day weekend: May 25-27

Summer Sessions

For the latest information regarding Summer Sessions
in 2012, check the website at www.deanza.edu.

Holidays:

Independence Day: July 4

Alternative Media

To request college materials in an alternate format, persons with disabilities should contact the alternate media specialist at 408.864.5815.

Accuracy of Information

Although every effort has been made to assure the accuracy of the information in this catalog, students and others who use this catalog should note that laws, rules and policies, programs, services and fees change from time to time and that these changes may alter the information contained in this publication. Changes may come in the form of statutes enacted by the legislature, rules and policies adopted by the Board of Trustees of the Foothill-De Anza Community College District, or by the chancellor or designee of the institution. For these reasons, we caution readers to verify the information in this catalog. The most current information is generally found on the college website.

The 2012-2013 De Anza College catalog is produced by the college's offices of Marketing/Communications and Curriculum with the assistance of contributors from other departments.

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De Anza College is a public, two-year college of the Foothill-De Anza Community College District
21250 Stevens Creek Boulevard ■ Cupertino, California 95014 ■ 408.864.5678 ■ www.deanza.edu

WELCOME AND MISSION

Dear Student:

We are delighted that you have chosen to join us at De Anza College. I know that you will find yourself at home here on our spectacular campus. De Anza is an exciting college, with wonderful faculty and staff committed to your success.

We have terrific academic programs, athletic teams and social clubs. And we care deeply about your future. We want you to become an engaged member of this community, as well as superbly educated in your chosen academic field. We expect you to emerge with broad, valuable attributes and skills.

All elements of this comprehensive education are crucial to your success, including providing you with a beautiful physical environment. The entire campus is committed to sound environmental practices, sustainable resources and energy conservation.

You will see lots of construction going on, and we are excited about the new and refurbished facilities we have. All of it was made possible by the generosity of local voters.

The buildings are great, but our people are the most critical part of why De Anza is “Simply the Best.” Faculty you can talk with, staff willing to go the extra mile, fellow students from all over the world – these are what make De Anza special.

I urge you to invest in your education by taking full advantage of our campus and its programs and services.

Welcome to De Anza College.

Sincerely,



President Brian Murphy



Mission Statement

De Anza College provides an academically rich, multicultural learning environment that challenges students of every background to develop their intellect, character and abilities; to realize their goals; and to be socially responsible leaders in their communities, the nation and the world.

De Anza College fulfills its mission by engaging students in creative work that demonstrates the knowledge, skills and attitudes contained within the college's Institutional Core Competencies:

- Communication and expression
- Information literacy
- Physical/mental wellness and personal responsibility
- Global, cultural, social and environmental awareness
- Critical thinking

– Updated Spring 2010

DE ANZA COLLEGE



Accreditation

De Anza College is accredited by the Accrediting Commission for Community and Junior Colleges of the Western Association of Schools and Colleges, 10 Commercial Boulevard, Suite 204, Novato, CA 94949, 415.506.0234; 415.506.0238 (fax). It is an institutional accrediting body recognized by the Commission on Recognition of Postsecondary Accreditation and the U.S. Department of Education.

Accredited colleges and universities generally give credit for comparable transfer level courses taken at De Anza College.

Pertinent coursework offered by the college has been approved by the Board of Governors of the California Community Colleges, the State Department of Education and the Veterans Administration, as well as the Council on Medical Education and Registration, the Board of Registered Nursing, Community Allied Health Education and Accreditation, and the American Bar Association.

Institutional Core Competencies

The Institutional Core Competency statements are a promise to the communities that support De Anza College that students graduating with an A.A. or A.S. degree, or who will transfer to a four-year college or university, will be able to demonstrate the knowledge, skills and attitudes contained within all of the five competency areas, based on general education and discipline-specific courses at the lower division level. Students who earn a certificate, or have taken courses for personal educational development, will be expected to demonstrate the knowledge, skills and attitudes specified within one (or more) of the five competency areas.

COMMUNICATION AND EXPRESSION

Students will communicate clearly, express themselves creatively, interpret thoughtfully and logically, and engage actively in dialogue and discussion, while paying attention to audience, situation and (inter) cultural context. Communication and expression may be written or oral, verbal or nonverbal, informational or artistic.

INFORMATION LITERACY

Students will recognize when information is needed and locate, critically evaluate, synthesize and communicate information in various formats. They will use appropriate resources and technologies while understanding the social, legal and ethical issues for information and its use.

PHYSICAL/MENTAL WELLNESS & PERSONAL RESPONSIBILITY

Students will recognize lifestyles that promote physical and mental well-being, engage in self-reflection and ethical decision-making, explore career choices and life goals, practice effective individual and collaborative work habits, and demonstrate a commitment to ongoing learning.

GLOBAL, CULTURAL, SOCIAL & ENVIRONMENTAL AWARENESS

Students will recognize their role as local, national and global citizens. They will participate in a democratic process, respect social and cultural diversity, appreciate the complexity of the physical world, and understand the significance of both environmental sustainability and social justice.

CRITICAL THINKING

Students will analyze arguments, create and test models, solve problems, evaluate ideas, estimate and predict outcomes based on underlying principles relative to a particular discipline, interpret literary, artistic, and scientific works, utilize symbols and symbolic systems, apply qualitative and quantitative analysis, verify the reasonableness of conclusions, explore alternatives, empathize with differing perspectives, and adapt ideas and methods to new situations.

— *Adopted by the Academic Senate on March 16, 2009*

General Education Program

The General Education Program reflects the conviction that students must have knowledge about certain basic principles, concepts, and methodologies both unique to and shared by various disciplines. The faculty intend that the General Education Program will provide students with the knowledge and skills necessary to evaluate and appreciate the physical environment, their culture and other cultures, the contributions of both men and women, and the society in which they live; and it will help them connect various fields of knowledge in order to become active, vibrant participants in a diverse and global society.
— *Taken from the General Education Statement of Philosophy*

Student Rights and Responsibilities

Students at Foothill or De Anza College have guaranteed rights, and assume responsibilities, under applicable state and federal law and regulations derived from these statutes. These rights and responsibilities include protection of freedom of expression and protection against improper evaluation in the classroom; access to, safekeeping, and confidentiality of records; rights of freedom of association, inquiry and expression; participation in student governance with corresponding responsibilities; and the exercise of the rights of citizenship off campus. Foothill and De Anza College have the responsibility to establish disciplinary proceedings and applicable penalties, within the law, for the violation of college rules and regulations. The colleges shall also establish procedures for grievances and complaints in order to provide a means for resolving alleged unfair or improper action by any member of the academic community.

Board Policy 5500

See Administrative Procedures AP-5500

California Education Code,
§76030 et. seq., 76120, 76210 et. seq.

California Administrative Code,
Title 5, § 54600, 59300 et. seq.

— Approved 1/4/99

CAMPUS OVERVIEW

De Anza College is an institution dedicated at its core to diversity and to a multicultural learning environment.

After extensive discussion about what a De Anza graduate needs to be successful, the college in spring 2010 updated its mission statement (see page 1) as part of its Educational Master Plan 2010-2015. The statement retains the essence of the college's previous mission statement and incorporates new language that uniquely defines De Anza. The updated mission statement, with the inclusion of its Institutional Core Competencies (ICCs) adopted in 2009 (see page 4), clearly articulates student learning goals and outcomes and the importance of civic engagement to democracy. It emphasizes success for every student in multiple areas of intellectual, personal and social development and competence. The mission statement also distills the results of strategic planning begun in 2005: commitments to Outreach, Student Success and Retention, Cultural Competence and Community Collaborations.

De Anza College offers 64 degrees, 96 certificates, and almost 2,000 courses.

History

De Anza was established in Cupertino on Sept. 11, 1967, as the Foothill Junior College District worked to meet local community demand for a second campus. Planning for De Anza began soon after the district's first campus, Foothill College, launched in temporary quarters in 1958 and filled to capacity after moving in 1961 to its permanent location in Los Altos Hills. Just four years after approving a \$10.4 million bond measure for Foothill, community members readily voted in favor of a second bond measure, in the amount of \$14 million, to build De Anza College.

De Anza was constructed on 112 acres of what was once a turn-of-the-century wine-producing estate that the district

purchased for \$1.1 million. Guiding principles for the new college called for creating an "open door" institution to serve students with a wide variety of abilities, aptitudes and interests; an atmosphere of "friendly informality between faculty members and students"; and a campus that conveyed a sense of "quiet dignity" and "higher learning."

From 3,000 students in its first year, De Anza College in 2012 serves more than 21,000 students over that number. Students, faculty and staff reflect the highly diverse ethnicities, cultures and backgrounds that comprise contemporary Silicon Valley.

From its earliest days, De Anza has embodied a set of fundamental values that remain embedded in its culture. A deep concern for equity and social justice took root during the college's formative years, influenced by the sweeping social and political changes of the 1960s and 1970s. In intentionally cultivating a new educational community, the founders of what became the Foothill-De Anza Community College District placed a premium on excellence and innovation, and searched out faculty with a passion for teaching.

These foundational values continue to shape De Anza's institutional character today. They are evident in De Anza's deep commitment to providing a learning environment that is inclusive and welcoming to all students, and the college's concerted effort over the past decade to achieve educational equity across racial and ethnic groups.

Student Success

De Anza College has long focused on access and success for all its students. From its founding, the college has recognized the importance of establishing programs and organizations that direct support and attention to historically underserved students.

In 2012, all De Anza students can find support through the Student Success Center. The SSC provides an entry point from which students can connect to a supportive community of instructors, counselors, advisers, tutors, peer mentors and study groups across the disciplines, or be directed to study skills classes or workshops on critical thinking and time

management. Learning Communities integrate instruction and support services for students.

These support systems are among the reasons De Anza has one of the highest university transfer rates among community colleges in California. A 2008 case study by the California Community Colleges Research and Planning (RP) Group concluded that De Anza's high transfer rate is attributable to its strategic approach to institutional development; its encouragement and support of academic excellence and achievement; its tradition of innovation; and its experimentation with ways to integrate student services with instruction. The college recently was ranked second in the state in transfer to four-year institutions, according to the State Chancellor's Office Velocity Data Mart.

De Anza's commitment to historically underserved students also is seen in its long history of programs for students with disabilities, which date to 1973. In 2010-11, the college served 1,704 students with disabilities. For the past two decades, the High Tech Center Training Unit based at De Anza College has helped faculty and staff at the state's 112 community colleges acquire skills to better serve the approximately 100,000 community college students in California with disabilities.

Sustainability, Learning Facilities and Bond Measures

Just as the civil rights movement shaped De Anza in its early days, the environmental movement has galvanized a wide range of activities on the campus among students, faculty and staff. De Anza's commitment to sustainability as a core value is evident in daily improvements ranging from 100 percent biodegradable containers and utensils in the cafeteria to drought-tolerant landscaping and weather-responsive irrigation on the grounds.

Through the work of its College Environmental Advisory Group (CEAG), De Anza in 2007 became the first community college in the nation to develop its own Sustainability Management Plan to guide continual improvement. The college's Environmental Studies

Department, housed in the Kirsch Center for Environmental Studies, has provided inspiration for the campus as the first “green” demonstration building in the California community colleges. The department has developed an extensive sustainability curriculum leading to certificates and degrees in four program areas. The Cheeseman Environmental Study Area contains several diversified ecosystems and is located next to the Kirsch Center for Environmental Studies.

De Anza College is committed to sustainable building materials and methods. All four of its newest buildings have been certified as meeting national LEED building standards for environmental sustainability: the Kirsch Center, LEED platinum; the Visual and Performing Arts Center (VPAC), LEED silver; and the Science Center and Student and Community Services Building, LEED certified. The Media and Learning Center, slated to open in fall 2012, will be the college’s second LEED platinum building.

Comprehensive athletic facilities feature the 5,000-seat Outdoor Events Arena, aquatics complex, gymnasiums, and fields and courts. Specialized facilities include the Fujitsu Planetarium at De Anza College, which houses the only Infinium S Star projector outside of Japan, and the Flint Center, a 2,570-seat performing arts auditorium. These buildings, as well as the

VPAC, with its 400-seat performance and lecture hall and the Euphrat Museum of Art, the California History Center and other buildings across campus, are spaces for the extensive program of cultural and educational activities that contribute to the enrichment of the students and community.

De Anza’s state-of-the-art facilities have been made possible by community support of two bond measures: Measure E for \$248 million was approved by Foothill-De Anza Community College District voters in 1999, and Measure C for \$490.8 million was approved in 2006. In addition to construction, bond proceeds have funded extensive building renovations; upgrades of critical electrical and mechanical systems; installation of energy-producing solar arrays; and restoration of two historic campus landmarks, the old stone Baldwin Winery building, which now houses Financial Aid, and the estate’s once-crumbling Le Petit Trianon, home to the college’s California History Center. Facilities are available for community rental.

Community and Civic Engagement

Community and civic engagement is a focus of the college. The Institute of Community and Civic Engagement (ICCE) was launched in 2006 to work with students on civic and leadership skills and provide

them with opportunities to be agents of social, economic and political change in their communities.

ICCE offers a range of opportunities for students, including a certificate in Leadership and Social Change. ICCE facilitates service learning for more than 500 students annually and maintains active relationships with more than 25 community partners that work with students in their service learning placements. ICCE also sponsors an annual “Youth Voices United For Change” conference at which De Anza hosts hundreds of historically underrepresented high school students in learning about college and becoming active in the community. ICCE has worked with a local food bank and the Office of College Life to develop the De Anza College Cupboard, a student food bank. ICCE is working to promote a national initiative, The Democracy Commitment, to engage community college students in civic learning and democratic practice.

De Anza students also have extensive opportunities to become engaged through the active leadership of the De Anza Associated Student Body (DASB), which in addition to on-campus and community activities mobilizes in statewide advocacy efforts for public higher education.



What Is Student Equity?

Student equity is an ongoing, accountable, institutional process that works toward achieving equity in all measurements of student access and achievement across lines of gender, ethnicity, mental and physical ability.

How Does It Relate to Student Success?

Student success is achieved through the partnership formed among the college’s faculty and staff and the students. In addition, it is an outcome of institutionalized student equity practices that support students who have a commitment to achieving their academic, career and personal goals. Student success is achieved when students reach their individual goals.

Source: Office of Equity, Social Justice and Multicultural Education, De Anza College



COLLEGE PROGRAMS and SERVICES

Athletics

De Anza is a member of the Coast Conference and the California Community College Athletics Association. Varsity teams compete in nine sports for men: baseball, basketball, swimming and diving, cross country, football, soccer, tennis, track and field, and water polo. Ten sports for women include basketball, cross country, swimming and diving, water polo, softball, tennis, track and field, volleyball, badminton and soccer. All entering students have two years of eligibility at the community college level and must be enrolled in 12 units while competing. Ten of those 12 units must be academic units.

A student athlete must maintain a minimum 2.0 grade point average (GPA) during his/her education. S/he must complete 36 quarter units to be eligible for a second season. Of those 36 units, 30 must be consistent with the student athlete's educational plan. Student athletes are required to have an educational plan on file by their second quarter of attendance.

Physical Education and Athletics

Division Location: Building PE 4,
Room 41c

Telephone: 408.864.8751

Website: www.deanza.edu/athletics

Bookstore

The De Anza College Bookstore is located in the Student and Community Services Building. The Bookstore is the one-stop source for textbooks, reference books, study aids and school, art and office supplies. The Bookstore is the source for De Anza College logo clothing and gifts, scantrons, pencils and convenience store items. The Bookstore also offers educationally priced computers, software and supplies.

Telephone numbers: General textbook
information 408.864.8455
Computer department
408.864.8232

FAX: 408.864.8468

Website: <http://books.deanza.edu>
(includes 24-hour online
textbook orders, school supplies,
logo clothing orders, online
faculty textbook requisitions,
hours of operation, buyback
dates, special events)

California History Center

The recipient of numerous awards and honors, the California History Center (CHC) is an active focal point for the study of California and has been recognized as an Outstanding Educational Facility by the state of California. The center is housed in the rehabilitated Le Petit Trianon, located on the De Anza College campus and listed on the National Register of Historic Places. CHC is dedicated to promoting the study of local and regional history and encouraging the development of a vibrant civic and cultural life for the community. Students, faculty, staff and community members are welcome to utilize the center's resources: credit courses, changing exhibits, lectures and special events, and publications including its quarterly membership magazine, *The Californian*, and local history books.

Another history center resource is the Stockmeir Library and Archives, a growing collection of materials on California and on almost every aspect of Santa Clara Valley's development. A book collection and archives, including student research papers, books, journals, oral history on video and audio tape, photographs, manuscripts, newsletters, clippings and pamphlets are available for research.

Telephone: 408.864.8986

Website: www.deanza.edu/califhistory

Campus Abroad Program

The Foothill-De Anza Campus Abroad Program has been suspended until further notice. Sometimes, however, individual faculty continue to offer summer programs that are specific to their disciplines.

Cheeseman Environmental Study Area (Cheeseman ESA)

This 1.5-acre site on the southeast corner of the campus is maintained by the Biological, Health and Environmental Sciences Division (Environmental Studies Department) and contains a student laboratory for use by environmental studies and biology classes. The area, which contains 12 California native plant communities with more than 400 species of plants, is open for guided natural science tours by appointment.

Telephone: 408.864.5446

Child Development Center

The De Anza Child Development Center (CDC) offers child care to Foothill-De Anza students and the community at large. The program serves as a practicum for student interns working toward their degree/certificate in the fields of Child Development or Early Intervention and values inclusion of all children. Staff members meet the highest standards of the profession, and curriculum is based on best practices for young children.

The CDC serves children ages 18 months to 5 years and has the capacity to provide services to more than 100 children. Parent participation is supported and strongly encouraged. It offers an income-eligible sliding scale fee program sponsored by the California Department of Education. Families are encouraged to sign up for a tour of the CDC prior to submitting a waiting list application – available at www.deanza.edu/child – where they can

also find the dates of tours. Parents can place their child's name on the waiting list by completing the application and mailing or faxing it to the CDC.

Junior Kindergarten

The Child Development Center will be offering a Junior Kindergarten class in 2012-2013 for children who were born on or before Dec. 2, 2007. This class is specially designed for children who are at the transitional kindergarten age or children who will benefit from spending an extra year in a small group setting with a higher child/teacher ratio. The class is designed to better prepare children with their social skills as well as the academic skills that are aligned with the California Department of Education's kindergarten. CDC staff are currently training at the Santa Clara County Office of Education to offer the curriculum designed for public school teachers who will be teaching transitional kindergarten classes.

Junior Kindergarten hours are 8:30 a.m.-12 p.m. and the program cost is \$650 per month. Grants are available for qualifying students. A limited all-day option is available and a half-day pre-kindergarten program for children who were born after Dec. 2, 2007 is also available. Call 408.864.8891 for more details.

Child care services operate all year from 7:15 a.m. to 5:30 p.m.

Location: Southwest corner of campus
Telephone: 408.864.5795
FAX: 408.864.5627

College Life, Office of

The Office of College Life provides an information and resource center for students, staff and community members. It also enhances multiculturalism and diversity at De Anza. The office, in concert with De Anza Associated Student Body (DASB), clubs and staff, provides for numerous educational programs and events representing the college's diverse student and staff community.

Among the many services are a housing website and college posting approval. Also available is free legal advice by a lawyer who will advise students on many legal matters.

Location: Hinson Campus Center
(Lower level, near Health Services)

Telephone: 408.864.8756

Website: www.deanza.edu/collegelife

Clubs

Student success is the primary focus of De Anza, and one factor of success is campus involvement. There are more than 65 active clubs on campus that provide diverse opportunities for students. Clubs provide leadership opportunities, community service and friendships, and the horizon is open for many new clubs to be formed. For a current list of clubs, club meetings, how to start a new club and more, visit the website.

Website: www.deanza.edu/clubs

Student Government

The De Anza Associated Student Body (DASB) is the elected government organization designed to enhance the college environment through student involvement in the decision-making process. Student government financially supports athletics, clubs, dances and speakers, creative arts events, student publications, social events and some instructional programs.

Active participation in student government provides students the opportunity to gain skills and knowledge in group dynamics, program planning and the opportunity to develop leadership skills.

Students are encouraged to participate in the development of co-curricular programs and the formulation of general college policies. Participation of students in the governance of the college is effected through membership and participation on all major college boards and committees.

The opportunity for self-government is extended to the students of De Anza by the board of trustees, administration and faculty to promote student activities that provide social and intellectual stimulation to the college campus and community. More information is available at the Office of College Life.

Website: www.deanza.edu/dasb

Community Education

De Anza College Community Education offers programs and services to community members of all ages and interests.

Website: www.communityeducation.fhda.edu

Foothill-De Anza Short Courses

This program provides a variety of fee-based, not-for-credit courses in educational, recreational, cultural and community development.

Location: Student and Community Services Building, 1st floor, Room 127

Telephone: 408.864.8817

FAX: 408.864.5434

Website: www.communityeducation.fhda.edu

Extended Year Summer Enrichment Program

This program is operated in partnership with college's Euphrat Museum of Art and the Cupertino Union School District. It is offered for students entering first through tenth grades. The program operates for four weeks, mornings only, at three to five school sites throughout the local community. The program is fee-based, and classes are designed for the student who is at or above grade level. Registration begins in mid-March each year.

Location: Student and Community Services Building, 1st floor, Room 127

Telephone: 408.864.5860 or 408.864.8441

Website: www.extendedyear.deanza.edu

Cooperative Education

Due to budget constraints, the Cooperative Education (Co-op) program at De Anza College will not be offered during the 2012-2013 academic year.

See Foothill College's Cooperative Work Experience program at www.foothill.edu/programs/coop.

Counseling and Advising Center

Counseling and advising services assist students in establishing their educational goals and identifying support services to achieve those goals. Counseling 200, Orientation to College, includes this component for new students. De Anza counselors and academic advisers have many years of experience helping students achieve their educational goals.

The Counseling and Advising Center, located in the Student and Community Services Building, provides a comprehensive service for students who seek assistance in dealing with a variety of concerns. Academic advisers assist with developing educational plans and addressing academic concerns. Counselors provide academic advising, educational, personal and career counseling. Services in the center include, but are not limited to, the following:

Academic Advising

- Individual educational planning
- Determination of transfer requirements
- Application for a certificate or degree
- Petitions to Academic Council

Educational Counseling

- Individual educational planning
- Selection of a major
- Time management
- Study skills
- Test anxiety

Career Counseling

- Career/life planning courses
- Assessment of skills, interests, values and personality styles
- Test referral and interpretation
- Exploration of career goals based on personal assessment
- Development and implementation of career plans

Personal Counseling

- Self-awareness
- Interpersonal communication
- Stress management
- Relationship counseling
- Clarification and resolution of problem areas
- Referral to off-campus resources

Counseling is a confidential relationship between a student and a counselor. Counselors act as catalysts to help students define their own questions, explore their own alternatives and ultimately find their own answers.

Hours of operation are subject to change, especially during academic breaks. Please visit the website or call to check hours the center is open each week. Typically, counselors and academic advisers are available Monday and Thursday from 8:30 a.m. to 5 p.m., Tuesday and Wednesday from 8:30 a.m. to 7 p.m., and Friday from 8:30 a.m. to 1 p.m. Appointments may be made in person through the receptionist in the Counseling and Advising Center lobby, or by telephone. Appointments can be made one to two weeks in advance, beginning the second week of the quarter. The center is open to students on a walk-in only basis during the first week and the last two weeks of any quarter.

Location: Student and Community Services Building

Telephone: 408.864.5400

Website: www.deanza.edu/counseling

DASB Card

The purchase of a DASB Card provides many benefits to the students and to the campus as a whole. The card provides the funds needed to support programs and services to the student such as clubs, seminars, guest speakers, athletics, creative arts productions, legal advice, loans, culturally diverse programs and campus publicity.

The DASB card is the property of the college and must be surrendered for needed replacement or by request of the Foothill-De Anza Community College Police.

The purchaser of the DASB Card is also entitled to the following benefits:

- The holding of a student government office
- The Valley Transit Authority (VTA) Eco Pass
- Free admission to all home athletic games
- Participation in student clubs and organizations
- DASB book grants
- Legal advice service
- Use of computers in the Open Media Lab

Office location: Hinson Campus Center (Lower level)

Telephone: 408.864.5551

Website: www.deanza.edu/dasbcard

Dining Services

Dining Services is located on the upper level of the Campus Center. Services for breakfast, lunch and dinner include an organic salad bar, hot and cold sandwiches, specialty pizzas, and salads, pasta and burgers made to order. An assortment of snacks, desserts and beverages is also available. Private dining rooms are available by reservation by calling the Dining Services Office. Banquet catering services are available for both on- and off-campus events.

Telephone: 408.864.8515

Website: www.deanza.edu/diningservices

Disability Support Programs and Services (DSPS)

Adapted Physical Education

The Adapted Physical Education (APE) program provides exercise classes for individuals with physical limitations and disabilities.

Location: Building PE 6 (near the pool)

Telephone: 408.864.8885

Website: www.deanza.edu/apc

Disability Support Services

Disability Support Services (DSS) provides special services and instruction for students with physical disabilities, psychological disabilities or chronic health impairments. These include registration assistance, parking permit distribution, tram service, assistive technology support and training, academic and test accommodations.

Print-impaired students have the services of an alternate media specialist to assist them with curricular modifications such as ordering materials in special media.

Deaf and hard-of-hearing students have the assistance of an interpreter/scheduler with registration, the provision of interpreting and captioning services in the classroom, and with a campus liaison.

Location: Student and Community Services Building

Telephone: 408.864.8753 (Voice)
408.864.8748 (TTY)

E-mail: dss@deanza.edu

Website: www.deanza.edu/dss

Educational Diagnostic Center

The Educational Diagnostic Center (EDC) assists students in discovering their learning styles and academic strengths and weaknesses, and assesses eligibility for learning disability services at the California Community Colleges.

An adult with learning disabilities has average or above-average intelligence and needs assistance in one or more of the following areas: reading, spelling, math, writing, problem solving, memory and organizational skills. All eligibility assessments are done on an individual basis, and a personalized plan of instruction is developed according to the student's abilities and needs. The following support services are available to students eligible for EDC: registration assistance; specialized instructional support classes; recommendation arrangements; and campus and community liaison including referral to social, medical, vocational and/or other educational agencies.

Location: Learning Center West,
Room 110

Telephone: 408.864.8839

Website: www.deanza.edu/edc

HOPE Program

The HOPE-De Anza cooperative program is designed to serve adults with developmental disabilities who would benefit from a comprehensive rehabilitation/educational program. The training assists the individual in developing the attitudes, behaviors, work skills and self-confidence leading toward competitive, supported or sheltered employment.

A team approach is used that considers the total individual with emphasis on the development of an individualized and prescriptive vocational/educational plan.

There are two facilities:

- 3080 Alfred St., Santa Clara, CA 95051, 408.562.1836
- 1555 Parkmoor Ave., San Jose, CA 95128, 408.282.5012

Website: www.deanza.edu/hope

Distance Learning Center

The Distance Learning Center (DLC) offers a wide variety of courses for students, ranging from academic credit to upgrading skills or changing careers.

Technologies used to deliver instruction include video- and Web-based tools. Video courses include live and recorded classes via cable television, video streaming, videotape and two-way interactive video between De Anza and off-campus locations. Online courses utilize the Web and electronic communication with the instructor and classmates. Hybrid distance learning classes may combine video-based and online technologies, with some courses integrating CDs or other media.

In addition to the technology-delivered instructional media, all courses include substantial readings in assigned texts and materials, other homework assignments and interaction with De Anza faculty. Instructors are available to answer questions by telephone, online or in person at De Anza College. Some courses include required on-campus meetings and provide students opportunities to participate in classroom discussions with the instructor and other students. Examinations and tests may be required on campus. Other courses are designed with online or proctored examinations, which enable students outside the Silicon Valley area to complete course requirements without coming to campus. Most of the coursework may be completed at home or at work, online or in one of the open computer labs on campus. Access to an individual e-mail account is strongly advised for all distance education students and is a requirement to participate in most distance learning classes. All DLC courses now provide online course syllabi ("green sheets") as a convenience for the students.

Students are encouraged to take advantage of other online college services, including the De Anza application for admission, course registrations for the current or upcoming quarter, adding and dropping courses after initial registration, access to library publications and materials, and college counseling (including the Counseling 200 and Career Life Planning 70 web-based classes).

Please refer to the Distance Learning Center website for information on required orientations for distance learning classes. Some orientations are on campus, some are online, and some have the option of either an online or an on-campus orientation.

The Distance Learning Center offers courses and certificate programs in a variety of disciplines. Technology-delivered classes are academically equivalent to and carry the same credits as on-campus courses. Numerous courses meet General Education (GE) and transfer requirements. Students may complete most lower division GE degree requirements for the A.A. or to transfer to a four-year institution.

Programs are designed for busy individuals who may have limited time to attend on-campus classes on a regular basis and prefer the flexibility and convenience that distance learning offers. Successful students enrolled in Distance Learning courses are highly motivated, self-disciplined, possess good study skills and enjoy instruction that appeals to a variety of learning styles.

Mediated delivery of instruction may also support and benefit students with disabilities. For specific information on services provided to students with disabilities, please contact the Disability Support Services office on campus.

De Anza College has transfer agreements with four-year institutions that welcome and encourage students to transfer and complete B.A. or B.S. degrees through distance learning programs. Those accredited institutions include Capella University in Minneapolis, Minn., and Governor's State University located in University Park, Ill.

Office location: Media and Learning
Center, Room 250

Telephone: 408.864.8969

FAX: 408.864.8245

E-mail: distance@deanza.edu

Website: www.deanza.edu/distance

EOPS and CARE

Extended Opportunity Programs and Services (EOPS) provides support services for economically and academically disadvantaged students. Services include academic and personal counseling; assistance in completing admission, registration and financial aid forms; early registration and university transfer services.

As part of EOPS, the Cooperative Agencies Resources for Education (CARE) Program provides support services to single heads of household receiving Temporary

Assistance for Needy Families (TANF). CARE students receive academic and personal counseling; early registration; and financial assistance with child care, books and transportation.

Location: Hinson Campus Center
(Lower level)

Telephone: 408.864.8950

Euphrat Museum of Art

The Euphrat Museum of Art, located at the front of the Visual and Performing Arts Center, presents engaging exhibitions and educational materials that provide a resource of visual ideas and a platform for communication. It is a forum of ideas about art expressed through one-of-a-kind exhibitions and events. Nationally recognized, the Euphrat program:

- Highlights the heritage of different cultures
- Enhances understanding of art fundamentals, art history and esthetics
- Augments college instruction in multiple disciplines

The Euphrat organizes an annual De Anza Student Art Show. Students participate in all aspects of museum operations, including the Euphrat's Arts & Schools Program that provides art classes to elementary and middle-school students in the community.

Receptions for the artists are free and open to the public. Call the Euphrat to schedule a group tour.

Visit. Volunteer. Experience art and leadership, community building, interdisciplinary projects and creative problem solving.

Location: Euphrat Museum of Art
(Front of Visual and Performing Arts Center)

Telephone: 408.864.5464

Website: www.deanza.edu/euphrat
(for program activity updates)

Financial Aid and Scholarships

Financial aid is available through the college for students who need financial support in order to pursue their college education. The college provides assistance in the form of grants, scholarships, loans and part-time

jobs. Except for scholarships, all programs require that a student show financial need in order to qualify.

De Anza College 2012-2013		
Cost of Attendance		
	Living at Home with No Dependents	All Others
Registration and fees	\$ 1,494	\$ 1,494
Books and supplies	1,665	1,665
Room and board	4,401	11,034
Transportation	1,314	1,314
Personal and misc.	2,832	2,832
Total	\$11,706	\$18,339

Application Procedure

For the programs below, use the Free Application for Federal Student Aid (FAFSA), available online at www.fafsa.gov. Carefully follow the directions provided. Applications for each new academic year are available online on Jan. 1. Deadlines for the various programs vary considerably. Generally, financial assistance is provided as long as funds are available. Students are encouraged to call or visit the Financial Aid Office for more information.

Ability to Benefit

Ability-to-benefit (ATB) options for establishing general student eligibility for federal student aid will be eliminated for students who first enroll in a program of study on or after July 1, 2012.

All students seeking federal financial aid will need to have a high school diploma, GED, or have been home schooled in order to meet the academic qualifications for general eligibility.

Financial Aid Programs

The following programs are offered at De Anza:

Grants

- Federal Supplemental Educational Opportunity Grant Program (SEOG)
- Federal Pell Grant
- Extended Opportunity Program Grant (EOPG)
- Board of Governors Fee Waivers (BOGW)
- Cal Grant B
- Cal Grant C

BOG A/B/C

Students admitted under AB540 become eligible to apply for BOG Fee Waivers in January 2013.

Students admitted under AB540 become eligible to apply for Cal Grants

in January 2013. The Cal Grant deadline is March 2, 2013 for 2013-2014.

Scholarships

Throughout the year, the Financial Aid Office receives announcements on scholarships offered by various organizations in the area. The amounts and qualifications vary with each scholarship. A listing of available scholarships is posted on the Financial Aid Bulletin Board and website.

Loans

- Federal Direct Loan
- Direct Parent Loan (PLUS)
- Book loans

Part-Time Jobs

- Federal Work Study Program (FWSP)

Financial Aid Contact

Location: Baldwin Winery Building

Voicemail: 408.864.8718

FAX: 408.864.5658

E-mail: financialaid@deanza.edu

Website: www.deanza.edu/financialaid
For financial aid updates visit the website regularly.

Foothill-De Anza Community College Police

The Foothill-De Anza Community College District Police Department exists to serve and protect a social and academic environment that sustains and encourages moral and intellectual growth. The department emphasizes being as proactive as possible in anticipating and preventing unsafe conditions, protecting facilities and property, and protecting individuals from the imprudent or illegal acts of others. Its operational philosophy of peacekeeping and protecting the campus is a service that best exists when it has the support and involvement of the total campus community.

Services include:

Emergency Car Service

This service, provided when the department is adequately staffed and not attending to priority security needs, includes dead-battery jumps or help if students lock themselves out of their car. (Vehicles with power locks and/or windows, or side air bags, or vehicles parked off campus are excluded.)

Security Escorts

Escorts are provided by District Police for

anyone wishing to be escorted to his/her car at any time of the day or night. During working hours, call District Police five minutes in advance.

Lost and Found

All items should be turned in or claimed at District Police.

Location: Hinson Campus Center,
Room 175 (Lower level)

Telephone: 408.864.5555

Emergency: 9-1-1

Emergency from cell phone: 408.924.8000

Police services are available every day of the week and on holidays from 6 a.m. to midnight.

FHDA Internship Program

The Internship Program is currently in a transitional period. To participate in the Internship Program, students must enroll in a Cooperative Work Experience (CWE) class at Foothill College. For more information, visit the website.

Website: www.foothill.edu/programs/coop/

Fujitsu Planetarium at De Anza College

The Fujitsu Planetarium at De Anza College hosts a variety of star and laser light shows during fall and winter quarters each year. Daytime school field trips can be reserved for school-age groups from October to July. The Planetarium is also available for private rentals. Visit the planetarium website to view more information.

Location: North end of Parking Lot E

Telephone: 408.864.8814

Show information line: 408.864.5791

Website: www.planetarium.deanza.edu

Health Services

Student Health Services provides a variety of confidential, free and low-cost services. Free services include first aid, blood pressure checks, TB testing, flu shots, over-the-counter medicines, smoking cessation, pregnancy tests, condoms and health education information. Short-term psychological and personal counseling services are also provided free of charge. Services at reduced cost include well-woman exams, physical exams, birth

control, emergency contraception and immunizations.

Location: Hinson Campus Center
(Lower level)

Telephone: 408.864.8732

Website: www.deanza.edu/healthservices

Housing

De Anza does not have housing facilities, but the Office of College Life maintains a website listing available housing. De Anza does not supervise or assume responsibility for any housing facility. Visit the website for more information and to search through the housing ads.

Telephone: 408.864.8756

Website: www.deanza.edu/housing

International Student Programs

The office of International Student Programs (ISP) addresses the needs of De Anza's international students and helps them adjust to their lives at the college and in the United States. Prospective and degree-seeking international students are encouraged to contact this office, visit the campus and check out ISP's website.

ISP has a professional, multilingual staff who are well informed about educational development, personal and financial planning, cross-cultural issues, immigration rules and regulations, and community programs and resources. The international student counselors assist international students in designing their educational plans and prepare students for their transfer to a four-year university to continue their undergraduate education.

Each quarter, ISP organizes an orientation program for all new international students that covers a wide range of topics, including placement tests, health issues, academic skills, personal safety, banking and transportation. ISP also conducts numerous workshops throughout the academic year on a broad range of topics such as employment, transfers to four-year universities, F1 immigration rules, etc. Furthermore, to help international students in their adjustment to life in the Bay Area and the United States, ISP organizes a selection of social and cultural

programs and activities; and to protect international students from the high costs of medical care in the U.S., all F1 students are required to purchase and subscribe to the international student health insurance selected by the Foothill-De Anza Community College District.

Location: Learning Center West
(LCW), Room 102

Telephone: 408.864.8826

E-mail: dainternational@deanza.edu

Website: www.deanza.edu/international

Learning in Communities (LinC) Program

A Learning Community is an interdisciplinary approach to learning designed for student success that links two or more classes together with a common theme, content and materials. The community of students and faculty work collaboratively which creates a friendly, supportive atmosphere. Learning communities are open to all De Anza students.

When they enroll in a learning community, students will:

- Have some common readings and assignments in all classes in the learning community
- Have academic and personal support from a counselor dedicated to the learning community
- Learn more and earn more units with less stress and more fun

For more information and to see the schedule of learning communities offered each quarter, visit the website.

Website: www.deanza.edu/linc

Library Services

The college's library services are housed in the A. Robert DeHart Learning Center complex. The Library and Library West Computer Lab contain resources for students including books, e-books, periodicals and DVDs. The building has wireless access to the Internet, 140 computer workstations located in two open computer labs, and a laptop checkout program for in-building use. Librarians are available to assist students with their information needs.

Instructors may place textbooks and other course materials on reserve either in print or electronic format.

Electronic resources are available 24 hours a day, 7 days a week. Using the library website as a starting point, users can access e-books, articles and other materials. Databases such as EbscoHost Academic Search Premier, Literature Resource Center, Lexis Nexis and Encyclopedia Britannica are available from off campus. Student, faculty and staff IDs provide access.

The Library offers a series of classes through Distance Learning, which can be found in the class listings.

Two computer labs are located in the Learning Center complex. The Library West Computer Lab, in the basement of the Learning Center West, has 90 computer workstations. The Library Computer Lab on the second floor of the Library has 20 workstations. In both of these labs, students can check e-mail, access the Internet, and prepare projects using Microsoft Office. Listening and viewing stations, digital cameras and a camcorder are also available. The Library West Computer Lab also has materials for the Distance Learning Program.

Location: Library and Learning Center West

Library Circulation: 408.864.9761

Library Reference: 408.864.8479

Library West Computer Lab:
408.864.8850

Website: www.deanza.edu/library

Occupational Training Institute (OTI)

OTI offers career and occupational training for students eligible through the following programs:

- CalWORKs (TANF/Welfare to Work)
- WIA (Workforce Investment Act)
- NAFTA (North American Free Trade Agreement)
- TAA (Trade Adjustment Assistance)

OTI provides intensive career and occupational training, internships and job placement for those eligible for the above programs and who are low income, economically disadvantaged or dislocated workers. Instructional and related activities are designed to prepare students with the

specific skill needs of the job market as well as to enhance the employability of the students. OTI supports De Anza and Foothill colleges' career training programs such as medical, technical, business and administrative occupations.

If students are on CalWORKs (TANF) or referred by a WIA or EDD office, OTI may be able to help them:

- Achieve academic and career goals
- Access academic, career and personal advisement/counseling
- Develop an individualized Education Plan
- Purchase required textbooks for classes (limited)
- Pay for childcare (limited)
- Provide early registration
- Obtain paid work-study job or internship
- Search for employment
- Access medical care through MediCal, Healthy Families, Healthy Kids and Valley Care
- Seek mental health assessments and assistance
- Locate and obtain referrals to various community services
- Get a free computer for school work through CompTechS

OTI's CompTechS Program (Computer Technical Support Program) is an internship program for students who are interested in careers in information technology. The computer donation program provides computers to disadvantaged students via the Financial Aid & Scholarships Office. For further information, contact the OTI office.

Location: Seminar Building (SEM)

Telephone: 408.864.8869

Website: www.deanza.edu/oti

Office of Outreach and Relations with Schools

The Office of Outreach and Relations with Schools actively works to attract a diverse student population to De Anza College through a collaborative working relationship with high schools, school districts and communities throughout Santa Clara County. The goal of Outreach is to promote college access and success for all students, with emphasis on underserved and underrepresented student groups. The office serves prospective students and parents

through a wide range of outreach activities at high schools including college fairs, career and college nights, presentations, info tables, student ambassadors, application workshops, placement testing, De Anza campus tours, student conferences, and the annual New Student and Parent Open House in spring quarter. Outreach provides information about De Anza programs and services and serves as a point of contact for schools, students and parents to support the successful transition of prospective students from high school to college. The office also works with all divisions, departments and programs on campus to coordinate institutional outreach efforts, meet enrollment targets, and connect new students to programs and services.

Location: Seminar Building (SEM)

Telephone: 408.864.8327

E-mail: outreach@deanza.edu

Website: www.deanza.edu/outreach

Professional & Workforce Development

Professional & Workforce Development (P&WD) for the Foothill-De Anza Community College District works to provide training and professional development opportunities for those in or entering the Silicon Valley workforce. P&WD contracts with employers to train employees on site at their workplace and develops new programs that have the goal of preparing the workforce for emerging fields. Programs under P&WD include the Center for Applied Competitive Technologies which serves the technology and manufacturing sectors with just-in-time consulting and training services in process improvement and other areas.

Location: Foothill College campus,
Room 4057,
12345 El Monte Rd.,
Los Altos Hills

Telephone: 650.949.7797

Website: www.deanza.edu/proworkforce

Center for Applied Competitive Technologies

The Center for Applied Competitive Technologies (CACT) is located at the Foothill College campus at 12345 El Monte Rd., Los Altos Hills. For information about its services, please call 650.949.7797.

Puente Project— A Bridge to Success

Puente is an award-winning national program that has helped thousands of students reach their dreams of college success. Puente was founded in 1981 at Chabot College in Hayward. Since then, Puente has been successfully replicated in more than 90 community colleges and high schools.

Puente provides three major areas of services to students to help prepare them for transfer to four-year colleges and universities:

- **English Instruction** – Puente students take two consecutive writing classes, EWRT 211 and EWRT 1A. These classes provide a supportive and stimulating environment for Puente students with an emphasis on developing writing skills through an exploration of the Mexican American/Latino experience.
- **Counseling** – Puente students work closely with their Puente counselor to develop an academic educational plan, explore career options and identify their goals. The students enroll in HUMA 20: Life Skills in Higher Education and COUN 80, Latina/o Issues in Higher Education. Students visit campuses of the University of California and other four-year colleges and attend an annual Puente student motivational conference.
- **Mentors** – Puente students are matched with an academically and professionally successful mentor from the community. The network of trained Puente mentors provides many resources for Puente students, their families, their colleges and the community.

Puente students:

- Succeed academically
- Are recognized as leaders and scholars
- Graduate from four-year colleges and universities
- Belong to a statewide network of leaders and professionals

Location: Student and Community Services Building

Contact: Alicia Cortez, Puente counselor
Telephone: 408.864.8365
E-mail: cortezalicia@deanza.edu

Science Resource Center

The Science Resource Center is located in the Science Pavilion. The resources are used by the Biology, Chemistry, Health Technology, Math, Medical Laboratory Technician, Nutrition and Health Department students and instructors to supplement class, laboratory and individual study. Students can also sign up to use one of the group study/meeting rooms.

The center supports the principle that learning doesn't have to stop once a student leaves the classroom; the scientific experience can continue at a time more convenient to the student. While learning is often thought to be a process of the mind, it is heavily influenced by the learner's environment – the variety of stimuli, the social aspect of the setting, the spatial context, and even the amount of ambient light and sound have all been seen to affect the learning experience. The Science Resource Center, a LEED certified building, is well suited to the learning experience.

The center maintains an extensive collection of models, histology slides, charts and reference books as well as a comprehensive library of CD ROMs for 21 computers available for student use.

The center is open for use to all registered De Anza College students.

Location: Science Center, Building 3, Room 3101

Hours: Monday 8:30 a.m. - 5 p.m.
Tuesday 8:30 a.m. - 5 p.m.
Wednesday 8:30 a.m. - 5 p.m.
Thursday 8:30 a.m. - 5 p.m.
Friday 8:30 a.m. - 1 p.m.
Closed on Fridays during the summer session

Telephone: 408.864.8921

Stewardship Resource Center

The Stewardship Resource Center (SRC) is operated by the Biological, Health and Environmental Sciences Division's Environmental Studies Department. The SRC provides tutorial and classroom support for Environmental Studies and

Environmental Sciences courses and programs as well as students who are interested in learning about the stewardship of California and the environment.

Location: Kirsch Center for Environmental Studies, Room 224 (southeast corner of campus)

Telephone: 408.864.5322

Student Success Center (SSC)

At De Anza College, many academic support efforts are organized within the Student Success Center, part of the Learning Resources Division. In the SSC, integrated programs support learning for all students across the curriculum in an open and supportive environment. Full-time professional staff provide support to students. In addition, all SSC programs depend on peer tutors. Consider joining the exciting, dynamic team of tutors. This is a great opportunity for De Anza students if they have done well in their courses and have a desire to help others.

Recently, the SSC has undergone many changes to better serve students, all of which are documented on the website along with updates on space, staffing, hours, activities, telephone numbers and other information.

Website: www.deanza.edu/studentsuccess

Academic Skills

The Academic Skills Center, part of the Student Success Center, offers self-paced individualized courses and linked study skills courses in a learning laboratory setting. Self-paced courses, listed under "Skills," include reading, writing, grammar, spelling, vocabulary, study skills and basic math. In these courses, students work on individualized assignments at their own pace.

Linked Adjunct Study Skills courses are available for certain content course. These half-unit courses combine weekly small group study and skills development labs. Enrollment information for Adjunct Study Skills courses is announced in the content courses during the first week of classes.

Small group workshops on various topics are available to any student enrolled in any Skills class.

General Subject Tutoring

Qualified peer tutors provide free individual, group and drop-in online tutoring in most academic subjects such as business, humanities, social sciences and modern languages during the day and early evening. Students who need assistance in their classes should apply for tutoring early in the quarter.

Math, Science and Technology Resource Center (MSTRC)

The MSTRC provides a variety of resources that enable students to develop the skills and abilities necessary to succeed in their math courses. Trained tutors provide weekly, drop-in and group tutoring in math and science courses. The center also houses the Math Performance Success (MPS) program, Enable Math and labs.

Location: Building S4, Room 43

Writing, Reading, Listening and Speaking

Part of the SSC is dedicated to providing language skills that empower students to succeed across campus in all their courses. For students at every level and in every discipline, we provide tutoring (drop-in, individual and group) as well as workshops and other opportunities to develop listening, speaking, reading and writing skills.

Student Success and Retention Services Program

The Student Success and Retention Services (SS&RS) program is an academic enrichment and support program that facilitates the matriculation of students with historically low retention, matriculation and transfer rates, and first-generation college students. The center provides a supportive community of peers, faculty and staff who foster a nurturing environment and encourage the retention and success necessary to enable achievement of a student's educational objectives.

Program participants receive educational planning and academic advising, a student study and computer center, peer mentoring and free tutoring, campus tours to four-year universities, scholarship and financial aid

information, as well as various academic enrichment workshops.

Location: Student and Community Services Building

Telephone: 408.864.8470

Website: www.deanza.edu/ssrsc

Technology Resources Group

Working with other groups across campus and in the district, the teams that comprise the Technology Resources Group are dedicated to finding the best solutions to achieve the college's instructional goals and meet faculty and student needs.

Services include:

- De Anza website technical development, tools and applications
- Video and audio systems engineering and support
- Online instructional technologies (online courses and streaming media)
- Multimedia production, including broadcast, webcast, CD and DVD creation

Location: Media and Learning Center, Room 210

Transfer Center Services

The Transfer Center, located in the Student and Community Services Building, assists students who are considering transferring to a four-year degree program. Understanding admission requirements and the transfer process can be time-consuming and confusing. To facilitate the process, the Transfer Center offers the following resources and support services to assist students in researching options, making sound choices and planning a smooth transition between institutions.

- Information about articulation agreements, guaranteed admission programs and impacted majors
- Resource library including access to college catalogs from all University of California and California State Universities, many private colleges and universities, and many out-of-state colleges and universities

- ASSIST articulation agreements (online)
- Visits from University of California, California State University, and selected private university representatives to provide transfer advising
- Workshops on guaranteed admission, general education requirements and application procedures
- Drop-in advising (designated hours) to answer brief questions

The Transfer Center sponsors special programs throughout the year. All scheduled activities are posted in the Transfer and Counseling centers and online.

Location: Student and Community Services Building

Telephone: 408.864.8841

Website: www.deanza.edu/transfer

Veteran Services

The De Anza College Veterans Services Office assists veterans, reservists, service members, dependents and spouses with the process of applying for and receiving Veterans Educational Benefits. De Anza certifies the Post-9/11 GI Bill, Montgomery GI bill and other assistance programs including VEAP, REAP, DEA, vocational rehabilitation and tuition assistance programs.

To comply with VA regulations, students receiving VA benefits must maintain both satisfactory attendance and grade point average. Students whose GPA falls below a 2.0 for one quarter are notified of unsatisfactory progress. If the GPA remains below 2.0 for a second consecutive quarter, the student's benefits will be suspended.

Location: Student and Community Services Building, Room 111

Appointments: available

Telephone: 408.864.8230

Contact: Shari Pasquali, veterans coordinator

E-mail: pasqualishari@deanza.edu

Website: www.deanza.edu/veterans

FINANCIAL PLANNING and COLLEGE COSTS

Student Fees

Full-time resident students enrolled in 12 units pay \$31 per unit.* Each quarter this will average \$372 for enrollment fees, plus an average of \$75 in other fees. The nonresident tuition fee is \$138 per unit, and the foreign student tuition fee is \$138 per unit.

De Anza charges additional fees for Campus Center use and the Eco Pass (mandatory), on campus parking, lab courses, De Anza Associated Student Body activities (voluntary) and health services (mandatory). International F-1 Visa students are required to purchase comprehensive health insurance for \$448 each quarter.

All fees are listed on the Internet at www.deanza.edu/registration/cashier and are subject to change. Payment and refund policies are also listed online. Tuition and fees may be refunded under certain

circumstances. Please direct questions to the Cashier's Office by e-mail to deanzacashier@deanza.edu.

* Fees are subject to change by California legislative action.

Instructional Materials Fees

For some courses, there will be an instructional materials fee. These fees, shown in the Class Listings, reflect the actual cost for materials, which is usually lower than if students purchased the same items separately. Unless there is an issue of health or safety, students can either pay the fees to the college or provide their own materials of equal quality. A list of materials will be provided by the instructor upon request.

Textbooks and Supplies

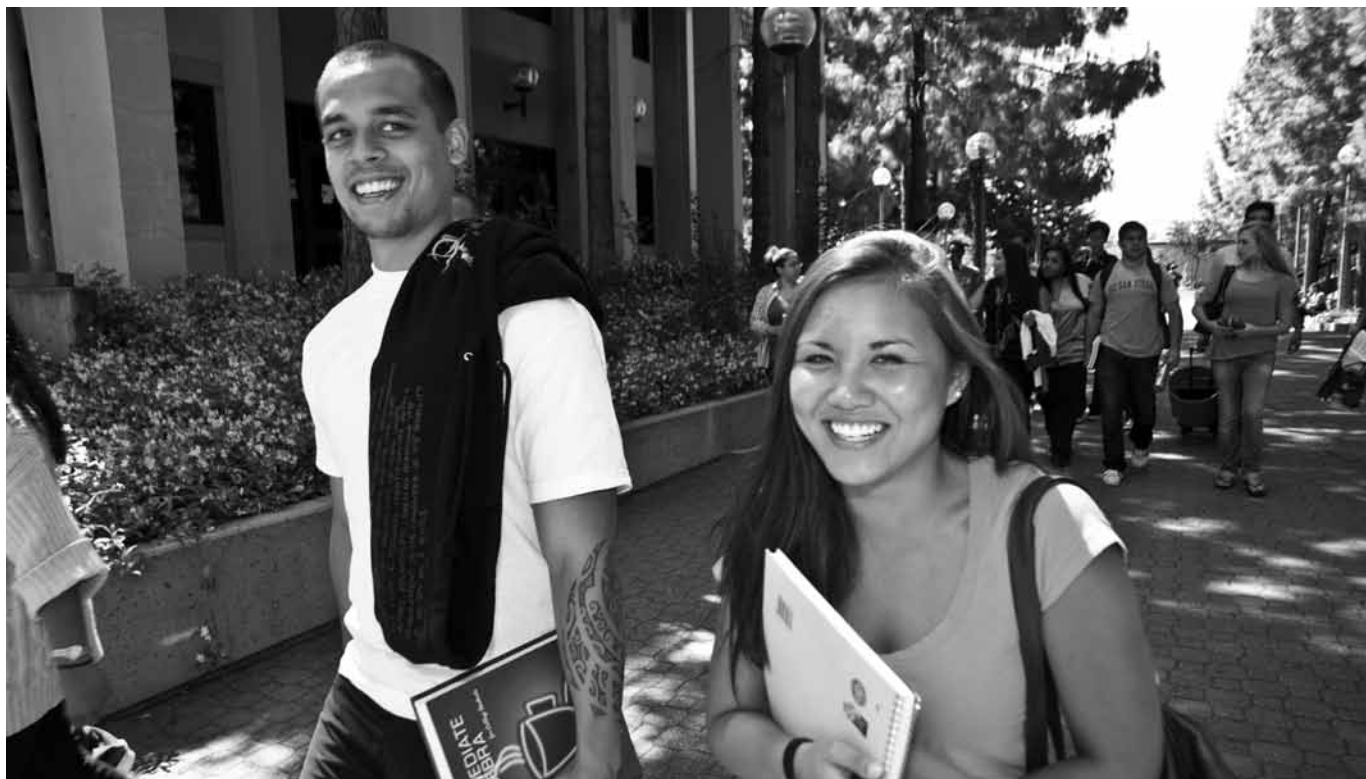
Students are responsible for purchasing textbooks and supplies including course syllabi, bibliographies and other printed

materials in excess of five pages. Some courses require the purchase of additional supplies. The De Anza Bookstore sells all course texts and other items.

Estimated Annual Cost of Attending De Anza College

It is important for students to plan financially for their education. The following cost estimates are calculated for a student attending De Anza College full time and enrolled in 12 units for three quarters or nine months. Costs for out-of-state or nonresident students will be higher.

De Anza College 2012-2013		
Cost of Attendance		
	Living at Home with No Dependents	All Others
Registration and fees	\$ 1,494	\$ 1,494
Books and supplies	1,665	1,665
Room and board	4,401	11,034
Transportation	1,314	1,314
Personal and misc.	2,832	2,832
Total	\$11,706	\$18,339



COLLEGE/DISTRICT POLICIES and GUIDELINES

Academic Freedom (Board Policy 4190)

Academic freedom encompasses the freedom to study, teach and express ideas and viewpoints, including unpopular and controversial ones, without censorship, political restraint or retribution. Academic freedom allows for the free exchange of ideas in the conscientious pursuit of truth. This freedom exists in all service areas, including but not limited to teaching, librarianship, counseling, coordinating and all faculty-student interactions. Academic Freedom is the bedrock principle of all institutions of learning and must be extended to all faculty regardless of their status as full-time, part-time, or probationary.

Faculty members have the principal right and responsibility to determine the content, pedagogy, methods of instruction, the selection, planning and presentation of course materials, and the fair and equitable methods of assessment in their assignment in accordance with the approved curriculum and course outline and the educational mission of the district, and in accordance with state laws and regulations. These rights and responsibilities include, but are not limited to, the faculty member's choice of textbooks and other course materials, assignments and assessment methods, teaching practices, grading and evaluation of student work, and teaching methods and practices.

Approved 1/5/10

Academic Integrity

De Anza College is committed to excellence in the pursuit of learning and academic achievement by its students. To further this goal, the college is committed to providing academic standards that are fair and equitable to all students in an atmosphere that fosters integrity on the part of student, staff and faculty alike. The student's responsibility is to perform to the best of his/her potential in all academic endeavors. This responsibility also includes abiding by the rules and regulations set forth by individual faculty members related to preparation and completion of assignments and examinations. The submission of work that is not the product of a student's personal effort, or work which in some way circumvents the given rules and regulations, will not be tolerated. It is the responsibility of the faculty to clearly define the requirements and rules applicable to their courses for all students. An applicable paragraph of the California State Educational Code (#76130) is quoted: "Code of Student Conduct: The college has an obligation to specify those standards of behavior essential to its educational mission and campus life. The following types of misconduct for which students are subject to disciplinary sanction apply at all times on campus as well as to any off-campus functions sponsored or supervised by the college: cheating, plagiarism or knowingly furnishing false information in the classroom or to a college officer."

Academic Renewal

Students may request that up to 45 units of De Anza coursework be disregarded (three consecutive quarters plus a summer session) and not calculated into their cumulative GPA (sections 55764 and 55765 of the California Administrative Code) when such work does not reflect their current ability.

Academic renewal at De Anza College does not guarantee that other colleges will accept this action, which is at the discretion of the transfer institution.

Approval of Academic Renewal requests is subject to the following conditions:

1. Two years must have elapsed since the last quarter to be disregarded was completed.
2. Since the last quarter to be considered for Academic Renewal, students must have completed at least:
15 units with a 3.0 GPA, or
30 units with a 2.5 GPA, or
45 units with a 2.0 GPA.
(Work completed at another institution may be considered in determining total units accrued.)
3. All work to be disregarded in the specific quarters, even if satisfactory (passing grades), will not be applied toward unit requirements or calculated into the GPA.
4. Although none of the units completed in the affected quarters will be counted toward a degree, courses completed with grades of C, CR, or better may be used to satisfy major or general education requirements.
5. Students may petition for academic renewal only once.
6. Student transcripts reflect all work including that disregarded through academic renewal to ensure a true, complete academic history.
7. Students cannot use academic renewal to qualify for honors at graduation.



Activities Preceding Final Examinations

Student activities will not be scheduled during the three school days preceding final examinations. However, classes and instruction continue as usual. A portion of the final examination may be scheduled during this period to allow for additional time if needed.

Advanced Placement Examinations (AP Exams)

Some AP exams with qualifying scores are accepted at De Anza College for granting credit and/or course placement. Official (sealed) exam reports should be submitted to the Assessment Center. For more infor-

mation, contact the Assessment Center.

Location: Student and Community

Services Building

Telephone: 408.864.8717

Antidiscrimination

De Anza College is committed to equal opportunity regardless of age, gender, marital status, disability, race, color, sexual orientation, religion, national origin, or other similar factors, for admission to the college, enrollment in classes, student services, financial aid, and employment in accordance with the provisions of Title VI of the 1964 Civil Rights Act, Title IX of the Educational Amendments of 1972 (45CRF 86), Section 504, Rehabilitation Act of 1973 (P.L. 93-112), and the Americans With Disabilities Act

as amended (ADAAA) 2008. The lack of English language skills will not be a barrier to admission and participation in vocational education programs.

Any person seeking information concerning these laws and policies or filing a complaint because of alleged violations of Title VI of the 1964 Civil Rights Act, Title IX of the Educational Amendments of 1972 (45CRF 86), and Sec. 504 of the Rehabilitation Act of 1973 should contact Michele LeBleu-Burns, dean of Student Development and EOPS at 408.864.8828 or the vice president of Student Services at 408.864.8330. Any person seeking information concerning or filing a complaint because of alleged violations of the Americans with Disabilities Act of 1990 should contact Michele Le Bleu-Burns, dean of Student Development and EOPS, at 408.864.8218; or her designee.

Antidiscrimination Policy in Spanish, Traditional Chinese and Vietnamese

Anti-discriminación

De Anza College se compromete a brindar la igualdad de oportunidad a todo individuo que solicite ingresar a la universidad, que desee inscribirse en clases, que solicite servicios estudiantiles, ayuda financiera o empleo, sin importar la edad, el sexo, el estado civil, la incapacidad, la raza, el color de la piel, la preferencia sexual, la religión, la nacionalidad, o factores similares, según lo estipulado por Title VI del Acta de Derechos Civiles de 1964, Title IX de la Enmienda a la Educación de 1972 (45CRF 86), Sección 504, 1990. El hecho que un individuo no pueda manejar el inglés con facilidad no será un obstáculo para ser admitido a la universidad ni para participar en los programas de educación vocacional.

Todo individuo que desee información tocante a estas leyes o pólizas o que desee presentar una queja debido a supuestas violaciones de Title VI del Acta de los Derechos Civiles de 1964, Title IX de la Enmienda a la Educación de 1972 (45CRF 86), y Sección 504 del Acta de Rehabilitación de 1973, debe ponerse en contacto con Michele LeBleu-Burns, decana de Desarrollo Estudiantil y EOPS, o con su designado, marcando el 408.864.8828. Todo individuo que desee información sobre el Acta de Americanos Deshabilitados de 1990, o que desee presentar una queja debido a supuestas violaciones de dicha acta, debe ponerse en contacto con Jim Haynes, decano de Educación Especial y Tecnologías Especiales, o con su designado, marcando el 408.864.8954.

Toda queja será revisada según los términos que dicta la ley con respecto a Title VI y Title IX. A todas las personas involucradas en el asunto se les informará lo que provee la ley y cuáles son sus derechos legales. Si no existen conductos normales a cuales recurrir, o si estos conductos no cumplen con los requisitos legales, se tomará la acción necesaria para solucionar el problema. La oficina mantendrá récords de todas las quejas que se presenten debido a violaciones de Title VI y Title IX y reportará al Comité Asesor Para La Fomentación De Diversidad Entre Profesores y Empleados sobre la naturaleza de tales quejas y de cómo avanza su resolución.

Todo estudiante que desee entablar una demanda por violaciones a sus derechos civiles y que desee hacerlo fuera del ámbito universitario, debe dirigirse a: Office of Civil Rights, United States Department of Education, 50 United Nations Plaza, Room 239, San Francisco, Ca. 94102.

反對歧視

De Anza 學院對所有申請入學者註冊課程，學生服務，助學金申請和依法*顧用人員方面不論其年齡、性別、婚姻狀況、殘障程度、種族、膚色、性傾向、宗教、國家、及相類似的因素都一律平等對待。（依法：指依據 1964 年民權法第 6 章、1972 年教育修正案第 9 章、1973 年恢復案第 504 條款和 1990 年美國殘障人法）英語程度低將不會成為註冊和學習職業教育課程的障礙。

任何想詢問有關法律、政策或者對違反 1964 年民權法第 6 章、1972 年教育修正案第 9 章、1973 年恢復案第 504 條款想提出控告的人應該與學生發展部和 EOPS 主任 Michele LeBleu-Burns 或她的指定人聯絡。電話是：408-864-8828。任何想詢問有關 1990 年美國殘障人法的資料或者想對違反該法律者提出控告的人應該與特殊教育和應用技術部主任 Jim Haynes 或他的指定人聯絡。電話是：408.864.8954。

所有的控告將會根據法律的第 6 章和第 9 章得到復審，凡有關人士都將會被告知他們的合法權利。如果正常渠道行不通或者不符合法律的要求，學校會採取必要的措施。有關第 6 章和第 9 章的控告均會記錄在案，並且向全體教員和職工諮詢委員會報告案子的基本情況及進展和結果。

若學生想利用其合法權利提出超出校級的控告，請直接向美國教育部民權辦公室詢問。地址是：50 United Nations Plaza, Room 239, San Francisco, CA 94102.

Chính sách chống phân biệt đối xử

Đại Học De Anza cam kết cung cấp cơ hội đồng đều cho mọi người, bất kể tuổi tác, giới tính, tình trạng gia đình, tàn phế, chủng tộc, màu da, khuynh hướng tình dục, tôn giáo, nguồn gốc quốc gia hay những nhân tố tương tự khác, trong việc được nhận vào trường, ghi tên theo học các lớp, các dịch vụ dành cho sinh viên, trợ cấp tài chính và công việc làm phù hợp với những dự liệu của Mục VI trong Đạo Luật Nhân Quyền năm 1964, Mục IX của Tu Chính Án về Giáo Dục năm 1972 (45CRF 86), Khoản 504 của Đạo Luật về Phục Hồi năm 1973 (P.L. 93-112), và Đạo Luật về Những Người Mỹ có Khuyết Tật năm 1990. Việc thiếu khả năng Anh Ngữ sẽ không phải là một rào cản việc gia nhập và tham dự các chương trình giáo dục chuyên nghiệp.

Bất cứ ai muốn tìm kiếm những thông tin liên quan tới các đạo luật và chính sách này, hoặc nộp một đơn khiếu nại vì những chỉ dấu cho là có vi phạm Mục VI của Đạo Luật Nhân Quyền năm 1964, Mục IX của Tu Chính Án về Giáo Dục năm 1972 (45CRF 86) và Khoản 504 của Đạo Luật về Phục Hồi năm 1973 thì xin liên lạc với Michele LeBleu-Burns, Chủ Nhiệm Khoa Student Development và EOPS ở số điện thoại (408) 864-8828, hoặc người được bà uỷ thác để lo việc này. Bất cứ ai muốn tìm kiếm thông tin liên quan hoặc muốn làm đơn khiếu nại vì những chỉ dấu cho là có vi phạm Đạo Luật Những Người Mỹ có Khuyết Tật năm 1990, thì xin liên lạc với Jim Haynes Chủ Nhiệm Khoa Special Education & Applied Technologies ở số điện thoại 408.864.8954 hoặc người được ông uỷ thác để làm việc này.

Mọi khiếu nại đều được duyệt xét lại chiếu Khoản VI và IX của Luật, và những thể nhân có liên quan sẽ được thông tri cho biết về những dự liệu của luật và những quyền pháp định của họ. Nếu những hướng giải quyết thông thường không khả dụng hoặc không đáp ứng được những đòi hỏi về pháp lý, thì biện pháp cần thiết sẽ được áp dụng. Văn phòng sẽ lưu giữ hồ sơ của mọi khiếu nại dựa trên Khoản VI và IX, và sẽ báo cáo cho Faculty and Staff Diversity Advisory Committee về bản chất chung của những khiếu nại này và những tiến triển trong phương cách giải quyết.

Các sinh viên muốn theo đuổi những khiếu nại về nhân quyền trên cấp trường Đại Học thì phải tiếp xúc với Office of Civil Rights Department, United States Department of Education, ở số 50 United Nations Plaza, Phòng 239, San Francisco, CA 94102

All complaints will be reviewed in terms of Title VI and Title IX law, and persons involved will be advised of the provisions of the law and their legal rights. If normal channels are not available or fail to meet legal requirements, the necessary action will be initiated. The office will maintain a record of all Title VI and Title IX complaints, and will report to the Faculty and Staff Diversity Advisory Committee the general nature of such complaints and progress toward their resolution.

Students wishing to pursue a civil rights complaint beyond the college level should direct their inquiries to: Office of Civil Rights, United States Department of Education, 50 United Nations Plaza, Room 239, San Francisco, CA 94102.

Admission Policies

Residency Requirements

California Residents

Students who have established California residency for at least one year prior to the term in which they wish to enroll and have met residency conditions required by state regulations may enroll as California residents for tuition purposes.

Nonresidents

California residents and residents of other states or territories who have not resided in the state for one year prior to the term in which they wish to enroll, must pay nonresident tuition when attending De Anza.

Students holding various visas, or undocumented or out-of-status aliens, may not establish residency and must pay nonresident tuition when enrolling at De Anza. Other nonresidents may be able to establish residency if they meet the requirements of California Education Code 68062. Still others may be exempted from paying nonresident fees through AB540 eligibility (68130.5), which allows certain nonresident students who have attended a California high school for three years and earned a diploma or equivalent to be charged resident fees. (Students with non-student visas or who are out of status or undocumented should call the Admissions and Records Office at 408.864.8722 to determine residency and discuss other attendance eligibility requirements.)

Students on F, J or M visas attending another college, but who wish to take a class at De Anza, must submit an official letter from the host college issuing their I-20. This letter should state the student's standing, confirm full-time status, and provide authorization for the student to take specific De Anza classes.

Students seeking residency eligibility based on military active duty status, military dependent status or other military considerations, should contact the Admissions Veterans Office at 408.864.8230 for specific eligibility criteria.

The Foothill-De Anza District uses CCCApply as its admissions application. This application is very strict about meeting state residency requirements and many applicants are initially given non-resident status based on application answers. Applicants who believe they meet residency requirements need to complete a Residency Reclassification form and provide state-approved documentation for review within two weeks of a new quarter.

Admission Requirements

De Anza College admits anyone with a high school or general education diploma (GED), a proficiency certificate, or who is at least 18 years old. High school (concurrently enrolled) students may attend De Anza if they have completed their sophomore year, and have submitted a permission form signed by their high school principal and parent/guardian. High school students who do not provide required documents will be dropped from their courses.

Course Repetition

Course repetition is regulated by state guidelines (55042, 58161, 55024, 55045). Students may not enroll in the same course for more than a total of three times, including substandard grades and Ws (per 55040 and 58161). Students may repeat any course for which they have earned an F, D, or NP twice, providing they have not earned any Ws for that course (55042). The second grade will supersede the first in calculating the student's GPA, but the initial course and grade will remain on the permanent record. If a class is repeated for a third time, the GPA will include the third grade and not the first two grades. If a student does not successfully complete the course

on the third attempt, the course must be completed at another college (not including Foothill), or another course chosen to meet the transfer or graduation requirements as a substitute (if one exists).

Students may not repeat a course in which they have earned any grade P/C or above, unless they petition with documented proof that they must repeat the course due to an extended lapse of time or to upgrade skills as a part of recertification.

Students who request repetition for a course prerequisite they have failed twice may repeat the course for one additional time if they have no Ws for that course. If they do not pass the third time, they should see a counselor for additional assistance and may be required to complete the course at another college.

Excessive Drops

Per legislation passed in 2011, students may no longer enroll in the same course more than three times without successful completion. Totals may be a combination of substandard grades and withdrawals. Students who have already enrolled in the same course twice without passing should see a counselor for assistance or seek tutorial help. Students may petition to re-enroll in the same course a fourth time, but approval will be highly selective. Additional repeats will not be approved.

Classification of Students

Freshman: Students who have completed fewer than 45 quarter units of college credit.
Sophomore: Students who have completed 45 or more quarter units of college credit and have not earned a degree.

High School Admissions (Concurrent Enrollment)

Beginning with the summer session, students who have completed their sophomore year of high school may apply to De Anza as special part-time students. California regulations restrict high school students to enroll in classes that are enrichment, vocational or otherwise not available at their high schools. High school students may not enroll in Basic Skills (200 level), ESL, guidance or other restricted courses. It is recommended that high school students enroll in no more than 11 units during a regular term or 5.5 units during the summer. If high school students register for more than 11 units, they will be charged full fees.

High school students wishing to enroll in English, math and/or some science classes must complete a placement test. Information regarding appointment and placement testing times can be found on the De Anza website.

High school students attending De Anza are held to the same requirements, standards and policies as other college students, and should be aware of the Student Code of Conduct. They also receive the same FERPA (Family Educational Rights and Privacy Act) protections as other students, and their records cannot be released to family members without their consent.

High school students should be aware that course content may be adult in nature. De Anza College recommends that parents be aware of the “open” campus environment, and discuss safety and accountability issues with their student prior to enrollment.

All coursework earned at De Anza is to be reported to any transfer college or university to which the high school student applies. Transcripts will not be automatically mailed to the student or the student’s high school. Grade information can be accessed through MyPortal. Official transcripts may be requested through MyPortal or via the De Anza webpage by searching on “transcripts.”

Service Areas

The Foothill-De Anza Community College District operates two colleges—De Anza College in Cupertino and Foothill College in Los Altos Hills. De Anza College serves the Fremont Union High School District, which includes Cupertino, Monte Vista and parts of Sunnyvale, San Jose, Santa Clara, Los Altos and Saratoga. Foothill College primarily serves the communities of Palo Alto, Los Altos, Mountain View and Los Altos Hills. These cities are in the Palo Alto Unified School District and the Mountain View-Los Altos Union High School Districts.

High School Completion

Many high schools recommend that students 18 years or older without a high school diploma complete their high school requirements by taking college courses. Students choosing to earn a diploma in this way should obtain a statement from their

host high school principal or counselor indicating:

1. The necessary subjects to meet graduation requirements and the number of quarter credits in each;
2. A list of De Anza courses that may satisfy these high school requirements;
3. The total number of quarter units required, including electives; and
4. Approval to use De Anza credit to meet high school requirements.

The California Department of Education recommends that college credit equal twice the number of units earned in high school; for example, two college units equal four high school semester periods.

Once De Anza courses have been completed, students should request that an official transcript be sent to the high school. Students may also enroll in additional courses not required for the diploma.

There are new regulations for students who have not earned a high school diploma. These students are no longer eligible for federal financial aid effective July 2012. Wherever possible, De Anza recommends that students who are close to earning a high school diploma or GED complete those requirements so that they may apply and be considered for financial aid when they attend De Anza.

Evening and Weekend Classes

De Anza offers a wide range of evening and weekend courses on campus, at other Cupertino and Sunnyvale sites and online. Certain services are available on a limited basis on Saturdays. Check the De Anza website at www.deanza.edu and the class listings for more information.

Summer Sessions

De Anza offers day and evening summer classes in sessions of varying lengths. Summer courses are comparable in academic standards, content and earn similar credits as classes offered during regular quarters. Summer enrollment enables students to complete prerequisites or accelerate their progress. It also allows high school students who have completed their sophomore year to take enrichment or vocational courses, or enhance their college applications by completing college-level work. All regular term attendance and academic policies apply to summer sessions.

Attendance

Instructors determine individual class attendance policies, which are distributed to students at the beginning of each quarter. State guidelines also recommend that absences in excess of one week’s class meetings may be considered excessive. Faculty may drop students for excessive absences, which will contribute to the total allowable enrollments in a course. (See Excessive Drops)

Auditing Classes

Students who have satisfactorily completed a class for the maximum allowable times may be able to audit. Instructor and division dean approval is required. Audit requests cannot be processed until the second week of class or later. A \$10 per unit fee is assessed for audited classes. Course audit request forms are available at www.deanza.edu/registration/forms.html. Course audits may not be approved to override repetition rules.

Catalog Rights

The college catalog serves as an agreement between the college and students. Students should be aware of published requirements, regulations and guidelines. De Anza students may follow the degree/certificate and general education requirements in effect for the catalog year in which they first enroll, or any subsequent catalog, providing they are continuously enrolled. Students may choose one catalog year for meeting general education requirements and another catalog year for meeting major requirements. It is recommended, however, that students choose the most recent catalog year for completing major requirements.

De Anza reserves the right to change catalog rights by modifying program requirements based upon legal mandate and accreditation standards.

College Level Examination Program (CLEP) Examinations

Some CLEP exams with qualifying scores are accepted at De Anza College for granting credit and/or course placement. Official (sealed) exam reports should be submitted to the Assessment Center. For more information, contact the Assessment Center.

Location: Student and Community
Services Building

Telephone: 408.864.8717

Computer and Network Use

Rights and Responsibilities (Board Policy 3250)

Foothill-De Anza Community College District ("district") owns and operates a variety of computer and communication systems, including voicemail, electronic mail (e-mail), telephone and access to the Internet, which are provided for the use of district faculty, administrators, staff and students in support of the programs of the colleges and district. Hereinafter, this system and all of its component parts shall be referred to as the "district network." This network establishes a communications platform that often substitutes for in-person meetings regarding district business.

The Computer and Network Use: Rights and Responsibilities Policy 3250 ("the policy") applies to all members of the district community using the district network including faculty, administrators, staff, students, independent contractors and authorized guests. The policy covers use of computer equipment and communication systems at any district facility in computer labs, classrooms, offices, libraries and the use of the district servers and networks from any location. If any provision of this policy is found to be legally invalid it shall not affect other provisions of the policy as long as they can be effective without the invalid provision.

Ownership Rights

The policy is based upon and shall be interpreted according to the following fundamental principle: the entire district network, and all hardware and software components within it, is the sole property of the district which sets the terms and

conditions of its use consistent with the law. Except as provided in board policy or collective bargaining agreements pertaining to intellectual property rights, employees and students have no rights of ownership to these systems or to the information they contain by virtue of their use of all or any portion of the district network.

Privacy Interests

The district recognizes the privacy interests of faculty and staff and their rights to freedom of speech, participatory governance and academic freedom as well as their rights to engage in protected union and concerted activity. However, both the nature of electronic communication and the public character of district business make electronic communication less private than many users anticipate. In addition the district network can be subject to authorized and unauthorized access by both internal and external users. For these reasons, there are virtually no online activities or services that guarantee an absolute right of privacy, and therefore the district network is not to be relied upon as confidential or private. Nonetheless, the district seeks to afford e-mail communication privacy protections comparable to those it traditionally affords paper mail and telephone communications.

District Rights

System administrators may access user files or suspend services they manage without notice:

1. to protect the integrity of computer systems;
2. under time-dependent, critical operational circumstances;
3. as required by and consistent with the law; or
4. when it is reasonable to believe that violations of law or district policy or procedures have occurred.

For example, system administrators, following organizational guidelines, may access or examine individual files or accounts based on suspicion that they have been corrupted or damaged or subject to unauthorized use or misuse. In such cases of access without notice, data or information acquired may be used to initiate or extend an investigation related to the initial cause or as required by law or Board policy. Such data or information may also be used as grounds for appropriate personnel action.

User Rights

While the district monitors electronic usage as part of its normal network operating procedures, the district does not routinely inspect or monitor users' computer hardware or files, e-mail, and/or telephone message system, nor disclose information created or stored in such media without the user's consent. The district shall attempt to notify users before accessing computer hardware and files or prior to suspending service. In the event that the district acts without user consent, under its District Rights specified above, the district shall do so with the least perusal of contents and the least action necessary to resolve the immediate situation. When the district accesses files without user consent, it shall notify the user as soon as possible of its access and provide the reason for its action.

User Responsibilities

The Board recognizes that computers and networks can provide access to resources on and off campus, as well as the ability to communicate with other users worldwide. Such open access is a privilege and requires that individual users act responsibly. Users must respect the rights of other users, respect the integrity of the systems and related physical resources and observe all relevant law, regulations and contractual obligations. For district employees, the intended uses of the district network are those which are reasonable and necessary for the pursuit of job duties; for students, the intended uses are those which are reasonable and necessary for the pursuit of instructional activities. Although personal use is not an intended use, the district recognizes that the network will be used for incidental personal activities provided that such use is within reason and provided that such usage is ordinarily on an employee's own time, is occasional, and does not interfere with or burden the district's operation.

"Unauthorized uses" include prohibited uses and any other use for a prohibited purpose, including illegal activities, messages which may constitute discrimination or harassment under state or federal law, or anything that interferes with the intended use. These types of prohibited uses and purposes are further defined in *Administrative Procedure 3250*.

All users of the district network must read, understand and comply with this

policy as well as *Administrative Procedures 3250*, and any additional guidelines established by the district. Such guidelines will be reviewed by the district and may become subject to Board approval as a district policy or procedure. By using any part of the district network, users agree that they will comply with this policy.

Copies of this policy can be found in the policies section of the college catalogues, student handbooks, faculty handbooks, new classified employee handbook and the handbook for new administrators. Copies of this policy are also available in the District Human Resources Office, the Office of the Dean of Student Development and EOPS (De Anza), the Office of the Dean of Student Affairs and Activities (Foothill), and on the district's website at www.fhda.edu.

Enforcement of the Policy

The Board directs the Chancellor or designee to enforce all existing federal and state law and district and college policies, including not only those laws and regulations that are specific to computers and networks but also those that apply generally to personal conduct. Violations of this policy will be dealt with in the same manner as violations of other district policies or standards of behavior and may result in disciplinary action, subject to applicable due process requirements.

Users who believe this policy has been misinterpreted or misapplied may file a complaint in accordance with the Complaint Procedures found in *Administrative Procedures 3250*. Students who do not observe the requirements of this policy may be in violation of the Student Code of Conduct and subject to student discipline.

This policy and *Administrative Procedures 3250* shall be distributed to all new and existing employees. Nothing in this policy should be construed to interfere with First Amendment rights or with the academic freedom of faculty as outlined in Board Policy 4190.

Both the Board Policy Manual and Administrative Procedures Appendix may be found at www.fhda.edu/about_us/board/policy.

Misuse of Computer Information (AP 3250)

This administrative procedure implements Board Policy 3250.

Abuse of computing, networking or information resources contained in or part of the District Network may result in the loss of computing privileges. Additionally, abuse can be prosecuted under applicable statutes. Users may be held accountable for their conduct under any applicable District or college policies, procedures, or collective bargaining agreements. Complaints alleging abuse of the District Network will be directed to those responsible for taking appropriate disciplinary action. Illegal reproduction of material protected by U.S. Copyright Law is subject to civil damages and criminal penalties including fines and imprisonment.

Examples of behaviors constituting abuse which violate District Board Policy 3250 include, but are not limited to, the following activities:

System Abuse

- Using a computer account that one is not authorized to use.
- Obtaining a password for a computer account that one is not authorized to have.
- Using the District Network to gain unauthorized access to any computer systems.
- Knowingly performing an act which will interfere with the normal operation of computers, terminals, peripherals or networks.
- Knowingly running or installing on any computer system or network, or giving to another user, a program intended to damage or to place excessive load on a computer system or network. This includes but is not limited to programs known as computer viruses, Trojan horses and worms.
- Knowingly or carelessly allowing someone else to use their account who engages in any misuse in violation of Board Policy 3250 or of this AP 3250.
- Forging e-mail messages.
- Attempting to circumvent data protection schemes or uncover or exploit security loopholes.

- Masking the identity of an account or machine.
- Deliberately wasting computing resources.
- Downloading, displaying, uploading or transmitting obscenity or pornography, as legally defined.
- Attempting without District authorization to monitor or tamper with another user's electronic communications, or changing, or deleting another user's files or software without the explicit agreement of the owner, or any activity which is illegal under California Computer Crime Laws.
- Personal use which is excessive or interferes with the user's or others' performance of job duties, or otherwise burdens the intended use of the Network.
- Illegal downloading and/or distribution of copyright-protected materials, including but not limited to music and videos.

Harassment

- Using the telephone, e-mail or voice mail to harass or threaten others.
- Knowingly downloading, displaying or transmitting by use of the District Network, communications, pictures, drawings or depictions that contain ethnic slurs, racial epithets, or anything that may be construed as harassment or disparagement of others based on their race, national origin, sex, sexual orientation, age, disability, religious or political belief.
- Knowingly downloading, displaying or transmitting by use of the District Network sexually explicit images, messages, pictures, or cartoons when done to harass or for the purposes of harassment.
- Knowingly downloading, displaying or transmitting by use of the District Network sexually harassing images or text in a public computer facility, or location that can potentially be in view of other individuals.
- Posting on electronic bulletin boards material that violates

existing laws or the colleges' Codes of Conduct.

- Using the District Network to publish false or defamatory information about another person.

Commercial Use

- Using the District Network for any commercial activity, without written authorization from the District. "Commercial activity" means for financial remuneration or designed to lead to financial remuneration.

Copyright

- Violating terms of applicable software licensing agreements or copyright laws.
- Publishing copyrighted material without the consent of the owner on District websites in violation of copyright laws.

Exceptions

Activities by technical staff, as authorized by appropriate District or college officials, to take action for security, enforcement, technical support, troubleshooting or performance testing purposes will not be considered abuse of the Network.

Although personal use is not an intended use, the District recognizes that the Network will be used for incidental personal activities and will take no disciplinary action provided that such use is within reason and provided that such usage is ordinarily on an employee's own time; is occasional and does not interfere with or burden the District's operation. Likewise, the District will not purposefully surveil or punish reasonable use of the network for union business-related communication between employees and their unions.

Complaints

A user who asserts that the District or District personnel have violated this policy shall file a complaint with his or her immediate supervisor with a copy to the Vice Chancellor of Human Resources, and a copy to the employee's bargaining unit. The supervisor shall notify the supervisor of the alleged violator to discuss the complaint. The supervisor of the complainant shall initiate an investigation if necessary and determine an appropriate remedy/resolution in consultation with the Vice Chancellor of Human Resources. In cases where the supervisor is part of

the complaint, the complaint shall be filed with the next level of supervision for investigation and resolution and/or remedy. The complainant shall be informed in writing 1) of the initiation of the investigation, and 2) of its outcome as appropriate, with copies to the Vice Chancellor of Human Resources and the employee's bargaining unit. Complainants dissatisfied with the resolution/remedy have full recourse to relevant contractual protections and/or legal action.

Illegal Distribution of Copyrighted Materials

De Anza College students are prohibited from using the Foothill-De Anza (FHDA) Community College District's information network to illegally download or share music, video and all other copyrighted intellectual property. De Anza College supports the Higher Education Opportunity Act and the Digital Millennium Copyright Act including efforts to eliminate the illegal distribution of copyrighted material. Under the law, college administrators may be obligated to provide copyright holders with information about users of the FHDA information network who have violated the law.

Be aware that illegal forms of downloading and file-sharing as well as the unauthorized distribution of copyrighted materials, including unauthorized peer-to-peer file sharing, are violations of the law and may subject students not only to academic sanctions from the college but also criminal and civil penalties, including a lawsuit against students by the Recording Industry Association of America (RIAA). Learn more at www.campusdownloading.com.

Penalties for copyright infringement include civil and criminal penalties. In general, anyone found liable for civil copyright infringement may be ordered to pay either actual damages or "statutory" damages affixed at not less than \$750 and not more than \$30,000 per work infringed. For "willful" infringement, a court may award up to \$150,000 per work infringed. A court can, in its discretion, also assess costs and attorneys' fees. For details, see Title 17, United States Code, Sections 504 and 505. Willful copyright infringement can also result in criminal

penalties, including imprisonment of up to five years and fines of up to \$250,000 per offense. For more information, please see the website of the U.S. Copyright Office at www.copyright.gov, especially their FAQ's at www.copyright.gov/help/faq.

In addition to being illegal, file sharing drains the FHDA network's bandwidth, which slows computer connections for students and employees who are using the network for legitimate academic purposes and ultimately costs the college money.

The college has developed policies and consequences to ensure that students respect music and other forms of intellectual property as well as make responsible use of the Internet.

There are plenty of easy, affordable ways to get music online legally. To protect their intellectual property, companies have licensed hundreds of digital partners that offer a range of legal downloading options, including download and subscription services, legitimate peer-to-peer services, video-on-demand, podcasts and CD kiosks. For a list of sources that offer legal downloading sites, access www.campusdownloading.com/legal.htm or www.educause.edu/Resources/Browse/LegalDownloading/33381.

Continuous Enrollment

For the purpose of determining the catalog year used to evaluate degree or certificate requirements, students must be continuously enrolled since that term. Continuous enrollment is equal to at least one semester or two quarters each academic year at De Anza, Foothill, any other California community college, CSU or UC. A single "W" in a term qualifies as enrollment in that term.

Credit by Examination (CBE)

Students seeking credit by examination must first successfully complete 15 units at De Anza. Following this, students may file for credit by examination during any regular quarter for courses in which s/he is especially qualified through previous training or experience, and for which prior AP or college credit has not been awarded.

Students may obtain the appropriate forms from the Counseling and Advising Center.

Additional requirements for credit by examination:

1. Students must be enrolled in the courses and the instructor has outlined successful completion requirements.
2. No course may be challenged after meeting twice the number of meetings per week.
3. Students may not request CBE for courses for which they have already earned a grade.
4. CBE units may not be used to meet the 24 residency units required to earn a De Anza degree.
5. No more than 45 CBE units may be earned.
6. Students who successfully challenge a course through credit by examination may not subsequently challenge a course normally preceding it; for example, challenging Chemistry 1B and then challenging Chemistry 1A.
7. When transferring to another college or university, accepting credit by examination requirements/units is at the discretion of the transfer institution.

Challenge is limited to those courses recommended by the divisions and approved by the vice president of Instruction. Special limitations exist for challenging courses in sequence. The examination may include oral, written, or skill tests, or a combination and will be sufficiently comprehensive to assess the student's knowledge and skills commensurate with a student successfully completing the course.

The credit by examination grade will be noted on the student's transcript at the end of the quarter. Students who do not successfully challenge may not remain enrolled in the course.

The following courses are challengeable:

Applied Technologies

AUTO 50A and 50B, AUTO 51A and 51B (*Must pass A and B classes to receive credit.*)
MCNC 71

Biological, Health and Environmental Sciences

HTEC 50, 60A, 73
NURS 50

Business/Computer Systems

ACCT 1A
CIS 2, 31, 50, 66, 67A, 67B, 74, 75A, 156A, 156B, 171A, 171B, 171C, 171D, 172, 172A, 173, 174, 174A, 175, 175A
(*CIS classes that have lab hours are not challengeable.*)

Creative Arts

ARTS 53A
F/TV 20

Intercultural/International Studies

The Foreign Language Department does not give credit by examination for any foreign language class.

Students can place at the appropriate level in the foreign language curriculum, depending on their language proficiency level.

Language Arts

JOUR 61

Physical Science/Math/Engineering

None

Social Science

ADMJ 1, 60
PARA 94, 95

A special no-credit challenge exam is available to meet the California State/Local Government portion of the CSU United States History, Constitution and American Ideals requirement.

Crime Awareness and Campus Security Summary Report

In compliance with Section 201 Public Law 101-542, as amended by Public Law 102-26, De Anza College provides the following Crime Awareness & Campus Security Act Summary Report for students, faculty and staff:

Crime	Year 2009	Year 2010	Year 2011
Aggravated assault	0	0	0
Arson	0	0	0
Burglary	22	19	9
Homicide	0	0	0
Vehicle theft	3	1	2
Rape	0	0	0
Robbery	0	1	0

Arrests

Statistics concerning the number of arrests for the following crimes occurring on campus:

	Year 2009	Year 2010	Year 2011
Alcohol violations	0	1	1
Drug violations	1	1	1
Warrants	1	2	2
Other	3	8	0

DASB Card Policies

1. The DASB Card is the property of De Anza Associated Student Body and entitles the student to access and service privileges as long as the De Anza Student Body fees are current. Certain access and privileges may be denied if fees are delinquent or otherwise not current.
2. The initial DASB Card is free with the payment of the quarterly student body fees. Subsequent or replacement cards are subject to existing Replacement Card Policies and will be charged a \$5 fee. To avoid paying the replacement fee, students are encouraged to retain the card for future use when not continuously enrolled or when leaving campus for the summer.
3. The DASB Card will serve as an official ID card for access to numerous labs and the Library as well as events and services on campus. Therefore, the card should be carried at all times while students are on campus and at campus-sponsored events.
4. The DASB Card shall not be transferred, altered or tampered with in any way except as authorized by De Anza College officials. Strict penalties may apply for unauthorized actions.
5. With the exception of the campus police, campus departments may not hold the DASB Card for any reason. Recovered cards should be returned to the Card Office immediately. The card must be surrendered when issued a replacement.
6. If the DASB Card is lost, stolen or damaged, the Card Office should be notified immediately.

7. The DASB Card should be treated as cash and kept secured at all times. Students are advised not to give their card to anyone at any time. The maximum amount of dollars that can be placed on the unsecured electronic cash purse is \$100. Purchases made with their DASB Card over \$25 will require a PIN ID. Additional purses will be available on their DASB Card at a future date for higher dollar amount, secured purchases.

Replacement Fee

8. The replacement fee is \$5.
9. If a person is not registered for one full year, s/he will not be charged a replacement fee for a new card.
10. If the DASB Card is stolen, the replacement fee will be waived if a police report from the Santa Clara County Sheriff's Office is provided to the Card Office.

Refund

11. Students are advised not to give their card to anyone at any time. If the DASB Card is lost/stolen/damaged, money in the unsecured electronic cash purse cannot be refunded until the card is located or destroyed and the amount is verified. All refunds will be issued by check.
12. If the DASB Card is found/returned subsequent to the issuance of a new card, money that can be verified to be in the electronic cash purse can be transferred to the new card.
13. If a student is leaving campus permanently and wishes to turn in the DASB Card, a refund can be requested for the amount verified in the unsecured electronic cash purse.

The DASB Card policies are subject to change. *December 2005*

Drug and Alcohol Policy

The unlawful possession, use or distribution of any illicit drug or alcohol by students or employees on college property or at college-sponsored activities or events is prohibited. Violation may constitute criminal conduct which could result in criminal prosecution under state and/or federal law. It is the

policy of the college to impose appropriate disciplinary sanctions on employees and students for the unlawful possession, use or distribution of illicit drugs or alcohol. Appropriate disciplinary sanctions may include suspension or expulsion for students or suspension or termination for employees, and may also include requiring the completion of a rehabilitation program. The standards of conduct for students and the applicable sanctions for violating the standards are contained in the Foothill-De Anza Community College District Board Policy on Student Rights and Responsibilities AP5510 and AP5520. The standards of conduct and sanctions applicable to employees are contained in the Foothill-De Anza Community College District Board Policy on a Drug-Free Workplace, Board Policy Number 4500, in the applicable collective bargaining agreements and in employee handbooks.

Due Process Procedures and Student Conduct

Individuals who elect to become students at De Anza College are afforded certain rights and privileges outlined in the De Anza College Students Rights and Responsibilities Policy and, at the same time, assume certain obligations for their personal conduct as set forth in the De Anza College Due Process Procedures. For additional information, refer to the college policy on Student Rights and Responsibilities, which can be obtained from the offices of the De Anza College President, Vice President of Instruction, Vice President of Student Services, Dean of Student Development and the Office of College Life.

Family Educational Rights and Privacy Act (FERPA)

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."

- 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.
- Students have the right to request that a school correct records that they believe to be inaccurate or misleading. If the school decides not to amend the record, the student then has the right to a formal hearing. After the hearing, if the school still decides not to amend the record, the 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 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;
 - organizations conducting certain studies for or on behalf of the school;
 - accrediting organizations;
 - to comply with a judicial order or lawfully issued subpoena;
 - appropriate officials in cases of health and safety emergencies; and

- ❑ state and local authorities, within a juvenile justice system, pursuant to specific state law.

Schools may disclose, without consent, “directory” information such as a student’s name, address, telephone number, date and place of birth, honors and awards, and dates of attendance. However, schools must tell students about directory information and allow students a reasonable amount of time to request that the school not disclose directory information about them. Schools must notify students annually of their rights under FERPA. The actual means of notification (special letter, inclusion in a PTA bulletin, student handbook or newspaper article) is left to the discretion of each school.

Foothill-De Anza Administrative Board Policy AP 5045 also identifies the college registrar as the “Records Officer” required by FERPA. Current and former students can review their education records by completing or filing a request in the Admissions and Records Office. Such records will be made immediately available when possible or within 15 days of written request. If the review results in a dispute, the college registrar will initiate an informal proceeding in an attempt to resolve the matter. If the dispute continues, a grievance may be filed with the vice president of Student Services.

Final Examinations

Final examinations are to be given in all courses. Students are responsible for taking final examinations at the scheduled time. Exam schedules are published each quarter online. Two hours will be scheduled for examinations.

Final examinations for courses shorter in length than one quarter will be given at the class meeting.

Students who miss a final examination for a legitimate reason should communicate with their instructor at once to arrange for an “I” grade. Final examinations normally will not be given in advance of the scheduled time.

Grading System

Grades are earned in each course and are recorded on the student’s permanent record. Evaluation of student achievement will be made in relation to the attainment of the specific objectives of the course. At the beginning of a course, the instructor will explain these objectives and the basis upon which grades are determined.

Dean’s List Policy

Full-time students (those taking 12 or more quarter units) must have a quarterly GPA of 3.30 or higher.

Grade Changes

Title 5 of the California State Administrative Code states, “The determination of the student’s grade by the instructor shall be final in the absence of mistake, fraud, bad faith or incompetency.” If students believe corrections should be made within the above restriction, they should first talk to their instructors. Corrections must be initiated within two years of completing any course in which a grade is being disputed.

Grade definitions are as follows:

Evaluative Symbols

Grade Points

A+	Excellent	4.0
A	Excellent	4.0
A-	Excellent	3.7
B+	Good	3.3
B	Good	3.0
B-	Good	2.7
C+	Satisfactory	2.3
C	Satisfactory	2.0
D+	Passing, less than satisfactory	1.3
D	Passing, less than satisfactory	1.0
D-	Passing, less than satisfactory	0.7
F	Failing	0.0

P Pass (at least satisfactory—units awarded not counted in GPA). This grade is assigned to those courses in which student achievement is evaluated on a Pass-No Pass basis rather than a letter grade (A, B, C, etc.). P-NP courses are so designated in the Announcement of Courses section of the catalog.

NP No Pass (less than satisfactory, or failing—units not counted in GPA). Not attaining course objectives. (Does not affect grade point average at De Anza.)

Non-Evaluative Symbols

(Not to be used in calculating GPA.)

I Incomplete. Incomplete academic work for unforeseeable, emergency and justifiable reasons at the end of the term. At least 75% of the class must have been completed to qualify for Incomplete status.

IP In Progress. The “IP” symbol denotes that the student is registered for this course, and the grading period is not complete. In Progress work will not appear on a student’s transcript until the term has officially begun. It will remain on the transcript until the student has either officially withdrawn (“W”) or a grade has been assigned.

RD Report Delayed. The “RD” symbol may be assigned by the Office of Admissions and Records only. It is to be used when there is a delay in reporting the grade of a student due to circumstances beyond the control of the student. It is a temporary notation to be replaced by a permanent symbol as soon as possible.

W Withdrawal. A W is assigned to drops after the first two weeks of a regular 12-week term and/or 20% of a course if a shorter term course. A W will be assigned to all drops between 20% and 75% of a term. After this period, a student can be awarded a W only by means of an Extenuating Circumstance Petition, in which s/he provides documentation proving “verifiable reason” such as illness, incarceration, etc. In the absence of the petition and documentation, a grade will be assigned to the student record. While a W will not be used in calculating GPA, Ws will be used as a factor in probation and dismissal procedures. (See section on “Progress Probation.”) Ws are also used to calculate enrollment limits; that is, students may not enroll in the same course more than 3 times, which includes both Ws and substandard grades.

P-NP Courses

De Anza College uses the P-NP grade for courses authorized by the Board of Trustees and Title 5. Students must request the P/NP

option within the first 30% of the course, either online or through the Admissions and Records Office.

1. Some courses are P/NP only and a letter grade cannot be assigned. Check the course description for information on grade type for the course. Letter grades are not available in these courses. (51302)
2. Other courses may allow the P-NP option. Students should be aware that some transfer schools may not accept P-NP as an option, and once the P-NP option has been chosen, it cannot be reversed per state regulations.
3. No more than 30 units of P-NP classes can be applied toward an A.A./A.S. and no P may be applied to a student's major requirements unless the course is only P-NP.
4. Units earned in P-NP will not be calculated in the GPA; however, NP shall be considered when determining Academic Progress, probation and dismissal procedures. (See section on Progress Probation)

Graduation Application

An application for graduation must be completed and submitted to the Admissions and Records Office prior to receiving a degree or certificate. Students should meet with a counselor the quarter preceding the one in which they plan to graduate to review their coursework and complete the graduation petition. This will allow time to make any necessary schedule changes in their last quarter.

Degrees are awarded at the end of all terms.

Degree Progress Report (DegreeWorks, Degree Audit)

Students preform a degree audit in MyPortal to see what courses they have completed and which requirements still need to be completed to finish their degree or certificate. DegreeWorks will also indicate what percentage of their degree has been completed, and this information may be used by Financial Aid to determine if students are "on pace" to complete their degree and maintain their financial aid eligibility. DegreeWorks also has an educational plan function that allows students

or counselors to create a multi-quarter plan for registration, including their degree requirements. This plan may also be used by Financial Aid in appeals or to determine if a student has an approved plan on file.

Students who are considering a change of major can run "what if" scenarios to compare their progress in other majors. A "change major" function is available in MyPortal if students decide they are making better progress in a different major/program.

Graduation Honors

Students who have achieved a De Anza College cumulative grade point average between 3.30 and 4.00 will, upon graduation, be awarded associate degree honors as follows:

4.00	Highest Honors	Summa Cum Laude
3.50-3.99	High Honors	Magna Cum Laude
3.30-3.49	Honors	Cum Laude

Guidelines for Course Offerings

To carry out its mission in the Foothill-De Anza Community College District, each college shall ensure students in college-approved, two-year degree A.A./A.S. programs that they will be able to obtain the degree in two years providing they adhere to the prescribed pattern and sequence of courses and are ready to begin college-level work upon entry. Courses that meet major requirements shall be listed in curriculum sheets distributed by each college; and each college, obligated under the policy, shall meet to ensure those courses are offered at one or both of the two colleges with appropriate frequency.

Minimum class size guidelines apply to all lecture, lecture-lab and laboratory classes. A minimum class size of 20 is generally required. Special circumstances, however, may necessitate the continuation of a class below the 20-student minimum. The key factor in making a decision to continue will be based upon program needs: e.g., second or third quarter or second-year sequential courses, courses required for an identified major or career subject area, combined courses meeting at the same hour with the same instructor, and one-of-a-kind offerings needed for graduation or transfer. Exceptions to minimum class

size guidelines may also be based on the following:

- a. limited classroom or laboratory facilities,
- b. statutory and state regulations mandating class size, Independent Study and Special Projects.

Other circumstances that warrant exception may be made by the Office of Instruction.

Class size of all sections is monitored by the Office of Instruction throughout the registration process. In consultation with the appropriate division dean, low-enrolled classes will be identified and an appraisal made of the enrollment pattern. When warranted, sections may be cancelled early in the registration process to foster improved enrollment in remaining sections.

Matriculation

Matriculation is a process and a partnership between De Anza College and the student designed to help students achieve their academic goals. The main goals of matriculation are to support student access and success through the following components:

1. Admissions
2. Assessment
3. Orientation
4. Counseling and Advisement
5. Follow-up

1. Admissions

New and returning students' first step in enrolling at De Anza is to submit an application for admission. Students submit the application online via the website at www.deanza.edu.

2. Assessment

Placement testing assures students receive a fair and accurate assessment of current skill levels, and provides placement in applicable courses. If students plan to take English, English as Second Language (ESL), math, Chemistry 1A, Biology 6A or Biology 40A at De Anza, they must take the assessment tests or provide college transcript proof of prerequisite courses. Assessment uses multiple measures to place each student in the proper class. It is important to complete assessment testing before meeting with a counselor. Some testing results may take up to three weeks. Visit the Placement/

Assessment website for information on dates, times and locations of tests.

Location: Student and Community Services Building

Telephone: 408.864.8717

Website: www.deanza.edu/admissions/placement

3. Orientation

De Anza offers both online and traditional instruction methods of providing orientation to new students. Students who are not exempt* from matriculation are sent information to register for Counseling 200, Orientation to College, a 0.5-unit course that covers important college policies and procedures, specific information for certificate, degree and transfer goals, and useful resources to be successful in achieving those goals. The student will also develop an educational plan in the Counseling 200, Orientation to College class. Please visit the website for more information.

* Students who already have a college degree or are only taking classes for personal enrichment are exempted from taking Counseling 200.

Website: www.deanza.edu/counseling/newstudents.html

4. Counseling and Advisement

Counseling and advising services assist students in establishing their educational goals and identify support services to achieve those goals. The Counseling and Advising Center, located in the Student and Community Services Building, provides comprehensive services for students who seek assistance in dealing with a variety of concerns. Academic advisers assist with developing academic plans. Counselors assist with academic advising, educational, personal and career concerns. Please see the website for more information.

Website: www.deanza.edu/counseling

5. Follow-Up

Follow-up includes supporting students' progress toward their educational goals and providing early intervention if they encounter difficulties, usually through follow-up counseling and advising sessions and more comprehensive referrals to additional student support services such as tutoring, mentoring and support programs, etc.

Frequently Asked Questions

What are my rights as a newly matriculated student?

Students have the right to the following matriculation services: admissions, assess-

ment and placement testing, orientation, counseling and advising, and follow-up student support services. Students are further entitled to:

- participate in the development of an educational plan;
- equal opportunity to engage in the educational process regardless of gender, marital status, sexual orientation, disability, race, color, religion or national origin;
- challenge any prerequisite or placement test result, using established procedures available through the Assessment Center in the Student and Community Services Building; and
- review the matriculation regulations of the California Community Colleges and file a complaint when the college has engaged in any practice prohibited by these regulations.

What are my responsibilities as a matriculated student?

Students have the responsibility to express a broad educational intent at entrance, complete assigned coursework, adhere to all college rules, regulations and policies and participate in the development of an educational plan.

Do I have to participate in the matriculation program?

Students who declare a goal of certificate, degree, transfer or undecided and do not already hold at least an associate degree are required to matriculate. However, a student can submit a request to waive matriculation requirements to the dean of Counseling and Matriculation for review. De Anza strongly encourages students to participate in matriculation services as research demonstrates that new students who take advantage of assessment, orientation and counseling services are more successful in achieving their educational goals than those students who do not.

Prerequisites

Prerequisites, corequisites and advisories are intended to guide students into courses in which they will have the greatest chance for academic success.

- **Prerequisite** means a condition of enrollment that 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 that a student is required to simultaneously take in order to enroll in a course or educational program.

- **Advisory or recommended preparation** means a condition of enrollment that a student is advised, but not required, to meet before or in conjunction with enrollment in a course or educational program.

Challenging Prerequisites

Students may challenge prerequisites and corequisites if they can demonstrate that:

- students have the knowledge or ability to succeed in the course without the prerequisite or corequisite
- the prerequisite or corequisite has been established in an arbitrary manner
- the prerequisite is discriminatory or is applied in a discriminatory manner
- the prerequisite course is not reasonably available

To challenge a prerequisite, contact the Assessment Office located in the Student and Community Services Building.

Academic Probation

Academic probation occurs when a student has attempted a total of 18 quarter units and earned a cumulative GPA of less than 2.0.

There are five levels of academic probation: Level 1, 2, 3, Pre-Dismissal and Dismissal.

Students will be placed on academic probation each quarter (excluding summer) as long as their cumulative GPA is below a 2.0.

Students will advance to the next level of academic probation in each consecutive enrolled quarter in which they do not earn a cumulative GPA of 2.0. Students who earn a cumulative GPA of less than 2.0 in all units attempted in each of the five consecutive enrolled quarters will be in Dismissal status. Students have the option to appeal.

Current and detailed information on the De Anza Probation policy can be found on the Counseling and Advising website at www.deanza.edu/counseling.

Important Information:

The De Anza College Probation/Dismissal system might not accurately reflect the correct academic probation status for students who have enrolled at both Foothill College and De Anza College. Students who are either enrolled within the current quarter at both colleges or have a past academic history with both colleges, should go to the Counseling Center at De Anza College for assistance regarding their probation/dismissal status.

If at any time students attend both De Anza College and Foothill College in the Foothill-De Anza Community College District, it is their responsibility to keep track of their grades to ensure that they remain in good standing at each college. Although students may be in good standing at Foothill College, if at De Anza College they fall below the required academic performance, the above probation and dismissal procedures will apply to them at De Anza.

Military Service School Credit

Service Schools

Students may receive college credit for military service schools by submitting a copy of their DD214 or DD295 or Army/American Council on Education Registry transcript. A request for evaluation must be made by seeing a counselor or contacting the Evaluations Office. **Basic Military Training:** Nine units of credit are awarded for basic military training including three units of physical education and six units of elective credit.

Mutual Respect*

De Anza College shall take all steps necessary to provide a positive educational and employment environment that encourages equal educational opportunities. The college will actively seek to educate staff and students on the deleterious effects of expressions of hatred or contempt based on race, color, national or ethnic origin,

age, gender, religion, sexual orientation, marital status, or physical or psychological disability; and will promote equality and mutual respect and understanding among all groups and individuals.

Nonsmoking Areas

The goal of the Foothill-De Anza Community College District is to provide a safe learning and working environment for students and employees. Smoking is prohibited in all indoor and outdoor campus locations, with the exception of designated parking lots.

Smoking is prohibited in district vehicles. "No Smoking" signs shall be conspicuously posted at building entrances and in employee lounges, rest rooms, locker rooms, dressing areas, cafeterias, lunchrooms, and stadium and sports facilities. In addition, designated parking lot areas for smoking areas will be clearly marked. Refer to California Government Code Section 7596; Board of Trustees Policy 3217. Noncompliance will result in fines.

Off-Campus Activities/Trips

Certain portions of the educational programs require off-campus attendance for scheduled field trips and excursions. Unless the course syllabus or the instructor state otherwise, each student is responsible for arranging his/her own transportation. Pursuant to 5 CCR section 55220 (h), each student making a field trip or excursion shall be deemed to have waived all claims against the district for injury, accident, illness or death occurring during, or by reason of, the field trip or excursion by completing the *required* Student Field Trip/Excursion Agreement Voluntary Assumption of Risk Form.

Open Classes

It is the policy of the district that every course—unless specifically exempted by statute—will be open to any student who has been admitted to the college and meets the class prerequisites. This policy applies to courses which must report the class average daily attendance for state aid purposes. It was established under Chapter II, Division 2, Part VI, Title 5 of the California Code of Regulations.

Requesting and Receiving Accommodation(s) Under ADA*

The Board of Trustees upholds that, for persons with disabilities, improving the access to educational and employment opportunities must be a priority. The Board of Trustees directs the administration to take the necessary actions to implement the requirements of the Americans with Disabilities Act and Section 504 of the Rehabilitation Act.

The Foothill-De Anza Community College District shall not discriminate against a qualified individual with a disability because of the disability with regard to employment or with regard to the provision of district programs, services and activities.

A person who is otherwise qualified may request accommodation related to his or her disability, provided that the accommodation does not impose an undue hardship on the district. The procedures for requesting accommodation are maintained in the President's Office, the Office of the ADA Coordinator and in the District Human Resources Office. The ADA coordinator for De Anza College is Michele LeBleu-Burns, dean of Student Development and EOPS, 408.864.8218.

Revision of Regulations

Any regulations adopted by the faculty and administration of the college shall have the same force as a printed regulation in the

* Foothill-De Anza's Administrative Procedures: Investigation and Resolution of Complaints Regarding Harassment and Discrimination, Procedures to Resolve Student Complaints of Sexual Harassment and Discrimination, and the district's Unlawful Discrimination Complaint forms are available in the President's Office, the Office of the Vice President for Student Services, the District Human Resources Office, and the district Chancellor's Office. Detailed information regarding the sexual harassment, mutual respect, and ADA policies are located at the following campus locations: Counseling Division, Health Services Office, Office of College Life, Learning Center Reference Desk, division offices, and Staff and Organizational Development.

catalog and shall supersede, upon public announcement, by posting on official bulletin boards and by announcement, any ruling on the same subject that may appear in the catalog or other official bulletins of the college.

Sexual Assault Including Rape

De Anza College will not tolerate any form of sexual assault, including rape, on college property or at any college-sponsored event. The college realizes that these situations may or may not be deemed criminal offenses and so may have to be handled both internally by college administrative action and externally by the appropriate law enforcement agency. Internally, disciplinary sanctions may include suspension or expulsion for students or suspension or termination for employees. The standards of conduct for students and the applicable sanctions for violating the standards are contained in the Student Rights and Responsibilities.

Decisions regarding discipline of employees will be made in accordance with applicable legal and contractual provisions and procedures.

When a victim of rape or any other sexual assault chooses to go to either the Counseling Division and/or Health Services, the strictest of confidentiality will be maintained. If the victim decides to report the incident to the appropriate law enforcement agency, the college will make every effort to ensure that it will be handled in the most private and confidential manner as possible.

Sexual Harassment*

Members of a college community—students, faculty, staff and visitors—must be able to study and work in an atmosphere of mutual respect and trust. It is the policy of the Foothill-De Anza Community College District to provide an educational, employment and business environment free of unwelcome sexual advances, requests for

sexual favors, and other verbal or physical conduct or communications constituting sexual harassment as defined and otherwise prohibited by Federal and State law. Sexual harassment may include, but is not limited to:

1. Conduct of a sexual nature that is explicitly or implicitly made a term or condition of an individual's employment or education.
2. A decision based on the submission to or rejection of a sexual advance.
3. Verbal or physical conduct of a sexual nature that interferes with an individual's performance or creates an intimidating work or educational environment.

Immediate action shall be taken against individuals determined to be in violation of this policy. Any individual who believes that he or she has been a victim of sexual harassment may file a complaint within one year of the date on which the complainant knew or should have known of the facts of the sexual harassment incident.

Complaints of sexual harassment filed by an employee of the district against another employee or student, or a student against an employee of the district shall be referred and handled pursuant to the district's Administrative Procedures: Investigation and Resolution of Complaints Regarding Harassment and Discrimination. Such complaints should be directed to Michele LeBleu-Burns, dean of Student Development and EOPS at 408.864.8818 or the vice president of Student Services at 408.864.8330.

Complaints of sexual harassment filed by a student against another student, or student against the criteria of a program, shall be referred and handled pursuant to the district's Procedures to Resolve Student Complaints of Sexual Harassment and Discrimination. Such complaints should be directed to Michele LeBleu-Burns, dean of Student Development and EOPS at 408.864.8818 or the vice president of Student Services at 408.864.8330.

Student Grievance Procedures

De Anza College strives to treat all students fairly, but as in any complex organization, misunderstandings and even conflicts can arise from time to time. Students have certain rights under the published rules and regulations of the district and the college, the state laws regarding education, and the federal affirmative action laws. This procedure should not be used to address unlawful harassment or discrimination. If students feel they may have been subjected to unlawful harassment or discrimination, they should refer to the sexual harassment and/or antidiscrimination sections of the catalog.

If students feel that their student rights have been violated by the college—in one instance, or over a period of time in a series of events—they have the right to try to resolve the problem. In most cases, problem situations turn out better if they're attended to quickly and simply. That's why De Anza's trustees and student government set up the Student Grievance Procedures, which require a student to do just that. The complete Student Grievance Procedures follow in this step-by-step summary. Students should read them carefully if they decide to file a grievance.

Procedures:

Step 1. Students must first try to solve the problem informally. Meet with the other person(s) involved and try to solve the problem. Ask for help from any De Anza community member.

Step 2. If students still aren't satisfied, they can file a formal grievance. Upon the recommendation of the appropriate dean or administrator, students can file a grievance form. They must provide the specific rule or law (Students Rights and Responsibilities) that they feel was violated, as well as all the details of the events(s), and copies of any pertinent documents. Don't delay—to file a grievance students must be currently enrolled or have been within 30 days before filing, and they must have learned of the particular event or the latest of a series of events no more than 30 days before they

* Foothill-De Anza's Administrative Procedures: Investigation and Resolution of Complaints Regarding Harassment and Discrimination, Procedures to Resolve Student Complaints of Sexual Harassment and Discrimination, and the district's Unlawful Discrimination Complaint forms are available in the President's Office, the Office of the Vice President for Student Services, the District Human Resources Office, and the district Chancellor's Office. Detailed information regarding the sexual harassment, mutual respect, and ADA policies are located at the following campus locations: Counseling Division, Health Services Office, Office of College Life, Learning Center Reference Desk, division offices, and Staff and Organizational Development.

file. [Regardless of when students learned of the event(s), if the alleged violation(s) happened more than a year in the past the grievance won't be valid.]

Step 3. Pick up a student grievance form from the Office of Student Development and EOPS or the De Anza Associated Student Body (DASB) Office, the Office of College Life or the office of the vice president of Student Services. Assistance is available for completing the form from any faculty or staff member; or ask for help from the DASB.

Step 4. File the completed student grievance form with the Office of Student Development and EOPS. Please do not return the completed grievance form to any other office. Students will receive acknowledgement of receipt of their grievance usually within two weeks from the time it is received. The grievance will be forwarded to the dean of Student Development and EOPS.

Step 5. The Grievance Review Board will review their grievance and will decide if students met the standards for filing, and whether their grievance meets the basic standards of legitimacy for consideration. The office of Student Development and EOPS will contact them if their grievance warrants a hearing, and a hearing will be scheduled.

Step 6. The exact nature of the hearing differs from case to case and is under the direction of the grievance officer. Students can have with them, or be represented by, any other person who is not an attorney. Students can purchase (at cost) a copy of the official record of the hearing.

Step 7. The Grievance Review Board will try to reach a decision within 14 days from the time of the hearing. The board will decide, based on the outcome of the grievance, what relief (if any) students should be granted, and will forward their recommendation to the dean of Student Development and EOPS. Students will be notified by the dean of the board's recommendation.

Step 8. The college president or his/her designee has the final decision regarding the outcome. If it is determined that violation of rights is a result of a district rule or some other reason beyond the college's control, the president or his/her designee will recommend the appropriate action at a higher level, the chancellor and trustees.

Student Right-to-Know and Campus Security Act

In compliance with the federal government, De Anza College has provided a summary of the students entering De Anza College for the first time in the 2007 fall quarter:

- Students completing A.A./A.S./ certificate: 60%
- Students who transferred out: 14%

A cohort is made up of students entering college for the first time in the fall term who declared a goal of transfer, associate degree or certificate and attended full time. These students were tracked over a three-year period.

Completers are students who attained a certificate or degree or became "transfer prepared" during a three-year period. Students who completed 60 transferable units with a GPA of 2.0 or better are considered transfer prepared.

Transfer student is defined as a student who transferred to a postsecondary institution prior to attaining a degree, certificate or becoming transfer prepared during a five-quarter period.

In accordance with the federal Student-Right-to-Know and Campus Security Act (Public Law 101-542, as amended by Public Law 102-26), De Anza College provides the Crime Awareness and Campus Security Summary Report. See the above entry and the Campus Security website at www.deanza.edu/edresources/security.html.

Student Rights and Responsibilities Concerning Health

Individuals who elect to become De Anza students have the right to a healthy, safe and drug-free environment. These students have personal responsibilities with regard to their own health and safety and the health and safety of the college community.

To promote an optimum personal and physical environment in which to facilitate individual development and learning, a De Anza student will:

- A. Not attend college if s/he has a contagious condition (i.e., TB, measles, hepatitis, etc.)
- B. Not attend college if s/he is under the influence of alcohol or illicit drugs.

- C. Have a physical exam on file if s/he is an intercollegiate athlete, or is in an allied health program.
- D. Notify the Admissions and Records Office if s/he will be absent for a week or more due to an illness.
- E. Observe sound personal hygiene habits.
- F. Have current TB results on file as required by the Allied Health Programs, the Child Development Center, the International Student Program and the Nursing Program.
- G. Obtain a physician's note and cooperate openly and honestly with college officials about medical problems that may threaten the health and/or welfare of self or others.
- H. Adhere to safety regulations and use safety equipment and protective devices as required.
- I. Adhere to all college infectious disease policies.

Textbook Affordability and Accessibility Options

De Anza College recognizes that textbook affordability directly impacts student access and successful learning. Learn about the numerous consumer options for students, including a wide selection of new and used textbooks, textbook rentals, e-books and textbook buyback at <http://books.deanza.edu>. Additional resources include textbooks that have been placed on reserve in the college library www.deanza.edu/library/ as well as a student-run book exchange www.deanza.edu/dasb/Textbook%20Exchange.html

De Anza College makes every reasonable effort to determine that the textbook information listed in the college's online schedule is accurate. However, textbook editions and ISBNs are subject to change without notice by either the instructor or publisher. The De Anza College Bookstore is not responsible for subsequent textbook changes if the student purchases them from another source. Review the online schedule at www.deanza.edu/schedule/

Traffic and Parking Regulations

All parking requires a paid fee or permit. Visitors, students and staff are required to observe all campus parking and traffic regulations enforced year-round by the Foothill-De Anza Community College District Police; failure to comply may subject violators to municipal citations.

Staff parking areas are identified by signs and yellow striping for stalls; student parking areas are identified by white striping for stalls, and disabled parking areas are marked with signs and blue striped stalls.

College quarterly and annual decals are available from the cashier. One-day permits can be purchased from machines in the parking lots. Red machines take quarters only; yellow machines take nickels, dimes, quarters and dollar bills. Daily parking permits cost \$3.

Maximum speed limit is 25 miles per hour on perimeter roads and 10 miles per hour within parking lots. No person shall operate a bicycle, moped or skateboard upon any pedestrian walkway, ramp or patio located within the college campus.

Transcripts

Students should request transcripts online. Foothill-De Anza contracts with Credentials Solutions for ordering and delivering college transcripts. Students can order transcripts through MyPortal or online. Transcripts will be electronically submitted or mailed in hard copy, depending on the arrangement with the receiving institution. Students are entitled to two free transcripts; subsequent orders will be subject to published fees.

Transfer Credit From Other Colleges

Students transferring from another accredited institution may request to use some of this credit to meet De Anza requirements. Official transcripts should be sent directly from the transfer institution to Admissions and Records. Students may also deliver a sealed, official transcript to Admissions and Records. Upon review, eligible trans-

fer credit will be applied to the student's De Anza record. Transfer review is not immediate and may take several weeks during peak times.

Students who want prior coursework used as a prerequisite for a De Anza course must submit a prerequisite clearance form, along with an unofficial copy of their transcript, to the Assessment Office for review. This transcript will not be evaluated for other transfer credit, but as a prereq clearance only. Prerequisite clearance forms are available on the Assessment website.

Non-Accredited Regional Colleges

Students may receive up to 18-quarter units of elective credit for coursework completed at a college accredited by other associations recognized by the Council of Postsecondary Accreditation (COPA). This credit is not transferable to meet bachelor's degree requirements. Official transcripts should be mailed or submitted to Admissions and Records.

Non-Accredited Colleges

Transfer credit will be denied in the case where transfer work is completed at an institution that is not accredited or is not accredited by a recognized accrediting body.

Units

A unit is the standard measurement of college and university work. One unit equals one hour of classroom work in most classes, predominantly those in lecture or lecture-discussion formats. Students should expect two hours of outside preparation for each one hour spent in class. Laboratory classes have three hours of work per week per unit. (Specialized performance classes such as athletics, drama and music require more than three hours per week per unit.) Quarter units are equal to two-thirds ($\frac{2}{3}$) of a semester unit. Conversely, a semester unit is equal to one-and-a-half ($1\frac{1}{2}$) quarter units.

Unit Load Limitations

Twelve units is the minimum number of units required for classification as a full-time student. A normal class load will be between 12-17 units. New students may not exceed a maximum of 21.5 units during their first quarter of enrollment at De Anza

without the approval of the dean of the Counseling Division.

Continuing students may enroll in excess of 21.5 units (including physical education and labs) if they have met the following conditions:

1. Completed a minimum of 12 units in the preceding quarter at De Anza;
2. Have not withdrawn from more than one class in the preceding quarter;
3. Completed the preceding quarter with at least a 3.0 GPA.

Students meeting the above criteria, wishing to enroll in excess of 21.5 units, must petition through the Counseling and Advising Center during the first week of the quarter. Petitions will not be considered before the first day of classes. Students who do not meet the criteria may petition the dean of Counseling for an exception to this policy.

Summer Sessions

During summer sessions, students may enroll in a maximum of 15 units including physical education classes and labs associated with courses.

- To exceed the 15-unit limit, students must meet with a counselor after classes have started to complete the special petition form. At that meeting, they must present authorization codes for every class over the maximum units they wish to add.
- The form and codes must be processed by the deadline to add for the session.
- Students must have completed a minimum of 12 units in the preceding quarter, not withdraw from more than one class, and have at least a 3.0 GPA to be eligible for a unit overload.

Unsatisfactory Work

When a student persistently neglects class assignments or has excessive absences, the instructor may drop the student from the class or assign a non-passing grade. Students may also be assigned a non-passing grade for violating De Anza's published Academic Integrity policies.

CAREER and DEGREE PROGRAMS

De Anza College offers a wide variety of two-year transfer and career programs leading to an Associate in Arts or Associate in Science degree. In addition, Certificates of Achievement and Certificates of Achievement-Advanced are awarded upon the satisfactory completion of certain programs that require less than two years of full-time study. Programs may be studied on a full- or part-time basis in the day, evening, or on weekends.

Associate Degree Programs

(Associate in Art and Associate in Science)

While many students seek an Associate Degree in preparation for immediate entry into the job market, earning an Associate Degree may also serve as excellent preparation for transfer to a four-year college or university. By earning an Associate Degree, a student indicates to potential employers, transfer institutions and society that they have specialized knowledge in a particular area of study. Degree completion also signals that the student has gained critical and analytical thinking ability, information literacy, written and oral communication skills, and is able to consider issues with cultural, global, social and environmental awareness.

Students are strongly advised to meet with a counselor early to decide which degree best suits their academic needs and for assistance in planning their course of study.

Associate Degree Requirements

(Associate in Arts and Associate in Science)

1. To receive an associate degree, a minimum of 90 quarter units of college credit in prescribed courses is required.

- Prescribed courses must be from a curriculum in effect and published in the catalog during the student's first quarter of enrollment or any subsequent quarter as long as continuous enrollment is maintained. A continuously enrolled student is defined as one who attended De Anza or Foothill College, CSU, UC, or any California community college at least one semester or two quarters each academic year. (For the purpose of continuous enrollment, an academic year is defined as fall through summer.) A single W grade in a term qualifies the student as having attended that term.
2. A minimum of 24 quarter units must be earned at De Anza College. A maximum of 22 quarter units from another college or university may be applied toward the major.
 3. Demonstrate proficiency in reading, written expression and mathematics.
 4. General education requirements for the A.A./A.S. as outlined in this catalog must be completed. A minimum of 31-42 quarter units are required from AREAS A-E. General education requirements can be selected from one catalog year; and major requirements can be selected from a different catalog year, as long as the rule of continuous enrollment is followed.
 5. Each major course must be completed with a minimum C grade. A minimum 2.0 grade point average for all De Anza College coursework and for all transfer and De Anza College coursework combined is required.
 6. Permission to continue in medical assisting and nursing is subject to the approval of the program faculty. A mandatory review of a student's academic standing takes place if grades fall below C in courses or in performance situations.



Transfer and Degree Programs

Transfer Associate Degrees. 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 (A.A.-T.) or the Associate in Science for Transfer (A.S.-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 (A.A.-T. or A.S.-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. While a minimum GPA of 2.0 is required for admission, some majors may require a higher GPA. Students transferring to a CSU campus that does accept the A.A.-T. or A.S.-T. will be required to complete no more than 60 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.

Associate in Science-Transfer (A.S.-T. degree)

Similar to the A.S. degree, the A.S.-T. degree is awarded to students who complete all of the lower division major preparation requirements for a related major in the areas of science, technology, engineering or mathematics for one or more local CSU campuses. This degree also requires completion of either the CSU General Education/Breadth requirements or the Intersegmental General Education Breadth Requirements (IGETC). Students who plan to complete this degree and who wish to transfer to a non-local CSU, UC

or other college or university are advised to meet with a counselor for assistance in developing their educational plan.

Associate in Arts-Transfer (A.A.-T. degree)

Similar to the A.A. degree, the A.A.-T. degree is awarded to students who complete all of the lower division major preparation requirements for a related major in academic areas such as the liberal arts, social sciences and related fields other than science, technology, engineering or mathematics for one or more local CSU campuses. This degree also requires completion of either the CSU General Education/Breadth requirements or the Intersegmental General Education Breadth Requirements (IGETC). Students who plan to complete this degree and who wish to transfer to a non-local CSU, UC or other college or university are advised to meet with a counselor for assistance in developing their educational plan.

Note: At the time this catalog was published, the A.A.-T. in Communication Studies and A.S.-T. in Mathematics had been approved by the Foothill-De Anza Board of Trustees. Additional majors are under development. For more information, please see a counselor and www.deanza.edu/degreesfortransfer.

Returning to De Anza College for a Subsequent Associate Degree

Students returning for additional degrees who do not qualify for continuous enrollment must meet the current A.A./A.S. degree GE pattern requirements and the current major requirements in effect during the academic year in which they return.

General Education Reciprocity

De Anza has entered into a mutual General Education Reciprocity agreement with other community colleges to accept the GE courses of these colleges “as completed.” In addition to De Anza, participating institutions include Chabot, Evergreen Valley, Foothill, Gavilan, Las Positas, Mission, Ohlone, San Jose City and West Valley colleges. Other community colleges do not participate in the agreement at this time.

The reciprocity agreement means that any of the participating colleges will accept “as completed” the GE coursework and graduation proficiencies of those students who obtain an official certificate of completion of associate degree GE requirements from one of the participating colleges. When using reciprocity to satisfy GE, the other degree requirements (e.g. prerequisites, major and elective units, GPA, etc.) as specified by the college issuing the degree must still be met.

To obtain an official certificate of completion of De Anza's GE pattern, students should:

- Provide official transcripts from other colleges to the Admissions and Records Office.
- Meet with a counselor and provide verification that De Anza's GE requirements have been completed to the evaluators in the Admissions and Records Office.

Official reciprocity certification will be completed by the counselor, verified by the evaluations officer or articulation officer, and mailed to the community college of transfer. Students will be given a copy of the certification. De Anza will honor the certification presented from another participating college only if it is transmitted in the same manner as an official transcript from that college.

Certificate Programs

Certificate of Achievement and Certificate of Achievement-Advanced programs are designed for students interested in programs of instruction with a high degree of specialization. Programs vary in length and generally require less than two years of full-time study to complete. If the student prefers, they may also be completed on a part-time basis. Students are encouraged to check with the departments and counselors for help with planning their courses. Successful completion of these certificates requiring a minimum of 18-quarter units is notated on official college transcripts. There is no limit on the number of certificates a student can earn.

Many certificates have been designed on the ladder concept, so that courses taken to meet the lower-unit Certificate of Achievement requirements meet

part of the higher-unit Certificate of Achievement-Advanced requirements; and those Certificate of Achievement-Advanced courses can be applied to the corresponding associate degree requirements.

Certificate Requirements

Completion of the prescribed number of courses in the major for each certificate is required.

Certificate of Achievement

Required units range from 18 to 26. Each major course must be completed with a minimum C grade. Up to 6 units may be applied from another college or university.

Certificate of Achievement-Advanced

Required units typically range from a minimum of 27 to 45.

- a. Each major course must be completed with a minimum C grade.
- b. A maximum of 18-quarter units may be applied from another college or university.
- c. Mathematics proficiency is required in addition to major courses. This may be met by completing MATH 112 (101) or higher level mathematics; or by qualifying for MATH 104 (Applied Technologies majors only) or 114 (105) on the De Anza mathematics placement test.

- d. English proficiency is required in addition to major courses: eligibility for EWRT 1A or ESL 5. This proficiency may be demonstrated by: qualifying for EWRT 1A on the De Anza College English placement test or qualifying for ESL 5 on the English as a Second Language placement test; completing EWRT 211 and READ 211, or LART 211 (or earlier EWRT/READ/LART courses that were prerequisites to EWRT 1A); or completing ESL 272 and 273, plus ESL 226 (or earlier ESL courses that were prerequisites to ESL 5).

Skills Certificate Programs

Some academic departments also offer Skills Certificates that require fewer than 18 quarter units. These certificates are issued by the department and are not notated on official college transcripts. Required courses must be completed at De Anza College with a passing grade (C or better/P).

Career Technical Education (CTE) Program Advisory Committees

In accordance with guidelines established by the California Community Colleges System Office, each De Anza Career

Technical Education (CTE) program is represented by an advisory committee. These advisory committees are comprised of business and industry leaders, as well as college faculty and administrators. They meet at least once annually to discuss course offerings and determine how to keep programs current with trends in the regional and global economies. The advisory committees provide input in the following areas:

1. advising on industry trends and employment needs
2. reviewing current course content
3. evaluating program graduates' performance
4. determining facilities and equipment needs
5. recommending new courses and content
6. initiating new certificate and degree programs

The recommendations of the CTE program advisory committees are implemented on a continuous basis. In addition to the program advisory committees, other college bodies make recommendations and decisions regarding implementation of new CTE certificate and degree programs. These bodies include the De Anza College Curriculum Committee and the Foothill and De Anza Colleges' Joint Academic Senate.



Certificates and Degrees	Certificate of Achievement	Certificate of Achievement-Advanced AAAS Degree
Accounting	◆	
Bookkeeping	◆	
Practice Emphasis		◆
Taxation Emphasis		◆
Tax Practitioner		◆
Administration of Justice		
Corrections/Probation		◆
Law Enforcement		◆
Private Security		◆
Art		
Art History	◆*	◆
Ceramics	◆*	◆
Painting	◆*	◆
Sculpture	◆*	◆
Automotive Technician (Evening)		
Machining and Engine Repair	◆	◆
Engine Performance (Beg./Intermed./Advanced)	◆	◆
Chassis	◆	◆
Powertrain	◆	◆
Smog Technician	◆	
Advanced Automotive Technology	◆	
Automotive Technology (Day)		
Auto Machining and Engine Repair	◆	◆
Auto Engine Performance	◆	◆
Auto Chassis & Powertrain	◆	◆
Biological Sciences		◆
Business Administration	◆	◆
Entrepreneurship	◆	
Child Development	◆	◆
Early Childhood Mental Health	◆	
Early Intervention/Special Ed Assistant	◆	
Computer Aided Design (CAD)	◆	◆
AutoDesk	◆*	
Creo Parametric (formerly Pro/Engineer)	◆*	
SolidWorks	◆*	
Computer Information Systems		
Enterprise Security Professional	◆	◆
Database Design for Developers	◆	
Network Administration	◆	◆
Programming		
Business Programming		◆
Network Programming	◆*	◆
Programming in C/C++	◆*	
Programming in JAVA	◆*	
Programming in PERL	◆*	
Systems Programming	◆	◆
UNIX/LINUX Operating System	◆*	
Visual Basic Programming	◆*	
Web Development	◆*	
English		◆
Environmental Studies		
Biodiversity Specialist	◆	◆
Energy Management and Bldg. Science	◆	◆
Environmental Compliance	◆	◆
Environmental Education	◆*	
Environmental Stewardship		◆
Wildlife Corridor Technician	◆	◆

Award Type

Certificate of Achievement
 Certificate of Achievement-Advanced
 Associates Degree (including GE)

Quarter Units

18-26
 27+
 min. of 90

* State approval pending for this certificate or degree.
 Check with the department for the status.

Certificates and Degrees	Certificate of Achievement	Certificate of Achievement-Advanced AAAS Degree
Film Production		◆
Film/TV Production: Screenwriting		◆
Film/TV Production: TV Emphasis	◆	◆
Global Studies		◆
Graphic Design/Interactive Design		
Graphic Design	◆	◆
Interactive Design		◆
Health Technologies		
Medical Assisting		◆
Business Office Clerk	◆	
Insurance and Coding	◆	
Lab Assisting	◆	
Medical File Clerk	◆	
Medical Reception	◆	
Medical Records Clerk	◆	
Medical Transcription	◆	
Phlebotomy Technician I	◆	
Medical Secretary		◆
Intercultural Studies		◆
Journalism		◆
Kinesiology*		◆
Liberal Arts		
Arts and Letters		◆
Business and Computer Info. Systems		◆
Science, Math, and Engineering		◆
Social and Behavioral Sciences		◆
Management	◆	◆
Mandarin*	◆	◆
Manufacturing and Computer Numerical Control (CNC) Technology		
CNC Machinist		◆
CNC Research and Development Machinist		◆
Manufacturing Systems Technician	◆	◆
Product Model Making		◆
Marketing Management	◆	◆
Massage Therapy	◆	◆
Medical Laboratory Technology (MLT)		◆
Music		◆
Nursing		
LVN Transition to RN		◆
Registered Nurse (RN)		◆
Paralegal Studies		◆
Photographic Arts		◆
Professional Photography	◆	◆
Project Management Practitioner	◆	
Real Estate		◆
Speech Communication	◆	◆
Technical Writing (ending 2013)	◆	◆

Associates Degrees for Transfer to CSU (AA-T & AS-T)

Business Administration		◆
Communication Studies		◆
Kinesiology		◆
Mathematics		◆

Skills Certificates

Some departments award their own Skills Certificates; these certificates are not notated on official transcripts.

CAD/CAM-Mastercam
 CNC Machine Operator
 Global Studies
 Intercultural Studies
 Leadership and Social Change
 Museum Studies

Each student may earn multiple certificates and degrees.

Certificates and degrees are subject to change. Check with the department.

TRANSFER PROGRAMS

De Anza College students who plan to transfer to a four-year college or university to earn a bachelor's degree can complete their freshman and sophomore-level coursework at De Anza. Each baccalaureate institution has a pattern of lower-division general education or breadth requirements and specific major requirements that should be fulfilled before transferring. De Anza offers numerous lower-division courses. In addition, students may make up any high school grade or subject deficiencies that are required for entrance to universities. Please see a counselor or academic adviser for rules and restrictions.

Students should acquaint themselves with the current catalog of their transfer college for information about admissions qualifications and application procedures since these vary and are subject to change. Check college websites for catalog and general transfer information. It is recommended that students also work closely with counselors/academic advisers to develop educational plans outlining appropriate courses that fulfill lower-division requirements (general education and major) for the colleges of their choice. Students planning to transfer may, with careful planning, also complete the graduation requirements for De Anza's Associate in Arts or Associate in Science degree. Students should meet with a counselor/academic adviser to apply for an A.A./A.S. degree before transfer.

Course Numbering System

Most De Anza courses are baccalaureate level and transferable to four-year institutions. Generally, courses at De Anza are numbered using the following guidelines:

1-199: De Anza A.A./A.S. degree applicable. (Check course listing for exceptions—some courses may be noted as non-degree applicable.)

1-99: Transferable to campuses of the California State University

1-49: Transferable to campuses of the University of California. (See information on UC transfer limitations for approved De Anza courses on page 113.)

All courses numbered **200 and above** are non-degree applicable.

There are exceptions to this numbering system. Consult the course listings in this catalog and schedule of classes to determine which courses 1-199 are non-degree applicable and which courses 50-99 have University of California transfer status pending.

Courses considered “transferable” may not necessarily meet specific requirements of the four-year institutions. Students should consult with a counselor/academic adviser to develop an effective educational plan. While students are strongly advised to work with counselors/academic advisers, the final responsibility for the selection of proper courses rests with the student.

Course Identification Numbering System (C-ID)

The Course Identification Numbering System (C-ID) is a statewide numbering system independent from the course numbers assigned by local California community colleges. A C-ID number next to a course signals that participating California colleges and universities have determined that courses offered by De Anza College or other California community colleges are comparable in content and scope to courses offered on their own campuses, regardless of their unique titles or local course number. The C-ID designation can be used to identify comparable courses at different community colleges. For example, students who complete SPCH 16 (C-ID COMM 130) at De Anza College can be assured that the course will be accepted in lieu of a course bearing the C-ID COMM 130 designation at another community college.

However, students should always consult www.ASSIST.org for specific information on C-ID course designations and to confirm how each college's course will be accepted at a particular four-year college or university for transfer credit.

The C-ID numbering system is useful for students attending more than one community college and is applied to many of the transferable courses students need as preparation for transfer. Because these course requirements may change and because courses may be modified and qualified for or deleted from the C-ID database, students should always check with a counselor or academic adviser to determine how C-ID designated courses fit into their educational plans for transfer.

Articulation Agreements

De Anza has established articulation agreements with several baccalaureate colleges and universities. Courses approved for credit at such universities are listed in these articulation agreements. Department course-to-course, general education and major preparation agreements may be available through counselors/academic advisers in the Counseling and Advising Center, the Transfer Center, and through the ASSIST website www.ASSIST.org (for UC and CSU campuses only).

The following is a sample list representing fields of study that De Anza has articulated with various four-year colleges and universities:

- Administration of Justice
- Advertising
- Aeronautics/Aviation
- Aerospace Engineering
- Afro-American Studies
- Agricultural Sciences
- American Studies
- Anthropology
- Art
- Behavioral Sciences
- Biochemistry
- Biological Sciences
- Bioresource Sciences
- Botany
- Business Administration
- Chemical Engineering
- Chemistry
- Chicano Studies
- Child Development
- Civil Engineering
- Communication Studies
- Computer Science

Conservation and Resource Studies
 Construction Management
 Criminal Justice
 Dental Hygiene
 Dentistry
 Design: Graphic/Industrial/Interior
 Economics/Business Economics
 Education
 Electrical Engineering and Computer
 Science
 Engineering
 English
 Environmental Design
 Environmental Studies/Ecology
 Ethnic Studies
 Forestry
 French
 Geography
 Geology/Earth Science
 German
 Government
 Health and Community Services
 History
 Hospitality Management
 Humanities
 Industrial Arts
 Industrial Technology
 International Studies/Business
 Italian
 Japanese
 Journalism: Radio/Television/Film
 Kinesiology
 Latin American Studies
 Legal Studies
 Liberal Studies
 Linguistics
 Mathematics/Statistics
 Meteorology
 Microbiology
 Music
 Natural Resources
 Nursing
 Nutrition
 Occupational Therapy
 Ophthalmology
 Pharmacology
 Philosophy
 Physical Education
 Physical Science
 Physics
 Physiology and Cell Biology
 Political Science
 Political Economy of Industrial Societies
 Pre-Professional Schools: Law, Medicine,
 Optometry, Veterinary Science
 Psychobiology
 Psychology

Public Relations
 Quality Assurance
 Recreation
 Religious Studies
 Rhetoric
 Russian
 Social Science
 Social Welfare
 Social Work
 Sociology
 Spanish
 Speech Communication
 Speech Pathology/Audiology
 Teaching
 Theatre Arts
 Women's Studies
 Zoology

ASSIST (Articulation website)

ASSIST is the official statewide repository for articulation information. ASSIST is the primary website where students can find specific De Anza courses that fulfill general education and/or major preparation requirements at the UCs and CSUs. Listings of course equivalencies assist students in selecting appropriate courses to prepare for transfer. Selection criteria for impacted and selective programs/majors, transfer credit limitations and important links to UC and CSU websites are also available at www.ASSIST.org.

De Anza College's Transfer Planning Website

The De Anza College Transfer Planning website at www.deanza.edu/transfer/ offers students a wide variety of information including:

- Information on UC/CSU transfer admission requirements, general education patterns and majors
- Transfer Admission Agreement/ Guarantee Program (TAA/TAG)
- Links to UC, CSU and Independent College/University websites
- Important dates, deadlines and updates
- Upcoming transfer events
- AP and IB exam credit for CSUGE and IGETC

University of California

The University of California campuses at Berkeley, Davis, Irvine, Los Angeles, Merced, Riverside, San Diego, Santa Barbara and Santa Cruz all share the same minimum admission requirements; however, each campus is unique. The academic programs offered, the size of the student body and the setting are just a few of the factors that contribute to the individual character of each campus. Entrance requirements vary as well. Academic preparation and grade point average are used by the competitive campuses and programs in the selection process. Criteria vary from year to year and from campus to campus according to the number and qualifications of applicants to each campus and program. For more information about campuses, consult the university general catalogs available online. Complete information on the UC may be found at www.universityofcalifornia.edu/admissions/transfer/index.html.

The university will award graduation credit for up to 105 lower-division quarter units of transferable coursework from a community college. Courses in excess of 105 quarter units will receive subject credit and may be used to satisfy university subject requirements. There is no limit, however, on the number of units used to determine a student's grade point average (GPA), so all UC-transferable units will apply.

Minimum Admission Requirements For Transfer Applicants Who Are California Residents*

The following information was taken from the University of California Admissions website. For complete information and updates, visit www.universityofcalifornia.edu/admissions/transfer/index.html. De Anza is not responsible for any changes the UC may make to this information after publication of this catalog.

According to UC, a transfer applicant is a student who has enrolled in a regular session at another college or university following high school. Students who

* *Residency Status: The requirements for bona fide California residents also apply to dependents of University of California graduates and employees. The manner in which legal residence is defined for fee purposes is different. If students have questions about their residency status, contact the Admissions or Registrar's Office at the campus students wish to attend.*

meet this definition cannot disregard their college records and apply as freshmen. (A student who attends a college summer program immediately after graduating from high school or who has completed college work while in high school is still considered a freshman applicant.)

The requirements described below represent the minimum academic standards students must attain to be eligible for admission to the UC. It is important to understand that meeting the minimum requirements does not guarantee admission. Often, admission to UC campuses and/or programs is extremely competitive and requires students to satisfy more demanding standards.

There are three ways to meet the university's minimum admission requirements for transfer students. The path students use depends on the degree to which they satisfied UC's minimum eligibility requirements for freshmen at the time they graduated from high school.

1. If students were eligible for admission to the university when they graduated from high school—meaning they satisfied the subject, scholarship and examination requirement, or were identified by the university during their senior year in high school as eligible in the local context—students are eligible to transfer if they have a 2.0 GPA in their transferable college coursework.
2. If students met the scholarship requirements in high school but did not satisfy the 15-course subject requirement, they must take transferable college courses in the missing subjects, earn a C or better in each required course, and have an overall C (2.0) average in all transferable coursework to be eligible for transfer.
3. If students were not eligible for admission to the university when they graduated from high school because they did not meet the scholarship requirement, they must:
 - a. Complete 90 quarter units/60 semester units of transferable college credit with a GPA of at least 2.4 (2.8 for nonresidents). No more than 21 quarter/14

semester units may be taken Pass/Not Pass, **and**

- b. Complete the following course pattern requirements, earning a grade of C or better in each course:
 - Two transferable college courses in English composition; **and**
 - One transferable college course in mathematical concepts and quantitative reasoning; **and**
 - Four transferable college courses chosen from at least two of these subject areas: the arts and humanities, the social and behavioral sciences, and the physical and biological sciences.

Each course must be worth at least 4-5 quarter/3 semester units.

Visit www.ASSIST.org for a list of UC-transferable courses and those that specifically meet the seven-course pattern described above.

Nonresidents

The minimum admission requirements for nonresidents are very similar to those for residents. If students are not California residents, please consult with the Admissions Office at one of the university campuses for details. In all cases, however, nonresidents must have a grade point average of 2.8 or higher in all transferable college coursework.

As a reminder, many campuses use criteria that exceed these minimum requirements to select students for admission. Students are advised to confer frequently with a counselor/academic adviser, consult university catalogs, research university websites and contact the Admissions Offices at the appropriate campus(es).

California State University

The following information is an abstract from the CSUMentor website (May 2012). For complete information and updates, visit www.csumentor.edu/planning/transfer/. De Anza is not responsible for any changes CSU may make to this information after publication of this catalog.

For students interested in transfer to one of the 23 campuses of the California State

University (CSU), admission eligibility is based on transferable units completed. For CSU, students are considered a transfer student if they complete college units after the summer following graduation from high school. The number of units they have completed at the time they enter a CSU determines the admission standards that will apply to their application. It is important to identify which admission requirements apply to each student.

Upper-Division Transfer Admission Requirements:

Students who have completed 90 or more transferable quarter units (60 semester units) are considered upper-division applicants. Students are eligible for admission if they:

- Have an overall college grade point average of 2.0 or better (2.4 for California nonresidents). The GPA is calculated using all transfer units attempted.
- Are in good standing at their prior college; i.e., students are eligible to re-enroll at their last college or university.
- Prior to transfer, complete at least 45 quarter units (30 semester units) of general education coursework with a grade of C or better. The 45 quarter units (30 semester units) must include all of the general education requirements in English composition (oral communication, written communication and critical thinking) and at least one course in mathematics (min. 4-5 quarter units/3 semester units).

Lower-Division Transfer Admission Requirements:

Most CSU campuses do not accept lower-division transfers. Be sure to check with the campus if students are considering transfer as a lower-division student.

Students who have completed fewer than 60 transferable semester units (90 quarter units) are considered lower-division transfer students. Students are eligible for admissions consideration as a lower-division transfer if they:

- Have a college grade point average of 2.0 or better in all transferable college units completed.
- Are in good standing at the last college or university attended; i.e., student is eligible to re-enroll.

- Meet the admission requirements for a first-time freshman or have successfully completed necessary courses to make up the deficiencies students had in high school if they did not complete the 15-unit pattern of college preparatory subjects.
- Meet the eligibility index required of a freshman.
- Some campuses require completion of English composition and general education mathematics, with grades of C or better, prior to transfer.

Almost all CSU campuses have impacted majors, and several campuses are impacted in all majors. As a result of major impaction, and because of the increasing competitiveness of the overall admissions process, completion of the minimum eligibility criteria may not be sufficient for admission. Additional criteria may be used in making admissions decisions.

Independent/Private and Out-of-State Colleges and Universities

Private and out-of-state colleges and universities have differing admissions requirements. For information on California institutions, visit www.californiacolleges.edu. This site provides online resources to help students choose institutions that best match their needs and interests. For out-of-state colleges and universities, research catalogs, each institution's website and other online resources.

Transfer Admission Agreements

Transfer Admission Agreements (TAA), also referred to as a Transfer Admission Guarantee (TAG), are commitments that selected colleges and universities make with De Anza students who meet specific GPA and course requirements. A TAA serves as a contract between a student and the transfer college or university. Students who complete a TAA and meet the contractual requirements are guaranteed admission. Transfer Admission Agreements are generally written one year prior to transfer.

Students preparing for a TAA begin by working with a De Anza counselor/academic adviser early in their academic career. This early relationship establishes a foundation for transfer and ensures early development of an education plan. With an education plan in place, students have the knowledge that each course taken has been agreed upon and that any loss of credit will be minimized.

The following institutions participate in a TAA program with De Anza College. These agreements are subject to periodic changes without notice:

California State University

- CSU Monterey Bay

University of California

- UC Davis
- UC Irvine
- UC Merced
- UC Riverside
- UC San Diego
- UC Santa Barbara
- UC Santa Cruz

Independent Colleges

- Cogswell Polytechnical College
- Kettering University
- The National Hispanic University
- Santa Clara University
- University of the Pacific

Visit the Counseling and Advising Center or the Transfer Center for TAA information. Deadlines, policies and the process to initiate a TAA are available at www.deanza.edu/transfer/.

Effective Transfer Planning Strategies

Be Competitive – Be “Transfer Ready” Do not wait until the last quarter to take math and English.

Complete transferable math and English requirements as early as possible. Develop long-range education plan and do not forget to include any prerequisites that are needed prior to enrolling in transferable level math and English courses.

Complete major preparation requirements prior to transfer.

Due to the increasingly competitive nature of the transfer admissions process, many majors require completion of lower-division major preparation course requirements. This is especially true for high

unit majors (e.g., science and engineering). Go to www.ASSIST.org for course requirements for CSU and UC campuses.

Complete general education (GE) requirements.

To be as competitive as possible, complete lower-division general education course work prior to transfer. If completing CSUGE or IGETC (see pages 49 and 50), do not forget to request certification prior to transfer. For high unit majors it is generally advised that students focus on completing major preparation and admission requirements.

Determine transfer goals early.

Deciding on the college(s) and the major(s) students are interested in will enable them to focus their planning efforts on specific goals. It is recommended that they plan with optional colleges and majors in mind, but start researching possibilities early in their college career.

Research college(s) of choice.

Successful transfer requires planning early and understanding what is needed to transfer, for example:

- the competitive GPA for their major and college
- minimum admission requirements for their major and college
- application process and deadlines

Information regarding transfer is subject to change. It is important to check websites and other resources periodically to ensure students have the most up-to-date information.

Keep course information.

Students should retain their course syllabi and selective course work (e.g. writing samples, final exams, etc.) because a transfer institution may request such documentation.

Develop relationships with instructors, counselors and advisers.

Applications for admission and scholarships may require letters of recommendation.

Complete an education plan with a counselor/adviser.

Keep on top of deadlines.

Check and update e-mail regularly.

Most colleges are using e-mail as primary means of communication. Make sure colleges have your current e-mail address and check messages often.

General Education Requirements 2012-2013

Effective Fall 2012 through Summer 2013

De Anza College offers two associate degrees, the Associate in Arts (A.A.) and the Associate in Science (A.S.). In order to obtain either degree, you must complete between 31-42 quarter units of General Education (GE) and additional unit requirements for your major. The number of units required for a major will vary from program to program. To qualify for the associate degree, you must complete a total of 90 quarter units which is comprised of De Anza's General Education, major and, if necessary, elective courses of your choice. The associate degree is not required for transfer. However, with careful planning, you may qualify for an associate degree while meeting requirements for transfer admission. Review the following pages for listings of courses that satisfy De Anza's GE, Intersegmental General Education Transfer Curriculum (IGETC) and California State University (CSU) GE/Breadth requirements.

The General Education subject areas for De Anza College's associate degree requirements are listed under the left column below. If you are planning to transfer to the University of California and/or California State University, you may want to complete the requirements listed under the IGETC or CSUGE Breadth. See pages 43-46 for approved course lists. De Anza College requirements for CSUGE certification differ from the requirements identified by the CSU and from the information published on www.ASSIST.org. In order to qualify for certification of CSUGE at De Anza College, students must complete the CSUGE requirements as stated in this catalog or at www.deanza.edu/transfer/.

Transfer students with high unit majors (e.g. sciences or engineering) should focus on completing requirements for the major and minimum admissions requirements rather than completing IGETC or CSUGE Breadth requirements.

Completion of IGETC and CSUGE Breadth requirements is not required for transfer. Students who plan to transfer may instead choose to complete the specific General Education-breadth requirements of the transfer institution they select.

Please see the following Web sites for more information: www.ASSIST.org or www.deanza.edu/transfer/

General Education/Breadth Requirements Summary

De Anza College A.A./A.S. Degree General Education Requirements (for students who want an A.A./A.S. Degree)	California State University (CSU) GE Breadth—All Campuses General Education/Breadth Requirements	UC/CSU—All Campuses** Intersegmental General Education Transfer Curriculum (IGETC)
Quarter Units	Quarter Units	Quarter Units
Area A: Language and Rationality 9-14 1. English Composition 2. Oral Communication 3. Critical Thinking <i>(if completing the AS degree this sub-area is satisfied)</i> Area B: Natural Sciences 4-6 One course from the Physical or Biological Sciences Area C: Arts and Humanities 8-9 Two courses: one from Arts and one from Humanities (One ICS course in Area C or D) Area D: Social & Behavioral Sciences 8 Two courses: one from Behavioral Sciences and one from History & Society. (One ICS course in Area C or D) Area E: Physical Education, Development and Performance 2-5 2 units minimum. At least one unit must be completed from PE or PEA Activities. Graduation requirements also include: <ul style="list-style-type: none"> proficiency in reading and written expression which is met by Area A1 above. Course must be completed with a grade of "C" or better. proficiency in mathematics which may be met by completing or MATH 114 (or 105) or equivalent or higher with a grade of "C" or better (or) achieving a score of 3 or higher on one AP mathematics exam (or) satisfactory score on the De Anza College Level Math Placement Test. 	A. English Language Communication and Critical Thinking 12-15 1. Oral Communication 2. Written Communication 3. Critical Thinking B. Scientific Inquiry and Quantitative Reasoning 12-15 1. Physical Science 2. Life Science 3. Laboratory Activity 4. Mathematics/Quantitative Reasoning C. Arts and Humanities 12-15 EWRT 1B or ESL 6* required 1. Arts 2. Humanities D. Social Sciences Min. 16 (HIST 17A or 17B or 17C) and POLI 1 required Select two courses from the following: D1 Anthropology and Archaeology D2 Economics D3 Ethnic Studies D4 Gender Studies D5 Geography D6 History D7 Interdisciplinary Social or Behavioral Science D8 Political Science, Government, and Legal Institutions D9 Psychology D0 Sociology and Criminology E. Lifelong Learning and Self-Development 4-5 Minimum Units: 58 You must request certification by completing the official certification form available at Admissions and Records and in the Counseling and Advising Center. * ESL 6 restricted to students whose native language is not English.	1. English Communication 10-14 a. English Composition b. Critical Thinking – English Composition c. Oral Communication (CSU only) 2. Mathematical Concepts & Quantitative Reasoning 4-5 3. Arts & Humanities 12-15 At least three courses including one from Arts and one from Humanities. 4. Social & Behavioral Sciences 12-15 At least three courses from at least two disciplines. (Courses used to meet the American History and Institutions requirement may not be used to fulfill IGETC.) 5. Physical & Biological Sciences 9-12 At least two courses, one Physical Science and one Biological Science; one must include a laboratory. 6. Language other than English (UC only) Total Units: 47-61 You must request certification by completing the official certification form available at Admissions and Records and in the Counseling and Advising Center.
Total Units: 31-42		

** See a counselor/academic adviser about UC professional schools and colleges that do not accept IGETC.

Student Name: _____ **Student I.D. Number:** _____

☒ Use boxes in left margin to check when areas/requirements are completed.

Graduation requirements for the A.A./A.S. degree include:

- ☒ Demonstrated proficiency in reading and written expression (Requirement satisfied through Area A1 below.)
 - ☐ Demonstrated proficiency in mathematics by completing MATH 114 (or 105) or equivalent or higher with a grade of "C" or better (or) achieving a score of 3 or higher on one AP mathematics exam (or) satisfactory score on the De Anza Intermediate Algebra Placement Test.
- Completion of General Education requirements with a minimum GPA of 2.0.

	AREA A: LANGUAGE AND RATIONALITY	9 -14 Quarter Units
<input type="checkbox"/>	A1 - English Composition - Demonstrate proficiency in reading and written expression by achieving a score of 3 or higher on either AP Language and Composition or Literature and Composition exams (or) completing one of the following courses with a grade of "C" or better: EWRT 1A or ESL 5	5 Units
<input type="checkbox"/>	A2 - Oral Communication - Select one course: SPCH 1 or SPCH 10	4 Units
<input type="checkbox"/>	A3 - Critical Thinking - For the A.A. degree, select one of the following courses: (If completing the A.S. degree, this sub-area is satisfied.) EWRT 2, EDUC 46, MATH 10, 44, 46, PHIL 3, 4, 7, SPCH 8, 9, 15	0-5 Units
<input type="checkbox"/>	AREA B: NATURAL SCIENCES	4 - 6 Quarter Units
Select one course in the Biological or Physical Sciences . Note: Completion of the nursing major clears this requirement. <u>Underlined</u> courses have a laboratory component.		
Biological Sciences: ANTH 1, 1/1L, BIOL <u>5, 6A, 8, 10, 11, 13, 15</u> , ESCI 1, 1/1L, <u>19, 20, 30</u> , E S 2@		
Physical Sciences: ASTR 4, 10, CHEM <u>10</u> , GEO 1, GEOL <u>10, 20</u> , MET 10, 10/10L, 10/20L, PHYS <u>2A, 4A, 10</u>		
<input type="checkbox"/>	AREA C: ARTS & HUMANITIES	8 - 9 Quarter Units
Select one course from the Arts category and one course from the Humanities category. One ICS course must be taken in Areas C or D .		
<input type="checkbox"/>	C1 - ARTS: ARTS 1A, 1B, 2A, 2B, 2C, 2D, 2F*, 2G, 2H, 2J, 2K, 2L, 3TC@, 3TD, 3TE, DANC 38A, ELIT 6*, E S 3@, F/TV 1, 2A, 2AW, 2B, 2BW, 2C@, 2CW@, 48*, HUMI 1@, 15, ICS 5, 14, 33, 45, INTL 10, 21, 22, 23, 24, MUSI 1A, 1B, 1C, 1D, PHTG 7, 20, 21, THEA 1, WMST 3C@	
<input type="checkbox"/>	C2 - HUMANITIES: CANT 1, 2, 3, EDUC 58, ELIT 10, 11, 12, 17, 19, 20, 21, 22, 24*, 25, 39, 44, 46A, 46B, 46C, 48A, 48B, 48C, 58, ESL 6, EWRT 1B, 1C, 30, E S 2@, F/TV 2C@, 2CW@, FREN 1, 2, 3, 4, 5, 6, 10, GERM 1, 2, 3, 4, 5, 6, HNDI 1, 2, 3, HIST 4A, 4B, 4C, 4D, 5A, 5B, HUMI 1@, 2, 5, 6, 7, 9, 10, 13, 14A, 14B, 14C, 16, 18, 20, ICS 11, 12, 24, 35, 44, 46, INTL 11, 13, 30, 34, ITAL 1, 2, 3, 4, JAPN 1, 2, 3, 4, 5, 6, KORE 1, 2, 3, 4, 5, 6, LING 1, MAND 1, 2, 3, 4, 5, 6, PERS 1, 2, 3, 4, 5, 6, PHIL 1, 2, 8, 9, 14A, 14B, 14C, 20A, 20B, 20C, 24, 30, 49, RUSS 1, 2, 3, SIGN 1, 2, 3, SPAN 1, 2, 3, 4, 5, 6, URDU 1, 2, 3, 4, 5, 6, VIET 1, 2, 3, 4, 5, 6, WMST 21, 49	
<input type="checkbox"/>	AREA D: SOCIAL & BEHAVIORAL SCIENCES	8 Quarter Units
Select one course from the Behavioral Sciences category and one course from the History and Society category. One ICS course must be taken in Areas C or D .		
<input type="checkbox"/>	D1 - BEHAVIORAL SCIENCE: ANTH 2, 3, 4, 6, BUS 80, C D 10G, 10H, 12, E S 1, HUMA 10@, ICS 4, 7, 8, 27, 31, 41, INTL 8, POLI 17, 30, PSYC 1, 6, 8, 9, 10G, 10H, 12, 14, SOC 1, 4*, 5, 8, 20, 28, 35, SPCH 7*, 16, 70, WMST 1, 8*, 12, 28, 30	
<input type="checkbox"/>	D2 - HISTORY AND SOCIETY: ADMJ 29*, ARTS 3TC@, BUS 21, CIS 2, ECON 1, 2, E S 2@, 3@, F/TV 10, GEO 4, 5, 10, HIST 2, 3A*, 3B*, 3C*, 7A*, 7B*, 9, 10, 16A*, 16B*, 17A, 17B, 17C, 18A*, 18B*, 19A, 19B, 28*, HUMA 10@, 50, ICS 3A, 3B, 3C, 9, 10, 16A, 16B, 17, 18A, 18B, 20, 21, 22, 25, 26, 28, 29, 30, 32, 36, 37, 38A, 38B, 42, 43, 55, INTL 5, 15, 19A, 19B, 33, JOUR 2, PHIL 10, 17*, POLI 1, 2, 3, 5, 15, 16, 33, WMST 3C@, 9	
<input type="checkbox"/>	AREA E: PHYSICAL/MENTAL WELLNESS AND PERSONAL DEVELOPMENT	2 - 5 Quarter Units
At least one unit must be completed from PE/PEA/DANC Activities.		
Personal Development Courses: BUS 56, C D 61, HLTH 51, NUTR 10, P E 30, 51, 53 (2 units), 54, 70A (2 units)		
Physical Education (PE) / Physical Education - Adapted (PEA) / DANC Activities:		
DANC 22, 22K, 22L, 23A, 23B, 23L, 23M, 24A, 24B, 24C, 25A, 25B, 37A, 37B, 49A		
P E 1A, 1H, 1HX, 1L, 1LX, 2A, 2AX, 2B, 2BX, 2K, 2KX, 2L, 2LX, 2P, 2PX, 2Q, 2QX, 2R, 2RX, 2S, 2SX, 2Y, 2YX, 3, 3X, 3AX, 3AY, 3G, 3GX, 4, 4X, 5AX, 5AY, 6B, 6BX, 6D, 6DX, 6F, 6FX, 6G, 6GX, 6H, 6HX, 6K, 6KX, 6Q, 6QX, 6R, 6RX, 6S, 6SX, 6U, 6UX, 6UY, 6V, 6VX, 8, 8X, 9, 9X, 9Y, 10, 10X, 10Y, 11, 11X, 12, 12X, 13A, 13AX, 13B, 13BX, 13C, 13CX, 13T, 13TX, 14A, 14AX, 14B, 14BX, 15, 15X, 16A, 16AX, 16B, 16BX, 19A, 19AX, 19B, 19BX, 19C, 19CX, 19T, 20A, 20AX, 20B, 20BX, 21A, 21AX, 21B, 21BX, 21C, 21CX, 21D, 21DX, 21E, 26A, 26AX, 26B, 26BX, 26C, 26CX, 26D, 26DX, 28A, 32B, 32F, 32G, 32H, 32I, 32J, 32K, 32L, 32M, 32N, 32P, 32S, 32T, 32W, 33A, 33AX, 33I, 33IX, 38W, 38WX, 39M, 39MX, 39W, 39WX, 40, 40X, 41, 41X, 42W, 42WX, 43, 43X, 44M, 44MX, 44W, 44WX, 45, 45X, 46, 46X, 47M, 47MX, 47W, 47WX, 48M, 48MX, 48W, 48WX, 71; PEA 1, 1X, 1Y, 1Z, 2, 2X, 2Y, 2Z, 4, 4X, 4Y, 4Z, 5, 5X, 5Y, 5Z, 6X, 6Y		
<input type="checkbox"/>	ICS Requirement Met in Area C or D	Total Units (31-42 Quarter Units)

* - In addition to ICS, courses with asterisks meet ICS requirement

@ Courses listed in two areas can only be counted in one.

Student Name: _____ **Student I.D. Number:** _____

De Anza College's requirements for the certification of CSUGE differ from the requirements identified by the California State University and the information published on **www.assist.org**. Students must complete the CSUGE requirements stated in the De Anza College Catalog in order to qualify for CSUGE certification by De Anza College. There is no catalog year or rule of continuing attendance for CSUGE certification. A course is certifiable if, and only if, it was on the CSUGE requirement list at the time the course was taken. Upon enrolling in final course requirements and receiving conditional admission to the university, students must submit a request for certification to De Anza's Office of Admissions and Records. G.E. Certification Request Forms are available at the Office of Admissions & Records, in the Counseling & Advising Center and online at **www.deanza.edu/counseling/forms.html**.

☒ **Check box when Area is completed.**

AREA A: ENGLISH LANGUAGE COMMUNICATION AND CRITICAL THINKING	12 - 15 Quarter Units
Includes instruction in oral communication, written communication and critical thinking. All courses (Areas A1 - A3) must be completed with a grade of C or better.	
<input type="checkbox"/> A1 – Oral Communication	SPCH 1 or SPCH 10
Other Course: _____ College: _____ No AP/IB Exam Credit for Area A1	
<input type="checkbox"/> A2 – Written Communication	EWRT 1A or ESL 5
Other Course: _____ College: _____ AP Exam Credit: _____ Qtr. Units: _____	
<input type="checkbox"/> A3 – Critical Thinking	Select one course from the following: EWRT 2 or PHIL 3, 4, 7 or SPCH 8, 9, 15
Other Course: _____ College: _____ No AP/IB Exam Credit for Area A3	
QUARTER UNITS COMPLETED (AREA A): _____	
AREA B: SCIENTIFIC INQUIRY AND QUANTITATIVE REASONING	12 - 15 Quarter Units
Includes instruction in physical science, life science, and mathematics/quantitative reasoning. At least one science course must contain a laboratory component.	
<input type="checkbox"/> B1 – Physical Science	ASTR 4, 10, CHEM 1A, 10, 30A, 30B, GEO 1, GEOL 10, 20, MET 10, 10/10L, 10/20L, PHYS 2A, 4A, 10
Other Course: _____ College: _____ AP/IB Exam/CLEP Credit: _____ Qtr. Units: _____	
<input type="checkbox"/> B2 – Life Science	ANTH 1, 1/1L, BIOL 5, 6A, 10, 11, 13, 15, ESCI 1, 1/1L, 19, 20
Other Course: _____ College: _____ AP/IB Exam/CLEP Credit: _____ Qtr. Units: _____	
<input type="checkbox"/> B3 – Laboratory Activity	(Underlined courses in Areas B1 and B2 include a lab.) AP Exam (See credit in Area B1 or B2 above)
<input type="checkbox"/> B4 – Mathematics/Quantitative Reasoning	(A grade of C or better is required.) Select one course from the following: EDUC 46, MATH 1A, 1B, 1C, 1D, 2A, 2B, 10, 11, 12, 22, 23, 41, 42, 43, 44, 46, PSYC 15, SOC 15
Other Course: _____ College: _____ AP/IB Exam/CLEP Credit: _____ Qtr. Units: _____	
QUARTER UNITS COMPLETED (AREA B): _____	
AREA C: ARTS AND HUMANITIES	12 - 15 Quarter Units
At least one course in the Arts and one course in the Humanities . One ICS course must be taken in Area C or D.	
<input type="checkbox"/> Students must take one course from: EWRT 1B (5) or ESL 6 (5)	
Other Course: _____ College: _____ Qtr. Units: _____	
<input type="checkbox"/> C1 – Arts: Arts, Cinema, Dance, Music, Theater	ARTS 1A, 1B, 2A, 2B, 2C, 2D, 2F*, 2G, 2H, 2J, 2K, 2L, 3TC#, 3TD, 3TE, DANC 38A, ELIT 6*, E S 3#, F/TV 1#, 2A, 2AW, 2B, 2BW, 2C#, 2CW#, 48*, HUMI 1#, 15, ICS 5#, 14, 33, 45, INTL 10, 21, 22, 23, 24, MUSI 1A, 1B, 1C, 1D, PHTG 7, 20, 21, THEA 1, WMST 3C#
Other Course: _____ College: _____ AP/IB Exam Credit: _____ Qtr. Units: _____	
<input type="checkbox"/> C2 – Humanities: Literature, Philosophy, Languages Other than English	CANT 1, 2, 3, EDUC 58, ELIT 10, 11, 12, 17, 19, 21, 22, 24*, 25, 39, 44, 46A, 46B, 46C, 48A, 48B, 48C, 58, EWRT 1C, 30, F/TV 1#, 2C#, 2CW#, FREN 1, 2, 3, 4, 5, 6, 10, GERM 1, 2, 3, 4, 5, 6, HNDI 1, 2, 3, HIST 4A, 4B, 4C, 4D, 5A, 5B, HUMI 1#, 2, 5, 6, 7, 9, 10, 13, 14A, 14B, 14C, 16#, 18, 20, ICS 11#, 12, 24, 35, 44, 46, INTL 11, 13, 30, 34, ITAL 1, 2, 3, 4, JAPN 1, 2, 3, 4, 5, 6, KORE 1, 2, 3, 4, 5, 6, LING 1, MAND 1, 2, 3, 4, 5, 6, PERS 1, 2, 3, 4, 5, 6, PHIL 1, 2, 8, 9, 14A, 14B, 14C, 20A, 20B, 20C, 24, 30, 49, RUSS 1, 2, 3, SIGN 1, 2, 3, SPAN 1, 2, 3, 4, 5, 6, URDU 1, 2, 3, 4, 5, 6, VIET 1, 2, 3, 4, 5, 6, WMST 21, 49
Other Course: _____ College: _____ AP/IB Exam/CLEP Credit: _____ Qtr. Units: _____	
QUARTER UNITS COMPLETED (AREA C): _____	

♦ - Courses may be added to CSUGE mid-academic year. These will be highlighted and identified in **bold print**, followed by the effective start term in parentheses.

Visit **www.deanza.edu/transfer** and **www.assist.org** for updates during the spring 2013 term.

- Courses listed in two areas can be counted in only one.

★ - In addition to ICS, courses with asterisks meet ICS requirement.

▲ - Students transferring to SFSU are advised to select EWRT 1A & EWRT 1B.

◆ - Non-PE Activity Courses will not fulfill SJSU's Physical Education Requirement for graduation.

† - No more than 45 quarter units from Areas B - D may be used towards certification.

AREA D: SOCIAL SCIENCES**16 Quarter Units**Select two courses from the following disciplines (D1-D0). One ICS course must be taken in Area C or D.**Two courses from American History and Institutions required: HIST 17A# or 17B# or 17C# (4 units ea.) AND POLI 1 (4 units)**

Other Course: _____ College: _____ AP Exam/CLEP Credit: _____ Qtr. Units: _____

Other Course: _____ College: _____ AP Exam Credit: _____ Qtr. Units: _____

*If applying a Political Science course that does not appropriately cover California state and local government OR if applying the U.S. Government & Politics AP exam (minimum score of 3), a passing score on the California Challenge Exam is needed to satisfy this requirement. See a counselor or academic advisor for more information.***D1 – Anthropology & Archaeology: ANTH 2#, 3, 4#, 6, ICS 37#****D2 – Economics: BUS 21#, ECON 1, 2****D3 – Ethnic Studies: ADMJ 29*#, ARTS 2F*#, HIST 18A*#, 18B*#, ICS 4#, 5#, 8#, 9, 10, 11#, 18A#, 18B#, 20, 21, 22#, 29#, 30, 31, 32#, 36#, 41, 42#, 43#, 55, POLI 16*#, SOC 4*#, WMST 8*#****D4 – Gender Studies: ARTS 3TC#, HIST 9#, HUMA 10#, ICS 4#, 8#, 26, POLI 30#, PSYC 12#, SOC 4*#, 28#, WMST 1#, 3C#, 8*#, 9#, 12#, 28#, 30#****D5 – Geography: GEO 4, 5, 10****D6 – History: ARTS 2F*#, 3TC#, CIS 2#, HIST 2#, 3A*, 3B*, 3C*, 7A*, 7B*, 9#, 10, 16A*, 16B*, 17A#, 17B#, 17C#, 18A*#, 18B*#, 19A, 19B, 28#, ICS 3A, 3B, 3C, 5#, 16A, 16B, 18A#, 18B#, 22#, 28, 32#, 37#, 38A, 38B, 42#, 43#, INTL 19A, 19B, WMST 3C#, 9#****D7 – Interdisciplinary, Social or Behavioral Sciences: ANTH 4#, BUS 80, C D 10G, 10H, 12, ES 1, 3#, F/TV 10, HIST 2#, HUMA 10#, 50#, ICS 4#, 7, 17, 25, 27, 36#, 37#, INTL 5, 8, 15, 33, JOUR 2, PHIL 17*, POLI 15*, 16*#, 17*, 33, PSYC 1#, 10G, 10H, SOC 1#, 4*#, 5, 28#, SPCH 7*, 70, WMST 28#****D8 – Political Science, Government and Legal Institutions: ADMJ 29*#, BUS 21#, ICS 29#, PHIL 10, POLI 2, 3, 5, 30#, WMST 30#****D9 – Psychology: HUMA 10#, PSYC 1#, 3, 4, 5, 6, 8#, 9#, 12#, 14#, 24, WMST 12#****D0 – Sociology & Criminology: SOC 1#, 8, 20, 28#, 35, WMST 28#**

Other Course: _____ College: _____ AP/IB Exam/CLEP Credit: _____ Qtr. Units: _____

Other Course: _____ College: _____ AP/IB Exam/CLEP Credit: _____ Qtr. Units: _____

QUARTER UNITS COMPLETED (AREA D):**AREA E: LIFELONG LEARNING AND SELF-DEVELOPMENT****4 - 5 Quarter Units**

No more than 2 units of PE/DANC/PEA activity courses may apply.

Non-PE/DANC/PEA Activity Courses:**ANTH 2#, BIOL 8, BUS 56, CIS 2#, CLP 70, E S 2, ESCI 30, HLTH 21, 51, HIST 9#, HUMA 10#, 20, 50#, HUMI 16#, NUTR 10, ◆PE 51, 53 (2 units), 70A (2 units), PSYC 8#, 9#, 12#, 14#, SPCH 16, WMST 1#, 9#, 12#****Physical Education (PE)/DANC Activity Courses:****DANC 22, 22K, 22L, 23A, 23B, 23L, 23M, 24A, 24B, 24C, 25A, 25B, 37A, 37B, 49A****P E 1A, 1H, 1HX, 1L, 1LX, 2A, 2AX, 2B, 2BX, 2K, 2KX, 2L, 2LX, 2P, 2PX, 2Q, 2QX, 2R, 2RX, 2S, 2SX, 2Y, 2YX, 3, 3X, 3AX, 3AY, 3G, 3GX, 4, 4X, 5AX, 5AY, 6B, 6BX, 6D, 6DX, 6F, 6FX, 6G, 6GX, 6H, 6HX, 6K, 6KX, 6Q, 6QX, 6R, 6RX, 6S, 6SX, 6U, 6UX, 6UY, 6V, 6VX, 8, 8X, 9, 9X, 9Y, 10, 10X, 10Y, 11, 11X, 12, 12X, 13A, 13AX, 13B, 13BX, 13C, 13CX, 13T, 13TX, 14A, 14AX, 14B, 14BX, 15, 15X, 16A, 16AX, 16B, 16BX, 19A, 19AX, 19B, 19BX, 19C, 19CX, 19T, 20A, 20AX, 20B, 20BX, 21A, 21AX, 21B, 21BX, 21C, 21CX, 21D, 21DX, 21E, 26A, 26AX, 26B, 26BX, 26C, 26CX, 26D, 26DX, 28A, 28G, 32B, 32F, 32G, 32H, 32I, 32J, 32K, 32L, 32M, 32N, 32P, 32S, 32T, 32W, 33A, 33AX, 33I, 33IX, 38W, 38WX, 39M, 39MX, 39W, 39WX, 40, 40X, 41, 41X, 42W, 42WX, 43, 43X, 44M, 44MX, 44W, 44WX, 45, 45X, 46, 46X, 47M, 47MX, 47W, 47WX, 48M, 48MX, 48W, 48WX, 71****Physical Education - Adapted (PEA) Activity Courses:****PEA 1, 1X, 1Y, 1Z, 2, 2X, 2Y, 2Z, 4, 4X, 4Y, 4Z, 5, 5X, 5Y, 5Z, 6X, 6Y**

Other Course: _____ College: _____ CLEP Credit: _____ Qtr. Units: _____

QUARTER UNITS COMPLETED (AREA E):**ICS Requirement Met in Area C or D****TOTAL UNITS FOR AREAS A-E (MINIMUM 58 QUARTER UNITS*):**◆ - Courses may be added to CSUGE mid-academic year. These will be **highlighted** and identified in **bold print**, followed by the effective start term in parentheses.Visit www.deanza.edu/transfer and www.assist.org for updates during the spring 2013 term.

- Courses listed in two areas can be counted in only one.

▲ - Students transferring to SFSU are advised to select EWRT 1A & EWRT 1B.

+ - No more than 45 quarter units from Areas B - D may be used towards certification.

★ - In addition to ICS, courses with asterisks meet ICS requirement.

◆ - Non-PE Activity Courses will not fulfill SJSU's Physical Education Requirement for graduation.

Student Name: _____ **Student I.D. Number:** _____

Completion of requirements on the Intersegmental General Education Transfer Curriculum (IGETC) will permit a California community college transfer student to transfer from a community college to a campus in either the California State University or the University of California system without the need, after transfer, to take additional lower-division, general education courses to satisfy campus general education requirements. **ALL COURSES MUST BE COMPLETED WITH GRADES OF "C" OR BETTER.** A course is certifiable if, and only if, it was on the IGETC requirement list at the time the course was taken. See a counselor/academic advisor about UC majors, colleges, and professional schools which do not accept IGETC, IGETC restrictions, and for other transfer requirements. Upon enrolling in final course requirements and receiving conditional admission to the university, students must submit a request for certification to De Anza's Office of Admissions & Records. G.E. Certification Request Forms are available at the Office of Admissions & Records, in the Counseling & Advising Center and online at: www.deanza.edu/counseling/forms.html.

☒ Use boxes in left margin to check when areas/requirements are completed.

AREA 1: ENGLISH COMMUNICATION		10 - 14 Qtr. Units
CSU: Select 3 courses, 1 course each from Areas 1A, 1B and 1C UC: Select 2 courses, 1 course each from Areas 1A and 1B		
<input type="checkbox"/>	Area 1A: English Composition (One course, 4-5 units): EWRT 1A Other Course: _____ College: _____ AP Exam Credit: _____ Qtr. Units: _____	
<input type="checkbox"/>	Area 1B: Critical Thinking-English Composition (One course, 4-5 units): EWRT 2 or PHIL 3 or SPCH 9 Other Course: _____ College: _____ No AP/IB Exam Credit for Area 1B	
<input type="checkbox"/>	Area 1C: Oral Communication (CSU Requirement Only) (One course, 4-5 units): SPCH 1 or SPCH 10* Other Course: _____ College: _____ No AP/IB Exam Credit for Area 1C	
QUARTER UNITS COMPLETED (AREA 1):		
AREA 2: MATHEMATICAL CONCEPTS AND QUANTITATIVE REASONING		4 - 5 Qtr. Units
Select 1 course below.		
MATH 1A*, 1B, 1C, 1D, 2A, 2B, 10*, 11, 12*, 22, 23*, 43, 44, PSYC 15*, SOC 15* Other Course: _____ College: _____ AP/IB Exam Credit: _____ Qtr. Units: _____		
QUARTER UNITS COMPLETED (AREA 2):		
AREA 3: ARTS AND HUMANITIES		12 - 15 Qtr. Units
At least 3 courses below, including 1 course from Arts (Area 3A) and 1 course from Humanities (Area 3B) .		
<input type="checkbox"/>	3A – Arts: ARTS 1A, 1B, 2A, 2B, 2C, 2D, 2F, 2G, 2H, 2J, 2K, 2L 3TC#, 3TD, 3TE*, DANC 38A, ELIT 6, E S 3#, F/TV 1, 2A*, 2AW*, 2B*, 2BW*, 2C#, 2CW#, 48, HUMI 1#, 15, ICS 5, 14, 33, 45, INTL 10, 21, 22, 23, 24, MUSI 1A, 1B, 1C, 1D, PHTG 7, 20, 21, THEA 1, WMST 3C# Other Course: _____ College: _____ AP/IB Exam Credit: _____ Qtr. Units: _____	
<input type="checkbox"/>	3B – Humanities: CANT 3*, ELIT 10, 11, 12, 17, 19, 21, 22, 24, 25, 39, 44, 46A, 46B, 46C, 48A, 48B, 48C, EWRT 1C, F/TV 2C#, 2CW#, FREN 3*, 4, 5, 6, 10*, GERM 3, 4, 5, 6, HNDI 3, HIST 4A, 4B, 4C, 4D, 5A, 5B, HUMI 1#, 2, 5, 6, 7, 9, 10, 13, 14A, 14B, 14C, 16, 18, 20, ICS 11#, 12, 24, 35, 44, 46, INTL 11, 13, 30, 34, ITAL 3, 4, JAPN 3, 4, 5, 6, KORE 3, 4, 5, 6, LING 1, MAND 3*, 4, 5, 6, PERS 3, 4, 5, 6, PHIL 1, 2, 8, 9, 14A, 14B, 14C, 20A, 20B, 20C, 24, 30, 49, RUSS 3, SIGN 3, SPAN 3, 4, 5, 6, URDU 3, 4, 5, 6, VIET 3, 4, 5, 6, WMST 21, 49 Other Course: _____ College: _____ AP/IB Exam Credit: _____ Qtr. Units: _____	
	(Area 3A or 3B) Other Course: _____ College: _____ AP/IB Exam Credit: _____ Qtr. Units: _____	
QUARTER UNITS COMPLETED (AREA 3):		

♦ Courses may be added to IGETC mid-academic year. These will be highlighted and identified in bold print, followed by the effective start term in parentheses. Visit www.deanza.edu/transfer and www.assist.org for updates during the spring 2013 term.

Courses listed in more than one area can count in only one area.

* Indicates that transfer credit is limited by either UC or CSU or both. See www.assist.org for more information.

^ International Baccalaureate (IB) Exam does not fulfill laboratory requirement in Area 5.

AREA 4: SOCIAL AND BEHAVIORAL SCIENCES		12 - 15 Qtr. Units
At least 3 courses from at least 2 disciplines (Areas 4A - 4J) or an interdisciplinary sequence.		
<input type="checkbox"/> 4A – Anthropology & Archaeology: ANTH 2, 3, 4, 6, ICS 37# <input type="checkbox"/> 4B – Economics: ECON 1, 2 <input type="checkbox"/> 4C – Ethnic Studies: ADMJ 29#, HIST 18A#, 18B#, ICS 4#, 8, 9, 10, 11#, 18A#, 18B#, 20, 21, 22#, 29#, 30, 31, 32#, 36#, 41, 42#, 43#, POLI 16#, SOC 4#, WMST 8 <input type="checkbox"/> 4D – Gender Studies: ARTS 3TC#, HIST 9#, HUMA 10#, ICS 4#, 26, POLI 30#, PSYC 12#, SOC 4#, 28#, WMST 1, 3C#, 9#, 12#, 28#, 30# <input type="checkbox"/> 4E – Geography: GEO 4, 5, 10 <input type="checkbox"/> 4F – History: ARTS 3TC#, HIST 2#, 3A, 3B, 3C, 7A, 7B, 9#, 10, 16A, 16B, 17A+, 17B+, 17C+, 18A#, 18B#, 19A, 19B, 28, ICS 3A, 3B, 3C, 16A, 16B, 18A#, 18B#, 22#, 28, 32#, 37#, 38A, 38B, 42#, 43#, INTL 19A, 19B, WMST 3C#, 9# <input type="checkbox"/> 4G – Interdisciplinary, Social & Behavioral Sciences: C D 10G, 10H, 12, E S 1, 3#, F/TV 10, HIST 2#, HUMA 10#, ICS 4#, 7, 17, 25, 27, 36#, 37#, INTL 5, 8, 15, 33, JOUR 2, PHIL 17, POLI 15, 16#, 17, 33, PSYC 10G, 10H, SOC 4#, 5, 28#, SPCH 7, WMST 28# <input type="checkbox"/> 4H – Political Science, Government & Legal Institutions: ADMJ 29#, ICS 29#, PHIL 10, POLI 1+, 2, 3, 5, 30#, WMST 30# 4I – Psychology: HUMA 10#, PSYC 1, 3, 4, 5, 6, 8, 9, 12#, 14, 24, WMST 12# 4J – Sociology & Criminology: SOC 1, 8, 20, 28#, 35, WMST 28#	Other Course: _____ College: _____ AP/IB Exam Credit: _____ Qtr. Units: _____ Other Course: _____ College: _____ AP/IB Exam Credit: _____ Qtr. Units: _____ Other Course: _____ College: _____ AP/IB Exam Credit: _____ Qtr. Units: _____	
QUARTER UNITS COMPLETED (AREA 4):		
AREA 5: PHYSICAL AND BIOLOGICAL SCIENCES		9 - 12 Qtr. Units
At least 2 courses, including one Physical Science and one Biological Science ; at least one must include a laboratory . Courses with a laboratory are <u>underlined</u> .		
<input type="checkbox"/> 5A – Physical Sciences: ASTR 4, 10, CHEM <u>1A*</u> , <u>10*</u> , <u>30A*</u> , <u>30B*</u> , GEO 1, GEOL <u>10</u> , 20, MET 10, 10/ <u>10L</u> , 10/ <u>20L</u> , PHYS <u>2A*</u> , <u>4A*</u> , 10* <input type="checkbox"/> 5B – Biological Sciences: ANTH 1, 1/ <u>1L</u> , BIOL <u>6A</u> , <u>10*</u> , <u>11*</u> , <u>13</u> , <u>15</u> , ESCI 1, 1/ <u>1L</u> , <u>19*</u> , <u>20*</u> <input type="checkbox"/> 5C – Laboratory Activity (Underlined courses in Areas 5A and 5B include a lab.)	Other Course: _____ College: _____ AP/ [^] IB Exam Credit: _____ Qtr. Units: _____ Other Course: _____ College: _____ AP/ [^] IB Exam Credit: _____ Qtr. Units: _____	
QUARTER UNITS COMPLETED (AREA 5):		
AREA 6: LANGUAGE OTHER THAN ENGLISH (LOTE) (UC Requirement Only)		
Students must demonstrate proficiency equivalent to two years of high school study in the same language. If requirement was met in high school, official transcripts must be on file at De Anza - Admissions & Records Office. For more information on this requirement go to: www.deanza.edu/transfer/ucge.html		
Complete one of the following with a grade of "C" or better: ARBC 2, 3, 4, 5, 6, CANT 2*, 3*, FREN 2*, 3*, 4, 5, 6, 10*, GERM 2, 3, 4, 5, 6, HNDI 2, 3, ITAL 2, 3, 4, JAPN 2, 3, 4, 5, 6, KORE 2, 3, 4, 5, 6, MAND 2*, 3*, 4, 5, 6, PERS 2, 3, 4, 5, 6, RUSS 2, 3, SIGN 2, 3, SPAN 2, 3, 4, 5, 6, URDU 2, 3, 4, 5, 6, VIET 2, 3, 4, 5, 6		
Other Course: _____ College: _____ AP/IB Exam Credit: _____ Qtr. Units: _____		
QUARTER UNITS COMPLETED (AREA 6):		
TOTAL UNITS FOR AREAS 1 - 6 (47 - 61 QUARTER UNITS):		

◆ Courses may be added to IGETC mid-academic year. These will be **highlighted** and identified in bold print, followed by the effective start term in parentheses. Visit www.deanza.edu/transfer and www.assist.org for updates during the spring 2013 term.

Courses listed in more than one area can count in only one area.

★ Indicates that transfer credit is limited by either UC or CSU or both. See www.assist.org for more information.

^ International Baccalaureate (IB) Exam does not fulfill laboratory requirement in Area 5.

NOTE: + CSU **graduation** requirement in **U.S. History, Constitution and American Ideals (AI):** (HIST 17A or 17B or 17C) and **POLI 1** fulfill this requirement. Each CSU campus has the discretion whether to allow courses used in Areas 4F/4H to also satisfy the (AI) graduation requirement. UC **graduation** requirement in **American History & Institutions:** If this requirement was not satisfied in high school, check UC campus catalog(s) for more information.

CERTIFICATE and A.A./A.S. DEGREE PROGRAMS **SECTION GUIDE**



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CERTIFICATE and A.A./A.S. DEGREE PROGRAMS



Individual department curriculum sheets for certificate and degree programs are available in the Counseling Center and at www.deanza.edu/counseling/degrecert.html. Division offices often have the information available as well.

Students transferring to other colleges should complete as many of that college's requirements as possible. Articulation agreements between De Anza and California public four-year institutions are available on the Web at www.assist.org. Students should also contact a counselor or adviser for program planning from the catalog of the desired transfer institution and maintain regular contact prior to transfer.

Although care has been taken to ensure the accuracy of the information that follows, there may be unintended errors and changes or deletions without notification.

General Requirements

To Earn a Certificate or Degree

1. Complete the course requirements listed.
2. Meet the requirements for the corresponding level (Skills Certificate, Certificate of Achievement, Certificate of Achievement-Advanced, A.A./A.S. degree) as specified below.

Skills Certificate

Skills Certificates **are issued by the individual departments and are not notated on official college transcripts.**

Contact the department directly for assistance and to apply for Skills Certificates.

Requirements:

A passing grade ("C" or better/"P") in each required course
Note: Each course must be completed at De Anza College.

Certificates of Achievement and Achievement-Advanced

Certificates of Achievement and Achievement-Advanced are awarded by the college and notated on official transcripts. Visit the Counseling and Advising Center to apply for these and for academic planning assistance.

Certificate of Achievement Level Requirements

A minimum "C" grade in each major course.

Note: A maximum of six (6) quarter units may be transferred from other academic institutions.

Certificate of Achievement-Advanced Level Requirements

1. A minimum "C" grade in each major course.

2. Demonstrated proficiency in English and mathematics as evidenced by eligibility for EWRT 1A or ESL 5 and eligibility for MATH 114.

Note: A maximum of 18 quarter units may be transferred from other academic institutions.

A.A./A.S. Degree Requirements

1. Completion of all General Education (GE) requirements (31-42 quarter units) for the A.A./A.S. degree. GE units must be completed with a minimum 2.0 GPA ("C" average).
2. Completion of all major requirements. Each major course must be completed with a minimum "C" grade. Major courses can also be used to satisfy GE requirements (except for Liberal Arts degrees).
Note: A maximum of 22 quarter units from other academic institutions may be applied toward the major.
3. Completion of a minimum of 90 degree-applicable quarter units (GE and major units included). All De Anza courses must be completed with a minimum 2.0 GPA ("C" average). All De Anza courses combined with courses transferred from other academic institutions must be completed with a minimum 2.0 GPA ("C" average).
Note: A minimum of 24 quarter units must be earned at De Anza College.

A.A./A.S. Transfer Degree Requirements

1. Completion of all major requirements. Each major course must be completed with a minimum "C" grade. Major courses can also be used to satisfy GE requirements (except for Liberal Arts degrees).
Note: A maximum of 22 quarter units from other academic institutions may be applied toward the major.
2. Certified completion of either the California State University (CSU) General Education Breadth pattern (CSU GE) or the Intersegmental General Education Transfer Curriculum (IGETC for CSU).
3. Completion of a minimum of 90 CSU-transferrable quarter units (De Anza courses numbered 1-99) with a minimum 2.0 GPA ("C" average).
4. Completion of all transferrable and non-transferrable De Anza courses (courses numbered 1-199) with a minimum 2.0 GPA ("C" average).
5. Completion of all De Anza courses combined with courses transferred from other academic institutions with a minimum 2.0 GPA ("C" average).
Note: A minimum of 24 quarter units must be earned at De Anza College.

NOTE: Major courses for certificates and degrees must be completed with a letter grade unless a particular course is only offered on a pass/no-pass basis.

Accounting

including Bookkeeping and Taxation

Certificate of Achievement

In this program Business students gain accounting knowledge needed for an entry-level accounting position.

Student Learning Outcomes - upon completion students will be able to:

- demonstrate knowledge of double-entry accounting within financial and cost accounting systems for various business organizations.
- prepare financial statements and reports and analyze these statements to evaluate the financial structure of a firm and describe fundamental business concepts, while identifying ethical issues in accounting.

1. Meet the requirements for this certificate level. (Page 48)

2. Complete the following.

ACCT 1A	Financial Accounting I	5
ACCT 1B	Financial Accounting II	5
ACCT 1C	Managerial Accounting	5
ACCT 88	Excel Spreadsheets for Accounting	2

Complete one (1) course from:

ACCT 87AH	Computerized Accounting Programs I (Peachtree - Windows) (2)	2
ACCT 87AI	Computerized Accounting Programs I (Quickbooks) (2)	2
ACCT 87AJ	Computerized Accounting Programs I (Great Plains) (2)	2

Complete a minimum of seven (7) units from the following: 7

ACCT 64	Payroll and Business Tax Accounting (3)	
ACCT 66	Cost Accounting (5)	
ACCT 67A	Federal Income Tax (4)	
ACCT 75	Accounting for Government and Nonprofit Entities (5)	
ACCT 86	Computer Accounting Systems (5)	
ACCT 105	Basic Financial Accounting Procedures (1)	
	Total Units Required.	26

Recommended

BUS 10	Introduction to Business (5)	
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Accounting: Practice Emphasis

Certificate of Achievement-Advanced

In this program Business students gain the skills needed for a professional job in Accounting or related positions such as analyst or staff accountant.

Student Learning Outcomes - upon completion students will be able to:

- demonstrate knowledge of double-entry accounting within financial and cost accounting systems for various business organizations.
- prepare financial statements and reports and analyze these statements to evaluate the financial structure of a firm and describe fundamental business concepts, while identifying ethical issues in accounting.
- identify and assess the theory and reporting differences between International Reporting Standards and US Generally Accepted Accounting Principles.

- evaluate events which require research in the professional literature and formulate an organized, concise approach to a solution.

1. Meet the requirements for this certificate level. (Page 48)

2. Complete the following.

ACCT 1A	Financial Accounting I	5
ACCT 1B	Financial Accounting II	5
ACCT 1C	Managerial Accounting	5
ACCT 51A	Intermediate Accounting	5
ACCT 51B	Intermediate Accounting	5
ACCT 88	Excel Spreadsheets for Accounting	2
	Complete one (1) course from:	2

ACCT 87AH	Computerized Accounting Programs I (Peachtree - Windows) (2)	
ACCT 87AI	Computerized Accounting Programs I (Quickbooks) (2)	
ACCT 87AJ	Computerized Accounting Programs I (Great Plains) (2)	

Complete a minimum of 16 units from the following: 16

ACCT 52	Advanced Accounting (5)	
ACCT 58	Auditing (5)	
ACCT 64	Payroll and Business Tax Accounting (3)	
ACCT 66	Cost Accounting (5)	
ACCT 67A	Federal Income Tax (4)	
ACCT 67B	Advanced Individual Tax: CA Emphasis (4)	
ACCT 68	Advanced Tax Accounting (4)	
ACCT 75	Accounting for Government and Nonprofit Entities (5)	
ACCT 86	Computer Accounting Systems (5)	
ACCT 105	Basic Financial Accounting Procedures (1)	
BUS 10	Introduction to Business (5)	
BUS 18	Business Law I (5)	
BUS 69	Investment Fundamentals (4)	
	Total Units Required	45

Accounting: Practice Emphasis

A.A. Degree

This program prepares Business students for transfer to a four-year institution as Accounting majors. In it students gain the skills needed for a professional job in Accounting or related field such as analyst or staff accountant.

Student Learning Outcomes - upon completion students will be able to:

- demonstrate knowledge of double entry accounting within financial and cost accounting systems for various business organizations.
- prepare financial statements and reports and analyze these statements to evaluate the financial structure of a firm and describe fundamental business concepts, while identifying ethical issues in accounting.
- identify and assess the theory and reporting differences between International Reporting Standards and US Generally Accepted Accounting Principles.
- evaluate events which require research in the professional literature and formulate an organized, concise approach to a solution.

Meet the A.A./A.S. degree requirements. (Page 48)

Major	Complete the course requirements for the Cert. of Achievement-Advanced	45 units
GE	General Education (31-42 units)	
Electives	Elective courses req'd. when major units plus GE units total is less than 90	
	Total Units Required	90 units

Accounting: Taxation Emphasis

Certificate of Achievement-Advanced

This program prepares Business students with the skills needed to work in the professional tax field.

Student Learning Outcomes - upon completion students will be able to:

- demonstrate knowledge of double-entry accounting within financial and cost accounting systems for various business organizations.
- prepare financial statements and reports and analyze these statements to evaluate the financial structure of a firm and describe fundamental business concepts, while identifying ethical issues in accounting.
- demonstrate a knowledge of payroll and income tax laws through recognition and analysis of tax issues and preparation of various federal, state and regulatory reports.

1. Meet the requirements for this certificate level. (Page 48)
2. Complete the following.

ACCT 1A	Financial Accounting I	5
ACCT 1B	Financial Accounting II	5
ACCT 1C	Managerial Accounting	5
ACCT 64	Payroll and Business Tax Accounting	3
ACCT 67A	Federal Income Tax	4
ACCT 67B	Advanced Individual Tax: CA Emphasis	4
ACCT 68	Advanced Tax Accounting	4
ACCT 88	Excel Spreadsheets for Accounting	2

Complete one (1) course from:

ACCT 87AH	Computerized Accounting Programs I (Peachtree - Windows) (2)	2
ACCT 87AI	Computerized Accounting Programs I (Quickbooks) (2)	2
ACCT 87AJ	Computerized Accounting Programs I (Great Plains) (2)	2

Complete a minimum of 11 units from the following:

ACCT 51A	Intermediate Accounting (4)	11
ACCT 51B	Intermediate Accounting (4)	
ACCT 52	Advanced Accounting (5)	
ACCT 58	Auditing (5)	
ACCT 66	Cost Accounting (5)	
ACCT 75	Accounting for Government and Nonprofit Entities (5)	
ACCT 86	Computer Accounting Systems (5)	
ACCT 105	Basic Financial Accounting Procedures (1)	
BUS 10	Introduction to Business (5)	
BUS 18	Business Law I	
BUS 69	Investment Fundamentals (4)	
REST 50	Real Estate Principles (4)	
	Total Units Required	45

Recommended

BUS 10	Introduction to Business (5)
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Accounting: Taxation Emphasis

A.A. Degree

This program prepares Business students to transfer to a four-year institution as an Accounting major with a taxation emphasis. In it students gain the skills needed in conjunction with a four-year degree for a professional job in the tax field.

Student Learning Outcomes - upon completion students will be able to:

- demonstrate a knowledge of double entry accounting within financial and cost accounting systems for various business organizations.
- prepare financial statements and reports and analyze these statements to evaluate the financial structure of a firm and describe fundamental business concepts, while identifying ethical issues in accounting.
- identify and assess the theory and reporting differences between International Reporting Standards and US Generally Accepted Accounting Principles.
- evaluate events which require research in the professional literature and formulate an organized, concise approach to a solution.

Meet the A.A./A.S. degree requirements. (Page 48)

Major	Complete the course requirements for the Cert. of Achievement-Advanced	45 units
GE	General Education (31-42 units)	
Electives	Elective courses req'd. when major units plus GE units total is less than 90	
	Total Units Required	90 units

Bookkeeping

Certificate of Achievement

This program prepares students for an entry-level position as an accounting technician or accounting clerk.

Student Learning Outcomes - upon completion students will be able to:

- demonstrate a knowledge of double entry accounting within financial and cost accounting systems for various business organizations.
- prepare financial statements and reports and analyze these statements to evaluate the financial structure of a firm and describe fundamental business concepts, while identifying ethical issues in accounting.
- apply fundamental accounting concepts to various computerized software programs.

1. Meet the requirements for this certificate level. (Page 48)
2. Complete the following.

ACCT 1A	Financial Accounting I	5
ACCT 1B	Financial Accounting II	5
ACCT 64	Payroll and Business Tax Accounting	3
ACCT 86	Computer Accounting Systems	5
ACCT 88	Excel Spreadsheets for Accounting	2
ACCT 105	Basic Financial Accounting Procedures	1

Complete one (1) course from:

ACCT 87AH	Computerized Accounting Programs I (Peachtree - Windows) (2)	2
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ACCT 87AI	Computerized Accounting Programs I (Quickbooks) (2)	
ACCT 87AJ	Computerized Accounting Programs I (Great Plains) (2)	
	Total Units Required	23

Recommended

BUS 10	Introduction to Business (5)	
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Tax Practitioner

Certificate of Achievement-Advanced

This program prepares students to work in the professional tax field.

Student Learning Outcomes - upon completion students will be able to:

- demonstrate a knowledge of double entry accounting within financial and cost accounting systems for various business organizations.
- prepare financial statements and reports and analyze these statements to evaluate the financial structure of a firm and describe fundamental business concepts, while identifying ethical issues in accounting.
- demonstrate knowledge of payroll and income tax laws through recognition and analysis of tax issues and preparation of various federal, state and regulatory reports.

1. Meet the requirements for this certificate level. (Page 48)

2. Complete the following.

ACCT 1A	Financial Accounting I	5
ACCT 1B	Financial Accounting II	5
ACCT 64	Payroll and Business Tax Accounting	3
ACCT 67A	Federal Income Tax	4
ACCT 67B	Advanced Individual Tax: CA Emphasis	4
ACCT 68	Advanced Tax Accounting	4
ACCT 88	Excel Spreadsheets for Accounting	2

Complete one (1) course from:

ACCT 87AH	Computerized Accounting Programs I (Peachtree - Windows) (2)	2
ACCT 87AI	Computerized Accounting Programs I (Quickbooks) (2)	
ACCT 87AJ	Computerized Accounting Programs I (Great Plains) (2)	

Complete a minimum of 16 units from the following:

ACCT 1C	Managerial Accounting (5)	
ACCT 52	Advanced Accounting (5)	
ACCT 66	Cost Accounting (5)	
ACCT 75	Accounting for Government and Nonprofit Entities (5)	
ACCT 86	Computer Accounting Systems (5)	
ACCT 105	Basic Financial Accounting Procedures (1)	
BUS 18	Business Law I (5)	
	Total Units Required.	45

Recommended

BUS 10	Introduction to Business (5)	
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Administration of Justice

Corrections/Probation

A.A. Degree

The Associate in Arts degree in Corrections/Probation provides the foundational education required for an individual's career entry into the criminal justice field, specifically correctional operations and probation/parole case investigations. The courses range from concepts of criminal law, evidence, investigation and reporting to criminology, aspects of social change, and corrections investigations.

Student Learning Outcomes - upon completion, students will be able to:

- identify and discuss the legal and sociological approaches to correctional theories and practices.
- analyze the current correctional system and alternative sentencing solutions.
- analyze and evaluate the current theories and concepts that attribute social deviations to juvenile delinquency.

1. Meet the A.A./A.S. degree requirements. (Page 48)

2. Complete the following.

ADMJ 1	Introduction to Administration of Justice	4
ADMJ 50	Crime, Correction and Society	4
ADMJ 54	Youth and the Law	4
ADMJ 56	Practical Writing for Administration of Justice	4
ADMJ 64X	Administration of Justice Internship	2
ADMJ 73	Crime and Criminology	4
ADMJ 74A	Interviewing, Interrogation and Crisis Intervention	4
ADMJ 75	Principles and Procedures of the Justice System	4
ADMJ 78	Correctional Investigation	4

Complete three (3) courses from the following:

ADMJ 3	Concepts of Criminal Law (5)	12-13
ADMJ 11	Federal Courts and Constitutional Law (4)	
ADMJ 25	Law and Social Change (4)	
ADMJ 29	Cultural Pluralism and American Law and Justice (4)	
ADMJ 51	Women in Crime (4)	
ADMJ 55	Alcohol, Narcotics and Drug Abuse (4)	
ADMJ 62	Sexual Assault: Police and Community Response (4)	

ADMJ 90A Legal Aspects of Evidence (4)

Major Corrections/Probation 46-47 units

GE General Education (31-42 units)

Electives Elective courses req'd. when major units plus GE units total is less than 90

Total Units Required 90 units

Recommended

ADMJ 5, 53; HIST 17A, 17B; P E 28A; PSYC 1, 4; SOC 1; Spanish (any level); Occupational Work Experience

Law Enforcement

A.A. Degree

The Associate in Arts degree in Law Enforcement provides the foundational education required for an individual's career pathway into the criminal justice field with an emphasis on the administration of justice. The courses range from

the concepts of criminal law, evidence, investigation and reporting to community relations and criminology.

Student Learning Outcomes - upon completion, students will be able to:

- identify the responsibilities of each component of the criminal justice system.
- analyze the issues and theories of ethical standards and unethical conduct that are unique to the criminal justice field.
- construct a professional report of a crime utilizing report criteria.

1. Meet the A.A./A.S. degree requirements. (Page 48)

2. Complete the following.

ADMJ 1	Introduction to Administration of Justice	4
ADMJ 3	Concepts of Criminal Law	5
ADMJ 5	Community Relations	4
ADMJ 56	Practical Writing for Administration of Justice	4
ADMJ 61	Criminal Investigation	4
ADMJ 64X	Administration of Justice Internship	2
ADMJ 75	Principles and Procedures of the Justice System	4
ADMJ 90A	Legal Aspects of Evidence	4
<i>Complete three (3) courses from the following:</i>		12-13
ADMJ 11	Federal Courts and Constitutional Law (4)	
ADMJ 25	Law and Social Change (4)	
ADMJ 29	Cultural Pluralism and American Law and Justice (4)	
ADMJ 50	Crime, Correction and Society (4)	
ADMJ 51	Women in Crime (4)	
ADMJ 53	Criminal Law II (5)	
ADMJ 54	Youth and the Law (4)	
ADMJ 55	Alcohol, Narcotics and Drug Abuse (4)	
ADMJ 60	Patrol Procedures (4)	
ADMJ 62	Sexual Assault: Police and Community Response (4)	
ADMJ 73	Crime and Criminology (4)	
ADMJ 74A	Interviewing, Interrogation and Crisis Intervention (4)	
Major	Law Enforcement	43-44 units
GE	General Education (31-42 units)	
Electives	Elective courses req'd. when major units plus GE units total is less than 90	
<i>Total Units Required</i>		<i>90 units</i>

Private Security

Certificate of Achievement-Advanced

The Certificate of Achievement-Advanced in Private Security provides a compressed, minimum foundational education required for an individual's career pathway into the private security field. The emphasis is on courses needed to apply for entry-level positions. The courses offer exposure to patrol and justice procedures.

Student Learning Outcomes - upon completion, students will be able to:

- identify the responsibilities of each component of the criminal justice system.
- identify and analyze ethical standards and unethical conduct that are unique to the criminal justice profession.

- construct a professional report of a crime utilizing report criteria.

1. Meet the requirements for this certificate level. (Page 48)

2. Complete the following.

ADMJ 1	Introduction to Administration of Justice	4
ADMJ 60	Patrol Procedures	4
ADMJ 64X	Administration of Justice Internship	2
ADMJ 75	Principles and Procedures of the Justice System	4
<i>Complete a minimum of 23 units from the following:</i>		23
ADMJ 3	Concepts of Criminal Law (5)	
ADMJ 11	Federal Courts and Constitutional Law (4)	
ADMJ 29	Cultural Pluralism and American Law and Justice (4)	
ADMJ 50	Crime, Correction and Society (4)	
ADMJ 53	Criminal Law II (5)	
ADMJ 54	Youth and the Law (4)	
ADMJ 55	Alcohol, Narcotics and Drug Abuse (4)	
ADMJ 56	Practical Writing for Administration of Justice (4)	
ADMJ 61	Criminal Investigation (4)	
ADMJ series	ADMJ 64, 64X, 64Y, 64Z	
	Administration of Justice Internship (1-4)	
ADMJ 90A	Legal Aspects of Evidence (4)	
<i>Total Units Required</i>		<i>37</i>

Private Security

A.A. Degree

The Associate in Arts degree in Private Security provides the foundational education required for an individual's career pathway into the private security field. The courses range from the concepts of criminal law, evidence, investigations and reporting to patrol procedures and criminology.

Student Learning Outcomes - upon completion, students will be able to:

- identify the components of the criminal justice system and describe how each is fundamental to criminology procedures.
- identify the elements of a crime based on a factual situation.
- construct a professional report of a crime utilizing report criteria.

1. Meet the A.A./A.S. degree requirements. (Page 48)

2. Complete the following.

ADMJ 1	Introduction to Administration of Justice	4
ADMJ 3	Concepts of Criminal Law	5
ADMJ 60	Patrol Procedures	4
ADMJ 64X	Administration of Justice Internship	2
ADMJ 75	Principles and Procedures of the Justice System	4
<i>Complete a minimum of 20 units from the following:</i>		20
ADMJ 11	Federal Courts and Constitutional Law (4)	
ADMJ 29	Cultural Pluralism and American Law and Justice (4)	
ADMJ 50	Crime, Correction and Society (4)	
ADMJ 53	Criminal Law II (5)	
ADMJ 54	Youth and the Law (4)	
ADMJ 55	Alcohol, Narcotics and Drug Abuse (4)	
ADMJ 61	Criminal Investigation (4)	

ADMJ 73	Crime and Criminology (4)	
ADMJ 74A	Interviewing, Interrogation and Crisis Intervention (4)	
ADMJ 90A	Legal Aspects of Evidence (4)	
Major	Private Security	39 units
GE	General Education (31-42 units)	
Electives	Elective courses req'd. when major units plus GE units total is less than 90	
	Total Units Required	90 units

Art

Art History

Certificate of Achievement

(Pending state approval. Check with the department for the status.)

Completion of the Art History Certificate of Achievement provides students with a basic understanding of the discipline of Art History, emphasizing visual literacy and research skills necessary for critical inquiry and analysis of art works in a global context.

Student Learning Outcomes - upon completion students will be able to:

- analyze artworks on the basis of social, cultural, political, economic and/or ethnic contexts and issues relevant to women's and gender studies.
- demonstrate critical thinking and visual literacy skills through oral and written communication, including those used to analyze, evaluate and synthesize primary and secondary sources.

1. Meet the requirements for this certificate level. (Page 48)

2. Complete the following.

Complete four (4) of the following Western and Multicultural Arts courses: 16

ARTS 2A	History of Art (Europe from Prehistory through Early Christianity) (4)
ARTS 2B	History of Art (Europe During Middle Ages/Renaissance) (4)
ARTS 2C	History of Art (Europe from the Baroque Period through Impressionism) (4)
ARTS 2D	History of Art (Europe and the United States/Post-Impressionism) (4)
ARTS 2F	History of Art (Multicultural Arts in the U.S.) (4)
ARTS 2G	Arts of Asia (4)
ARTS 2H	History of Art: Native Arts of Mesoamerica and South America (4)
ARTS 2J	History of Art: Indigenous Arts of the World (4)
ARTS 2K	History of Art: Visual Arts of Islam (4)
ARTS 2L	History of Art: Visual Arts of Africa (4)

Complete one (1) course from: 4

ARTS 3TE	Today's Working Artist (4)
ARTS 3TC	Women and Art (4)

Complete:

ARTS 4A	Beginning Drawing	3
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Complete one (1) course from: 3

ARTS 8	Two-Dimensional Design (3)	
ARTS 10A	Three-Dimensional Design (3)	
ARTS 53A	Introduction to Visual Technology (3)	
	Total Units Required	26

Art History

Certificate of Achievement-Advanced

A.A. Degree

Completion of the Art History Certificate of Achievement-Advanced/degree provides students with a broad overview of the discipline of Art History from a global perspective. The program emphasizes visual literacy and research skills necessary for critical inquiry and analysis of art works, as well as knowledge of the technical processes of studio art relevant to the field of Art History.

Student Learning Outcomes - upon completion students will be able to:

- analyze artworks on the basis of social, cultural, political, economic and/or ethnic contexts and issues relevant to women's and gender studies.
- demonstrate critical thinking and visual literacy skills through oral and written communication, including those used to analyze, evaluate and synthesize primary and secondary sources.
- analyze artistic traditions through a cross-cultural perspective and in a global context.
- apply technical processes of studio art in written assignments in the field of Art History.

Certificate of Achievement-Advanced

1. Meet the requirements for this certificate level. (Page 48)

2. Complete the Certificate of Achievement course requirements. 26

3. Complete the following.

Complete these two (2) courses:

ARTS 1B	Architecture Past and Present	4
ARTS 3TD	Public Places, Private Spaces - American Art	4

Complete one (1) course from the following Art series that was not previously completed for the Art History Cert. of Achievement: 4

ARTS 2A	History of Art (Europe from Prehistory through Early Christianity) (4)
ARTS 2B	History of Art (Europe During Middle Ages/Renaissance) (4)
ARTS 2C	History of Art (Europe from the Baroque Period through Impressionism) (4)
ARTS 2D	History of Art (Europe and the United States/Post-Impressionism) (4)
ARTS 2F	History of Art (Multicultural Arts in the U.S.) (4)
ARTS 2G	Arts of Asia (4)
ARTS 2H	History of Art: Native Arts of Mesoamerica and South America (4)
ARTS 2J	History of Art: Indigenous Arts of the World (4)
ARTS 2K	History of Art: Visual Arts of Islam (4)
ARTS 2L	History of Art: Visual Arts of Africa (4)

Complete four (4) courses from the courses listed below that were not previously selected to complete the requirements for the Art History Certificate of Achievement: 12

ARTS 4B	Intermediate Drawing (3)
ARTS 8	Two-Dimensional Design (3)
ARTS 10A	Three-Dimensional Design (3)
ARTS 12	Design and Color (3)
ARTS 15A	Introduction to Acrylic Painting (3)
ARTS 15B	Intermediate Acrylic Painting (3)
ARTS 16A	Oil Painting I (3)

ARTS 16B	Oil Painting II (3)	
ARTS 18A	Ceramics (3)	
ARTS 53A	Introduction to Visual Technology (3)	
ARTS 56	Computer Graphic Design/ Electronic Publishing (3)	
	Total Units Required	50

A.A. Degree

Meet the A.A./A.S. degree requirements. (Page 48)

Major	Complete the course requirements for the Cert. of Achievement and the Cert. of Achievement-Advanced	50 units
GE	General Education (31-42 units)	
Electives	Elective courses req'd. when major units plus GE units total is less than 90	
	Total Units Required	90

Museum Studies

Skills Certificate

Skills Certificates are issued by the individual departments and are not notated on official college transcripts. Please contact the department directly for assistance and to apply for Skills Certificates

This certificate provides a foundation-level art and museum studies education. The Museum Studies courses emphasize the skills and knowledge necessary for entry-level employment in the museum/gallery field. A required internship provides practical experience, along with courses that include all aspects of design, installation and viewing of art exhibits in a museum/gallery environment.

Student Learning Outcomes - upon completion students will be able to:

- compare and contrast gallery/museum art exhibits in terms of history, culture and aesthetics.
- demonstrate a working knowledge of gallery design, processes and procedures.
- apply internship experience skills to art gallery/museum work environments.

1. Meet the requirements for this certificate level. (Page 48)
2. Complete the following.

ARTS 70	Viewing Bay Area Art Museums and Galleries	1
ARTS 71	Gallery Exhibition Design	3
ARTS 72	Internship in Art	1
ARTS 1A	Introduction to the Visual Arts	4
ARTS 4A	Beginning Drawing	3
ARTS 8	Two-Dimensional Design	3
ARTS 10A	Three-Dimensional Design	3
	Total Units Required	18

Ceramics

Certificate of Achievement

(Pending state approval. Check with the department for the status.)

This certificate provides foundation-level art and fundamental ceramics instruction. The ceramic courses emphasize hands-on experience and familiarize students with basic ceramic construction and design skills.

Student Learning Outcomes - upon completion, students will be able to:

- explore and develop their ideas by drawing and conceptualizing their work.
- demonstrate construction techniques in hand-building and wheel throwing.
- demonstrate competency in glaze application and firing.

1. Meet the requirements for this certificate level. (Page 48)
2. Complete the following.

ARTS 4A	Beginning Drawing	3
ARTS 8	Two-Dimensional Design	3
ARTS 10A	Three-Dimensional Design	3
ARTS 18A	Ceramics	3
ARTS 18B	Ceramics (Wheel Throwing)	3
ARTS 18C	Ceramics (Intermediate Wheel Throwing)	3
ARTS 18D	Ceramics (Hand Building)	3
ARTS 18E	Ceramics (Advanced Wheel Throwing)	3
ARTS 20	Ceramics Individual Lab	2
	Total Units Required	26

Ceramics

Certificate of Achievement-Advanced

This certificate provides foundation-level art and fundamental ceramics instruction. In the ceramic courses students gain the experience necessary for entry-level positions and learn intermediate-level skills needed for ceramics study at the university.

Student Learning Outcomes - upon completion, students will be able to:

- demonstrate competency in hand and wheel forming techniques.
- develop expertise in clay selection for different types of expression and surface embellishment.
- demonstrate competency in advanced technical skills associated with firing techniques.
- demonstrate loading and firing kilns for different temperature aesthetics and function.

1. Meet the requirements for this certificate level. (Page 48)
2. Complete the Certificate of Achievement course requirements. 26
3. Complete the following.

	Complete a minimum of 21 units from the following:	21
ARTS 19G	Ceramic Glaze Calculation (3)	
ARTS 19H	Raku (Ceramics) (3)	
ARTS 19I	Ceramic Sculpture (3)	
ARTS 19J	Ceramic Techniques (3)	
ARTS 19K	Ceramic Decoration (3)	
ARTS 19M	Low Fire Ceramics (3)	
ARTS 19N	Porcelain Ceramics (3)	
ARTS 50	Primitive Firing of Ceramics (3)	
ARTS 51	Ceramics Kiln Construction (3)	
	Total Units Required	47

Ceramics

A.A. Degree

This degree provides foundation-level art and fundamental ceramics instruction. In the ceramic courses students gain the experience necessary for entry-level positions and learn intermediate-level skills needed for ceramics study at the university.

Student Learning Outcomes - upon completion, students will be able to:

- demonstrate competency in hand and wheel forming techniques.
- develop expertise in clay selection for different types of expression and surface embellishment.
- demonstrate competency in advanced technical skills associated with firing techniques.
- demonstrate loading and firing kilns for different temperature aesthetics and function.

Meet the A.A./A.S. degree requirements. (Page 48)

Major	Complete the course requirements for the Cert. of Achievement and the Cert. of Achievement-Advanced	47 units
GE	General Education (31-42 units)	
Electives	Elective courses req'd. when major units plus GE units total is less than 90	
	Total Units Required	90

Painting

Certificate of Achievement

(Pending state approval. Check with the department for the status.)

Courses within the Certificate of Achievement in Painting will train students in basic drawing skills using a variety of techniques. Students are also introduced to the computer as an effective and important mode of communication used by artists and designers. Critical thinking skills towards understanding of the history of paintings from a multicultural perspective of several time periods are also an important component of the students' training.

Student Learning Outcomes - upon completion, students will be able to:

- create drawings using a variety of techniques with traditional media such as charcoal, graphite, and ink.
- demonstrate basic painting techniques with either acrylic or oil media.
- utilize critical thinking skills to evaluate works of art for cultural and historical influences.
- demonstrate a basic understanding of the creative process, from idea generation through the preliminary/first draft phase to final product.

1. Meet the requirements for this certificate level. (Page 48)
2. Complete the following.

Complete one (1) course from:		4
ARTS 2D	History of Art (Post-Impressionism/Pres.) (4)	
ARTS 3TE	Today's Working Artist (4)	

Complete the following:

ARTS 4A	Beginning Drawing	3
ARTS 4B	Intermediate Drawing	3
ARTS 12	Design and Color	3

Complete one (1) course from the following:		3
ARTS 4D	Representational Drawing (3)	
ARTS 8	Two-Dimensional Design (3)	
ARTS 14A	Watercolor Painting I (3)	
ARTS 53A	Introduction to Visual Technology (3)	
Complete one (1) of the following sequences:		9
ARTS 15A	Acrylic Painting I (3)	
ARTS 15B	Acrylic Painting II (3)	
ARTS 15C	Acrylic Painting III (3)	
or		
ARTS 16A	Oil Painting I (3)	
ARTS 16B	Oil Painting II (3)	
ARTS 16C	Oil Painting III (3)	
Total Units Required		25

Painting

Certificate of Achievement-Advanced

The Certificate of Achievement-Advanced in Painting provides a foundation in the basics of painting, including drawing, using a variety of traditional media techniques. Students are trained in basic painting techniques with either acrylic or oil media and develop skills to evaluate works of art for cultural and historical influences while engaging in the creative process. This program prepares students with the experience necessary for entry-level positions in the painting field as well as the intermediate-level skills needed for study at the university.

Student Learning Outcomes - upon completion, students will be able to:

- reproduce drawings of the human figure using a variety of techniques with materials such as charcoal, graphite, ink and conte crayon.
- demonstrate awareness of the computer as an effective and important mode of communication used by artists and designers today.
- utilize critical thinking skills in their understanding of the history of paintings from a multicultural perspective spanning several time periods.

1. Meet the requirements for this certificate level. (Page 48)
2. Complete the Certificate of Achievement course requirements.
3. Complete the following.

ARTS 4C	Life Drawing	3
ARTS 53B	Introduction to Visual Technology	3

Complete the sequence from the list below that was not previously selected for the Painting Certificate of Achievement:

ARTS 15A	Acrylic Painting I (3)	
ARTS 15B	Acrylic Painting II (3)	
ARTS 15C	Acrylic Painting III (3)	
or		
ARTS 16A	Oil Painting I (3)	
ARTS 16B	Oil Painting II (3)	
ARTS 16C	Oil Painting III (3)	
Total Units Required		40

Painting

A.A. Degree

This degree provides a comprehensive foundation in the areas of design, color theory, multiple painting processes, and professional software/hardware used by artists and designers. Students gain the skills and experience necessary to demonstrate a complete understanding of aesthetics, techniques and philosophy in the creative process.

Student Learning Outcomes - upon completion, students will be able to:

- critically analyze and assess diverse historical and contemporary works of art, architecture, and design.
- create art that engages and builds on historical and contemporary practices, theories, and materials.
- translate concepts and visual experience into images and tactile forms.
- present finished artwork for peer, professional or academic review.
- evaluate and critique artwork and receive criticism from others.
- express artistic concepts and intents in written and oral formats.

Meet the A.A./A.S. degree requirements. (Page 48)

Major	Complete the course requirements for the Cert. of Achievement and the	
	Cert. of Achievement-Advanced	40 units
GE	General Education (31-42 units)	
Electives	Elective courses req'd. when major units plus GE units total is less than 90	
	Total Units Required	90

Sculpture

Certificate of Achievement

(Pending state approval. Check with the department for the status.)

The certificate of Achievement in Sculpture provides a comprehensive foundation in studio art in the discipline of sculpture at an intermediate level.

Student Learning Outcomes - upon completion, students will be able to:

- explore and develop ideas by drawing and creating work that incorporates concepts and techniques introduced in the courses.
- demonstrate intermediate critical thinking and problem solving skills during each phase of the sculpture making process.
- use tools and equipment properly and safely during the sculpture making process, including Oxy-Acetylene and MIG welding equipment and basic electric and hand tools.

- Meet the requirements for this certificate level. (Page 48)
- Complete the following.

Complete one (1) course from:

ARTS 2D	History of Art (Post-Impressionism/Pres.) (4)	
ARTS 3TE	Today's Working Artist (4)	4

Complete the following:

ARTS 4A	Beginning Drawing	3
ARTS 4B	Intermediate Drawing	3
ARTS 8	Two-Dimensional Design	3
ARTS 10A	Three-Dimensional Design	3
ARTS 37A	Sculpture	3
ARTS 37B	Intermediate Sculpture	3
	Total Units Required	22

Sculpture

Certificate of Achievement-Advanced

This certificate provides a comprehensive foundation in the discipline of studio art for sculpture at an advanced level.

Student Learning Outcomes - upon completion, students will be able to:

- explore and develop individual ideas by drawing and creating original works of art while incorporating advanced sculpture techniques.
- create a body of work or develop a portfolio which is reflective of their coursework in preparation for further studies.
- demonstrate advanced critical thinking and problem solving skills during each phase of the sculpture making process.
- use specific tools expertly in working with a variety of sculpture materials and techniques.

- Meet the requirements for this certificate level. (Page 48)
- Complete the Certificate of Achievement course requirements. 22
- Complete the following.

ARTS 10B	Intermediate Three-Dimensional Design	3
ARTS 37C	Advanced Sculpture	3
ARTS 58A	Furniture Design	3
ARTS 58B	Intermediate Furniture Design	3
ARTS 58C	Advanced Furniture Design	3
	Total Units Required	37

Sculpture

A.A. Degree

This degree offers a foundation in lower division courses enabling students to pursue a B.A. or B.F.A. in sculpture or design at a four-year institution. The degree prepares students to transition successfully into a university environment. Their acquired knowledge may be transferred into areas such as teaching, studio art production, product design, museum work, architectural design and engineering.

Student Learning Outcomes - upon completion, students will be able to:

- explore and develop individual ideas by drawing and creating original works of art while incorporating advanced sculpture techniques.
- create a body of work or develop a portfolio which is reflective of their coursework in preparation for further studies.
- demonstrate advanced critical thinking and problem solving skills during each phase of the sculpture making process.

- use specific tools expertly in working with a variety of sculpture materials and techniques.

Meet the A.A./A.S. degree requirements. (Page 48)

Major	Complete the course requirements for the Cert. of Achievement and the Cert. of Achievement-Advanced	37 units
GE	General Education (31-42 units)	
Electives	Elective courses req'd. when major units plus GE units total is less than 90	
	Total Units Required	90 units

Automotive Technician

An evening, in-service program for practicing apprentices and technicians, auto enthusiasts, and students seeking to enter the automotive technician workforce

Machining and Engine Repair

Automotive Machining and Engine Repair Technology

Certificate of Achievement

This certificate program prepares students for an entry-level engine diagnostics technician position in the automotive repair industry.

Student Learning Outcomes - upon completion students will be able to:

- demonstrate an understanding of four-stroke engine theory, basic safe machining practices, and engine assembly.

1. Meet the requirements for this certificate level. (Page 48)
2. Complete the following.

AUTO 64	Automotive Machining and Engine Repair	9
AUTO 64HP	High Performance Engine Preparation	9
	Total Units Required	18

Automotive Machining and Engine Repair Technology

Certificate of Achievement-Advanced

A.S. Degree

This certificate and degree program prepares students with advanced skills for an entry-level position in automotive engine diagnostics.

Student Learning Outcomes - upon completion students will be able to:

- demonstrate an understanding of four-stroke engine theory, basic safe machining practices, estimates and repair orders, and engine assembly.
- identify the basic electrical circuits and diagnose automotive electrical systems.
- apply the basic principles of physics as they work in the automotive industry.

Certificate of Achievement-Advanced

1. Meet the requirements for this certificate level. (Page 48)
2. Complete the following.

AUTO 53A	Automotive Mechanisms	3
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AUTO 60	Automotive Electrical Systems	9
AUTO 60A	Electrical Schematic Diagnosis	4.5
AUTO 60B	Automotive Electronics	4.5
AUTO 60C	Automotive Ignition, Fuel, and Emissions Systems	9
AUTO 64	Automotive Machining and Engine Repair	9
AUTO 64HP	High Performance Engine Preparation	9
	Total Units Required	48

A.S. Degree

Meet the A.A./A.S. degree requirements. (Page 48)

Major	Complete the course requirements for the Cert. of Achievement-Advanced	48 units
GE	General Education (31-42 units)	
Electives	Elective courses req'd. when major units plus GE units total is less than 90	
	Total Units Required	90 units

Engine Performance

Basic Engine Performance Technology

Certificate of Achievement

This certificate prepares a student to be successful as an entry-level technician in vehicle electrical systems repairs.

Student Learning Outcomes - upon completion students will be able to:

- identify the basic electrical circuits and diagnose automotive electrical systems.
- apply the basic principles of physics as they work in the automotive industry.

1. Meet the requirements for this certificate level. (Page 48)
2. Complete the following.

AUTO 53A	Automotive Mechanisms	3
AUTO 60	Automotive Electrical Systems	9
AUTO 60A	Electrical Schematic Diagnosis	4.5
AUTO 60B	Automotive Electronics	4.5
	Total Units Required	21

Intermediate Engine Performance Technology

Certificate of Achievement

This certificate prepares a student to be successful as an entry-level technician in vehicle ignition, fuel, and ignition systems.

Student Learning Outcomes - upon completion students will be able to:

- interpret and analyze automotive ignition, fuel, and ignition systems.

1. Meet the requirements for this certificate level. (Page 48)
2. Complete the following.

AUTO 60C	Automotive Ignition, Fuel, and Emissions Systems	9
AUTO 60D	Ignition Analysis and Oscilloscope Diagnosis	4.5
AUTO 60E	Automotive Fuel Injection	4.5
	Total Units Required	18

Advanced Engine Performance Technology Certificate of Achievement

This certificate helps prepare students for an entry-level position in the automotive repair industry.

Student Learning Outcomes - upon completion students will be able to:

- utilize the appropriate diagnostic equipment, documentation, and troubleshoot principles on various automotive systems.

1. Meet the requirements for this certificate level. (Page 48)
2. Complete the following.

AUTO 60F	No-Start Diagnosis	4.5
AUTO 60G	Advanced Automotive Scan Tool Diagnosis	4.5
AUTO 60H	Advanced Driveability and Onboard Diagnosis	4.5
AUTO 60J	Advanced Lab Scope and Waveform Diagnosis	4.5
Total Units Required		18

Advanced Engine Performance Technology Certificate of Achievement-Advanced

This certificate program prepares students with advanced skills for an entry-level position in the automotive repair industry utilizing appropriate diagnostic equipment, documentation, and troubleshooting principles on various automotive systems.

Student Learning Outcomes - upon completion students will be able to:

- identify the basic electrical circuits and diagnose automotive electrical systems.
- apply the basic principles of physics as they work in the automotive industry.
- interpret and analyze automotive ignition, fuel, and ignition systems.
- utilize appropriate diagnostic equipment, documentation, and troubleshooting principles on various automotive systems.

1. Meet the requirements for this certificate level. (Page 48)
2. Complete the following.

AUTO 53A	Automotive Mechanisms	3
AUTO 60	Automotive Electrical Systems	9
AUTO 60A	Electrical Schematic Diagnosis	4.5
AUTO 60B	Automotive Electronics	4.5
AUTO 60C	Automotive Ignition, Fuel, and Emissions Systems	9
AUTO 60D	Ignition Analysis and Oscilloscope Diagnosis	4.5
AUTO 60E	Automotive Fuel Injection	4.5
AUTO 60F	No-Start Diagnosis	4.5
AUTO 60G	Advanced Automotive Scan Tool Diagnosis	4.5
AUTO 60H	Advanced Driveability and Onboard Diagnosis	4.5
AUTO 60J	Advanced Lab Scope and Waveform Diagnosis	4.5
Total Units Required		57

Advanced Engine Performance Technology A.S. Degree

This degree prepares students with advanced skills for an entry-level position in the automotive repair industry utilizing appropriate diagnostic equipment, documentation, and troubleshooting principles on various automotive systems.

Student Learning Outcomes - upon completion students will be able to:

- identify the basic electrical circuits and diagnose automotive electrical systems.
- apply the basic principles of physics as they work in the automotive industry.
- interpret and analyze automotive ignition, fuel, and ignition systems.
- utilize appropriate diagnostic equipment, documentation, and troubleshooting principles on various automotive systems.

Meet the A.A./A.S. degree requirements. (Page 48)

Major	Complete the course requirements for the Cert. of Achievement-Advanced	57 units
GE	General Education (31-42 units)	
Electives	Elective courses req'd. when major units plus GE units total is less than 90	
Total Units Required		90 units

Automotive Chassis

Automotive Chassis Technology Certificate of Achievement

This certificate prepares students for an entry-level position in automotive undercar inspection and repair procedures.

Student Learning Outcomes - upon completion students will be able to:

- perform undercar inspections and repair suspension, steering, hydraulic, and active braking systems.

1. Meet the requirements for this certificate level. (Page 48)
2. Complete the following.

AUTO 61A	Automotive Brake Systems	4.5
AUTO 61B	Electronically Controlled Brake Systems	4.5
AUTO 62A	Steering, Suspension and Alignment	9
Total Units Required		18

Automotive Chassis Technology Certificate of Achievement-Advanced

This certificate program prepares students with advanced skills for an entry-level position in the automotive repair industry in undercar inspection and repair procedures.

Student Learning Outcomes - upon completion students will be able to:

- perform undercar inspections and repair suspension, hydraulic, and active braking systems.
- diagnose vehicle alignment concerns.
- identify the basic electrical circuits and diagnose automotive electrical systems.
- apply the basic principles of physics as they work in the automotive industry.

1. Meet the requirements for this certificate level. (Page 48)
2. Complete the following.

AUTO 53A	Automotive Mechanisms	3
AUTO 60	Automotive Electrical Systems	9
AUTO 60A	Electrical Schematic Diagnosis	4.5
AUTO 60B	Automotive Electronics	4.5
AUTO 61A	Automotive Brake Systems	4.5
AUTO 61B	Electronically Controlled Brake Systems	4.5
AUTO 62A	Steering, Suspension and Alignment	9
AUTO 62B	Advanced Wheel Alignment	9
Total Units Required		48

Automotive Chassis Technology

A.S. Degree

This degree prepares students with advanced skills an entry-level position in the automotive repair industry in undercar inspection and repair procedures.

Student Learning Outcomes - upon completion students will be able to:

- perform undercar inspections and repair suspension, hydraulic, and active braking systems.
- diagnose vehicle alignment concerns.
- identify the basic electrical circuits and diagnose automotive electrical systems.
- apply the basic principles of physics as they work in the automotive industry.

Meet the A.A./A.S. degree requirements. (Page 48)

Major	Complete the course requirements for the Cert. of Achievement-Advanced	48 units
GE	General Education (31-42 units)	
Electives	Elective courses req'd. when major units plus GE units total is less than 90	
Total Units Required		90 units

Automotive Powertrain

Automotive Powertrain Technology

Certificate of Achievement

This certificate program helps prepare students for an entry-level position in the automotive repair industry in automotive transmission and differential.

Student Learning Outcomes - upon completion students will be able to:

- show an understanding of the overall operation of an automotive transmission and differential.

1. Meet the requirements for this certificate level. (Page 48)
2. Complete the following.

AUTO 63	Automotive Transmissions and Transaxles	9
AUTO 63A	Automotive Drive Train	4.5
AUTO 63D	Transmission Diagnostic and Repair Techniques	4.5
Total Units Required		18

Automotive Powertrain Technology

Certificate of Achievement-Advanced

This certificate program prepares students with advanced skills for an entry-level position in automotive transmission and differential repair.

Student Learning Outcomes - upon completion students will be able to:

- demonstrate knowledge of the overall operation of an automotive transmission and differential.
- identify the basic electrical circuits and diagnose automotive electrical systems.
- apply the basic principles of physics as they work in the automotive industry.

1. Meet the requirements for this certificate level. (Page 48)
2. Complete the following.

AUTO 53A	Automotive Mechanisms	3
AUTO 60	Automotive Electrical Systems	9
AUTO 60A	Electrical Schematic Diagnosis	4.5
AUTO 60B	Automotive Electronics	4.5
AUTO 63	Automotive Transmissions and Transaxles	9
AUTO 63A	Automotive Drive Train	4.5
AUTO 63D	Transmission Diagnostic and Repair Techniques	4.5
Total Units Required		39

Automotive Powertrain Technology

A.S. Degree

This degree prepares students with advanced skills for an entry-level position in automotive transmission and differential repair.

Student Learning Outcomes - upon completion students will be able to:

- demonstrate knowledge of the overall operation of an automotive transmission and differential.
- identify the basic electrical circuits and diagnose automotive electrical systems.
- apply the basic principles of physics as they work in the automotive industry.

Meet the A.A./A.S. degree requirements. (Page 48)

Major	Complete the course requirements for the Cert. of Achievement-Advanced	39 units
GE	General Education (31-42 units)	
Electives	Elective courses req'd. when major units plus GE units total is less than 90	
Total Units Required		90 units

Additional Certificates

Smog Technician

Certificate of Achievement

This certificate program prepares students for an entry-level position in the automotive repair industry performing California state smog inspections.

Student Learning Outcomes - upon completion students will be able to:

- perform a complete California state smog inspection.

1. Meet the requirements for this certificate level. (Page 48)	
2. Complete the following.	
AUTO 65P Clean Air Car Course	7
AUTO 65W Advanced Clean Air Car Course	2.5
AUTO 60C Automotive Ignition, Fuel, and Emissions Systems	9
Total Units Required	18.5

Advanced Automotive Technology

Certificate of Achievement

This certificate program prepares students for an entry-level position in the automotive repair industry in advanced automotive electrical/environmental concepts.

Student Learning Outcomes - upon completion students will be able to:

- demonstrate understanding of general advanced automotive electrical/environmental concepts as they relate to automotive service, diagnosis, and repair.

1. Meet the requirements for this certificate level. (Page 48)	
2. Complete the following.	
AUTO 60 Automotive Electrical Systems	9
AUTO 60K Advanced Body Electrical	4.5
AUTO 60M Hybrid Electric Vehicles	4.5
AUTO 66 Automotive Air Conditioning	4.5
Total Units Required	22.5

Automotive Technology

An entry-level program for full-time day students
Certificate of Achievement-Advanced (Options A - C)

Automotive Technology

Certificate of Achievement-Advanced (Options A - C)

Complete the required courses for your option choice and meet the corresponding certificate requirements.

Option A: Automotive Machining and Engine Repair

This program prepares students for an entry-level position in the automotive repair industry in engine diagnostics.

Student Learning Outcomes - upon completion, students will be able to:

- demonstrate an application of four-stroke engine theory, basic safe machining practices, estimates and repair orders, and engine assembly.
- identify basic electrical circuits and diagnose automotive electrical circuit systems.
- apply the basic principles of physics as they work in the automotive industry.
- demonstrate knowledge of the job procurement process and hazardous materials/waste handling in the automotive industry.

AUTO 53A Automotive Mechanisms	3
AUTO 53B Automotive Electrical & Mechanical Systems	2
AUTO 57A Career Research and Employment in the Automotive Industry	2
AUTO 94A Principles of Four Stroke Cycle Gas and Diesel Engines	5
AUTO 94B Automotive Machining and Engine Service	5

AUTO 94C Automotive Machining and Engine Service	5
AUTO 94D Automotive Machining and Engine Service	5
AUTO 94E Automotive Machining and Engine Service	5
AUTO 94F Automotive Machining and Engine Service	5
Total Units Required	37

Option B: Automotive Engine Performance

This program prepares students for an entry-level position in the automotive repair industry.

Student Learning Outcomes - upon completion, students will be able to:

- diagnose basic electrical, engine performance, and emissions systems.
- identify basic electrical circuits and diagnose automotive electrical circuit systems.
- apply the basic principles of physics as they work in the automotive industry.

AUTO 53A Automotive Mechanisms	3
AUTO 53B Automotive Electrical & Mechanical Systems	2
AUTO 57A Career Research and Employment in the Automotive Industry	2
AUTO 99A Automotive Electricity, Battery, and Cranking Systems	6.25
AUTO 99B Automotive Charging, Ignition, and Accessory Systems	6.25
AUTO 99C Introduction to Engine Performance Systems	6.25
AUTO 99D Intermediate Engine Performance Systems	6.25
AUTO 99E Basic Engine Performance Diagnostic Procedures	6.25
AUTO 99F Intermediate Engine Performance Diagnostic Procedures	6.25
Total Units Required	44.5

Option C: Automotive Chassis and Powertrain

This certificate program prepares students for an entry-level position in the automotive repair industry.

Student Learning Outcomes - upon completion, students will be able to:

- perform undercar inspections and repair suspension, steering, hydraulic, and active braking systems.
- demonstrate overall operation of an automotive transmission and differential as it relates to service, diagnosis, and repair.
- identify basic electrical circuits and diagnose automotive electrical circuit systems.
- apply the basic principles of physics as they work in the automotive industry.
- use written and oral communication skills to write repair orders and speak with customers.

AUTO 53A Automotive Mechanisms	3
AUTO 53B Automotive Electrical & Mechanical Systems	2
AUTO 57A Career Research and Employment in the Automotive Industry	2
AUTO 91A Automotive Brake Systems	5
AUTO 92A Automotive Steering and Suspension	5
AUTO 92B Automotive Alignment	5
AUTO 93A Automotive Final Drivetrain	5
AUTO 93B Standard Transaxles	1.5
AUTO 93C Automatic Transmissions	5

AUTO 93D	Automatic Transaxles	1.5
AUTO 93E	Diagnostic Techniques	1
AUTO 93F	Automotive Transmission Service	5
Total Units Required		41

Automotive Technology

A.S. Degree (Options A - C)

Refer to the corresponding description, student learning outcomes, and course requirements for the certificate of achievement-advanced option of your choice.

Complete the prerequisite below and the certificate of achievement-advanced option requirements for the major, and meet the A.A./A.S. degree requirements. (Page 48)

Prerequisite: approved Automotive Technology Course Sequence Contract. See department for an application.

Recommended: One year of automotive educational experience (high school, ROP or De Anza's AUTO 50 series).

Major	Requirement: one (1) Automotive Technology Cert. of Achievement-Advanced, Option A, B, or C (37-44.5)
GE	General Education (31-42 units)
Electives	Elective courses req'd. when major units plus GE units total is less than 90
Total Units Required 90 units	

Biological Sciences

A.S. Degree

The purpose of the Biological Sciences AS Degree is to provide a lower division science foundation for those interested in pursuing a Bachelors degree in Biology/Biological Sciences. This major prepares students for transfer to any University of California or California State University campus. A major in Biological Sciences prepares students for advanced academic work and for careers in civil service, industry or teaching. It also provides a background for professional training in such fields as biotechnology, public health, nutrition, laboratory and field research, medicine, dentistry, pharmacy and veterinary medicine.

Student Learning Outcomes - upon completion, students will be able to:

- design and complete a biological research project applying scientific methods.
- correlate structure and function in biological systems.

1. Meet the A.A./A.S. degree requirements. (Page 48)
2. Complete the following.

BIOL 6A	Form and Function in the Biological World	6
BIOL 6B	Cell and Molecular Biology	6
BIOL 6C	Evolution, Systematics, and Ecology	6
CHEM 1A	General Chemistry	5
CHEM 1B	General Chemistry	5
CHEM 1C	General Chemistry and Qualitative Analysis	5

Complete a minimum of 15 units from one (1) of these two (2) options: 15-18

Option 1: Organic Chemistry

CHEM 12A	Organic Chemistry (5)
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CHEM 12B	Organic Chemistry (5)
CHEM 12C	Organic Chemistry (5)

Option 2: Physics

PHYS 2A	General Introductory Physics (5)
PHYS 2B	General Introductory Physics (5)
PHYS 2C	General Introductory Physics (5)

or

PHYS 4A	Physics for Scientists and Engineers (Mechanics) (6)
PHYS 4B	Physics for Scientists and Engineers (Electricity and Magnetism) (6)
PHYS 4C	Physics for Scientists and Engineers (Fluids, Waves, Optics, and Thermodynamics) (6)

Major Biological Sciences 48-51 units

GE General Education (31-42 units)

Electives Elective courses req'd. when major units plus GE units total is less than 90

Total Units Required 90 units

Recommended elective courses:

BIOL 13, BIOL 15, BIOL 26, BIOL 40A-C

ES 1, ESCI 19

MATH 1A-D, MATH 10

Students may complete either the Organic Chemistry or the Physics option in order to receive the A.S. Degree in Biological Sciences from De Anza College.

For students planning to transfer to a four-year institution, it may be beneficial to complete both the Organic Chemistry option and the Physics option. Course sequences in chemistry and physics are required in most B.S. Biology programs. For your specific transfer situation, please visit the Counseling Center and consult with the four-year institution.

Business Administration

Certificate of Achievement

The Business Administration Certificate of Achievement introduces the fundamental concepts and practices of business. Students obtain a basic understanding of the operation, methods, and purpose of each of the major functional areas within business: management, human resources, operations, marketing, accounting and finance. Students also learn business law fundamentals.

Student Learning Outcomes - upon completion students will be able to:

- distinguish and explain the primary functions within business such as management, human resources, business law, operations, marketing, accounting, and finance.

1. Meet the requirements for this certificate level. (Page 48)
2. Complete the following.

ACCT 1A	Financial Accounting I	5
BUS 10	Introduction to Business	5
BUS 18	Business Law I	5

Complete two (2) courses from the following: 8-10

BUS 21	Business and Society (5)
BUS 54	Business Mathematics (5)

BUS 55	Introduction to Entrepreneurship (5)
BUS 56	Human Relations in Business (5)
BUS 57	Human Resource Management (4)
BUS 58	The Business Plan (4)
BUS 60	International Business Management (5)
BUS 65	Leadership (5)
BUS 70	Principles of E-Business (5)
BUS 87	Introduction to Selling (4)
BUS 89	Advertising (5)
BUS 90	Principles of Marketing (5)
BUS 96	Principles of Management (5)
CIS 3	Business Information Systems (4.5)
Total Units Required 23-25	

Business Administration

A.A. Degree

The A.A. Degree in Business Administration is a general business degree for those who want to pursue any of the numerous career possibilities in the field of business such as Customer Service/Support Representative, Warehouse/Distribution Supervisor, Payroll Clerk/Administrator, Accounts Receivable Clerk, Collections Analyst, Executive Assistant, and Contracts Administrator. This degree provides students with an understanding of basic business practices, including operations, methods, and purpose, and an introduction to the major functional areas within business.

Student Learning Outcomes - upon completion students will be able to:

- explain how the primary functions within business (marketing, management, operations, human resources, accounting, finance, and business law) interact to achieve organizational goals.

1. Meet the A.A./A.S. degree requirements. (Page 48)
2. Complete the following.

ACCT 1A	Financial Accounting I	5
ACCT 1B	Financial Accounting II	5
ACCT 1C	Managerial Accounting	5
BUS 10	Introduction to Business	5
BUS 18	Business Law I	5
BUS 56	Human Relations in Business	5
BUS 60	International Business Management	5
BUS 90	Principles of Marketing	5
BUS 96	Principles of Management	5
CIS 3	Business Information Systems	4.5
<i>Major</i>	<i>Business Administration</i>	<i>49.5 units</i>
<i>GE</i>	<i>General Education (31-42 units)</i>	
<i>Electives</i>	<i>Elective courses req'd. when major units plus GE units total is less than 90</i>	
Total Units Required		90 units

Recommended

BUS 21, 54, 55, 57, 58, 59, 65, 69, 70, 85, 87, 89
ECON 1, 2
EWRT 1B or 2 or ESL 6
MATH 10, SPCH 70

Entrepreneurship

Certificate of Achievement

Students pursuing the Certificate of Achievement in Entrepreneurship are taught the fundamentals of small business administration and business planning. The certificate is designed to prepare students for the challenges they are likely to encounter in starting and maintaining a small business.

Student Learning Outcomes - upon completion students will be able to:

- critically evaluate business plans and describe the processes required to start, operate and measure the results of a small business.

1. Meet the requirements for this certificate level. (Page 48)

2. Complete the following.

BUS 55	Introduction to Entrepreneurship	5
BUS 58	The Business Plan	4
Complete three (3) courses from the following:		15
BUS 59	Promoting Your Small Business (5)	
BUS 60	International Business Management (5)	
BUS 65	Leadership (5)	
BUS 70	Principles of E-Business (5)	
BUS 90	Principles of Marketing (5)	
Total Units Required		24

Associate in Science in Business

Administration for Transfer

A.S.-T. Degree

The Business major consists of courses appropriate for an Associate of Science in Business Administration for Transfer degree, which provides a foundational understanding of the discipline, a breadth of coursework in the discipline, and preparation for transfer to any CSU that accepts the Transfer Model Curriculum (TMC).

Student Learning Outcome

Upon completion of this degree, students will be prepared for successful entry into upper division courses in Business.

1. Meet the A.A./A.S. degree requirements for transfer. (Page 48)
2. Complete the following.

BUS 10	Introduction to Business	5
BUS 18	Business Law I	5
ACCT 1B	Financial Accounting II	5
ACCT 1C	Managerial Accounting	5
CIS 3	Business Information Systems	4.5
ECON 1	Principles of Macroeconomics	4
ECON 2	Principles of Microeconomics	4

Complete one (1) course from the following: 5

MATH 10	Elementary Statistics and Probability (5)
MATH 11	Finite Mathematics (5)
MATH 12	Introductory Calculus for Business and Social Science (5)

Major Business Administration for Transfer 37.5 units

Transfer GE CSU GE or IGETC for CSU pattern (47-61)

Electives CSU-transferrable elective courses required when the major units plus transfer GE units total is less than 90

Total Units Required 90 units

Child Development

Certificate of Achievement

This vocational training program prepares future early childhood workers and educators to work with diverse children in early childhood settings. The program includes academic instruction, job skills training, and field and community engagement experiences. Students enrolled acquire knowledge to integrate developmentally appropriate practices and their application to teaching young children along with skills in building relationships with children and families.

This certificate meets entry-level professional requirements for teachers in early childhood programs and fulfills requirements to qualify as a Teacher in a center licensed by the California Department of Social Services. Students who wish to qualify to become a Director must also take C D 59G "Supervision and Administration of Child Development Programs (Management Systems)" and C D 59H "Supervision and Administration of Child Development Programs (Leadership Skills)."

The certificate requirements also meet the Child Development course work requirements for the Child Development Associate Teacher Permit.

Student Learning Outcomes - upon completion students will be able to:

- demonstrate the ability to work in a variety of settings with children and families with a commitment to uphold ethical standards.
- recognize the importance of community engagement and their role as local, national, and global advocates for children, families, and the community.
- integrate developmentally appropriate practices and their application to teaching young children.
- demonstrate skills in building relationships with children and families.

1. Meet the requirements for this certificate level. (Page 48)
2. Complete the following.

Current Infant and Child CPR/First Aid Certificate required.

C D 10G	Child Development (The Early Years)	4
C D 12	Child, Family & Community Interrelationships	4
C D 50	Principles and Practices of Teaching Young Children	3

Complete a minimum of nine (9) units from the following:

C D 10H	Child Development (Middle Childhood and Adolescence)	4
C D 52	Observation and Assessment/Young Child	(3)
C D 53	Creative Arts for the Young Child	(3)
C D 54	Curriculum for Early Childhood Programs	(3)
C D 55	Literacy Development and Activities for the Young Child	(3)
C D 56	Understanding and Working with English Language Learners	(3)
C D 58	Infant/Toddler Development	(4)
C D 61	Music and Movement (Developmental Foundations)	(3)
C D 63	Math and Science Activities/Young Child	(3)
C D 64	Health, Safety and Nutrition for the Young Child	(3)
C D 65	Programs for School-Age Child Care	(3)

C D 71	Constructive Guidance and Discipline	(3)
C D 72	Partnerships with Families in Early Childhood Education	(3)

Practicum Requirement (3-5 units) from the following:

C D 51	Student Teaching Practicum	(5)
C D 57	Self Assessment for Teachers of Young Children	(3)
Total Units Required		23-25

The Certificate of Achievement fulfills requirements to qualify as a Teacher in a center licensed by the Department of Social Services.

Students who wish to qualify as a Director must also take C D 59G Supervision and Administration of Child Development Programs (Management Systems) and C D 59H Supervision and Administration of Child Development Programs (Leadership Skills).

Child Development

Certificate of Achievement-Advanced

This vocational training program prepares future early childhood workers and educators to work with diverse children in early childhood settings. The program includes academic instruction, job skills training, field experiences, and civic and community engagement skills. Students learn to integrate developmentally appropriate practices and apply them to curriculum design for teaching young children. They also learn how to build culturally responsive partnerships with children and families. The Certificate of Achievement-Advanced is designed to meet the Child Development course requirements for a Child Development Teacher Permit. The Permit also requires 24 quarter units (equivalent of 16 semester units) of General Education courses.

Student Learning Outcomes - upon completion students will be able to:

- demonstrate the ability to work in a variety of settings with children and families with a commitment to uphold ethical standards.
- recognize the importance of community engagement and their role as local, national, and global advocates for children, families, and the community.
- integrate developmentally appropriate practices and apply them to curriculum design for teaching young children.
- demonstrate skills in building culturally responsive partnerships with children and families.

1. Meet the requirements for this certificate level. (Page 48)
2. Complete the following.

Current Infant and Child CPR/First Aid Certificate required.

C D 10G	Child Development (The Early Years)	4
C D 10H	Child Development (Middle Childhood and Adolescence)	4
C D 12	Child, Family and Community Interrelationships	4
C D 50	Principles and Practices of Teaching Young Children	3
C D 52	Observation of the Young Child	3
C D 54	Curriculum for Early Childhood Programs	3

C D 55	Literacy Development and Activities for the Young Child	3
C D 64	Health, Safety & Nutrition for the Young Child	3
C D 68	Teaching in a Diverse Society	3
<i>Complete a minimum of three (3) units from the following:</i>		
C D 53	Creative Arts for the Young Child (3)	
C D 56	Understanding and Working with English Language Learners (3)	
C D 57	Self Assessment for Teachers of Young Children (3)	
C D 58	Infant/Toddler Development (4)	
C D 59G	Supervision and Administration of Child Development Programs (Management Systems) (4)	
C D 59H	Supervision and Administration of Child Development Programs (Leadership Skills) (4)	
C D 60	Exceptional Children (3)	
C D 61	Music and Movement (Developmental Foundations) (3)	
C D 63	Math and Science Activities for the Young Child (3)	
C D 65	Programs for School-Age Child Care (3)	
C D 67	Supervision and Administration of Child Development Programs (Adult Supervision) (3)	
C D 71	Constructive Guidance and Discipline (3)	
EDUC 1	Introduction to Elementary Education in a Diverse Society (3)	
<i>Practicum Requirement (5 units)</i>		
C D 51	Student Teaching Practicum	5
<i>May be repeated up to three (3) times.</i>		
Total Units Required		38

The Certificate of Achievement-Advanced is designed to meet the Child Development course requirements for a Child Development Teacher Permit. The Permit also requires 24 quarter units (equivalent of 16 semester units) of General Education courses.

Child Development

A.A. Degree

The Associate in Arts Degree vocational training program prepares future early childhood workers and educators to work with diverse children in early childhood settings. The program prepares students for entry-level careers or entrance into a Bachelor's degree program in Child Development studies. The degree program focuses on integrating developmentally appropriate knowledge and practice, and developing professional competencies and job skills.

Students learn how to build partnerships with local, national and international resource organizations in order to advocate effectively for the needs of children and families. The degree fulfills the Child Development course requirements to qualify for the Child Development Permit Site Supervisor on the California Child Development Matrix. Students who wish to qualify as a Site Supervisor must also take C D 59G "Supervision and Administration of Child Development Programs (Management Systems)," C D 59H "Supervision

and Administration of Child Development Programs (Leadership Skills)" and CD 67 "Adult Supervision."

Student Learning Outcomes - upon completion students will be able to:

- demonstrate the ability to work in a variety of settings with children and families with a commitment to uphold ethical standards.
- build partnerships with local, national and international resource organizations in order to advocate effectively for the needs of children and families.
- integrate developmentally appropriate practices and their application to teaching young children.
- demonstrate skills in building relationships with children and families.

1. Meet the A.A./A.S. degree requirements. (Page 48)
2. Complete the following.

Current Infant and Child CPR/First Aid Certificate required.

C D 10G	Child Development (The Early Years)	4
C D 10H	Child Development (Middle Childhood and Adolescence)	4
C D 12	Child, Family and Community Interrelationships	4
C D 50	Principles and Practices of Teaching Young Children	3
C D 52	Observation of the Young Child	3
C D 54	Curriculum for Early Childhood Programs	3
C D 55	Literacy Development and Activities for the Young Child	3
C D 56	Understanding and Working with English Language Learners	3
C D 60	Exceptional Children	3
C D 64	Health, Safety & Nutrition for the Young Child	3
C D 67	Supervision and Administration of Child Development Programs (Adult Supervision)	3
C D 68	Teaching in a Diverse Society	3
<i>Complete a minimum of three (3) units from the following:</i>		
C D 53	Creative Arts for the Young Child (3)	
C D 57	Self Assessment for Teachers of Young Children (3)	
C D 58	Infant/Toddler Development (4)	
C D 59G	Supervision and Administration of Child Development Programs (Management Systems) (4)	
C D 59H	Supervision and Administration of Child Development Programs (Leadership Skills) (4)	
C D 61	Music and Movement (Developmental Foundations) (3)	
C D 63	Math and Science Activities for the Young Child (3)	
C D 65	Programs for School-Age Child Care (3)	
C D 71	Constructive Guidance and Discipline (3)	
C D 72	Partnerships with Families in Early Childhood Education (3)	
C D 73	Early Childhood Mental Health (3)	
C D 74	Early Childhood Mental Health Seminar and Fieldwork (3)	
C D 75	Social Emotional Development in Early Childhood (3)	

EDUC 1	Introduction to Elementary Education in a Diverse Society (3)	
<i>Practicum Requirement (10 units)</i>		
C D 51	Student Teaching Practicum (5)	10
	<i>May be repeated up to three (3) times.</i>	
Major	Child Development	52 units
GE	General Education (31-42 units)	
Electives	Elective courses req'd. when major units plus GE units total is less than 90	
	<i>Total Units Required</i>	<i>90 units</i>

Early Childhood Mental Health Certificate of Achievement

De Anza College's Child Development and Education Department developed the Early Childhood Mental Health Certificate to train mental health professionals at the entry- and advanced- level, ECE educators at the beginning and advanced-level, and professionals working in early education, mental health and community services settings and/or programs. Certificate requirements include student participation in field experiences with community-based, early childhood mental health programs. Students develop skills to work with both children and their families.

Student Learning Outcomes - upon completion students will be able to:

- demonstrate the ability to work in a variety of settings with children and families with a commitment to uphold ethical standards.
- recognize the importance of community engagement and their role as local, national, and global advocates for children, families, and the community.
- integrate early childhood mental health practices to support the development of social and emotional skills in young children.
- demonstrate skills in building relationships with children and families.

1. Meet the requirements for this certificate level. (Page 48)
2. Complete the following.

C D 10G	Child Development (The Early Years)	4
C D 58	Infant/Toddler Development	4
C D 72	Partnerships with Families in Early Childhood Education	3
C D 73	Early Childhood Mental Health	3
C D 74	Early Childhood Mental Health Seminar and Fieldwork	3
C D 75	Social Emotional Development in Early Childhood	3
	<i>Total Units Required</i>	<i>20</i>

Early Intervention/Special Education Assistant Certificate of Achievement-Advanced

This vocational training program prepares future early childhood workers and educators to work with children with disabilities and special needs in public and private early intervention, special education and educational settings that serve typical and atypical developing young children and their families. Students are taught practical skills in early intervention and early childhood special education from a

culturally responsive perspective. Students learn to integrate early intervention/special education practices and apply them to teaching young children with special needs. Certificate requirements include student participation in field experiences with community-based, inclusive educational programs.

The Certificate prepares students for two career paths: Early Intervention Assistant and Early Childhood Teacher. It is the equivalent of the Teacher level permit on the California Child Development Matrix. The Teacher level permit also requires 24 quarter units (equivalent of 16 semester units) of General Education courses.

Student Learning Outcomes - upon completion students will be able to:

- demonstrate the ability to work in a variety of settings with children and families with a commitment to uphold ethical standards.
- recognize the importance of community engagement and their role as local, national, and global advocates for children, families, and the community.
- integrate early intervention/special education practices and their application to teaching young children with special needs.
- demonstrate skills in building relationships with children and families.

1. Meet the requirements for this certificate level. (Page 48)
2. Complete the following.

Current Infant and Child CPR/First Aid Certificate required.

C D 10G	Child Development (The Early Years)	4
C D 12	Child, Family and Community Interrelationships	4
C D 50	Principles and Practices of Teaching Young Children	3
C D 52	Observation of the Young Child	3
C D 55	Literacy Development and Activities for the Young Child	3
C D 58	Infant/Toddler Development	4
C D 60	Exceptional Children	3
C D 64	Health, Safety & Nutrition for the Young Child	3
C D 73	Early Childhood Mental Health	3
C D 90	Facilitating Inclusion in Early Childhood Programs: Intervention Strategies	3
	<i>Complete a minimum of three (3) units from the following:</i>	<i>3</i>
C D 10H	Child Development (Middle Childhood and Adolescence) (4)	
C D 53	Creative Arts for the Young Child (3)	
C D 56	Understanding and Working with English Language Learners (3)	
C D 57	Self Assessment for Teachers of Young Children (3)	
C D 61	Music and Movement (Developmental Foundations) (3)	
C D 63	Math and Science Activities for the Young Child (3)	
C D 68	Teaching in a Diverse Society (3)	
C D 71	Constructive Guidance and Discipline (3)	
C D 75	Social Emotional Development in Early Childhood (3)	

<i>Practicum Requirement (5 units)</i>	5
C D 51 Student Teaching Practicum	
<i>May be repeated up to three (3) times.</i>	
<i>The practicum experience must be completed in an Early Intervention/Special Education Environment with an inclusion component or an Inclusion Environment.</i>	
Total Units Required	41

The Certificate of Achievement-Advanced is designed to meet the Early Intervention Assistant II requirements. It is the equivalent of the Teacher level permit on the California CTC Child Development Matrix. The Teacher level permit also requires 24 quarter units (equivalent of 16 semester units) of General Education courses.

Computer Aided Design (CAD)

AutoDesk

Certificate of Achievement

(Pending state approval. Check with the department for the status.)

The goal of De Anza College's Computer Aided Design-AutoDesk Certificate of Achievement program is to prepare individuals to seek employment as an engineering technician/CAD drafter, in architectural engineering or in civil engineering and design. This certificate program is designed to give students an overview of the latest version AutoDesk software while building transferable skills in computer aided drafting, architectural and construction design, and problem solving. This program also serves the needs of those currently employed or wishing to re-enter the mechanical engineering and design fields and needing to update technology and software skills.

Student Learning Outcomes - upon completion, students will be able to:

- solve basic and complex drafting and design application problems using AutoDesk design software.
- apply fundamental computer-aided drafting and design principles and practices to mechanical, industrial, and engineering design.
- utilize industry standard microcomputer CAD software and the hardware, operating systems and peripherals used to facilitate it.
- create engineering notes and scaled drawings in AutoDesk software using ASME and/or International Standards Organization (ISO) specifications.
- satisfy a prospective employer with quality technical expertise in using AutoDesk software at a level commensurate with entry- to mid-level usage in industry design and engineering.

Complete:

CDI 51	Geometric Dimensioning and Tolerancing	2
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Complete one (1) course from each of the following series:

CDI 80A-H	AutoCAD (Beginning)	4
CDI 81A-H	AutoCAD (Intermediate)	4
CDI 83A-H	AutoDesk Revit Architecture	4
CDI 85A-H	AutoDesk Inventor	4
Total Units Required		18

Creo Parametric

Certificate of Achievement

(Pending state approval. Check with the department for the status.)

De Anza College's Computer Aided Design Department developed the Creo Certificate option to teach drafter, designer, and engineering professionals entry- and mid-levels skills using Creo CAD Software. Students pursuing De Anza College's Creo Certificate of Achievement will receive education in Creo CAD system fundamentals. Students will learn substantive job skills in Creo that will make them employable in industrial and mechanical engineering and design.

Student Learning Outcomes - upon completion, students will be able to:

- solve basic and complex drafting and design application problems using Creo's feature-based 3-D parametric design software.
- apply fundamental computer-aided drafting and design principles and practices to mechanical, industrial, and engineering design.
- utilize industry standard microcomputer CAD software and the hardware, operating systems and peripherals used to facilitate it.
- create engineering notes and scaled drawings in Creo using ASME and/or International Standards Organization (ISO) specifications.
- satisfy a prospective employer with quality technical expertise in using Creo software at a level commensurate with entry- to mid-level usage in industry design and engineering.

1. Meet the requirements for this certificate level. (Page 48)

2. Complete the following.

Complete:

CDI 51	Geometric Dimensioning and Tolerancing	2
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Complete a minimum of 16 units from the following (limit one course per series): 16

CDI 70A-H	Creo Parametric (Beginning) (4)	
	---Note: either CDI 70D or 70E may apply toward the 16 units but not both---	
CDI 71A-H	Creo Parametric (Intermediate) (4)	
	---Note: either CDI 71D or 71E may apply toward the 16 units but not both---	
CDI 72A-H	Creo Parametric (Advanced) (4)	
	---Note: either CDI 72D or 72E may apply toward the 16 units but not both---	
CDI 73A-H	Creo Parametric (Sheetmetal) (4)	
	---Note: either CDI 73D or 73E may apply toward the 16 units but not both---	
CDI 74A-H	Creo Parametric (Surfaces) (4)	
	---Note: either CDI 74D or 74E may apply toward the 16 units but not both---	
Total Units Required		18

SolidWorks

Certificate of Achievement

(Pending state approval. Check with the department for the status.)

The goal of De Anza College's Computer Aided Design-SolidWorks Certificate of Achievement program is to prepare individuals to seek employment as an engineering technician/CAD drafter, in architectural engineering or in civil engineering and design. This certificate program is designed to give students an overview of the latest version SolidWorks software while building transferable skills in computer aided drafting, engineering design and problem solving.

Student Learning Outcomes - upon completion, students will be able to:

- solve basic and complex drafting and design application problems using SolidWorks design software.
- apply fundamental computer-aided drafting and design principles and practices to mechanical, industrial, and engineering design.
- utilize industry standard microcomputer CAD software and the hardware, operating systems and peripherals used to facilitate it.
- create engineering notes and scaled drawings in SolidWorks using ASME and/or International Standards Organization (ISO) specifications.
- satisfy a prospective employer with quality technical expertise in using SolidWorks software at a level commensurate with entry- to mid-level usage in industry design and engineering.

Complete:

CDI 51	Geometric Dimensioning and Tolerancing	2
<i>Complete one (1) course from each of the following series:</i>		
CDI 60A-H	SolidWorks (Beginning)	4
CDI 61A-H	SolidWorks (Intermediate)	4
CDI 62A-H	SolidWorks (Advanced)	4
CDI 63A-H	SolidWorks (SURFACES)	4
Total Units Required		18

Computer Aided Design - Mechanical

Certificate of Achievement-Advanced

Students pursuing De Anza College's Computer Aided Design Certificate of Achievement Advanced will receive education in the fundamentals of CAD that combines the use of three types of design graphic software packages. Students will learn substantive job skills in AutoDesk, Creo, and SolidWorks CAD systems that will make them employable in industrial and mechanical engineering and design.

Student Learning Outcomes - upon completion, students will be able to:

- solve basic and complex drafting and design application problems using industry standard two-dimensional and three-dimensional software and feature-based parametric design software.
- apply the fundamentals of computer-aided drafting and design to disciplines such as architectural, mechanical, and industrial design and engineering.
- utilize industry standard microcomputer CAD software

and the hardware, operating systems and peripherals used to facilitate it.

- create engineering notes and scaled drawings using ASME and/or International Standards Organization (ISO) specifications.
- satisfy a prospective employer with quality technical expertise in the use of three CAD tools (AutoDESK, SolidWorks, and Creo) at a level commensurate with entry- to mid-level usage in industry design and engineering.

1. Meet the requirements for this certificate level. (Page 48)
2. Complete the following.

Complete a minimum of eight (8) units from the following (limit one course per series): 8

CDI 60A-H	SolidWorks (Beginning) (4)
CDI 61A-H	SolidWorks (Intermediate) (4)
CDI 62A-H	SolidWorks (Advanced) (4)
CDI 63A-H	SolidWorks (SURFACES) (4)

Complete a minimum of 12 units from the following (limit one course per series): 12

CDI 70A-H	Creo Parametric (Beginning) (4)
---Note: either CDI 70D or 70E may apply toward the 12 units but not both---	
CDI 71A-H	Creo Parametric (Intermediate) (4)
---Note: either CDI 71D or 71E may apply toward the 12 units but not both---	
CDI 72A-H	Creo Parametric (Advanced) (4)
---Note: either CDI 72D or 72E may apply toward the 12 units but not both---	
CDI 73A-H	Creo Parametric (Sheetmetal) (4)
---Note: either CDI 73D or 73E may apply toward the 12 units but not both---	
CDI 74A-H	Creo Parametric (Surfaces) (4)
---Note: either CDI 74D or 74E may apply toward the 12 units but not both---	

Complete a minimum of eight (8) units from the following (limit one course per series): 8

CDI 80A-H	AutoCAD (Beginning) (4)
CDI 81A-H	AutoCAD (Intermediate) (4)
CDI 83A-H	AutoDesk Revit Architecture (4)
CDI 85A-H	AutoDesk Inventor (4)
	Total Units Required 28

Computer Aided Design - Mechanical

A.S. Degree

Students pursuing De Anza College's Computer Aided Design A.S. Degree will learn the fundamentals of CAD using three different design graphic software packages. The program teaches students substantive job skills in AutoDesk products (Inventor, ACAD, and Revit), Creo, and SolidWorks CAD systems. Completion of the program will enable students to be employable in industrial and mechanical engineering and design at an entry level.

Student Learning Outcomes - upon completion, students will be able to:

- solve basic and complex drafting and design application problems using industry standard two-dimensional and three-dimensional software and feature-based parametric design software.
- apply the fundamentals of computer-aided drafting and design to disciplines such as architectural, mechanical, and industrial design and engineering.
- utilize industry standard microcomputer CAD software and the hardware, operating systems and peripherals used to facilitate it.
- create engineering notes and scaled drawings using ASME and/or International Standards Organization (ISO) specifications.
- satisfy a prospective employer with quality technical expertise in the use of three CAD tools (AutoDESK, SolidWorks, and Creo) at a level commensurate with entry- to mid-level usage in industry design and engineering.

1. Meet the A.A./A.S. degree requirements. (Page 48)
2. Complete the following.

Complete:

CDI 51 Geometric Dimensioning and Tolerancing 2

Complete a minimum of 12 units from the following (limit one course per series): 12

CDI 60A-H SolidWorks (Beginning) (4)
 CDI 61A-H SolidWorks (Intermediate) (4)
 CDI 62A-H SolidWorks (Advanced) (4)
 CDI 63A-H SolidWorks (SURFACES) (4)

Complete a minimum of 20 units from the following (limit one course per series): 20

CDI 70A-H Creo Parametric (Beginning) (4)
 ---Note: either CDI 70D or 70E may apply toward the 20 units but not both---

CDI 71A-H Creo Parametric (Intermediate) (4)
 ---Note: either CDI 71D or 71E may apply toward the 20 units but not both---

CDI 72A-H Creo Parametric (Advanced) (4)
 ---Note: either CDI 72D or 72E may apply toward the 20 units but not both---

CDI 73A-H Creo Parametric (Sheetmetal) (4)
 ---Note: either CDI 73D or 73E may apply toward the 20 units but not both---

CDI 74A-H Creo Parametric (Surfaces) (4)
 ---Note: either CDI 74D or 74E may apply toward the 20 units but not both---

Complete a minimum of 12 units from the following (limit one course per series): 12

CDI 80A-H AutoCAD (Beginning) (4)
 CDI 81A-H AutoCAD (Intermediate) (4)
 CDI 83A-H AutoDesk Revit Architecture (4)
 CDI 85A-H AutoDesk Inventor (4)

Major Computer Aided Design 46 units

GE General Education (31-42 units)

Electives Elective courses req'd. when major units plus GE units total is less than 90

Total Units Required 90 units

Computer Information Systems

Enterprise Security

Enterprise Security Professional Certificate of Achievement

This certificate program prepares students to become Enterprise Security Technicians in a networking environment. In the program students learn network security basics, security policies and procedures, Network Monitoring, and Risk Analysis and Assessment based on Network Security.

Student Learning Outcomes - upon completion students will be able to:

- describe network components, protocols, architectures and the application of current communication and networking technologies.
- define properties of all modern network types.
- detect and stop security breaches in network and application layers.
- help organizations increase awareness of security policies and procedures.

1. Meet the requirements for this certificate level. (Page 48)
2. Complete the following.

Prerequisites/Corequisites

CIS 66* Intro. to Data Communication & Networking 5
 CIS 75A* Internet Concepts and TCP/IP Protocols 5

Requirements

CIS 108 Personal Computer Security Basics 4
 or CAOS 108

CIS 76 Introduction to Network Security 4

CIS 75C Enterprise Security Threats Management 4.5

CIS 75D Enterprise Security Policy Management 3

Total Units Required. 25.5

* To substitute this course based on previous knowledge or experience, go to www.caos.deanza.edu/substitute.

Enterprise Security Professional Certificate of Achievement-Advanced

This certificate program prepares students to become Enterprise Security Technicians in a networking environment. In this program students learn network security basics, emergency response planning, internet protocols, and more advanced-level security policies and procedures, Network Monitoring, and Risk Analysis and Assessment based on Network Security.

Student Learning Outcomes - upon completion students will be able to:

- describe network components, protocols, architectures and the application of current communication and networking technologies.
- define properties of all modern network types.
- detect and stop security breaches in network and application layers.
- help organizations increase awareness of security policies and procedures.

1. Meet the requirements for this certificate level. (Page 48)
2. Complete the following.

Prerequisites/Corequisites

CIS 66*	Intro. to Data Communication & Networking	5
CIS 75A*	Internet Concepts and TCP/IP Protocols	5

* Based on previous experience or knowledge, student may substitute another CIS course of equal or greater unit value with departmental approval.

Requirements

CIS 75C	Enterprise Security Threats Management	4.5
CIS 75D	Enterprise Security Policy Management	3
CIS 75E	Enterprise Emergency Response Planning	2
CIS 76	Introduction to Network Security	4
CIS 108	Personal Computer Security Basics or CAOS 108	4
CIS 170F	Windows 7 Administration	4.5
Total Units Required		32

Enterprise Security Professional

A.A. Degree

The Associate Degree program offers students the opportunity to study information security principles and theories that focus on asset protection. In this program students learn network security basics, security policies and procedures, Network Monitoring, and Risk Analysis and Assessment based on Network Security.

Students in this program can pursue either a general course of study or a concentration in information security. Graduates find employment in general public or private management, federal or local government civil service, military service, law enforcement, and private security.

Student Learning Outcomes - upon completion students will be able to:

- describe network components, protocols, architectures and the application of current communication and networking technologies.
- define properties of all modern network types.
- determine, at a more advanced level, how to detect and stop security breaches in network and application layer.
- help organizations increase awareness of security policies and procedures.

Meet the A.A./A.S. degree requirements. (Page 48)

Major	Complete the course requirements for the Enterprise Security Professional Cert. of Achievement-Advanced	32 units
GE	General Education (31-42 units)	
Electives	Elective courses req'd. when major units plus GE units total is less than 90	
Total Units Required		90 units

Database Design

Database Design for Developers (Oracle)

Certificate of Achievement

The Database Design for Developers Certificate of Achievement includes database management system fundamentals, SQL, PL/SQL and performance tuning. Students become proficient in organizing essential information and abstract relationships into a database. They also learn to update, maintain, and repair databases and improve database performance. Database skills are applied by Software Engineers, Business Analysts, Database Architects, Database Administrators, Database Designers and Reporting Analysts.

Student Learning Outcomes - upon completion, students will be able to

- prepare and review a database design that includes logical and system representations.
- design, code and debug SQL and PL/SQL programs.
- apply performance tuning techniques to large-scale database applications.
- create, design and debug intermediate level programs with basic C programming language.
- create a database that is optimized to meet defined technical requirements.

1. Meet the requirements for this certificate level. (Page 48)
2. Complete the following.

Complete both CIS 15AG and 15BG, or both CIS 71A and CIS 71B. 9

CIS 15AG	Intro. to Computer Programming Using C (4.5)
CIS 15BG	Intermediate Problem Solving in C (4.5)
or	
CIS 71A	Beg. Programming Methodologies/C++ (4.5)
CIS 71B	Interm. Programming Methodologies/C++ (4.5)

Complete the following courses:

CIS 64A	Database Management Systems	4.5
CIS 64B	Introduction to SQL	4.5
CIS 64C	Introduction to PL/SQL	4.5
CIS 64D	Database Tuning	3
Total Units Required		25.5

Network Design and Administration

Network Administration

Certificate of Achievement

This certificate program offers studies in overseeing and maintaining Windows systems as part of a network enterprise. Students become proficient in running administrative processes on a Windows operating system. Focus is placed on organization, security, and upkeep decisions as part of a larger business environment.

Student Learning Outcomes - upon completion, students will be able to:

- identify computer hardware and networking components in the context of micro computers and various types of network operating systems, architectures and protocols.
- develop and present a business improvement plan using the business decision making model and utilizing software applications in word processing, spreadsheets, or databases.

1. Meet the requirements for this certificate level. (Page 48)
2. Complete the following.

Complete:

CAOS 90GA* Computer Literacy I (PC) 2

* Based on previous experience or knowledge, student may substitute another CAOS course of equal or greater unit value with departmental approval.

Complete the following:

CAOS 102N	Microsoft Windows I (Windows 7)	1
CIS 108	Personal Computer Security Basics or CAOS 108	4
CIS 66	Intro. to Data Communication & Networking	5
CIS 3	Business Information Systems	4.5
CIS 170F	Windows 7 Administration	4.5
Total Units Required		21

Network Administration

Certificate of Achievement-Advanced

A.A. Degree

This achievement-advanced certificate and degree program offers studies in overseeing and maintaining Windows systems as part of a network enterprise. Students become proficient in running administrative processes on a Windows operating system. Focus is placed on organization, security, and upkeep decisions as part of a larger business environment. In addition, the Achievement-Advanced certificate offers training in programming, network management, UNIX and PERL to aid in understanding more complex networking problems that occur in business enterprises.

Student Learning Outcomes - upon completion, students will be able to:

- use UNIX/LINUX utilities and shell features for file manipulation and communication
- create algorithms and code, document, debug, and test shell scripts that interact with the UNIX/LINUX OS
- create algorithms to solve introductory-level problems using C programming and shell scripting or perl languages.
- identify networking components and protocols in the context of architectures and technologies for LAN, WAN and Internet networks.

Certificate of Achievement-Advanced

1. Meet the requirements for this certificate level. (Page 48)
2. Complete the following.

Complete both CIS 15AG and 15BG, or both CIS 71A and CIS 71B. 9

CIS 15AG	Intro. to Computer Programming Using C (4.5)
CIS 15BG	Intermediate Problem Solving in C (4.5)
or	
CIS 71A	Beg. Programming Methodologies/C++ (4.5)
CIS 71B	Interm. Programming Methodologies/C++ (4.5)

Complete the following courses:

CIS 18A	Introduction to UNIX/LINUX	4.5
CIS 66	Intro. to Data Communication & Networking	5
CIS 67A	Local Area Networks	4
CIS 67B	Introduction to Wide Area Networking	4
CIS 75A	Internet Concepts and TCP/IP Protocols	5

Complete one (1) course from: 4.5

CIS 18B	Advanced UNIX/LINUX (4.5)
CIS 33A	Programming in PERL (4.5)

Complete one (1) course from: 4.5-5

CIS 31	Operating System Concepts (5)
CIS 170F	Windows 7 Administration (4.5)

Total Units Required 40.5-41

Check with the CIS department about the recommended sequence for completing the above courses.

A.A. Degree

Meet the A.A./A.S. degree requirements. (Page 48)

Major	Complete the course requirements for the Network Administration Cert. of Achievement-Advanced 40.5-41 units
GE	General Education (31-42 units)
Electives	Elective courses req'd. when major units plus GE units total is less than 90 Total Units Required 90 units

Check with the CIS department about the recommended sequence for completing the above courses.

Programming/Network Programming

Business Programming

Certificate of Achievement-Advanced

A.A. Degree

The Business Programming certificate and degree program creates a programming savvy entrepreneur who can make decisions about finances and technology, and who understands how to run an enterprise from both the technology and business perspectives. This program teaches skills combined from business and programming that enable a more in-depth view into the technology necessary to run a business in the 21st century.

Student Learning Outcomes - upon completion, students will be able to:

- design and develop business applications complete with user interface, algorithms and storage.
- analyze business requirements and create systems that meet the requirements.
- design and implement network topologies using knowledge about modern networks.

Certificate of Achievement-Advanced

1. Meet the requirements for this certificate level. (Page 48)
2. Complete the following.

Complete both CIS 15AG and 15BG, or both CIS 71A and CIS 71B. 9

CIS 15AG	Intro. to Computer Programming Using C (4.5)
CIS 15BG	Intermediate Problem Solving in C (4.5)

or	
CIS 71A	Beg. Programming Methodologies/C++ (4.5)
CIS 71B	Interm. Programming Methodologies/C++ (4.5)

<i>Complete one (1) course from:</i>		4.5
CIS 15C	Data Structures (4.5)	
CIS 63	Systems Design (4.5)	
CIS 71C	Data Abstraction and Structures (4.5)	

Complete the following courses:

ACCT 1A	Financial Accounting I	5
BUS 10	Introduction to Business	5
CIS 14A	Visual Basic.NET Programming I	4.5
CIS 14B	Visual Basic.NET Programming II	4.5
CIS 64A	Database Management Systems	4.5
CIS 66	Intro. to Data Communication & Networking	5

<i>Complete one (1) course from:</i>		4-5
CIS 3	Business Information Systems (4.5)	
CIS 67A	Local Area Networks (4)	
CIS 86	Computer Accounting Systems (5)	
Total Units Required.		46-47

Check with the CIS department about the recommended sequence for completing the above courses.

A.A. Degree

Meet the A.A./A.S. degree requirements. (Page 48)

Major	Complete the course requirements for the Business Programming Cert. of Achievement-Advanced	46-47 units
GE	General Education (31-42 units)	
Electives	Elective courses req'd. when major units plus GE units total is less than 90	
Total Units Required		90 units

Check with the CIS department about the recommended sequence for completing the above courses.

Network Basics*

Certificate of Achievement

The Network Basics Certificate of Achievement prepares students for entry-level employment as a computer support or network technician. Students are introduced to programming, networking, and Internet protocols. This certificate program also gives students a foundation for further study in either network administration or programming.

Student Learning Outcomes - upon completion, students will be able to:

- create algorithms to solve introductory-level problems using C programming language through the stages of coding, documenting, debugging, reading and testing with various tools.
- identify networking components and protocols in the context of architectures and technologies for LAN, WAN and Internet networks.

1. Meet the requirements for this certificate level. (Page 48)
2. Complete the following.

<i>Complete one (1) course from:</i>		4.5
CIS 15AG	Intro. to Computer Programming Using C (4.5)	
CIS 71A	Beg. Programming Methodologies/C++ (4.5)	

Complete the following:

CIS 66	Intro. to Data Communication & Networking	5
CIS 67A	Local Area Networks	4
CIS 75A	Internet Concepts and TCP/IP Protocols	5
Total Units Required		18.5

Network Programming*

Certificate of Achievement-Advanced

A.A. Degree

This certificate of achievement-advanced and degree program gives students a foundation for either employment or further study in the field of network programming. The curriculum offers students an introduction to computer programming, networking, and Internet protocols. Advanced topics include data structures, advanced computer programming, Internet programming with TCP/IP, and UNIX/LINUX utilities and shell features for file manipulation and communication.

Student Learning Outcomes - upon completion, students will be able to:

- design solutions for advanced network problems creating distributed programs using Transmission Control Protocol and Internet Protocol.
- create algorithms and code, document, debug and test advanced-level C programs using multiple source and header files.
- use UNIX/LINUX utilities and shell features for file manipulation and communication.

Certificate of Achievement-Advanced

1. Meet the requirements for this certificate level. (Page 48)
2. Complete the following.

Complete both CIS 15AG and 15BG, or both CIS 71A and CIS 71B. 9

CIS 15AG	Intro. to Computer Programming Using C (4.5)
CIS 15BG	Intermediate Problem Solving in C (4.5)
or	
CIS 71A	Beg. Programming Methodologies/C++ (4.5)
CIS 71B	Interm. Programming Methodologies/C++ (4.5)

Complete one (1) course from: 4.5

CIS 15C	Data Structures (4.5)
CIS 71C	Data Abstraction and Structures (4.5)

Complete the following courses:

CIS 18A	Introduction to UNIX/LINUX	4.5
CIS 26B	Advanced C Programming	4.5
CIS 66	Introduction to Data Communication and Networking	5
CIS 75A	Internet Concepts and TCP/IP Protocols	5
CIS 75B	Internet Programming with TCP/IP	5

Complete one (1) course from the following: 4-5

CIS 18B	Advanced UNIX/LINUX (4.5)
CIS 21JA	Introduction to 8086 IA32 Processor Assembly Language (4.5)
CIS 31	Operating System Concepts (5)
CIS 33A	Programming in PERL (4.5)
CIS 67A	Local Area Networks (4)
CIS 67B	Introduction to Wide Area Networking (4)
Total Units Required 41.5-42.5	

Check with the CIS department about the recommended sequence for completing the above courses.

A.A. Degree

Meet the A.A./A.S. degree requirements. (Page 48)

Major	Complete the course requirements for the Network Programming Cert. of Achievement-Advanced	41.5-42.5 units
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GE	General Education (31-42 units)
Electives	Elective courses req'd. when major units plus GE units total is less than 90
	Total Units Required 90 units

Check with the CIS department about the recommended sequence for completing the above courses.

Programming in C/C++*

Certificate of Achievement

The C/C++ Certificate of Achievement program prepares students for entry-level employment in computer programming, software testing and integration, software analysis or algorithm design. The curriculum offers students an introduction to programming in C, intermediate problem solving in C, and advanced C/C++ programming and design. The Certificate of Achievement program also provides a solid foundation and skill set for those interested in pursuing further study towards a Certificate of Achievement-Advanced or A.A. Degree in Systems Programming or Business Programming.

Student Learning Outcomes - upon completion, students will be able to:

- read, analyze and explain advanced C/C++ programs
- design solutions for advanced problems using appropriate design methodology incorporating advanced programming constructs.
- create algorithms and code, document, debug and test advanced level C/C++ programs using multiple source and header files.

1. Meet the requirements for this certificate level. (Page 48)
2. Complete the following.

Complete both CIS 15AG and 15BG, or both CIS 71A and CIS 71B. 9

CIS 15AG	Intro. to Computer Programming Using C (4.5)
CIS 15BG	Intermediate Problem Solving in C (4.5)
or	
CIS 71A	Beg. Programming Methodologies/C++ (4.5)
CIS 71B	Interm. Programming Methodologies/C++ (4.5)

Complete one (1) course from: 4.5

CIS 15C	Data Structures (4.5)
CIS 71C	Data Abstraction and Structures (4.5)

Complete one (1) course from: 4.5

CIS 26B	Advanced C Programming (4.5)
CIS 27	Programming in C++ for C Programmers (4.5)
	Total Units Required 18

Programming in JAVA*

Certificate of Achievement

This program gives students the knowledge and skills necessary to develop client/server, web and distributed environments. Organizations running networks on private and public clouds pass information among Windows NT, Macintosh, and UNIX platforms, and count on Java as a general-purpose, object-oriented solution to fulfill the development requirement of applications. The flexible nature of the language is driving the demand for trained Java programmers.

Student Learning Outcomes - upon completion, students will be able to:

- read, analyze and debug code using CoreJava
- design solutions using object-oriented programming constructs and advanced concepts in the Java Development Kit.
- design web applications using a three-tier architecture and applying advanced concepts for Java Enterprise Edition.
- design and create Java programs that can connect disparate systems using communication protocols defined in Java Enterprise Edition.
- create, design and debug advanced-level programs with Java language.

1. Meet the requirements for this certificate level. (Page 48)
2. Complete the following.

Complete both CIS 15AG and 15BG, or both CIS 71A and CIS 71B. 9

CIS 15AG	Intro. to Computer Programming Using C (4.5)
CIS 15BG	Intermediate Problem Solving in C (4.5)
or	
CIS 71A	Beg. Programming Methodologies/C++ (4.5)
CIS 71B	Interm. Programming Methodologies/C++ (4.5)

Complete the following:

CIS 35A	Introduction to Java Programming	4.5
CIS 35B	Advanced Java Programming	4.5
CIS 53	Distributed Processing Using Java	4.5
	Total Units Required	22.5

Programming in PERL*

Certificate of Achievement

The Programming in PERL Certificate of Achievement certifies that the student can create Perl programs. Perl is a continuously developing language, designed for practical management of important server systems. Perl programming is a key skill used in server processing, web host processing, and integrating multiple subsystems. Students develop basic knowledge of Perl which enables them to match interfaces of web protocol subsystems, the operating system, and database subsystems.

Student Learning Outcomes - upon completion, students will be able to:

- read, analyze and explain intermediate level C programs.
- design solutions for intermediate-level problems using appropriate design methodology incorporating intermediate programming constructs.
- create algorithms and code, document, debug, and test intermediate level C programs.
- use the UNIX/LINUX Operating System utilities and shell features for basic file manipulation, networking, and communication.
- design, code, document, analyze, debug, and test advanced-level Perl programs that include object-oriented Perl modules and access to database, TCP/IP, and system processes.

1. Meet the requirements for this certificate level. (Page 48)
2. Complete the following.

Complete both CIS 15AG and 15BG, or both CIS 71A and CIS 71B. 9

CIS 15AG Intro. to Computer Programming Using C (4.5)
CIS 15BG Intermediate Problem Solving in C (4.5)

or
CIS 71A Beg. Programming Methodologies/C++ (4.5)
CIS 71B Interm. Programming Methodologies/C++ (4.5)

Complete the following:

CIS 18A Introduction to UNIX/LINUX 4.5
CIS 33A Programming in PERL 4.5
CIS 33B Advanced PERL Programming 4.5
Total Units Required 22.5

Systems Programming*

Certificate of Achievement-Advanced

A.A. Degree

Students pursuing the Systems Programming Certificate of Achievement-Advanced or A.A. degree learn computer programming fundamentals of both low-level and high-level languages and gain computing experience on both Windows and Linux platforms.

Student Learning Outcomes - upon completion, students will be able to:

- create a design, implement and debug solutions for computing systems of different levels of complexity using C and C++.
- create, design, implement, and debug solutions for embedded systems such as 8086/ IA32 processor using Assembly Language.
- use UNIX/LINUX utilities and shell features for file manipulation and communication.

Certificate of Achievement-Advanced

1. Meet the requirements for this certificate level. (Page 48)
2. Complete the following.

Complete both CIS 15AG and 15BG, or both CIS 71A and CIS 71B. 9

CIS 15AG Intro. to Computer Programming Using C (4.5)
CIS 15BG Intermediate Problem Solving in C (4.5)

or
CIS 71A Beg. Programming Methodologies/C++ (4.5)
CIS 71B Interm. Programming Methodologies/C++ (4.5)

Complete one (1) course from: 4.5

CIS 15C Data Structures (4.5)
CIS 71C Data Abstraction and Structures (4.5)

Complete the following:

CIS 18A Introduction to UNIX/LINUX 4.5
CIS 21JA Introduction to 8086 IA32 Processor Assembly Language 4.5
CIS 26B Advanced C Programming 4.5
CIS 27 Programming in C++ for C Programmers 4.5
CIS 31 Operating System Concepts 5

Complete one (1) course from: 4.5-5

CIS 18B Advanced UNIX/LINUX (4.5)
CIS 28 Object Oriented Analysis and Design (4.5)
CIS 35A Introduction to Java Programming (4.5)
CIS 66 Intro. to Data Communication and Networking (5)
Total Units Required 41-41.5

Check with the CIS department about the recommended sequence for completing the above courses.

A.A. Degree

Meet the A.A./A.S. degree requirements. (Page 48)

Major Complete the course requirements for the Systems Programming
Cert. of Achievement-Advanced 41-41.5 units
GE General Education (31-42 units)
Electives Elective courses req'd. when major units plus GE units total is less than 90
Total Units Required 90 units

Check with the CIS department about the recommended sequence for completing the above courses.

UNIX/LINUX Operating System*

Certificate of Achievement

Students pursuing the UNIX/LINUX Operating System Certificate of Achievement learn the fundamentals of the UNIX/LINUX OS, ranging from text file manipulation, job control, and communication to implementation of shell scripts to automate tasks.

Student Learning Outcomes - upon completion, students will be able to:

- use UNIX/LINUX utilities and shell features for file manipulation, job control, and communication.
- create algorithms and code, document, debug, and test shell scripts that interact with the UNIX/LINUX Operating System.

1. Meet the requirements for this certificate level. (Page 48)
2. Complete the following.

Complete both CIS 15AG and 15BG, or both CIS 71A and CIS 71B. 9

CIS 15AG Intro. to Computer Programming Using C (4.5)
CIS 15BG Intermediate Problem Solving in C (4.5)

or
CIS 71A Beg. Programming Methodologies/C++ (4.5)
CIS 71B Interm. Programming Methodologies/C++ (4.5)

Complete the following:

CIS 18A Introduction to UNIX/LINUX 4.5
CIS 18B Advanced UNIX/LINUX 4.5
CIS 18C Shell Programming 4.5
Total Units Required 22.5

Visual Basic Programming*

Certificate of Achievement

The Visual Basic Certificate of Achievement program prepares students for entry-level positions such as: Visual Basic Developer, .NET Developer, and Web Database Developer. Additionally, students will enhance their skills in working with spreadsheets and databases and these skills can be applied to degrees in MIS, Web Development, or any associated area.

Student Learning Outcomes - upon completion, students will be able to:

- develop and present a plan for improving a business using the business decision making model utilizing hardware and software applications such as word processing, spreadsheets, and/or databases.

- design, create and debug an application incorporating class modules, bas modules, multiple forms, and database updating.
- design, create, and debug a Web application using ASP.NET 3.5

1. Meet the requirements for this certificate level. (Page 48)
2. Complete the following.

CIS 3	Business Information Systems	4.5
CIS 14A	Visual Basic.NET Programming I	4.5
CIS 14B	Visual Basic.NET Programming II	4.5
CIS 86	Computer Accounting Systems	5
Total Units Required		18.5

Web Development*

Certificate of Achievement

The Certificate of Achievement in Web Development certifies that the student can create web pages and client side programming for web pages.

Student Learning Outcomes - upon completion, students will be able to:

- create algorithms and code, document, debug, and test introductory-level programs in a high-level programming language.
- create web pages using Extensible Hypertext Markup Language (XHTML), Cascading Style Sheets (CSS), JavaScript, and the Document Object Model (DOM), and demonstrate how they interact together within a web document.

1. Meet the requirements for this certificate level. (Page 48)
2. Complete the following.

<i>Complete one (1) course from:</i>		4.5
CIS 15AG	Intro. to Computer Programming Using C (4.5)	
CIS 14A	Visual Basic Programming I (4.5)	
CIS 71A	Beg. Programming Methodologies/C++ (4.5)	
<i>Complete the following:</i>		
CIS 18A	Introduction to UNIX/LINUX	4.5
CIS 89A	World Wide Web Page Development	3
CIS 89C	Client Side Programming with JavaScript	4.5
CAOS 113A	Web Authoring Software (Dreamweaver)	4
(or both CAOS 113I, 113Q - 2 units ea.)		
Total Units Required		20.5

English

A.A. Degree

The English major at De Anza College offers students the opportunity to study language, literature, creative writing and composition and to deepen critical thinking, communication skills and aesthetic awareness. The English major also prepares students for further study leading to employment and internships in fields such as education, business, law, editing and writing. The program further prepares students to become effective communicators and broadly literate members of the community.

Student Learning Outcomes - upon completion, students will be able to:

- demonstrate awareness of diverse social, critical, historical and cultural perspectives by reading and responding to a range of literary texts.
- analyze texts representing a wide range of genres including poetry, drama, fiction, and film.
- identify and make relevant connections between texts of various historical periods.
- write well developed and effectively organized essays including in-class essays, interpretive arguments, and essays incorporating research.
- synthesize historical, formal, and critical ideas in interpreting a text.

Prerequisite

EWRT 1A Composition and Reading

1. Meet the A.A./A.S. degree requirements. (Page 48)

2. Complete the following.

Complete one (1) course from: 5

EWRT 1B Reading, Writing, and Research (5)

EWRT 2 Critical Reading, Writing, and Thinking (5)

Complete three (3) courses from the following: 12

ELIT 46A Major British Writers
(Medieval and Renaissance) (4)

ELIT 46B Major British Writers
(Neo-Classical and Romantic) (4)

ELIT 46C Major British Writers
(Victorian and Modern) (4)

ELIT 48A Major American Writers
(Colonial and Romantic, 1620-1855) (4)

ELIT 48B Major American Writers
(The Advent of Realism, 1855-1920) (4)

ELIT 48C Major American Writers
(The Modern Age, 1914-present) (4)

Complete one (1) course from the following: 4-5

EWRT 1C Literature and Composition (5)

ELIT 10 Introduction to Fiction (4)

ELIT 11 Introduction to Poetry (4)

ELIT 12 Introduction to Dramatic Literature (4)

ELIT 17 Introduction to Shakespeare (4)

Complete two (2) courses from the following that do not duplicate courses selected above: 8

ELIT 20 Major Authors (variable topics) (4)

ELIT 21 Women in Literature (4)

or WMST 21

ELIT 22 Mythology and Folklore (4)

ELIT 24 Asian American Literature (4)

or ICS 24

ELIT 25 Introduction to Linguistics (4)

or LING 1

ELIT 39 Contemporary Literature (4)

ELIT 44 International Literature (4)

ELIT 46A Major British Writers
(Medieval and Renaissance) (4)

ELIT 46B Major British Writers
(Neo-Classical and Romantic) (4)

ELIT 46C Major British Writers
(Victorian and Modern) (4)

ELIT 48A Major American Writers
(Colonial and Romantic, 1620-1855) (4)

ELIT 48B	Major American Writers (The Advent of Realism, 1855-1920) (4)	
ELIT 48C	Major American Writers (The Modern Age, 1914-present) (4)	
ELIT 58	Children's Literature (4) or EDUC 58	
EWRT 30	Introduction to Creative Writing (4)	
Major	English	29-30 units
GE	General Education (31-42 units)	
Electives	Elective courses req'd. when major units plus GE units total is less than 90	
Total Units Required		90 units

Environmental Studies

Biodiversity Specialist

Certificate of Achievement

In the Biodiversity Specialist Certificate of Achievement program students learn technician-level scientific and ecological principles of Biodiversity Stewardship, Conservation Biology and the Natural Sciences. These include genetic, species and ecological diversity and related trends in local and global biodiversity loss.

Student Learning Outcomes - upon completion, students will be able to:

- utilize scientific and ecological principles to evaluate genetic, species, and ecosystem biodiversity, and causes of biodiversity loss, and ways to conserve biodiversity.

1. Meet the requirements for this certificate level. (Page 48)
2. Complete the following.

ES 95	Introduction to Environmental Careers	1
ESCI 1	Environmental Science	4
ESCI 1L	Environmental Science Lab	1
ESCI 19	Environmental Biology	5
ESCI 20	Introduction to Biodiversity	5
ESCI 21	Biodiversity 2	5
ESCI 30	Conservation Biology	5
Total Units Required		26

Biodiversity Specialist

Certificate of Achievement-Advanced

In the Biodiversity Specialist Certificate of Achievement-Advanced program students learn technician-level scientific and ecological principles of Biodiversity Stewardship, Conservation Biology and the Natural Sciences. These include genetic, species and ecological diversity and related trends in local and global biodiversity loss. Students apply these scientific including ecological concepts and field techniques to collaborative, community-based case studies in an effort to preserve, protect and restore biodiversity.

Student Learning Outcomes - upon completion, students will be able to:

- utilize scientific and ecological principles to evaluate genetic, species, and ecosystem biodiversity, and causes of biodiversity loss, and ways to conserve biodiversity.

- apply the above concepts and techniques to local and statewide biodiversity case studies to develop strategies in creating and implementing community-based, collaborative efforts to preserve, protect, and restore native species, ecosystems and the landscape.

1. Meet the requirements for this certificate level. (Page 48)		
2. Complete the Certificate of Achievement course requirements.		26
3. Complete the following.		
ES 1	Introduction to Environmental Studies	4
ES 80	California Field Studies	1
ES 85A	California Native Plants and Animals	2
ES 91X	Environmental Education and Nature-Based Learning	2
GEO 1	Physical Geography	4
Complete one (1) course from the following:		5
CHEM 1A	General Chemistry (5)	
CHEM 10	Introduction to Chemistry (5)	
CHEM 30A	Introduction to General, Organic and Biochemistry I (5)	
CHEM 50	Preparatory Course for General Chemistry (5)	
Total Units Required		44

Biodiversity Specialist

A.A. Degree

In the Biodiversity Specialist A.A. degree program students learn technician-level scientific and ecological principles of Biodiversity Stewardship, Conservation Biology and the Natural Sciences. These include genetic, species and ecological diversity and related trends in local and global biodiversity loss. Students apply these scientific including ecological concepts and field techniques to collaborative, community-based case studies and communicate the value and skills required to preserve, protect and restore biodiversity.

Student Learning Outcomes - upon completion, students will be able to:

- utilize scientific and ecological principles to evaluate genetic, species, and ecosystem biodiversity, and causes of biodiversity loss, and ways to conserve biodiversity.
- apply the above concepts and techniques to local and statewide biodiversity case studies to develop strategies in creating and implementing community-based, collaborative efforts to preserve, protect, and restore native species, ecosystems and the landscape.
- demonstrate the ability to communicate the relationship between values, skills, environmental education, and environmental careers in order to play a role in furthering a more sustainable and biologically diverse world.

1. Meet the A.A./A.S. degree requirements. (Page 48)
 2. Complete the course requirements listed for the Certificate of Achievement and the Certificate of Achievement-Advanced.
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3. Complete the following.		
ESCI 50	Introduction to Wildlife Corridor Technician: Connectivity	4
<i>Complete a minimum of four (4) units from the following:</i>		
ES 2	Humans, the Environment and Sustainability (4)	4
ES 3	Imagery of the Environment (4)	
ES 6	Introduction to Environmental Law (4)	
ES 55	Ten Steps to Effective Learning in Environmental Studies (1)	
ES 65	Environmental Stewardship (1)	
ES 66	Environmental Leadership (1)	
ES 67	Environmental Team-Building (1)	
ES 68	Community-Based Coalitions and Stakeholders (1)	
ES 85B	Cheeseman Environ. Study Area Interpretive Training (2)	
ES 86	Global Field Studies (4)	
ES 90	Environmental Research & Field Methods (4)	
ES 91Z	Environmental Education and Nature-Based Learning (4)	
ESCI 52	Wildlife Corridor Technician: Animal Tracking Techniques (4)	
ESCI 55	Wildlife Corridor Technician: Corridor Design (3)	
MET 10	Weather and Climate Processes (5)	
MET 10L	Meteorology Laboratory (1)	
PHYS 2A	General Introductory Physics (5)	
PHYS 4A	Physics for Scientists and Engineers (6)	
PHYS 50	Preparatory Physics (4)	
Major	<i>Biodiversity Specialist</i>	52 units
GE	<i>General Education (31-42 units)</i>	
Electives	<i>Elective courses req'd. when major units plus GE units total is less than 90</i>	
<i>Total Units Required</i>		<i>90 units</i>

Energy Management and Building Science Certificate of Achievement

This program trains students in 21st century energy management/climate policy principles, practices, and technology; environmental science principles; laws of thermodynamics; and effective design and management of energy systems and a sustainable society based on energy efficiency principles. The program will also prepare students in Level 1 introductory energy management practices, protocols, monitoring and evaluation of energy equipment and systems.

Student Learning Outcomes - upon completion, students will be able to:

- investigate and communicate the relationships between energy management/climate policy and ecological principles and evaluate the role of energy management in fostering a sustainable society.
- demonstrate an understanding of energy management principles, laws of thermodynamics, effective design of energy systems and a sustainable society utilizing energy management systems.

- Meet the requirements for this certificate level. (Page 48)
- Complete the following.

ES 1	Introduction to Environmental Studies	4
ES 58	Introduction to Green Building	1

ES 64	AB 32 (CA Global Warming Solutions Act of 2006)	1
ES 65	Environmental Stewardship	1
ES 66	Environmental Leadership	1
ES 67	Environmental Team-Building	1
ES 69	Energy Reliability and Your Organization	1
ES 70	Introduction to Energy Management Technology	1
ES 70LX	Energy Management Technology and Principles of Building Performance Lab.	1
ES 71	The Building Envelope	1
ES 71LX	The Building Envelope & Climate Responsive Building Design/Construction Lab.	1
ES 72	Heating, Ventilating & Air Conditioning (HVAC) Systems	1
ES 73	Electric Motors and Drives	1
ES 74	Lighting Distribution Systems	1
ES 75	Electric Power Systems	1
ES 76	Energy Star Products	1
ES 76A	Solar Thermal Systems	1
ES 78	Energy Management Systems and Controls	1
ES 79	Renewable and Alternative Energy Systems	1
ES 79LX	Renewable and Alternative Energy Systems Lab.	1
ESCI 61	Introduction to Photovoltaic (PV) Technology	3
<i>Total Units Required</i>		<i>26</i>

Energy Management and Building Science Certificate of Achievement-Advanced

This program trains students in 21st century energy management/climate policy principles, practices, and technology; environmental science principles; laws of thermodynamics; and effective design and management of energy systems and a sustainable society based on energy efficiency principles. The program will also prepare students in Level 2 advanced field-based practices in energy management protocols, monitoring and evaluation of energy equipment and systems.

Student Learning Outcomes - upon completion, students will be able to:

- investigate and communicate the relationships between energy management/climate policy and ecological principles and evaluate the role of energy management in fostering a sustainable society.
- demonstrate an understanding of energy management principles, laws of thermodynamics, effective design of energy systems and a sustainable society utilizing energy management systems.
- apply these concepts and techniques to local and statewide case studies to develop strategies for implementing effective energy management systems.

- Meet the requirements for this certificate level. (Page 48)
- Complete the Certificate of Achievement course requirements. 26
- Complete the following.

ES 6	Introduction to Environmental Law	4
ES 61A	Environmental Protection and Pollution Prevention: Local and Regional	4

Complete a minimum of eight (8) units from the following: 8

(Note: Lab units completed for the Certificate of Achievement do not count toward these eight units.)

ES 70LX, 70LY, 70LZ (1-3 units)	
Energy Management Technology and Principles of Building Performance Laboratory	
ES 71LX, 71LY, 71LZ (1-3 units)	
The Building Envelope and Climate Responsive Building Design/Construction Laboratory	
ES 72LX, 72LY, 72LZ (1-3 units)	
Heating, Ventilation and Air Conditioning (HVAC) Systems Laboratory	
ES 78LX, 78LY, 78LZ (1-3 units)	
Energy Management Systems and Controls Laboratory	
ES 79LX, 79LY, 79LZ (1-3 units)	
Renewable and Alternative Energy Systems Laboratory	
ESCI 63 Photovoltaic (PV) Technology Field Project (2)	
Total Units Required	42

Energy Management and Building Science A.A. Degree

This program trains students in 21st century energy management/climate policy principles, practices, and technology; environmental science principles; laws of thermodynamics; and effective design and management of energy systems and a sustainable society based on energy efficiency principles. The program also prepares students in Level 2 advanced field-based practices in energy management protocols, monitoring and evaluation of energy equipment and systems. The trained Energy Management Technician is able to apply these practices and principles to local and statewide case studies and collaborate with key stakeholders in the energy management/climate policy field.

Student Learning Outcomes - upon completion, students will be able to:

- investigate and communicate the relationships between energy management/climate policy and ecological principles and evaluate the role of energy management in fostering a sustainable society.
 - demonstrate an understanding of energy management principles, laws of thermodynamics, effective design of energy systems and a sustainable society utilizing energy management systems.
 - apply these concepts and techniques to local and statewide case studies to develop strategies for implementing effective energy management systems.
 - identify and interact with the key stakeholders in energy management/climate policy including the public, governmental agencies, industry, and non-profits to enhance global, cultural, social and environmental well-being.
- Meet the A.A./A.S. degree requirements. (Page 48)
 - Complete the course requirements listed for the Certificate of Achievement and the Certificate of Achievement-Advanced. 42
 - Complete the following.
- | | | |
|---------|---------------------------------------|---|
| ES 95 | Introduction to Environmental Careers | 1 |
| ESCI 1 | Environmental Science I | 4 |
| ESCI 1L | Environmental Science I Lab | 1 |

Complete a minimum of four (4) units from the following:		4
ES 50	Introduction to Environmental Protection and Pollution Prevention (4)	
ES 55	Ten Steps to Effective Learning in Environmental Studies (1)	
ES 61B	Environmental Protection and Pollution Prevention: State and Federal (4)	
ES 63	Agenda 21: Blueprint for Sustainability (1)	
ES 68	Community-Based Coalitions & Stakeholders (1)	
ES 90	Environmental Research and Field Methods (4)	
ES 95B	Environmental Studies Internships (2)	
ESCI 50	Introduction to Wildlife Corridor Technician: Connectivity (4)	
Major	Energy Management and Building Science	52 units
GE	General Education (31-42 units)	
Electives	Elective courses req'd. when major units plus GE units total is less than 90	
Total Units Required		90 units

Environmental Compliance and Pollution Prevention

Certificate of Achievement

This is a 21st century career program in which students are trained in environmental compliance (law and policy) and pollution prevention principles, practices, and technologies that cover air, water, land, food production, environmental health and justice, and sustainable cities. Environmental compliance/pollution prevention specialists work at local, state, federal, and international levels applying environmental compliance and pollution prevention strategies in an effort to achieve a more sustainable society. Certificate of Achievement-level students are trained in Level 1 introductory sustainability practices and protocols and monitoring and evaluation techniques.

Student Learning Outcomes - upon completion, students will be able to:

- investigate and communicate the relationships between environmental law, protection, and pollution prevention and apply the knowledge gained to environmental solutions.

- Meet the requirements for this certificate level. (Page 48)
- Complete the following.

ES 2	Humans, the Environment and Sustainability	4
ES 6	Introduction to Environmental Law	4
ES 50	Introduction to Environmental Protection and Pollution Prevention	4
ES 56	Introduction to Environmental Health	4
ES 61A	Environmental Protection and Pollution Prevention: Local and Regional	4
ES 62A	Introduction to ISO 14001 and Sustainability Management Plans (SMP)	1
ES 62B	ISO 14001: Environmental Mgmt. Systems (EMS) and Sustainability Mgmt. Plans (SMP)	1
ES 64	AB 32 (CA Global Warming Solutions Act of 2006)	1
ES 65	Environmental Stewardship	1
ES 66	Environmental Leadership	1
ES 95	Introduction to Environmental Careers	1
Total Units Required		26

Environmental Compliance and Pollution Prevention

Certificate of Achievement-Advanced

This is a 21st century career program in which students are trained in environmental compliance (law and policy) and pollution prevention principles, practices, and technologies that cover air, water, land, food production, environmental health and justice, and sustainable cities. Environmental compliance/pollution prevention specialists work at local, state, federal, and international levels applying environmental compliance and pollution prevention strategies in an effort to achieve a more sustainable society. Certificate of Achievement-Advanced level students are trained in Level 2 advanced sustainability practices and protocols and monitoring and evaluation techniques.

Student Learning Outcomes - upon completion, students will be able to:

- investigate and communicate the relationships between environmental law, protection, and pollution prevention and apply the knowledge gained to environmental solutions.
- communicate and critically evaluate the relationship between laws, history, values, stakeholders, and strategies to assist in implementing environmental solutions through the use of data analysis, targets and timetables.

1. Meet the requirements for this certificate level. (Page 48)
2. Complete the Certificate of Achievement course requirements. 26
3. Complete the following.

ES 58	Introduction to Green Building	1
ES 61B	Environmental Protection and Pollution Prevention: State and Federal	4
ES 62C	ISO 14001: Integration of an Environmental Mgmt. System (EMS) and Sustainability Mgmt. Plan (SMP)	1
ES 62D	ISO 14001: Voluntary Audit	1
ES 63	Agenda 21: Blueprint for Sustainability	1
ES 90	Environmental Research & Field Methods	4
ESCI 1	Environmental Science	4
ESCI 1L	Environmental Science Lab	1
Total Units Required		43

Environmental Compliance and Pollution Prevention

A.A. Degree

This is a 21st century career program in which students are trained in environmental compliance (law and policy) and pollution prevention principles, practices, and technologies that cover air, water, land, food production, environmental health and justice, and sustainable cities. Environmental compliance/pollution prevention specialists work at local, state, federal, and international levels applying environmental compliance and pollution prevention strategies in an effort

to achieve a more sustainable society. A.A. degree-level students are trained in Level 2 advanced sustainability practices and protocols and monitoring and evaluation techniques. A.A. degree-level students receive additional training in environmental studies, biodiversity, energy management and environmental education.

Student Learning Outcomes - upon completion, students will be able to:

- identify and interact with the key stakeholders in environmental compliance, pollution prevention and environmental health and justice, including the public, governmental and resource agencies, agriculture and industry, and non-profits to enhance global, cultural, social and environmental well-being.

1. Meet the A.A./A.S. degree requirements. (Page 48)
2. Complete the course requirements listed for the Certificate of Achievement and the Certificate of Achievement-Advanced. 43
3. Complete the following.

ES 79	Renewable and Alternative Energy Systems	1
ES 91X	Environmental Education and Nature-Based Learning	2
ESCI 50	Introduction to Wildlife Corridor Technician: Connectivity	4
Complete a minimum of five (5) units from the following:		5
ES 1	Introduction to Environmental Studies (4)	
ES 55	Ten Steps to Effective Learning in Environmental Studies (1)	
ES 67	Environmental Team-Building (1)	
ES 68	Community-Based Coalitions & Stakeholders (1)	
ES 69	Energy Reliability and Your Organization (1)	
ES 70	Introduction to Energy Management Technology (1)	
ES 80	California Field Studies (1)	
ES 85A	California Native Plants and Animals (2)	
ES 91Z	Environmental Education and Nature-Based Learning (4)	
ES 95B	Environmental Studies Internship (2)	
ESCI 19	Environmental Biology (5)	
ESCI 20	Introduction to Biodiversity (5)	
ESCI 21	Biodiversity 2 (5)	
ESCI 61	Introduction to Photovoltaic (PV) Technology (3)	
Major Environmental Compliance and Pollution Prevention		55 units
GE General Education (31-42 units)		
Electives Elective courses req'd. when major units plus GE units total is less than 90		
Total Units Required		90 units

Environmental Education and Nature-Based Learning

Certificate of Achievement

(Pending state approval. Check with the department for the status.)

This certificate program introduces students to Environmental Education Technician & Nature-Based Learning, which includes ecological concepts and principles, applied learning strategies, stewardship ethics and leadership and team-building skills.

Student Learning Outcomes - upon completion, students will be able to:

- investigate and communicate the relationship between environmental education, nature-based learning, ecosystem's thinking, ecological literacy, stewardship, leadership and team-building and the environmental protection and stewardship of the Earth's natural resources.

1. Meet the requirements for this certificate level. (Page 48)
2. Complete the following.

ESCI 1	Environmental Science	4
ESCI 1L	Environmental Science Lab	1
ES 63	Agenda 21: Blueprint for Sustainability	1
ES 80	California Field Studies	1
ES 85A	California Native Plants and Animals	2
ES 85B	Cheeseman Environmental Study Area Interpretive Techniques	2
ES 91X	Environmental Education and Nature-Based Learning	2
ES 93	Sustainability Across the Curriculum	1
ES 96Z	Environmental Stewardship of the Earth's Natural Resources for Educators	4
ES 97Z	Environmental Leadership Teaching and Learning Model for Educators	4
ES 98Z	Environmental Team-Building and Community-Based Coalitions for Educators	4
Total Units Required		26

Wildlife Corridor Technician

Certificate of Achievement

This is a technician-level career program that prepares students to use 21st century wildlife corridor (connectivity) practices and technology. It also teaches students the scientific principles of corridor ecology, landscape ecology and ecosystem (adaptive) management. They are trained in Level 1 introductory wildlife tracking and monitoring, field-based practices and scientific protocols. A wildlife corridor technician applies wildlife corridor principles, theory, and technology to assist in the preservation, protection and restoration of native species and ecosystems.

Student Learning Outcomes - upon completion, students will be able to:

- investigate the practice and technology of wildlife corridors (connectivity or linking landscapes).
- utilize the terminology, concepts, and principles of the environmental sciences, corridor ecology, landscape ecology, ecosystem (adaptive) management, and the Rapid Assessment Methodology (RAM) developed at De Anza College.

1. Meet the requirements for this certificate level. (Page 48)
2. Complete the following.

ES 65	Environmental Stewardship	1
ESCI 1	Environmental Science	4
ESCI 1L	Environmental Science Lab	1
ESCI 50	Introduction to Wildlife Corridor Technician: Connectivity	4
ESCI 52	Wildlife Corridor Technician: Animal Tracking Techniques	4
ESCI 53	Wildlife Corridor Technician: Data Collection	1

ESCI 54	Wildlife Corridor Technician: Data Analysis	3
ESCI 55	Wildlife Corridor Technician: Corridor Design	3
ESCI 56	Wildlife Corridor Technician: Plant Survey Techniques	3
ESCI 57	Wildlife Corridor Technician: Advanced Tracking	2
Total Units Required		26

Wildlife Corridor Technician

Certificate of Achievement-Advanced

This is a technician-level career program that prepares students to use 21st century wildlife corridor (connectivity) practices and technology. It also teaches students the scientific principles of corridor ecology, landscape ecology and ecosystem (adaptive) management. Students are trained in Level 2 advanced wildlife tracking and monitoring, field-based practices and scientific protocols. A wildlife corridor technician applies wildlife corridor principles, theory, and technology to assist in the preservation, protection and restoration of native species and ecosystems.

Student Learning Outcomes - upon completion, students will be able to:

- investigate the practice and technology of wildlife corridors (connectivity or linking landscapes).
- utilize the terminology, concepts, and principles of the environmental sciences, corridor ecology, landscape ecology, ecosystem (adaptive) management, and the Rapid Assessment Methodology (RAM) developed at De Anza College.
- examine local wildlife in the field and the core corridor areas these species utilize.
- examine the data analysis equipment and processes used in wildlife corridor technology in the field.
- apply corridor ecology and connectivity concepts and techniques, including the Rapid Assessment Methodology, to local and statewide corridor cases to develop strategic community-based, collaborative efforts that preserve, protect, and restore native species, ecosystems and the landscape.

1. Meet the requirements for this certificate level. (Page 48)
2. Complete the course requirements for the Wildlife Corridor Technician Certificate of Achievement. 26
3. Complete the following.

ES 66	Environmental Leadership	1
ES 67	Environmental Team-Building	1
ESCI 20	Introduction to Biodiversity	5
ESCI 58	Wildlife Corridor Technician: Advanced Tracking 2	4

Complete a minimum of five (5) units from the following:		5
ESCI 82,X,Y,Z	Central Coast Wildlife Corridors: Coyote Valley series (1-4 units)	
ESCI 83,X,Y,Z	Central Coast Wildlife Corridors: Salinas River Drainage series (1-4 units)	
ESCI 84,X,Y,Z	Central Coast Wildlife Corridors: San Benito River Drainage series (1-4 units)	
ESCI 85,X,Y,Z	Central Coast Wildlife Corridors: Pajaro River Drainage series (1-4 units)	
ESCI 86,X,Y,Z	Central Coast Wildlife Corridors: Pacheco Pass series (1-4 units)	

ESCI 87,X,Y,Z	Central Coast Wildlife Corridors: Diablo Range series series (1-4 units)
ESCI 88,X,Y,Z	Central Coast Wildlife Corridors: Santa Cruz Mountains series (1-4 units)
ESCI 90	Santa Clara County Field Studies: Tule Elk (1)
ESCI 91	Santa Clara County Field Studies: American Badger (1)
ESCI 92	Santa Clara County Field Studies: Raptors (1)
Total Units Required 42	

Environmental Stewardship

A.A. Degree

This is a technician-level career program that prepares students to use 21st century wildlife corridor (connectivity) practices and technology. It also teaches students the scientific principles of corridor ecology, landscape ecology and ecosystem (adaptive) management. Students are trained in Level 2 advanced wildlife tracking and monitoring, field-based practices and scientific protocols.

This degree program teaches future wildlife corridor technicians to apply wildlife corridor principles, theory, and technology to assist in the preservation, protection and restoration of native species and ecosystems. It also teaches them skills useful in helping develop a regional habitat conservation plan (local) and/or natural community and conservation plan (state).

Student Learning Outcomes - upon completion, students will be able to:

- investigate the practice and technology of wildlife corridors (connectivity or linking landscapes).
- utilize the terminology, concepts, and principles of the environmental sciences, corridor ecology, landscape ecology, ecosystem (adaptive) management, and the Rapid Assessment Methodology (RAM) developed at De Anza College.
- examine local wildlife in the field and the core corridor areas these species utilize.
- examine the data analysis equipment and processes used in wildlife corridor technology in the field.
- apply corridor ecology and connectivity concepts and techniques, including the Rapid Assessment Methodology, to local and statewide corridor cases to develop strategic community-based, collaborative efforts that preserve, protect, and restore native species, ecosystems and the landscape.
- communicate with key stakeholders - government, resource agencies, agriculture, industry, the public, non-profits - the importance of the relationship between corridor ecology/connectivity and the public good, particularly enhanced global, cultural, social and environmental well-being.

1. Meet the A.A./A.S. degree requirements. (Page 48)
2. Complete the course requirements listed for the Wildlife Corridor Technician Certificates of Achievement and Achievement-Advanced 42
3. Complete the following.

ESCI 21	Biodiversity 2	5
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<i>Complete a minimum of five (5) units from the following:</i>		5
ES 1	Introduction to Environmental Studies (4)	
ES 2	Humans, the Environment and Sustainability (4)	
ES 3	Imagery of the Environment (4)	
ES 6	Introduction to Environmental Law (4)	
ES 55	Ten Steps to Effective Learning in Environmental Studies (1)	
ES 56	Introduction to Environmental Health (4)	
ES 61A	Environmental Protection and Pollution Prevention: Local and Regional (4)	
ES 63	Agenda 21: Blueprint for Sustainability (1)	
ES 68	Community-Based Coalitions & Stakeholders (1)	
ES 80	California Field Studies (1)	
ES 85A	California Native Plants and Animals (2)	
ES 86	Global Field Studies (4)	
ES 90	Environmental Research and Field Methods (4)	
ES 91X	Environmental Education and Nature-Based Learning (2)	
ES 91Z	Environmental Education and Nature-Based Learning (4)	
ES 93	Sustainability Across the Curriculum (1)	
ES 95	Introduction to Environmental Careers (1)	
ES 95B	Environmental Studies Internship (2)	
ESCI 19	Environmental Biology (5)	
ESCI 30	Conservation Biology (5)	
CHEM 1A	General Chemistry (5)	
CHEM 10	Introduction to Chemistry (5)	
CHEM 30A	Introduction to General, Organic and Biochemistry I (5)	
CHEM 50	Preparatory Course for General Chemistry (5)	
GEO 1	Physical Geography (4)	
HIST 28	Social Environmental History (4)	
MET 10	Weather and Climate Processes (5)	
MET 10L	Meteorology Laboratory (1)	
PHYS 50	Preparatory Physics (4)	

<i>Major</i>	<i>Environmental Stewardship</i>	<i>52 units</i>
<i>GE</i>	<i>General Education (31-42 units)</i>	
<i>Electives</i>	<i>Elective courses req'd. when major units plus GE units total is less than 90</i>	
<i>Total Units Required</i>		<i>90 units</i>

Film Production

A.A. Degree

The Film Production A.A. Degree provides a foundation for students interested in pursuing a career in the film industry or a baccalaureate degree in Film/Television. Students are exposed to various facets of a professional film production, including directing, shooting, editing and screenwriting. To fulfill the requirements for this degree, students will complete all required courses in a particular area of production.

Student Learning Outcomes - upon completion, students will be able to:

- develop and write a production proposal, including a script, location scouting survey, production schedule and budget.
- operate film camera, sound and lighting equipment in a remote shoot.

- use and apply dramatic skills to cast and evaluate talent.
- use and apply principles of editing techniques and post production.
- develop a distribution plan for a finished film or video project.

1. Meet the A.A./A.S. degree requirements. (Page 48)
2. Complete the following.

Complete one (1) course from the following: 4-4.5

F/TV 2A	History of Cinema (1895-1950) (4)
F/TV 2AW	History of Cinema (1895-1950) (4.5)
F/TV 2B	History of Cinema (1950-Present) (4)
F/TV 2BW	History of Cinema (1950-Present) (4.5)
F/TV 2C	Contemporary World Cinema (4)
F/TV 2CW	Contemporary World Cinema (4.5)

Complete the following:

F/TV 1	Introduction to Film	4
F/TV 20	Basic Digital Film/Video Production	4
F/TV 22	16MM Film Production I	4
F/TV 50	Introduction to Film/Television Directing	4
F/TV 52A	16mm/35mm Film Production I	4
F/TV 53	Non-Linear Editing	4
F/TV 60A	Screenwriting for Film and Video I	4

Complete a minimum of one-half (0.5) unit from the production workshop series of courses: 0.5-8

F/TV 58R-Z	Film/Television Production Workshop
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Complete a minimum of six (6) units from the following: 6

ARTS 53B	Introduction to Visual Technology (3)
F/TV 10	Introduction to Electronic Media (4)
F/TV 41	Film Genres (variable topics) (4)
F/TV 42	National Cinemas (4)
F/TV 43	Film Artists (variable topics) (4)
F/TV 45	History of Experimental Film/Video (4)
F/TV 48	Cinema and the African-American (4)
F/TV 51A	Intermediate Digital Film and Video Production (4)
F/TV 52B	16mm/35mm Film Production II (4)
F/TV 54 series	F/TV 54, 54X, 54Y, 54Z
	Film/Television Production Laboratory (0.5-3)
	Up to three (3) units from this F/TV series may apply.
F/TV 55A	Video Studio Production (4)
F/TV 57A	Non-Fiction Workshop I: The Documentary (4)
F/TV 57B	Non-Fiction Workshop II: The Documentary (4)
F/TV 59	The Role of the Media Producer (4)
F/TV 60B	Screenwriting for Film and Video II (4)
F/TV 60C	Screenwriting for Film and Video III (4)
F/TV 62	Lighting for Television and Film (4)
F/TV 63A	Location Recording and Sound Design (3)
F/TV 64A	Fiction Screenwriting I (4)
F/TV 64B	Fiction Screenwriting II (4)
F/TV 64C	Fiction Screenwriting III (4)
F/TV 65	Current Practices in the Film/Video Profession (4)
F/TV 78 series	F/TV 78W, 78X
	Special Topics in Film Studies (1-2)
F/TV 85	Motion Graphics (3)
F/TV 92	Topics: Guest Artist/Industry Professional (0.5)
F/TV 98G	Fiction Workshop (The Writer, Producer, Director) (3)

F/TV 98H	Fiction Workshop (Technical Crew) (3)
F/TV 98J	Fiction Workshop (Editing/Post Production) (3)
HUMI 1	Creative Minds (4)
HUMI 2	But Is It Art? Questions and Criticism (4)
HUMI 15	Discussion on the Arts (4)
PHTG 2	Intermediate Photography (3)
PHTG 3	Advanced Photography (3)
Major	Film Production 38.5-46.5 units
GE	General Education (31-42 units)
Electives	Elective courses req'd. when major units plus GE units total is less than 90
	Total Units Required 90 units

Film/Screenwriting

A.A. Degree

The Screenwriting A.A. Degree provides a foundation for students interested in pursuing a career in screenwriting for film or pursuing a baccalaureate degree in Film/Television. Students are exposed to the craft and business of screenwriting. In order to fulfill the major requirements, students take each course in the screenwriting series, courses in cinema studies and media theory, and basic production courses.

Student Learning Outcomes - upon completion, students will be able to:

- apply the principles of cinematic story, character, and theme to screenwriting.
- write both short and feature-length screenplays with good technique and craft.
- execute the step-by-step process of screenwriting from concept and idea to completed screenplay.
- apply all aspects of story and character to oral pitches.
- understand the business of screenwriting and how to best position themselves for success.

1. Meet the A.A./A.S. degree requirements. (Page 48)
2. Complete the following.

F/TV 1	Introduction to Film	4
F/TV 2A	History of Cinema (1895-1950)	4
F/TV 2B	History of Cinema (1950-Present)	4
F/TV 10	Introduction to Electronic Media	4
F/TV 20	Basic Digital Film/Video Production	4
F/TV 60A	Screenwriting for Film and Video I	4
F/TV 60B	Screenwriting for Film and Video II	4
F/TV 60C	Screenwriting for Film and Video III	4
F/TV 64A	Fiction Screenwriting I	4
F/TV 64B	Fiction Screenwriting II	4
F/TV 64C	Fiction Screenwriting III	4

Complete a minimum of four (4) units from the following: 4

ARTS 53B	Introduction to Visual Technology (3)
F/TV 2C	Contemporary World Cinema (4)
F/TV 2CW	Contemporary World Cinema (4.5)
F/TV 22	16MM Film Production I (4)
F/TV 41	Film Genres (variable topics) (4)
F/TV 42	National Cinemas (4)
F/TV 43	Film Artists (variable topics) (4)
F/TV 45	History of Experimental Film/Video (4)
F/TV 48	Cinema and the African-American (4)

F/TV 50	Introduction to Film/Television Directing (4)	
F/TV 51A	Intermediate Digital Film and Video Production (4)	
F/TV 52A	16mm/35mm Film Production I (4)	
F/TV 52B	16mm/35mm Film Production II (4)	
F/TV 54 series	F/TV 54, 54X, 54Y, 54Z	
	Film/Television Production Laboratory (0.5-3)	
	Up to three (3) units from this F/TV series may apply.	
F/TV 55A	Video Studio Production (4)	
F/TV 57A	Non-Fiction Workshop I: The Documentary (4)	
F/TV 57B	Non-Fiction Workshop II: The Documentary (4)	
F/TV 59	The Role of the Media Producer (4)	
F/TV 62	Lighting for Television and Film (4)	
F/TV 63A	Location Recording and Sound Design (3)	
F/TV 65	Current Practices in the Film/Video Profession (4)	
F/TV 78 series	F/TV 78W, 78X	
	Special Topics in Film Studies (1-2)	
F/TV 85	Motion Graphics (3)	
F/TV 92	Topics: Guest Artist/Industry Professional (0.5)	
F/TV 98G	Fiction Workshop (The Writer, Producer, Director) (3)	
F/TV 98H	Fiction Workshop (Technical Crew) (3)	
F/TV 98J	Fiction Workshop (Editing/Post Production) (3)	
HUMI 1	Creative Minds (4)	
HUMI 2	But Is It Art? Questions and Criticism (4)	
HUMI 15	Discussion on the Arts (4)	
PHTG 2	Intermediate Photography (3)	
PHTG 3	Advanced Photography (3)	
Major	Film/Screenwriting	48 units
GE	General Education (31-42 units)	
Electives	Elective courses req'd. when major units plus GE units total is less than 90	
	Total Units Required	90 units

Film/Television Production: Television Emphasis

Certificate of Achievement

The Film/TV Production Certificate of Achievement provides a solid introduction in video production for students interested in pursuing a career in the TV/Video industry or pursuing a baccalaureate degree in Film/Television. Students are exposed to various facets of a professional video production, including directing, shooting, editing and screenwriting.

Student Learning Outcomes - upon completion, students will be able to:

- develop and write a production proposal, including targeting an audience, location scouting, production schedule, and budgeting.
- operate video camera, sound and lighting equipment in a remote shoot.
- apply dramatic skills to cast and evaluate talent.
- apply principles of editing techniques and post production.

- develop a distribution plan for a finished film/video project.

1. Meet the requirements for this certificate level. (Page 48)
2. Complete the following.

F/TV 20	Basic Digital Film/Video Production	4
F/TV 53	Non-Linear Editing	4
F/TV 55A	Video Studio Production	4
F/TV 59	The Role of the Media Producer	4
F/TV 60A	Screenwriting for Film and Video I	4
	Total Units Required	20

Film/Television Production:

Television Emphasis

Certificate of Achievement-Advanced

The Film/TV Production Certificate of Achievement-Advanced provides a more advanced introduction in video production for students interested in pursuing a career in the TV/Video industry or pursuing a baccalaureate degree in Film/Television. Students are exposed to various facets of a professional video production, including directing, shooting, editing and screenwriting.

Student Learning Outcomes - upon completion, students will be able to:

- develop and write a production proposal, including targeting an audience, location scouting, production schedule and budgeting.
- operate video camera, sound and lighting equipment in a remote shoot.
- apply dramatic skills to cast and evaluate talent.
- apply principles of editing techniques and post production.
- use and apply principles of audio recording and post production.
- develop a distribution plan for a finished film/video project.

1. Meet the requirements for this certificate level. (Page 48)
2. Complete the Certificate of Achievement course requirements. 20
3. Complete the following.

F/TV 10	Introduction to Electronic Media	4
F/TV 50	Introduction to Film/Television Directing	4
F/TV 51A	Intermediate Digital Film/Video Production	4
F/TV 63A	Location Recording and Sound Design	3
	Total Units Required	35

Film/Television Production:

Television Emphasis

A.A. Degree

The Film/TV Production: TV Emphasis A.A. Degree provides a foundation in video production for students interested in pursuing a career in the TV/Video industry or pursuing a baccalaureate degree in Film/Television. Students are exposed to various facets of a professional video production, including directing, shooting, editing and screenwriting. To fulfill the requirements for this major, students complete the required set of courses in their particular area of interest within production.

Student Learning Outcomes - upon completion, students will be able to:

- develop and write a production proposal, including targeting an audience, location scouting, production schedule and budgeting.
- operate video camera, sound and lighting equipment in a remote shoot.
- apply dramatic skills to cast and evaluate talent.
- apply principles of editing techniques and post production.
- use and apply principles of audio recording and post production.
- develop a distribution plan for a finished film/video project.

1. Meet the A.A./A.S. degree requirements. (Page 48)
2. Complete the course requirements listed for the Certificate of Achievement and the Certificate of Achievement-Advanced. 35
3. Complete the following.

Complete one (1) course from the following: 4-4.5

- F/TV 2A History of Cinema (1895-1950) (4)
 F/TV 2AW History of Cinema (1895-1950) (4.5)
 F/TV 2B History of Cinema (1950-Present) (4)
 F/TV 2BW History of Cinema (1950-Present) (4.5)
 F/TV 2C Contemporary World Cinema (4)
 F/TV 2CW Contemporary World Cinema (4.5)

Complete a minimum of six (6) units from the following which do not duplicate courses taken above: 6

- ARTS 53B Introduction to Visual Technology (3)
 F/TV 1 Introduction to Film (4)
 F/TV 2A History of Cinema (1895-1950) (4)
 F/TV 2AW History of Cinema (1895-1950) (4.5)
 F/TV 2B History of Cinema (1950-Present) (4)
 F/TV 2BW History of Cinema (1950-Present) (4.5)
 F/TV 22 16MM Film Production I (4)
 F/TV 41 Film Genres (variable topics) (4)
 F/TV 42 National Cinemas (4)
 F/TV 43 Film Artists (variable topics) (4)
 F/TV 45 History of Experimental Film/Video (4)
 F/TV 48 Cinema and the African-American (4)
 F/TV 52A 16mm/35mm Film Production I (4)
 F/TV 52B 16mm/35mm Film Production II (4)
 F/TV 54 series F/TV 54, 54X, 54Y, 54Z
 Film/Television Production Laboratory (0.5-3)
Up to three (3) units from this F/TV series may apply.
 F/TV 57A Non-Fiction Workshop I:
 The Documentary (4)
 F/TV 58 series F/TV 58R-Z
 Film/Television Production Workshop (0.5-8)
 F/TV 60B Screenwriting for Film and Video II (4)
 F/TV 60C Screenwriting for Film and Video III (4)
 F/TV 62 Lighting for Television and Film (4)
 F/TV 63B Audio Post Production (3)
 F/TV 64A Fiction Screenwriting I (4)
 F/TV 64B Fiction Screenwriting II (4)
 F/TV 64C Fiction Screenwriting III (4)
 F/TV 65 Current Practices in the
 Film/Video Profession (4)
 F/TV 78 series F/TV 78W, 78X
 Special Topics in Film Studies (1-2)

- F/TV 85 Motion Graphics (3)
 F/TV 92 Topics: Guest Artist/Industry
 Professional (0.5)
 F/TV 98G Fiction Workshop
 (The Writer, Producer, Director) (3)
 F/TV 98H Fiction Workshop (Technical Crew) (3)
 F/TV 98J Fiction Workshop (Editing/Post Production) (3)
 HUMI 1 Creative Minds (4)
 HUMI 2 But Is It Art? Questions and Criticism (4)
 HUMI 15 Discussion on the Arts (4)
 PHTG 1 Basic Photography (3)
 PHTG 2 Intermediate Photography (3)
 PHTG 3 Advanced Photography (3)
 Major Film/Television Prod.: TV Emphasis
 45-45.5 units
 GE General Education (31-42 units)
 Electives Elective courses req'd. when major
 units plus GE units total is less than 90
 Total Units Required 90 units

Global Studies

Skills Certificate

Skills Certificates are issued by the individual departments and are not notated on official college transcripts. Please contact the department directly for assistance and to apply for Skills Certificates

The Global Studies Skills Certificate is designed to enable students to meet the demands of living and working in a global society. This certificate provides an interdisciplinary approach to understanding the interdependence and interconnectedness of people from around the globe. By taking a variety of courses with a common, global focus, students gain the analytical skills to discuss political, economic, and cultural elements of our global society from several perspectives. Students also gain the knowledge and skills necessary to work more effectively with people from a variety of backgrounds and cultures.

Student Learning Outcomes - upon completion, students will be able to:

- integrate information about the environment, cultures, histories, politics, arts, and economics of people around the world and explain their interdependence and interconnectedness.
- demonstrate cultural competence through the ability to interact effectively in international and multicultural settings based on an integrated understanding of global issues and perspectives.

1. Meet the requirements for this certificate level. (Page 48)
2. Complete the following.

Complete one (1) course from: 4

- HIST/ICS 3A World History (4)
 HIST/ICS 3B World History (4)
 HIST/ICS 3C World History (4)

Complete one (1) course from: 4

- ANTH 2 Cultural Anthropology (4)
 ECON 1 Principles of Macroeconomics (4)
 GEO 10 World Regional Geography (4)

<i>Complete the following:</i>		
ES 1	Introduction to Environmental Studies	4
ICS/SPCH 7	Intercultural Communication	4
INTL 5	Global Issues and Perspectives	4
LIB 1	Library Research Skills	1
Total Units Required		21

Global Studies

Certificate of Achievement-Advanced

A.A. Degree

The Global Studies Certificate of Achievement-Advanced and A.A. major is an interdisciplinary program that prepares students to be well-versed in world history, global issues and perspectives, geography, and cultural competence as well as proficient in a foreign language. Elective options direct students to a course of study focused on world history, international business, globalization issues, language and culture, and the arts and humanities in the global environment. Students can take electives within one area of study, or mix electives from the various areas. The program prepares students for careers as citizens of the world and to navigate and communicate in a global environment.

Student Learning Outcomes - upon completion, students will be able to:

- integrate information about the environment, cultures, histories, politics, arts, and economics of people around the world and explain their interdependence and interconnectedness.
- demonstrate cultural competence through the ability to interact effectively in international and multicultural settings based on an integrated understanding of global issues and perspectives.
- demonstrate proficiency in a foreign language.

Certificate of Achievement-Advanced

1. Meet the requirements for this certificate level. (Page 48)
2. Complete the Certificate of Achievement course requirements. 21
3. Complete the following.

One year (3 quarters) of college-level world language	15
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World Languages offered:
Arabic, Cantonese, French, German, Hebrew, Hindi, Italian, Japanese, Korean, Mandarin, Persian, Russian, Spanish, Urdu, Vietnamese

Total Units Required	36
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A.A. Degree

1. Meet the A.A./A.S. degree requirements. (Page 48)
2. Complete the following.

<i>Complete one (1) course from:</i>	4
HIST/ICS 3A World History (4)	
HIST/ICS 3B World History (4)	
HIST/ICS 3C World History (4)	

Complete the following:

ANTH 2 Cultural Anthropology	4
ECON 1 Principles of Macroeconomics	4
ES 1 Introduction to Environmental Studies	4
GEO 10 World Regional Geography	4
ICS/SPCH 7 Intercultural Communication	4

INTL 5	Global Issues and Perspectives	4
LIB 1	Library Research Skills	1

Language Requirement 0-15
 One year (3 quarters) of college-level world language or three (3) years of high school foreign language or the equivalent

Complete 24 units from the courses listed below. 24
 Selections may be from one area of study or a combination of areas of emphasis. The HIST/ICS World History course completed as a major core requirement may not also count toward completion of the 24 major elective units.

Arts and Humanities

ARTS 2A	History of Art (Europe from Prehistory through Early Christianity) (4)
ARTS 2B	History of Art (Europe During Middle Ages/Renaissance) (4)
ARTS 2C	History of Art (Europe from the Baroque Period through Impressionism) (4)
ARTS 2D	History of Art (Europe and the United States/Post-Impressionism) (4)
ARTS 2G	History of Art: Arts of Asia (4) <i>also listed as INTL 10</i>
ARTS 2H	History of Art: Native Arts of Mesoamerica and South America (4) <i>also listed as INTL 21</i>
ARTS 2J	History of Art: Indigenous Arts of the World (4) <i>also listed as INTL 22</i>
ARTS 2K	History of Art: Visual Arts of Islam (4) <i>also listed as INTL 23</i>
ARTS 2L	History of Art: Visual Arts of Africa (4) <i>also listed as INTL 24</i>
ARTS 3TC	Women and Art (4)
F/TV 2A	History of Cinema (1895-1950) (4)
F/TV 2B	History of Cinema (1950-Present) (4)
F/TV 42	National Cinemas (4)
HUMI 9	Introduction to Comparative Religion (4)
HUMI 10	Introduction to Western Religions (4)
HUMI 14A	Indian Philosophy (4)
HUMI 14B	Chinese Philosophy (4)
HUMI 14C	Japanese Philosophy (4)
INTL 11	Vietnamese Literature (4)
INTL 13	Introduction to Korean Popular Culture (4)
INTL 15	Introduction to the Arab World (4)
MUSI 1C	Introduction to Music: World Music in America (4)

Global Environment

ES 6	Introduction to Environmental Law (4)
ESCI 19	Environmental Biology (5)
ESCI 30	Conservation Biology (5)
GEO 1	Physical Geography (4)

Globalization Issues

BUS 21	Business and Society (5)
CIS 2	Computers and Society (4)
POLI 3	International Relations (4)
SOC 1	Introduction to Sociology (4)

International Business

BUS 21	Business and Society (5)
BUS 56	Human Relations in Business (5)
BUS 60	International Business Management (5)
BUS 70	Principles of E-Business (5)
BUS 87	Introduction to Selling (4)
BUS 89	Advertising (5)
BUS 90	Principles of Marketing (5)
ECON 2	Microeconomics (4)
POLI 3	International Relations (4)

World History

ANTH 4	World Prehistory (4)
HIST 3A	World History (4)
HIST 3B	World History (4)
HIST 3C	World History (4)
HIST 4A	History of Western Civilization (4)
HIST 4B	History of Western Civilization (4)
HIST 4C	History of Western Civilization (4)
HIST 4D	History of Western Civilization (4)
HIST 7A	Colonial Latin American History (4)
HIST 7B	Modern Latin American History (4)
HIST 16A	History of Africa to 1800 (4)
HIST 16B	History of Africa from 1800 to Present (4)
HIST 19A	History of Asian Civilization (4)
HIST 19B	History of Asian Civilization (4)
ICS 37	Ancient People of Mesoamerica (4)
INTL 30	Introduction to Islamic Studies (4)

World Languages

ANTH 6	Linguistic Anthropology (4)
ELIT 44	International Literature (Fiction) (4)
LING 1	Introduction to Linguistics (4)
World Lang.	World Language units in addition to Language Requirement above (5-15)

World Languages offered:

Arabic, Cantonese, French, German, Hebrew, Hindi, Italian, Japanese, Korean, Mandarin, Persian, Russian, Spanish, Urdu, Vietnamese

Major	Global Studies	53-68 units
GE	General Education (31-42 units)	
Electives	Elective courses req'd. when major units plus GE units total is less than 90	
	Total Units Required	90 units

Graphic and Interactive Design

The Graphic Design program emphasizes the elements and principles of design in combination with the use of the computer as a tool to produce graphic design projects. Focus is placed on the creative integration and selection of type styles and images as they relate to the printed page, film/video output, Web-based design, and multimedia applications. The Graphic Design certificate and degree programs are designed to prepare students for the workforce.

Graphic Design

Certificate of Achievement

Student Learning Outcomes - upon completion, students will be able to:

- demonstrate awareness of the computer as an effective and important mode of visual communication

used by artists and designers today.

- demonstrate the creative potential of art and design software.
- analyze and interpret the elements and principles of graphic design as applied to the practice of visual communication and current graphic production techniques.
- demonstrate an understanding of the design process
- analyze styles in typographic design, type selection, and type specification in relation to new computer technology and the World Wide Web.
- demonstrate an understanding of the range of business practices currently used by artists and designers in the visual communications industry.

1. Meet the requirements for this certificate level. (Page 48)
2. Complete the following.

ARTS 4A	Beginning Drawing	3
ARTS 4B	Intermediate Drawing	3
ARTS 8	Two-Dimensional Design	3
ARTS 12	Design and Color	3
ARTS 53A	Introduction to Visual Technology	3
ARTS 55A	Graphic Design - Communication	3
	Total Units Required.	18

Recommended

ARTS 4D	Representational Drawing (3)
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Graphic Design

Certificate of Achievement-Advanced

Student Learning Outcomes - upon completion, students will be able to:

- demonstrate an understanding of the design process.
- analyze styles in typographic design, type selection, and type specification in relation to new computer technology and the World Wide Web.
- demonstrate an understanding of the range of business practices currently used by artists and designers in the visual communications industry.

1. Meet the requirements for this certificate level. (Page 48)
2. Complete the Graphic Design Certificate of Achievement course requirements. 18

3. Complete the following.

ARTS 53B	Introduction to Visual Technology	3
ARTS 55B	Graphic Design - Communication	3
ARTS 55C	Graphic Design - Communication: Production Techniques	3
ARTS 56	Computer-Aided Graphic Design: Electronic Publishing	3
ARTS 57	Graphic Design - Typography	3
ARTS 63	Business Practices for Graphic Designers	3
ARTS 65	Graphic Design for the World Wide Web	3
ARTS 86	Electronic Illustration Techniques	3
	Total Units Required	42

Graphic Design

A.A. Degree

Student Learning Outcomes - upon completion, students will be able to:

- demonstrate an understanding of the design process.
- analyze styles in typographic design, type selection, and type specification in relation to new computer technology and the World Wide Web.
- demonstrate an understanding of the range of business practices currently used by artists and designers in the visual communications industry.

Meet the A.A./A.S. degree requirements. (Page 48)

Major	Complete the course requirements for the Graphic Design Cert. of Achievement and Cert. of Achievement-Advanced	42 units
GE	General Education (31-42 units)	
Electives	Elective courses req'd. when major units plus GE units total is less than 90	
	Total Units Required	90 units

Interactive Design

The Interactive Design program emphasizes the elements and principles of design in combination with the use of the computer as a tool to produce interactive design projects, including motion graphics, animation, and film. Focus is placed on the creative integration and selection of type styles and images as they relate to the printed page, film/video output, Web-based design, multimedia applications. The Interactive Design certificate and degree are designed to prepare students for the growing workforce in interactive media.

Student Learning Outcomes - upon completion, students will be able to:

- demonstrate awareness of the computer as an effective and important mode of visual communication used by artists and designers today.
- demonstrate the creative potential of art and design software.
- analyze and interpret the elements and principles of interactive design as applied to the practice of visual communication and current design production techniques.
- demonstrate an understanding of the design process.
- analyze styles in typographic design, type selection, and type specification in relation to new computer technology and the World Wide Web.
- demonstrate an understanding of the range of business practices currently used by artists and designers in the visual communications industry.

Interactive Design

Certificate of Achievement-Advanced

1. Meet the requirements for this certificate level. (Page 48)
 2. Complete the Graphic Design Certificate of Achievement course requirements. 18
 3. Complete the following.
- | | | |
|----------|-----------------------------------|---|
| ARTS 53B | Introduction to Visual Technology | 3 |
| ARTS 55B | Graphic Design - Communication | 3 |

ARTS 55C	Graphic Design - Communication: Production Techniques	3
ARTS 57	Graphic Design - Typography	3
ARTS 63	Business Practices for Graphic Designers	3
ARTS 65	Graphic Design for the World Wide Web	3
ARTS 85	Motion Graphics	3
<i>Complete a minimum of six (6) units from the following:</i>		6
ARTS 86	Electronic Illustration Techniques (3)	
ARTS 113A	Web Authoring Software (Dreamweaver) (4)	
ARTS 114A	Web Graphics/Animation Software (Flash) (3)	
CIS 89A	World Wide Web Page Development (3)	
MUSI 51	Introduction to Electronic Music (3)	
PHTG 1	Basic Photography (3)	
	Total Units Required	45

Interactive Design

A.A. Degree

Meet the A.A./A.S. degree requirements. (Page 48)

Major	Complete the course requirements for the Graphic Design Cert. of Achievement and the Interactive Design Certificate of Achievement-Advanced	45 units
GE	General Education (31-42 units)	
Electives	Elective courses req'd. when major units plus GE units total is less than 90	
	Total Units Required	90 units

Health Technologies

Business Office Clerk

Certificate of Achievement

Students in the Business Office Clerk Certificate of Achievement program learn basic medical coding, health insurance claims billing, collections and appeals processing, medical records management, and keyboarding. Students also participate in administrative skills externships in local clinical sites as part of the program.

Student Learning Outcomes - upon completion, students will:

- be eligible to be employed in a medical facility, hospital, clinic or doctor's office.

1. Meet the requirements for this certificate level. (Page 48)

2. Complete the following.

Prerequisite/Corequisite

HTEC 50	Introduction to Health Technologies Requirements	1
<i>Complete one (1) course from:</i>		1-1.5
CAOS 70AA	Elementary Keyboarding I (1.5)	
CAOS 173	Keyboarding Skill Development (1)	

Complete the following:

CAOS 90GA*	Computer Literacy (PC)	2
CAOS 91AN	Word Processing I (Word 2010) or CAOS 91AM	2
CAOS 110N	Database I (Access 2010) or CAOS 110M	2
CAOS 104O	Introduction to Filing	1
HTEC 60A	Basic Medical Terminology	3

HTEC 72	Medical Office Financial Procedures	1.5
HTEC 73	Medical Law and Ethics	1.5
HTEC 96E	Business Office Clerk Externship	4
HTEC 101D	Skill Building in Medical Office Financial Procedures	1

* May be substituted with another CAOS course of equal or greater unit value.

Total Units Required,
Including Prerequisite 20-20.5

Insurance and Coding

Certificate of Achievement

The Health Technologies Department developed this certificate of achievement program to train students in basic and advanced procedural and disease coding, health insurance claims billing, insurance claims registry maintenance, tracing unpaid claims, and evaluating rejected claims. Students also participate in administrative skills externships in local clinical sites as part of the program.

Student Learning Outcomes - upon completion, students will:

- be eligible to be employed in a medical facility, hospital, clinic or doctor's office.
- be prepared to pass the National Certified Coding Associate Examination.

1. Meet the requirements for this certificate level. (Page 48)

2. Complete the following.

Prerequisite/Corequisite

HTEC 50	Introduction to Health Technologies	1
Requirements		
BIOL 54G*	Applied Human Anatomy and Physiology	1.5
BIOL 54H*	Applied Human Anatomy and Physiology	1.5
BIOL 54I*	Applied Human Anatomy and Physiology	1.5
BIOL 54J*	Applied Human Anatomy and Physiology	1.5
HTEC 60A	Basic Medical Terminology	3
HTEC 60G	Advanced Medical Terminology	2
HTEC 60H	Advanced Medical Terminology	2
HTEC 61	Medical Communications	1.5
HTEC 72	Medical Office Financial Procedures	1.5
HTEC 73	Medical Law and Ethics	1.5
HTEC 96F	Coding Externship	4
HTEC 101C	Skill Building in Medical Communications and Transcription	1
HTEC 101D	Skill Building in Medical Office Financial Procedures	1
Total Units Required,		
Including Prerequisite		24.5

* BIOL 40A,B,C series may be substituted for the BIOL 54G, H, I, J series.

Recommended

CAOS 104O	Introduction to Filing (1)
CAOS 81H	10-Key and Electronic Calculator (1)
CAOS 90GA	Computer Literacy (PC) (2)
CAOS 70AA	Elementary Keyboarding I (1.5) or CAOS 173
CAOS 84A	Business English I (2)
CAOS 91AN	Word Processing I (Word 2010) (2) or CAOS 91AM

Lab Assisting

Certificate of Achievement

The Health Technologies Department developed this certificate of achievement program to train students in the clinical skills of performing venipunctures, setting up lab tests, processing specimens for testing in clinical labs, performing electrocardiograms and recognizing arrhythmias. Students also participate in administrative skills externships in local clinical sites as part of the program.

Student Learning Outcomes - upon completion, students will:

- be eligible to be employed in a medical facility, hospital, clinic or doctor's office.
- be prepared to pass the National Phlebotomy and EKG Certification Examinations.

1. Meet the requirements for this certificate level. (Page 48)

2. Complete the following.

Prerequisites/Corequisites

HTEC 50	Introduction to Health Technologies	1
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Student must present current American Red Cross or American Heart Association First Aid and Adult CPR Pro card to receive the certificate.

Requirements

HTEC 60A	Basic Medical Terminology	3
HTEC 60G	Advanced Medical Terminology	2
HTEC 60H	Advanced Medical Terminology	2
HTEC 90G	Basic Patient Care	1.5
HTEC 64A	Basic Clinical Lab Procedures	1.5
HTEC 64B	Advanced Clinical Lab Procedures	1.5
HTEC 73	Medical Law and Ethics	1.5
HTEC 91	Medical Office Diagnostic Tests	1.5
HTEC 95B	Phlebotomy Technician I Externship	3
HTEC 96H	EKG Externship	4
HTEC 101A	Skill Building in Clinical Lab Procedures	1
HTEC 101B	Skill Building in Basic Patient Care	1
HTEC 101F	Skill Building in Medical Office Diagnostic Tests	1
Total Units Required,		
Including Prerequisites		25.5

Recommended

CAOS 90GA	Computer Literacy (PC) (2)
CAOS 70AA	Elementary Keyboarding I (1.5) or CAOS 173
HLTH 57A	First Aid in the Workplace, Community and Wilderness (1)
HLTH 57E	CPR & Automated External Defibrillation (0.5)

Medical File Clerk

Certificate of Achievement

The Health Technologies Department developed this certificate of achievement program to train students in the administrative skills of answering phones, keyboarding and filing medical reports. Students also participate in administrative skills externships in local clinical sites as part of the program.

Student Learning Outcomes - upon completion, students will:

- be eligible to be employed in a medical facility, hospital, clinic or doctor's office.

1. Meet the requirements for this certificate level. (Page 48)
2. Complete the following.

Prerequisite/Corequisite		
HTEC 50	Introduction to Health Technologies	1
Requirements		
CAOS 70AA*	Elementary Keyboarding I	1.5
CAOS 90GA*	Computer Literacy (PC)	2
CAOS 91AN	Word Processing I (Word 2010) or CAOS 91AM	2
CAOS 110N	Database I (Access 2010) or CAOS 110M	2
CAOS 104O	Introduction to Filing	1
HTEC 60A	Basic Medical Terminology	3
HTEC 73	Medical Law and Ethics	1.5
HTEC 96C	Medical File Clerk Externship	4
* May be substituted with another CAOS course of equal or greater unit value.		
Total Units Required, Including Prerequisite		18

Medical Reception

Certificate of Achievement

The Health Technologies Department developed this certificate of achievement program to train students in the administrative skills of appointment scheduling, billing, insurance and coding, and medical records management. Students also participate in administrative skills externships in local clinical sites as part of the program.

Student Learning Outcomes - upon completion, students will:

- be eligible to be employed in a medical facility, hospital, clinic or doctor's office.

1. Meet the requirements for this certificate level. (Page 48)
2. Complete the following.

Prerequisites/Corequisites		
HTEC 50	Introduction to Health Technologies	1

Student must present current American Red Cross or American Heart Association First Aid and Adult CPR Pro card to receive the certificate.

Requirements		
CAOS 84A	Business English I	2
CAOS 176	Telephone Communications	1
HTEC 60A	Basic Medical Terminology	3
HTEC 61	Medical Communications	1.5
HTEC 68	Medical Reception Externship	2
HTEC 71	Medical Office Reception	1
HTEC 72	Medical Office Financial Procedures	1.5
HTEC 73	Medical Law and Ethics	1.5
HTEC 75	Medical Office Management	1.5

HTEC 101C	Skill Building in Medical Communications and Transcription	1
HTEC 101D	Skill Building in Medical Office Financial Procedures	1
Total Units Required, Including Prerequisites		18

Recommended

HLTH 57A	First Aid in the Workplace, Community and Wilderness (1)	
HLTH 57E	CPR & Automated External Defibrillation (0.5)	
CAOS 90GA	Computer Literacy (PC) (2)	
CAOS 70AA	Elementary Keyboarding I (1.5) or CAOS 173	
CAOS 91AN	Word Processing I (Word 2010) (2) or CAOS 91AM	

Medical Records Clerk

Certificate of Achievement

The Health Technologies Department developed this certificate of achievement program to train students in the administrative skills of answering phones, providing customer service, managing medical records, and keyboarding. Students also participate in administrative skills externships in local clinical sites as part of the program.

Student Learning Outcomes - upon completion, students will:

- be eligible to be employed in a medical facility, hospital, clinic or doctor's office.

1. Meet the requirements for this certificate level. (Page 48)
2. Complete the following.

Prerequisite/Corequisite		
HTEC 50	Introduction to Health Technologies	1
Requirements		
<i>Complete one (1) course from:</i>		1-1.5
CAOS 70AA	Elementary Keyboarding I (1.5)	
CAOS 173	Keyboarding Skill Development (1)	
<i>Complete the following:</i>		
CAOS 90GA*	Computer Literacy (PC)	2
CAOS 91AN	Word Processing I (Word 2010) or CAOS 91AM	2
CAOS 110N	Database I (Access 2010) or CAOS 110M	2
CAOS 104O	Introduction to Filing	1
HTEC 60A	Basic Medical Terminology	3
HTEC 71	Medical Office Reception	1
HTEC 73	Medical Law and Ethics	1.5
HTEC 96D	Medical Records Clerk Externship	4

* May be substituted with another CAOS course of equal or greater unit value.

Total Units Required, Including Prerequisite		18.5-19
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Medical Transcription

Certificate of Achievement

The Health Technologies Department developed this certificate of achievement program to train students in the administrative skills of transcribing medical dictation that details a patient's health care during an illness or after an

injury, and editing phrase recognition transcription. Students also participate in administrative skills externships in local clinical sites as part of the program.

Student Learning Outcomes - upon completion, students will:

- be eligible to be employed in a medical facility, hospital, clinic, doctor's office or research center.

1. Meet the requirements for this certificate level. (Page 48)
2. Complete the following.

Prerequisite/Corequisite

HTEC 50	Introduction to Health Technologies	1
Requirements		
BIOL 54G*	Applied Human Anatomy and Physiology	1.5
BIOL 54H*	Applied Human Anatomy and Physiology	1.5
BIOL 54I*	Applied Human Anatomy and Physiology	1.5
BIOL 54J*	Applied Human Anatomy and Physiology	1.5
HTEC 60A	Basic Medical Terminology	3
HTEC 60G	Advanced Medical Terminology	2
HTEC 60H	Advanced Medical Terminology	2
HTEC 61	Medical Communications	1.5
HTEC 73	Medical Law and Ethics	1.5
HTEC 74**	Medical Transcription with Advanced Terminology (1.5) (taken three times)	4.5
HTEC 96G	Medical Transcription Externship	4
	Total Units Required, Including Prerequisite	25.5

* BIOL 40A,B,C series may be substituted for the BIOL 54G, H, I, J series.

** This course may be taken three times (the student will be given different tapes to transcribe in each course).

Recommended

HTEC 101C	Skill Building in Medical Communications and Transcription (1)
CAOS 90GA	Computer Literacy (PC) (2)
CAOS 70AA	Elementary Keyboarding I (1.5) or CAOS 173
CAOS 84A	Business English I (2)
CAOS 91AN	Word Processing I (Word 2010) (2) or CAOS 91AM

Phlebotomy Technician I

Certificate of Achievement

The Health Technologies Department developed this certificate of achievement program to train students in the clinical skills of performing venipunctures, setting up lab tests, and processing specimens for testing in clinical labs. Students also participate in administrative skills externships in local clinical sites as part of the program.

Student Learning Outcomes - upon completion, students will:

- be prepared to pass the National Phlebotomy Certification Examination.

1. Meet the requirements for this certificate level. (Page 48)
2. Complete the following.

Prerequisites/Corequisites

<i>Complete one (1) course from:</i>		1-1.5
CAOS 70AA	Elementary Keyboarding I (1.5)	
CAOS 173	Keyboarding Skill Development (1)	

Complete the following:

HTEC 50	Introduction to Health Technologies	1
CAOS 90GA*	Computer Literacy (PC)	2
CAOS 91AN*	Word Processing I (Word 2010) or CAOS 91AM	2
HLTH 57A	First Aid in the Workplace, Community and Wilderness	1
HLTH 57E	CPR & Automated External Defibrillation	0.5

Student must present current American Red Cross or American Heart Association First Aid and Adult CPR Pro card to receive the certificate.

* May be substituted with another CAOS course of equal or greater unit value.

Requirements

HTEC 60A	Basic Medical Terminology	3
HTEC 64A	Basic Clinical Lab Procedures	1.5
HTEC 64B	Advanced Clinical Lab Procedures	1.5
HTEC 73	Medical Law and Ethics	1.5
HTEC 95B	Phlebotomy Externship	3
HTEC 101A	Skill Building in Clinical Lab Procedures	1
	Total Units Required, Including Prerequisites	19-19.5

The Phlebotomy Technician I program has been approved by the California Department of Public Health-Laboratory Field Services.

Medical Assisting

Certificate of Achievement-Advanced

A.A. Degree

The Health Technologies Department developed the Medical Assisting Certificate of Achievement-Advanced and A.A. degree programs to train students in the fundamental clinical skills of reading vital signs, assisting with minor surgery, performing routine lab procedures, administering medication, and the administrative skills of medical coding and medical records management. Students also participate in administrative skills externships in local clinical sites as part of the program.

Student Learning Outcomes - upon completion, students will:

- be prepared to pass the State Medical Assisting Certification Examination.

Certificate of Achievement-Advanced

1. Meet the requirements for this certificate level. (Page 48)
2. Complete the following.

Prerequisites/Corequisites

HTEC 50	Introduction to Health Technologies	1
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Student must present current American Red Cross or American Heart Association First Aid and Adult CPR Pro card to receive the certificate.

Requirements

ACCT 1A	Financial Accounting I	5
BIOL 54G*	Applied Human Anatomy and Physiology	1.5
BIOL 54H*	Applied Human Anatomy and Physiology	1.5
BIOL 54I*	Applied Human Anatomy and Physiology	1.5
BIOL 54J*	Applied Human Anatomy and Physiology	1.5

CAOS 84A	Business English I	2
CAOS 104O	Introduction to Filing	1
CAOS 110N	Database I (Access 2010) or CAOS 110M	2
HTEC 60A	Basic Medical Terminology	3
HTEC 60G	Advanced Medical Terminology	2
HTEC 60H	Advanced Medical Terminology	2
HTEC 61	Medical Communications	1.5
HTEC 64A	Basic Clinical Lab Procedures	1.5
HTEC 64B	Advanced Clinical Lab Procedures	1.5
HTEC 68	Medical Reception Externship	2
HTEC 71	Medical Office Reception	1
HTEC 72	Medical Financial Procedures	1.5
HTEC 73	Medical Law and Ethics	1.5
HTEC 74	Medical Transcription with Advanced Terminology	1.5
HTEC 75	Medical Office Management	1.5
HTEC 90G	Basic Patient Care	1.5
HTEC 90H	Medical Office Sterile Techniques	1.5
HTEC 91	Medical Office Diagnostic Tests	1.5
HTEC 93	Pharmacology for Medical Assistants	1.5
HTEC 94	Administration of Medications	1
HTEC 95A	Medical Assisting Externship	3
HTEC 96A	Medical Assisting Externship	4
HTEC 110	Health Technologies Employment Preparation	1.5
	Total Units Required, Including Prerequisites	53

* BIOL 40A,B,C series may be substituted for the BIOL 54G, H, I, J series.

Recommended

CAOS 90GA	Computer Literacy (PC) (2)
CAOS 70AA	Elementary Keyboarding I (1.5) or CAOS 173
CAOS 91AN	Word Processing I (Word 2010) (2) or CAOS 91AM
CAOS 81H	10-Key and Electronic Calculator (1)
HTEC 101A-G	Skill Building Labs (1 unit each)
HLTH 57A	First Aid in the Workplace, Community and Wilderness (1)
HLTH 57E	CPR & Automated External Defibrillation (0.5)

A.A. Degree

Meet the A.A./A.S. degree requirements. (Page 48)

Student must present current American Red Cross or American Heart Association First Aid and Adult CPR Pro card for the degree.

Major	Complete the course requirements for the Cert. of Achievement-Advanced	53 units
GE	General Education (31-42 units)	
Electives	Elective courses req'd. when major units plus GE units total is less than 90	
	Total Units Required	90 units

Recommended

PSYC 1^	General Psychology (4)
SOC 1^	Introduction to Sociology (4)
CAOS 81H	10-Key and Electronic Calculator (1)
CAOS 176	Telephone Communications (1)

^Any Psychology or Sociology course will be acceptable.
Units may apply toward GE requirement.

Medical Secretary

Certificate of Achievement-Advanced

The Health Technologies Department developed this certificate of achievement-advanced program to train students in the administrative skills of medical transcription, billing, insurance, and coding, and medical records management. Students also participate in administrative skills externships in local clinical sites as part of the program.

Student Learning Outcomes - upon completion, students will:

- be eligible to be employed in a medical facility, hospital, clinic or doctor's office.

1. Meet the requirements for this certificate level. (Page 48)

2. Complete the following.

Prerequisite/Corequisite

HTEC 50	Introduction to Health Technologies	1
	Requirements	
ACCT 1A	Financial Accounting I	5
BIOL 54G*	Applied Human Anatomy and Physiology	1.5
BIOL 54H*	Applied Human Anatomy and Physiology	1.5
BIOL 54I*	Applied Human Anatomy and Physiology	1.5
BIOL 54J*	Applied Human Anatomy and Physiology	1.5
CAOS 81H	10-Key and Electronic Calculator	1
CAOS 84A	Business English I	2
CAOS 104O	Introduction to Filing	1
CAOS 110N	Database I (Access 2010) or CAOS 110M	2
HTEC 60A	Basic Medical Terminology	3
HTEC 60G	Advanced Medical Terminology	2
HTEC 60H	Advanced Medical Terminology	2
HTEC 61	Medical Communications	1.5
HTEC 68	Medical Reception Externship	2
HTEC 71	Medical Office Reception	1
HTEC 72	Medical Office Financial Procedures	1.5
HTEC 73	Medical Law and Ethics	1.5
HTEC 74	Medical Transcription with Advanced Terminology	1.5
HTEC 75	Medical Office Management	1.5
HTEC 96B	Medical Secretary Externship	4
HTEC 101C**	Skill Building in Medical Communications and Transcription (1,1)	2
HTEC 101D	Skill Building in Medical Office Financial Procedures	1
	Total Units Required, Including Prerequisite	42.5

* BIOL 40A,B,C series may be substituted for the BIOL 54G, H, I, J series.

**This course must be taken twice.

Recommended

CAOS 90GA	Computer Literacy (PC) (2)
CAOS 70AA	Elementary Keyboarding I (1.5) or CAOS 173
CAOS 91AN	Word Processing I (Word 2010) (2) or CAOS 91AM
CAOS 176	Telephone Communications (2)

Intercultural Studies

Skills Certificate

Skills Certificates are issued by the individual departments and are not notated on official college transcripts. Please contact the department directly for assistance and to apply for Skills Certificates.

Students pursuing the Intercultural Studies Skills Certificate gain the knowledge and skills necessary for increasing cultural sensitivity, cultural competence, and social equity. This certificate is designed for anyone wanting to interact more effectively with people from a variety of cultural and linguistic backgrounds. The goals of the program are to facilitate awareness and understanding of the multi-ethnic society in which we live and work and to develop critical thinking frameworks for addressing societal inequities.

Student Learning Outcomes - upon completion, students will be able to:

- critically analyze social and political phenomena based on social constructs of race, class, ethnicity, gender, sexuality, and identity to express cultural competence in local and global contexts.
- articulate the values, experiences and contributions of historically marginalized populations.

- Meet the requirements for this certificate level. (Page 48)
- Complete the following.

ICS 4	Race, Ethnicity and Social Stratification	4
ICS 7	Intercultural Communication	4
ICS 9	Studying Race and Ethnicity: Theories and Methods	4
Complete a minimum of 12 units from the following:		12
ICS 8	Women of Color in the USA (4)	
ICS 10	An Introduction to African American Studies (4)	
ICS 11	The Roots of the African American Experience (4)	
ICS 20	Asian American Experiences in History (4)	
ICS 22	Contemporary Asian American Communities (4)	
ICS 26	Introduction to Lesbian, Gay, Bisexual and Transgender Studies (4)	
ICS 29	Cultural Pluralism and American Law and Justice (4)	
ICS 30	Introduction to Chicano Studies (4)	
ICS 31	Chicano Culture (4)	
ICS 32	Chicano History (4)	
ICS 43	American Indian History (4)	
ICS 44	American Indian Religious and Philosophical Thought (4)	
Total Units Required		24

Intercultural Studies

Certificate of Achievement-Advanced A.A. Degree

The Certificate of Achievement-Advanced and Associate degree major is an interdisciplinary program that provides both focused study on one or more ethnic groups and coursework that examines the social constructs and dynamics that govern our interactions with others. Students

pursuing the Certificate of Achievement-Advanced or A.A. in Intercultural Studies gain the knowledge and skills necessary for increasing their cultural sensitivity, cultural competence, and social equity. This program enables them to work with confidence and increased effectiveness in a wide variety of international and multicultural settings.

Student Learning Outcomes - upon completion, students will be able to:

- critically analyze social and political phenomena based on social constructs of race, class, ethnicity, gender, sexuality, and identity to express cultural competence in local and global contexts.
- articulate the values, experiences and contributions of historically marginalized populations.
- demonstrate ability to interact in the workplace, community and other social contexts with sensitivity to individual and group-dynamic issues arising from political, economic, and cultural experiences and positions.

Certificate of Achievement-Advanced

- Meet the requirements for this certificate level. (Page 48)
- Complete the following.

ICS 4	Race, Ethnicity and Social Stratification	4
ICS 5	History of Art: Multicultural Arts in the U.S.	4
ICS 7	Intercultural Communication	4
ICS 9	Studying Race and Ethnicity: Theories and Methods	4
ICS Electives	Complete eight (8) units of ICS electives listed below (unduplicated by GE Requirements)	8
Complete one (1) of the three (3) options below:		16

Option 1: General Multicultural Background

Complete 16 units from three (3) or more of the following categories.

Option 2: Two Ethnic Areas

Complete 16 units from two (2) of the following categories.

Option 3: One Ethnic Area

Complete 16 units from one (1) of the following categories.

African American

ICS 10	An Introduction to African American Studies (4)
ICS 11	The Roots of the African American Experience (4)
ICS 12	An Introduction to African American Literature (4)
ICS 14	Cinema and the African American (4) also listed as F/TV 48
ICS 16A	History of Africa to 1800 (4)
ICS 16B	History of Africa from 1800 to Present (4)
ICS 18A	African American History to 1865 (4)
ICS 18B	African American History since 1865 (4)

Asian American

INTL 19A	History of Asian Civilization: China and Japan (through the 18th Century) (4) also listed as HIST 19A
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INTL 19B	History of Asian Civilization: China and Japan (19th - 20th Centuries) (4) <i>also listed as HIST 19B</i>
ICS 20	Asian American Experiences in History (4)
ICS 22	Contemporary Asian American Communities (4)
Chicano	
ICS 30	Introduction to Chicano Studies (4)
ICS 31	Chicano Culture (4)
ICS 32	Chicano History (4)
ICS 33	Chicanos and the Arts (4)
ICS 35	Chicano Literature (4)
Latin American	
ICS 38A	Colonial Latin American History (4)
ICS 38B	Modern Latin American History (4)
Multicultural	
ICS 3A	World History (4)
ICS 3B	World History (4)
ICS 3C	World History (4)
ICS 8	Women of Color in the U.S.A. (4)
ICS 17	Critical Consciousness and Social Change (4)
ICS 26	Introduction to Lesbian, Gay, Bisexual and Transgender Studies (4)
ICS 29	Cultural Pluralism and American Law and Justice (4)
ICS 77	Special Projects in Intercultural Studies (1)
ICS 78	Special Group Projects in Intercultural Studies (0.5)
Native American	
ICS 41	American Indians Today (4)
ICS 42	American Indians in California (4)
ICS 43	American Indian History (4)
ICS 44	American Indian Religious and Philosophical Thought (4)
ICS 45	Survey of American Indian Arts (4)
ICS 46	American Indian Literature (4)
Total Units Required 40	

A.A. Degree

For the major, complete all requirements for the Certificate of Achievement-Advanced in Intercultural Studies **except** where 16 units are required in Options 1, 2, & 3 above, complete 20 units. Also meet the A.A./A.S. degree requirements. (Page 48)

Major	<i>Requirements for Intercultural Studies Cert. of Achievement-Advanced plus four (4) additional units 44 units</i>
GE	<i>General Education (31 - 42 units)</i>
Electives	<i>Elective courses req'd. when major units plus GE units total is less than 90</i> <i>Total Units Required 90 units</i>

Journalism

A.A. Degree

The Journalism A.A. degree prepares students to transfer to a four-year university in journalism, mass communications, public relations/advertising or related disciplines, and offers students sufficient training to obtain an internship at a media outlet in print or electronic journalism or within the field of new media.

Student Learning Outcomes - upon completion, students will be able to:

- demonstrate competency in the basics of journalistic writing, including grammar, punctuation, story structure and journalistic styles.
- demonstrate competency in research, information gathering and critical analysis of information using techniques such as observation, researching sources, and interviewing.
- compile a portfolio of print, electronic and/or multimedia projects that tell journalistic stories.
- apply media literacy skills to explain the communication process and detect media bias.
- summarize steps appropriate to gain employment in a mass communications industry.

Prerequisite

EWRT 1A Composition and Reading
1. Meet the A.A./A.S. degree requirements. (Page 48)
2. Complete the following.

Complete one (1) course from: 5

EWRT 1B Reading, Writing, and Research (5)
EWRT 2 Critical Reading, Writing, and Thinking (5)

Complete the following:

JOUR 2 Mass Communication and Its Impact on Society 4
JOUR 21A News Writing and Reporting 3
JOUR 21B Feature Writing and Reporting 3
JOUR 61 Newspaper and Student Media Staff 3
PHTG 1 Basic Photography 3

Complete two (2) courses from: 2-8

JOUR 77 series JOUR 77W, 77X, 77Y, 77Z
Special Projects in Journalism (1-4)
JOUR 78 series JOUR 78W, 78X, 78Y, 78Z
Special Topics in Journalism (1-4)
JOUR 62 Newspaper and Media Freelancing (1)
JOUR 63 Newspaper Advertising Staff (1)

Complete a minimum of four (4) units from the following: 4

ARTS 55A Graphic Design - Communication (3)
ARTS 65 Graphic Design for the World Wide Web (3)
CIS 89A World Wide Web Page Development (3)
EWRT 65 Literary Magazine (1)
or JOUR 65W
EWRT 65X Literary Magazine (2)
or JOUR 65X
F/TV 20 Basic Digital Film/Video Production (4)
ICS 7 Intercultural Communication (4)
or SPCH 7
ICS 29 Cultural Pluralism and American Law and Justice (4)
LIB 1 Library Research Skills (1)
POLI 1 American Government and Politics (4)
SPCH 9 Argumentation: Analysis of Oral and Written Communication (5)

TWRT 61 Introduction to Technical Writing (5)
Major Journalism 27-33 units

GE General Education (31-42 units)
Electives Elective courses req'd. when major units plus GE units total is less than 90
Total Units Required 90 units

Kinesiology

A.A. Degree

(Pending state approval. Check with the department for the status.)

Kinesiology is the study of the art and science of the human organism during work, play, sports, and other forms of movement. Sub disciplines and vocational opportunities include: Personal Training, Exercise Physiology, Sports Medicine, Biomechanics, Motor Development, Sociology and Psychology of Sport, Personal Training, Coaching, and Teaching. Upon completion of this degree, students will be able to transfer to a four-year institution to further their studies and/or be prepared to take national certification tests in the vocational areas of this discipline.

Student Learning Outcomes - upon completion, students will be able to:

- complete national certification tests in the vocational areas of this discipline.

Students must present current CPR certification when applying for this degree.

Complete the following and meet the A.A./A.S. degree requirements. (Page 48)

BIOL 40A	Human Anatomy and Physiology	5
BIOL 40B	Human Anatomy and Physiology	5
BIOL 40C	Human Anatomy and Physiology	5
CHEM 30A	Introduction to General, Organic and Biochemistry I	5
NUTR 10	Contemporary Nutrition	4
P E 30	Introduction to Physical Education/ Kinesiology	4
P E 35	Care and Prevention of Athletic Injuries	4
P E/HLTH 51*	Health and Fitness	4
P E 53	Stress Reduction	2
P E 88A	Coaching I: The Foundations of Coaching	2

Complete a minimum of four (4) units of PE activity from at least four (4) different activity areas. Only one (1) unit from intercollegiate athletics may apply. 4

- Aquatics
- Combatives
- Dance
- Fitness
- Individual and Dual Sports
- Team Sports

Complete a minimum of one (1) unit of Special Projects/ Internship in the Fitness Center. Special Projects in Physical Education need approval from the division dean. 1-1.5

P E 77X	Special Projects in Physical Education (1)
P E 77Y	Special Projects in Physical Education (1.5)

* The course combination of PE 70A and PE 71 may be substituted for the PE/HLTH 51 course. PE 71 (one unit of Fitness) may apply toward the four (4) units of required PE activity.

Major	Kinesiology	45 - 45.5 units
GE	General Education (31-42 units)	
Electives	Elective courses req'd. when major units plus GE units total is less than 90	
	Total Units Required	90 units

Recommended courses:

CHEM 30B	Introduction to General, Organic and Biochemistry II (5)
HLTH 57A	First Aid in the Workplace, Community and Wilderness (1)
HLTH 57D	CPR/AED for the Professional Rescuer - Recertification (0.5)
HLTH 57E	CPR & Automated External Defibrillation (0.5)
NUTR 62	Nutrition and Athletic Performance (2)
NUTR 62G	Dieting (Sifting Fact from Fiction) (1)
P E 54	Introduction to Massage (4)
P E 88B	Coaching II: The Fundamentals of Fund Raising and Budgeting (2)

Associate in Arts in Kinesiology for Transfer

A.A.-T. Degree

The Kinesiology major consists of courses appropriate for an Associate in Arts in Kinesiology for Transfer degree, which provides a foundational understanding of the discipline, a breadth of coursework in the discipline, and preparation for transfer to any CSU that accepts the Transfer Model Curriculum (TMC).

Student Learning Outcomes - upon completion, students will be able to:

- display increasing confidence in the ability to use a range of speaking, listening and collaboration skills.
- apply fitness concepts to individuals seeking training programs.
- analyze, evaluate, and respond to requests for individualized fitness programs by weighing research, examining evidence, and critical reasoning.
- display competence in a variety of sports and activities.

1. Meet the A.A./A.S. degree requirements for transfer. (Page 48)

2. Complete the following.

Complete:

P E 30	Introduction to Physical Education/ Kinesiology	4
BIOL 40A	Human Anatomy and Physiology	5
BIOL 40B	Human Anatomy and Physiology	5
BIOL 40C	Human Anatomy and Physiology	5

Complete a min. of (1) unit from each of three (3) different movement activity areas listed below for a total of three (3) movement activity units. 3

- Aquatics
- Combatives
- Dance
- Fitness
- Individual and Dual Sports
- Team Sports

Complete two (2) courses from the following: 10

BIOL 11	Human Biology (5)
CHEM 30A	Introduction to General, Organic and Biochemistry I (5)
MATH 10	Elementary Statistics and Probability (5)
PHYS 10	Concepts of Physics (5)

Major	Kinesiology for Transfer	32 units
Transfer GE	CSU GE or IGETC for CSU pattern (47-61)	
Electives	CSU-transferrable elective courses required when the major units plus transfer GE units total is less than 90	
	Total Units Required	90 units

Leadership and Social Change

Skills Certificate

The Leadership and Social Change certificate program prepares students to be community leaders, agents of change in the workplace, and responsible participants in civic life in general. Students completing this certificate are prepared to work as an entry-level union organizer or staff person at a non-profit organization. Students who plan to pursue a transfer degree can use the skills obtained to analyze the social forces at work in, and to take leadership in, their areas of work or study.

Contact the Institute of Community and Civic Engagement (ICCE) for more information on earning this certificate.

www.deanza.edu/communityengagement

Student Learning Outcomes - upon completion, students will be able to:

- analyze the social processes that foster inequality and disempowerment, and those that challenge inequality and lead to empowerment.
- analyze the ways that social processes are amenable to transformation through strategic planning and constituent mobilization.
- apply leadership skills, such as meeting facilitation, strategic planning, consensus-building and generating buy-in from stakeholders, with the aim of fostering social justice and empowerment.

1. Meet the requirements for this certificate level. (Page 48)
2. Complete the following requirements for each category.

Leadership and Power

Complete the following course:

POLI 17	Grassroots Democracy: Leadership and Power	4
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Leadership Skills

Complete a minimum of four (4) units from the following: 4

BUS 65	Leadership (5)
E S 66	Environmental Leadership (1)
E S 67	Environmental Team-Building (1)
E S 68	Community-Based Coalitions and Stakeholders (1)

ICS 55	Civic Leadership for Community Empowerment (4)
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SPCH 15	Critical Decision-Making in Groups (4)
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SPCH 70	Effective Organizational Communication (4)
---------	--

Understanding Social Change

Complete a minimum of four (4) units from the following: 4

ICS 17	Critical Consciousness and Social Change (4) also listed as PHIL 17
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POLI 15	Grassroots Democracy: Race, Culture and Liberation (4)
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POLI 16	Grassroots Democracy: Social Movements Since the 1960s (4)
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SOC 5	Sociology of Globalization and Social Change (4)
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Leadership Internship

Complete a minimum of six (6) units from the following: 6

ICS 80 series	ICS 80, 80W, 80X, 80Y, 80Z Community Based Learning in Intercultural Studies (0.5-4)
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LART 80 series	LART 80, 80W, 80X, 80Y, 80Z Community Based Learning in Language Arts (0.5-4)
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SOSC 80 series	SOSC 80, 80W, 80X, 80Y, 80Z Community Based Learning in Social Sciences (0.5-4)
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Total Units Required 18

Liberal Arts

A.A. Degree

Designed primarily for students who plan on transferring to the University of California or California State University, the Associate degree in Liberal Arts represents the completion of a broad area of study with an emphasis in one of the following four areas: Arts and Letters, Business and Computer Information Systems, Social and Behavioral Sciences and Science, Math and Engineering. The degree allows the student to develop a broad set of essential life/work competencies such as: communication, critical thinking, problem solving, quantitative reasoning and multicultural skills. Students complete a minimum of 27 units from one of the four emphasis areas, the A.A. degree General Education requirements and the A.A./A.S. degree requirements noted in the campus catalog. Courses used for the 27 unit emphasis area requirement may not be used to satisfy the General Education requirements. Students are limited to earning one (1) Liberal Arts degree.

Student Learning Outcomes - upon completion, students will be able to:

- demonstrate the use of effective language and speech communication skills.
- analyze and solve problems by using thoughtful and logical reasoning skills.
- recognize and value the complexities of living in a multicultural world by demonstrating an appreciation of diversity in its many forms.
- display behaviors that promote the mental and physical well-being of self and others.
- identify basic/foundational theories, concepts, and practices in the comprehensive area of emphasis.

Arts and Letters Emphasis

Arabic 1, 2, 3, 4, 5, 6

Arts 1A, 1B, 2A, 2B, 2C, 2D, 2F, 2G, 2H, 2J, 2K, 2L, 3TC, 3TD, 3TE, 4A, 4B, 4C, 4D, 8, 10A, 10B, 12, 14A, 14B, 14C, 15A, 15B, 15C, 16A, 16B, 16C, 17, 18A, 18B, 18C, 18D, 18E, 19G, 19H, 19I, 19J, 19K, 19M, 19N, 20, 37A, 37B, 37C, 50, 51, 53A, 53B, 55A, 55B, 55C, 56, 57, 58A, 58B, 58C, 59, 63, 65, 70, 71, 72, 85, 86

Cantonese 1, 2, 3

Dance 22, 22K, 23A, 23H, 23L, 24A, 25A, 25B, 27A, 37A, 38A, 49A

Education 58

English as a Second Language 6**English Literature** 6, 10, 11, 12, 17, 19, 20, 21, 22, 24, 25, 39, 44, 46A, 46B, 46C, 48A, 48B, 48C, 58**English Writing** 1B, 1C, 2, 30, 40, 41, 42**Environmental Studies** 3**Film and Television** 1, 2A, 2AW, 2B, 2BW, 2C, 2CW, 20, 41, 42, 43, 48, 75K, 85**French** 1, 2, 3, 4, 5, 6**German** 1, 2, 3, 4, 5, 6**Hindi** 1, 2, 3**History** 4A, 4B, 4C, 4D**Humanities** 1, 2, 5, 6, 7, 9, 10, 13, 14A, 14B, 14C, 15, 16, 18, 20**Intercultural Studies** 5, 11, 12, 14, 24, 33, 35, 44, 45, 46**International Studies** 10, 11, 13, 15, 21, 22, 23, 24, 34**Italian** 1, 2, 3, 4**Japanese** 1, 2, 3, 4, 5, 6**Journalism** 2, 21A, 21B**Korean** 1, 2, 3, 4, 5, 6**Linguistics** 1**Mandarin** 1, 2, 3, 4, 5, 6**Music** 1A, 1B, 1C, 1D, 3A, 3B, 3C, 4A, 4B, 4C, 5A, 8, 9, 10A, 10B, 12A, 12B, 12C, 13A, 13B, 14A, 14B, 14C, 15A, 15B, 15C, 16, 18, 20, 21, 22, 24, 25G, 25H, 25J, 25K, 25M, 25VJ, 27, 31, 32A, 34, 42, 45, 46, 48, 51, 53, 58A, 58B**Persian** 1, 2, 3, 4, 5, 6**Philosophy** 1, 2, 3, 4, 7, 8, 9, 14A, 14B, 14C, 20A, 20B, 20C, 24, 30, 49**Photography** 1, 2, 3, 4, 5, 7, 20, 21, 52, 52X, 54, 57A, 57B, 58A, 58B, 60**Russian** 1, 2, 3**Sign Language** 1, 2, 3**Spanish** 1, 2, 3, 4, 5, 6**Speech Communication** 1, 8, 9, 10, 15**Theatre Arts** 1, 20A, 20B, 20C**Urdu** 1, 2, 3, 4, 5, 6**Vietnamese** 1, 2, 3, 4, 5, 6**Women's Studies** 3C, 21, 49

<i>Major</i>	<i>Arts and Letters Emphasis</i>	<i>27 units</i>
<i>GE</i>	<i>General Education (31-42 units)</i>	
<i>Electives</i>	<i>Elective courses req'd. when major units plus GE units total is less than 90</i>	
	<i>Total Units Required</i>	<i>90 units</i>

Business and Computer Information Systems Emphasis**Accounting** 1A, 1B, 1C, 51A, 51B, 52, 58, 64, 66, 67A, 67B, 68, 75, 86, 87AH-87AV, 88**Business** 10, 18, 21, 54, 55, 56, 57, 58, 59, 60, 61, 65, 67A, 67B, 69, 70, 85, 87, 89, 90, 91, 96**Computer Information Systems** 2, 3, 14A, 14B, 15AG, 15BG, 15C, 18A, 18B, 18C, 21JA, 21JB, 26A, 26B, 27, 28, 29, 30A, 30B, 31, 33A, 33B, 35A, 35B, 50, 53, 57, 61A, 61B, 63, 64A, 64B, 64C, 64D, 66, 67A, 67B, 71A, 71B, 71C, 73, 74, 75A, 75B, 75C, 75D, 75E, 76, 79, 86, 89A, 89C**Economics** 1, 2**English Writing** 61**Library** 1, 51, 53, 55**Math** 1A, 1B, 1C, 1D, 10, 11, 12**Paralegal Studies** 18, 52A**Real Estate** 50, 51, 52A, 53, 54, 56A, 59, 61**Speech Communication 70****Technical Writing 61**

<i>Major</i>	<i>Business and Computer Information Systems Emphasis</i>	<i>27 units</i>
<i>GE</i>	<i>General Education (31-42 units)</i>	
<i>Electives</i>	<i>Elective courses req'd. when major units plus GE units total is less than 90</i>	
	<i>Total Units Required</i>	<i>90 units</i>

Science, Math and Engineering Emphasis**Anthropology** 1, 1L**Astronomy** 4, 10**Biology** 5, 6A, 6B, 6C, 8, 10, 11, 13, 15, 26, 40A, 40B, 40C, 45, 54G, 54H, 54I, 54J**Chemistry** 1A, 1B, 1C, 10, 12A, 12B, 12C, 30A, 30B, 50**Computer Information Systems** 2, 3, 14A, 14B, 15AG, 15BG, 15C, 18A, 18B, 18C, 21JA, 21JB, 26A, 26B, 27, 28, 29, 30A, 30B, 31, 33A, 33B, 35A, 35B, 50, 53, 57, 61A, 61B, 63, 64A, 64B, 64C, 64D, 66, 67A, 67B, 71A, 71B, 71C, 73, 74, 75A, 75B, 75C, 75D, 75E, 76, 79, 89A, 89C**Education** 46**Engineering** 10, 35, 37**Environmental Science** 1, 1L, 19, 20, 21, 30, 81**Environmental Studies** 2, 50, 56, 58**Geography** 1, 5**Geology** 10, 20**Health** 21, 51**Math** 1A, 1B, 1C, 1D, 2A, 2B, 10, 11, 12, 22, 23, 41, 42, 43, 44, 46**Meteorology** 10, 10L, 20L**Nutrition** 10**Physical Education** 30, 51**Physics** 2A, 2B, 2C, 4A, 4B, 4C, 4D, 10, 50

<i>Major</i>	<i>Science, Math and Engineering Emphasis</i>	<i>27 units</i>
<i>GE</i>	<i>General Education (31-42 units)</i>	
<i>Electives</i>	<i>Elective courses req'd. when major units plus GE units total is less than 90</i>	
	<i>Total Units Required</i>	<i>90 units</i>

Social and Behavioral Sciences Emphasis**Administration of Justice** 1, 3, 5, 11, 25, 29, 50, 51, 53, 54, 55, 56, 60, 61, 62, 73, 74A, 75, 78, 90A, 95**Anthropology** 2, 3, 4, 6, 69**Arts** 3TC**Business** 21**Career Life Planning** 70, 75**Child Development** 10G, 10H, 12, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59G, 59H, 60, 61, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 80, 90**Computer Information Systems** 2**Economics** 1, 2**Education** 1, 56, 73, 74**Environmental Studies** 1, 2, 3**Film and Television** 10**Geography** 1, 4, 5, 10**History** 2, 3A, 3B, 3C, 4A, 4B, 4C, 4D, 5A, 5B, 7A, 7B, 9, 10, 16A, 16B, 17A, 17B, 17C, 18A, 18B, 19A, 19B, 28**Human Development** 10, 20, 50

Intercultural Studies 3A, 3B, 3C, 4, 7, 8, 9, 10, 11, 16A, 16B, 17, 18A, 18B, 20, 21, 22, 25, 26, 27, 28, 29, 30, 31, 32, 36, 37, 38A, 38B, 41, 42, 43, 44, 55
International Studies 5, 8, 19A, 19B, 30, 33
Journalism 2
Math 10
Paralegal Studies 3, 11, 54, 74A, 75, 90A, 95
Philosophy 10, 17
Political Science 1, 2, 3, 5, 10, 11, 13, 15, 16, 17, 30, 33, 75, 95
Psychology 1, 2, 3, 4, 5, 6, 8, 9, 10G, 10H, 12, 14, 15, 24, 60, 63, 67, 74A
Sociology 1, 4, 5, 8, 15, 20, 25, 28, 35, 50, 51, 54, 73
Speech Communication 7, 16, 70
Women's Studies 1, 3C, 8, 9, 12, 28, 30

Major Social and Behavioral Sciences
Emphasis 27 units
GE General Education (31-42 units)
Electives Elective courses req'd. when major units plus GE units total is less than 90
Total Units Required 90 units

Management

Certificate of Achievement

In the Certificate of Achievement in Management program, students learn the fundamentals of general business administration, management, human resources, and leadership, among other areas of study. Students develop practical knowledge and skills for formal management roles or other positions of influence. Successful students will also be prepared for higher-level job responsibilities and be able to communicate more effectively. De Anza College's Management program is built on the ladder concept, whereby students can complete a Certificate of Achievement en route to the Associate in Arts degree.

Student Learning Outcomes - upon completion, students will be able to:

- identify management issues and apply solutions and leadership styles.

1. Meet the requirements for this certificate level. (Page 48)
2. Complete the following.

BUS 10	Introduction to Business	5
BUS 57	Human Resource Management	4
BUS 65	Leadership	5
BUS 96	Principles of Management	5

Complete one (1) course from the following: 5

BUS 18	Business Law I (5)	
BUS 55	Introduction to Entrepreneurship (5)	
BUS 56	Human Relations in Business (5)	
BUS 60	International Business Management (5)	
<i>Total Units Required</i>		<i>24</i>

Management

A.A. Degree

The A.A. degree in Management prepares students for a career managing and leading employees in positions such as (but not limited to) Service Manager, Retail Sales Manager, Customer Service Supervisor, Office Manager, Human Resources Coordinator, Employee Benefits Associate, Construction Project Manager, Hotel/Hospitality Supervisor,

or Management Trainee. Students learn the fundamentals of general business administration, with an emphasis on management, leadership, and human resource management.

Student Learning Outcomes - upon completion, students will be able to:

- analyze management issues, develop solutions, and compare leadership styles for a given organizational environment.

1. Meet the A.A./A.S. degree requirements. (Page 48)

2. Complete the following.

BUS 10	Introduction to Business	5
BUS 18	Business Law I	5
BUS 21	Business and Society	5
BUS 56	Human Relations in Business	5
BUS 57	Human Resource Management	4
BUS 60	International Business Management	5
BUS 65	Leadership	5
BUS 96	Principles of Management	5

Complete a minimum of 14 units from the following: 14

BUS 54	Business Mathematics (5)	
BUS 55	Introduction to Entrepreneurship (5)	
BUS 58	The Business Plan (4)	
BUS 70	Principles of E-Business (5)	
BUS 87	Introduction to Selling (4)	
BUS 90	Principles of Marketing (5)	
ACCT 1A	Financial Accounting I (5)	
ECON 1	Principles of Macroeconomics (4)	
SPCH 70	Effective Organizational Communication (4)	
<i>Major Management</i>		<i>53 units</i>
<i>GE General Education (31-42 units)</i>		
<i>Electives Elective courses req'd. when major units plus GE units total is less than 90</i>		
<i>Total Units Required</i>		<i>90 units</i>

Mandarin

Certificate of Achievement

(Pending state approval. Check with the department for the status.)

The Certificate of Achievement in Mandarin is designed to open employment opportunities for local students because of the large number of Bay Area companies conducting business and trade with China and Taiwan, along with Singapore and other Asian countries where Mandarin is widely used. The electronics industry in particular seeks to employ people who know Mandarin. For students planning to continue their undergraduate or graduate education in business, electronics, or law, this certificate will complement their studies. From a cultural standpoint, Mandarin study is valuable in California, with its rich diversity of cultural traditions represented by many Mandarin-speaking immigrants. Many Mandarin courses can also satisfy GE requirements for an Associates degree and transfer GE requirements.

Student Learning Outcomes - upon completion students will be able to:

- demonstrate a working command of essential vocabulary, recognize and reproduce between 600-800 Chinese characters, use proper language structures when providing or requesting information orally and in writing, and use the appropriate level of

- respect and language style in varying situations.
- demonstrate a solid understanding of the social protocols and contributions of Mandarin-speaking cultures by analyzing and comparing them to other cultures.

1. Meet the requirements for this certificate level. (Page 48)
2. Complete the following.

MAND 1	Elementary Mandarin (First Quarter)	5
MAND 2	Elementary Mandarin (Second Quarter)	5
MAND 3	Elementary Mandarin (Third Quarter)	5
INTL 19A	History of Asian Civilization: China and Japan (through the 18th Century) <i>also listed as HIST 19A</i>	4
Total Units Required		19

Mandarin

Certificate of Achievement-Advanced

(Pending state approval. Check with the department for the status.)

The Certificate of Achievement-Advanced in Mandarin is designed to open employment opportunities for local students because of the large number of Bay Area companies conducting business and trade with China, Taiwan, Singapore, and other Asian countries where Mandarin is widely used. It is a two-year course of study designed to build a strong language foundation in communication as well as expose students to Chinese culture and literature. Students transferring to four-year schools who plan to major or minor in Mandarin are well prepared by this curriculum.

Student Learning Outcomes - upon completion students will be able to:

- demonstrate a working command of essential vocabulary, recognize and reproduce at least 1800 Chinese words, use proper language structures accurately when providing or requesting information orally and in writing with native speakers, and use the appropriate level of respect and language style in varying situations.
- demonstrate a solid understanding of the subtleties and idiosyncracies of Mandarin-speaking cultures by analyzing and comparing them to other cultures.

1. Meet the requirements for this certificate level. (Page 48)
2. Complete the following.

MAND 1	Elementary Mandarin (First Quarter)	5
MAND 2	Elementary Mandarin (Second Quarter)	5
MAND 3	Elementary Mandarin (Third Quarter)	5
MAND 4	Intermediate Mandarin (First Quarter)	5
MAND 5	Intermediate Mandarin (Second Quarter)	5
MAND 6	Intermediate Mandarin (Third Quarter)	5
INTL 19A	History of Asian Civilization: China and Japan (through the 18th Century) <i>also listed as HIST 19A</i>	4
Total Units Required		34

Manufacturing and Computer Numerical Control (CNC)

CAD/CAM - Mastercam

Skills Certificate

Skills Certificates are issued by the individual departments and are not notated on official college transcripts. Please contact the MCNC coordinator directly for assistance and to apply for Skills Certificates.

The CAD/CAM Mastercam Skills certificate program teaches students 2D, 3D, lathe and multi-axis machine tool programming. Students learn to construct geometry, select tools, and produce and verify tool paths. Upon completion, students are prepared for employment as entry-level programmers in prototype and production manufacturing facilities. This certificate is part of a career ladder. Students may also choose to complete a certificate of achievement-advanced or A.S. degree.

Student Learning Outcomes - upon completion, students will be able to:

- design and construct 2D, 3D, lathe, horizontal and multi-axis part geometry.
- select tools and produce tool paths with constructed and imported geometry.
- verify tool paths and create word address programs for CNC machines.

Complete each required course at De Anza College with a passing grade ("C" or better/"P").

Complete one (1) course from: 4.5
MCNC 76C - 76E series (introductory) (4.5 each)
CAD/CAM Based CNC Programming Using Mastercam

Complete one (1) course from: 4.5
MCNC 76G - 76K series (4.5 each)
CAD/CAM Based CNC Programming Using Mastercam

Complete one (1) course from: 4.5
MCNC 76M - 76Q series (4.5 each)
Advanced CAD/CAM Based CNC Programming Using Mastercam

Total Units Required 13.5

CNC Machine Operator

Skills Certificate

Skills Certificates are issued by the individual departments and are not notated on official college transcripts. Please contact the department directly for assistance and to apply for Skills Certificates.

The Computer Numerical Control (CNC) Machine Operator Skills certificate program teaches students the fundamentals of conventional and CNC machine tools. Students learn how to set-up safely and operate manual mills and lathes and construct word address programs for the set-up and operation of CNC mills. Upon completion, students are prepared for employment in manufacturing facilities as set-up persons, machine operators and production workers. This certificate is part of a career ladder. Students may also

choose to complete a certificate of achievement-advanced or A.S. degree.

Student Learning Outcomes - upon completion, students will be able to:

- set up and operate conventional and CNC machines safely.
- construct and inspect machined projects using conventional and CNC equipment.
- construct word address programs to machine projects.

Complete each required course at De Anza College with a passing grade ("C" or better/"P").

MCNC 71	Introduction to Machining & CNC Processes	4.5
MCNC 75A	Intro. to Computer-Aided Numerical Control (CNC) Programming and Operation: Mills	4.5
MCNC 75B	Computer-Aided Numerical Control (CNC) Programming & Operation: Lathes, Adv. Mills	4.5
Total Units Required		13.5

CNC Machinist

Certificate of Achievement-Advanced A.S. Degree

The CNC Machinist Certificate of Achievement-Advanced and AS degree programs teach students the fundamentals of CNC machine tools. Students learn safe set-up, editing and operation of CNC equipment, including vertical and horizontal mills, lathes and rotary multi-axis components. Students are taught to dimension and inspect parts using various inspection methods, and to analyze materials and processes used in manufacturing. Upon completion, students are prepared for employment in manufacturing facilities as CNC set-up persons and machine operators.

Student Learning Outcomes - upon completion, students will be able to:

- construct and inspect machined projects using CNC equipment with word address programs.
- apply geometric dimensioning and tolerance standards to inspect drawings and inspect parts using a coordinate measuring machine.
- differentiate and analyze the materials and processes used in manufacturing.
- produce tool paths with constructed and imported geometry using Mastercam.
- apply advanced machining skills by independently contracting projects.

Certificate of Achievement-Advanced

1. Meet the requirements for this certificate level. (Page 48)
2. Complete the following.

Complete two (2) units from:		2
MCNC 56	Special Projects in Manufacturing and CNC (1)	
MCNC 56X	Special Projects in Manufacturing and CNC (2)	

Complete the following:

MCNC 64	Manufacturing Materials and Processes	4
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MCNC 71	Introduction to Machining and CNC Processes	4.5
MCNC 72	Applied Geometric Inspection Dimensioning and Tolerancing; Coordinate Measuring Machines	3
MCNC 75A	Intro. to Computer-Aided Numerical Control (CNC) Programming and Operation: Mills	4.5
MCNC 75B	Computer-Aided Numerical Control (CNC) Programming & Operation: Lathes, Adv. Mills	4.5
MCNC 75C	CNC Lathes & Horizontal Machining Centers; Programming & Operation, 4th Rotary Axis, Fixture Design	4.5
Complete one (1) course from:		4.5
MCNC 76C - 76E series (introductory) (4.5 each)		
CAD/CAM Based CNC Programming Using Mastercam		
Complete one (1) course from:		4.5
MCNC 76G - 76K series (4.5 each)		
CAD/CAM Based CNC Programming Using Mastercam		
Complete one (1) course from:		4.5
MCNC 76M - 76Q series (4.5 each)		
Advanced CAD/CAM Based CNC Programming Using Mastercam		
Total Units Required		40.5

A.S. Degree

Meet the A.A./A.S. degree requirements. (Page 48)

Major	Complete the course requirements for the CNC Machinist Certificate of Achievement-Advanced	40.5 units
GE	General Education (31-42 units)	
Electives	Elective courses req'd. when major units plus GE units total is less than 90	
Total Units Required		90 units

CNC Research and Development Machinist

Certificate of Achievement-Advanced A.S. Degree

The certificate of achievement-advanced and AS degree programs teach students the fundamentals of conventional and CNC machine tools. Students learn to set up safely and operate manual mills, lathes, surface grinders, and CNC equipment, including vertical and horizontal mills, lathes and rotary multi-axis components. They also learn to produce word address programs with CAD/CAM software. Students are taught to dimension and inspect parts using various inspection methods, and to analyze materials and processes used in manufacturing. Upon completion, students are prepared for employment working closely with engineers in a research and development environment.

Student Learning Outcomes - upon completion, students will be able to:

- construct and inspect machined projects using conventional and CNC equipment using word address programs.
- apply geometric dimensioning and tolerance standards to inspect drawings and inspect parts using a coordinate measuring machine.
- differentiate and analyze the materials and processes used in manufacturing.

- analyze, construct, and inspect diagrams to repair physical and electrical components.
- produce tool paths with constructed and imported geometry using Mastercam.

Certificate of Achievement-Advanced

1. Meet the requirements for this certificate level. (Page 48)
2. Complete the following.

MCNC 64	Manufacturing Materials and Processes	4
MCNC 71	Introduction to Machining and CNC Processes	4.5
MCNC 72	Applied Geometric Inspection Dimensioning & Tolerancing; Coordinate Measuring Machines	3
MCNC 75A	Intro. to Computer-Aided Numerical Control (CNC) Programming and Operation: Mills	4.5
MCNC 75B	Computer-Aided Numerical Control (CNC) Programming & Operation: Lathes, Adv. Mills	4.5
MCNC 75C	CNC Lathes & Horizontal Machining Centers; Programming & Operation, 4th Rotary Axis, Fixture Design	4.5
MCNC 77	Machining Practices Using Conventional Machine Tools, Tool Design, Abrasive Machining	4.5
AUTO 53A	Automotive Mechanisms	3
AUTO 53B	Automotive Electromechanical Systems	2
Complete one (1) course from:		4.5
MCNC 76C - 76E series (introductory) (4.5 each)		
CAD/CAM Based CNC Programming Using Mastercam		
Complete one (1) course from:		4.5
MCNC 76G - 76K series (4.5 each)		
CAD/CAM Based CNC Programming Using Mastercam		
Complete one (1) course from:		4.5
MCNC 76M - 76Q series (4.5 each)		
Advanced CAD/CAM Based CNC Programming Using Mastercam		
Total Units Required		48

A.S. Degree

Meet the A.A./A.S. degree requirements. (Page 48)

Major	Complete the course requirements for the CNC Research and Develop. Machinist Cert. of Achievement-Advanced	48 units
GE	General Education (31-42 units)	
Electives	Elective courses req'd. when major units plus GE units total is less than 90	
Total Units Required		90 units

Manufacturing Systems Technician

Certificate of Achievement

The Manufacturing Systems Technician Certificate of Achievement teaches students the safe operation of basic and specialized machine tools. Students learn to set up safely and operate manual mills, lathes, and surface grinders as well as construct entry-level programs for operation of CNC Mills and inspect parts to repair physical and electrical components. Upon completion, students are prepared for employment for set up, maintenance, and occasional operation of a variety of automated equipment.

Student Learning Outcomes - upon completion, students will be able to:

- demonstrate safe operation of basic and specialized equipment.
- demonstrate entry-level programming skills for computer numerical controlled equipment.
- analyze, construct, and inspect parts and diagrams to repair physical and electrical components.

1. Meet the requirements for this certificate level. (Page 48)
2. Complete the following.

AUTO 53A	Automotive Mechanisms	3
AUTO 53B	Automotive Electromechanical Systems	2
MCNC 64	Manufacturing Materials and Processes	4
MCNC 71	Introduction to Machining & CNC Processes	4.5
MCNC 75A	Intro. to Computer-Aided Numerical Control (CNC) Programming and Operation: Mills	4.5
MCNC 77	Machining Practices Using Conventional Machine Tools, Tool Design, Abrasive Machining	4.5
Total Units Required.		22.5

Product Model Making

Certificate of Achievement-Advanced

A.S. Degree

Students in the Certificate of Achievement-Advanced and A.S. degree programs are taught the fundamentals of Product Model Making. Students learn the safe set-up of CNC equipment, how to design and construct three-dimensional objects using CAD/CAM software, and how to analyze materials and processes used in prototype model making. Upon completion, students are prepared for employment working in design-stage product development, and prototype and model making environments.

Student Learning Outcomes - upon completion, students will be able to:

- construct and inspect machined projects using conventional and CNC equipment that uses word address programs.
- design and construct three-dimensional objects.
- create part geometry using Solidworks or CREO/Pro Engineer CAD software.
- differentiate and analyze the materials and processes used in manufacturing.
- produce tool paths with constructed and imported geometry using Mastercam.

Certificate of Achievement-Advanced

1. Meet the requirements for this certificate level. (Page 48)
2. Complete the following.

ARTS 10A	Three-Dimensional Design	3
ARTS 10B	Intermediate Three-Dimensional Design	3
MCNC 64	Manufacturing Materials and Processes	4
MCNC 71	Introduction to Machining & CNC Processes	4.5
MCNC 75A	Intro. to Computer-Aided Numerical Control (CNC) Programming and Operation: Mills	4.5
MCNC 75B	Computer-Aided Numerical Control (CNC) Programming & Operation: Lathes, Adv. Mills	4.5

Complete one (1) course from one (1) of these series:	4
CDI 60A-F SolidWorks (Beginning) (4 each)	
CDI 70A-F Creo Parametric (Beginning) (4 each)	
Complete one (1) course from:	4.5
MCNC 76C - 76E series (introductory) (4.5 each)	
CAD/CAM Based CNC Programming Using Mastercam	
Complete one (1) course from:	4.5
MCNC 76G - 76K series (4.5 each)	
CAD/CAM Based CNC Programming Using Mastercam	
Complete one (1) course from:	4.5
MCNC 76M - 76Q series (4.5 each)	
Advanced CAD/CAM Based CNC Programming Using Mastercam	
Total Units Required	41

A.S. Degree

Meet the A.A./A.S. degree requirements. (Page 48)	
Major	Complete the course requirements for the Product Model Making Cert. of Achievement-Advanced 41 units
GE	General Education (31-42 units)
Electives	Elective courses req'd. when major units plus GE units total is less than 90
	Total Units Required90 units

Marketing Management

Certificate of Achievement

Students learn the fundamentals of general business administration, marketing, selling, advertising, and other related functions. They also prepare for a wide variety of marketing-related careers. The Marketing Management program is built on the ladder concept, whereby students can complete a certificate of achievement and/or a certificate of achievement-advanced en route to the Associate in Arts degree.

Student Learning Outcomes - upon completion, students will be able to:

- identify and distinguish the elements of the marketing mix for an organization in a given business environment.

1. Meet the requirements for this certificate level. (Page 48)	
2. Complete the following.	
BUS 10 Introduction to Business	5
BUS 87 Introduction to Selling	4
BUS 89 Advertising	5
BUS 90 Principles of Marketing	5
Complete one (1) course from the following:	5
ACCT 1A Financial Accounting I (5)	
BUS 18 Business Law I (5)	
BUS 54 Business Mathematics (5)	
BUS 56 Human Relations in Business (5)	
BUS 59 Promoting Your Small Business (5)	
BUS 60 International Business Management (5)	
BUS 65 Leadership (5)	
BUS 70 Principles of E-Business (5)	
BUS 96 Principles of Management (5)	
Total Units Required	24

Marketing Management

Certificate of Achievement-Advanced

Students learn the fundamentals of general business administration, marketing, selling, and advertising. Other related subjects the program covers such as business law, accounting, and management give them additional insight into the marketing concepts and techniques they learn by placing them in a broader context. Students pursuing this certificate prepare for a wide variety of marketing-related careers. The Marketing Management program is built on the ladder concept, whereby students can complete a certificate of achievement and/or a certificate of achievement-advanced en route to the Associate in Arts degree.

Student Learning Outcomes - upon completion, students will be able to:

- apply and analyze marketing concepts for an organization in a given business environment.

1. Meet the requirements for this certificate level. (Page 48)	
2. Complete the following.	
BUS 10 Introduction to Business	5
BUS 87 Introduction to Selling	4
BUS 89 Advertising	5
BUS 90 Principles of Marketing	5
Complete five (5) courses from the following:	25
ACCT 1A Financial Accounting I (5)	
BUS 18 Business Law I (5)	
BUS 54 Business Mathematics (5)	
BUS 56 Human Relations in Business (5)	
BUS 59 Promoting Your Small Business (5)	
BUS 60 International Business Management (5)	
BUS 65 Leadership (5)	
BUS 70 Principles of E-Business (5)	
BUS 96 Principles of Management (5)	
Total Units Required	44

Marketing Management

A.A. Degree

Students pursuing an A.A. in Marketing Management prepare for a wide variety of marketing-related careers such as Marketing Events Coordinator, Retail Sales Manager, Marketing Communications Associate, Inside Sales Representative, Sales Specialist/Coordinator, and Sales Support Specialist. Students learn the fundamentals of general business administration with an emphasis on marketing, advertising, selling, international business, and management.

Student Learning Outcomes - upon completion, students will be able to:

- develop an appropriate marketing plan for an organization in a given business environment.

1. Meet the A.A./A.S. degree requirements. (Page 48)	
2. Complete the following.	
ACCT 1A Financial Accounting I	5
BUS 10 Introduction to Business	5
BUS 18 Business Law I	5
BUS 54 Business Mathematics	5
BUS 60 International Business Management	5
BUS 87 Introduction to Selling	4

BUS 89	Advertising	5
BUS 90	Principles of Marketing	5
BUS 96	Principles of Management	5
<i>Complete a minimum of nine (9) units from the following:</i>		9
BUS 21	Business and Society (5)	
BUS 56	Human Relations in Business (5)	
BUS 57	Human Resource Management (4)	
BUS 59	Promoting Your Small Business (5)	
BUS 65	Leadership (5)	
BUS 70	Principles of E-Business (5)	
BUS 85	Business Communication (3)	
SPCH 70	Effective Organizational Communication (4)	
Major	Marketing Management	53 units
GE	General Education (31-42 units)	
Electives	Elective courses req'd. when major units plus GE units total is less than 90	
<i>Total Units Required</i>		<i>90 units</i>

Massage Therapy

Certificate of Achievement

This program prepares students with the knowledge, skills and abilities necessary for entry-level massage therapist positions.

Student Learning Outcomes - upon completion, students will be able to:

- demonstrate knowledge of the various systems of the body and pathologies of these systems that can contraindicate or benefit from massage.
- utilize the results of health intake forms and physical assessments to formulate and administer effective individualized massage treatments.

Complete the following and meet the requirements for this certificate level. (Page 48)

Students must present current First Aid and CPR cards to receive a certificate in Massage Therapy.

BIOL 40A	Human Anatomy and Physiology (84 hours)	5
P E 11	Stretching (24 hours)	0.5
P E 53	Stress Management (24 hours)	2
P E 54	Introduction to Massage (72 hours)	4
P E 54A	Intermediate Massage (60 hours)	3
P E 54B	Sports Massage (60 hours)	3
P E 54C	Advanced Massage Skills (72 hours)	4
P E 54D	Clinical Practicum in Massage Therapy (84 hours)	3

Complete a min. of 36 applied massage ("hands on") internship hours.

P E 54T,U,V	Internship in Massage Therapy courses (1, 2, 3 units - 36, 72, 108 hours)	1
<i>Total Units Required (516 hours minimum)</i>		<i>25.5</i>

Massage Therapy

Certificate of Achievement-Advanced

This program builds on the instruction of the certificate of achievement and provides students training in advanced treatment modalities and fitness concepts and more

experience administering therapeutic treatments in a variety of professional settings.

Student Learning Outcomes - upon completion, students will be able to:

- integrate advanced modality and treatment concepts into their treatments.
- utilize advanced theories, methods and procedures to design and administer effective clinical treatments in a variety of professional settings with diverse populations.
- demonstrate increased physical strength and endurance to meet the rigors of the profession.

Complete the following and meet the requirements for this certificate level. (Page 48)

Students must present current First Aid and CPR cards to receive a certificate in Massage Therapy.

Complete the course and internship requirements for the Certificate of Achievement.

BIOL 40B	Human Anatomy and Physiology (84 hours)	5
P E 54E	Table Shiatsu (72 hours)	4
P E 35	Care & Prevention/Athletic Injuries (72 hours)	4

Complete a total of 108 hours/three (3) units from the "Internship in Massage Therapy" course series. Thirty-six (36) hours/one (1) unit must be in applied massage (completing the Certificate of Achievement internship meets this requirement). The additional 72 hours/two (2) units may be either in applied massage or teaching assistant internships.

P E 54T,U,V	Internship in Massage Therapy courses (1, 2, 3 units - 36, 72, 108 hours)	
<i>additional hours = 72</i>		<i>additional units = 2</i>

Complete a minimum of four (4) units from the following:

BUS 55	Intro. to Entrepreneurship (5) (60 hours)	4
NUTR 62	Nutrition & Athletic Performance (2) (24 hours)	
P E 2Q*	Tai Chi (0.5) (24 hours)	
P E 54F	Introduction to Chair Massage (3) (60 hours)	
P E 70A	Orientation to Lifetime Fitness (2) (24 hours)	
P E 71*	Lifetime Wellness and Fitness Center Lab. (1) (36 hours)	
P E 77, 77X, 77Y	Special Projects in Physical Education* * (0.5, 1, 1.5 units - 18, 36, 54 hours)	
<i>Total Units Required (876 hours minimum)</i>		<i>44.5</i>

* This repeatable course may only apply once.

** Special Projects in Physical Education for the Massage Therapy program need approval from the Massage Program Coordinator.

Massage Therapy

A.A. Degree

This program builds on the instruction of the certificate of achievement-advanced and provides students with additional knowledge, hands-on experience and fitness training to help them succeed as a massage therapist or to transfer to a four-year institution as a Kinesiology major.

Student Learning Outcomes - upon completion, students will be able to:

- integrate advanced modality and treatment concepts into their treatments.
- utilize advanced theories, methods and procedures to design and administer effective clinical treatments in a variety of professional settings with diverse populations.
- demonstrate increased physical strength and endurance to perform consecutive massage treatments without difficulty.
- demonstrate effective entrepreneurial and oral and written communication skills to increase success in their careers.

Complete the following and meet the A.A./A.S. degree requirements. (Page 48)

Students must present current First Aid and CPR cards to receive a degree in Massage Therapy.

*Complete the course and internship requirements for the **Certificate of Achievement**.*

BIOL 40B	Human Anatomy and Physiology (84 hours)	5
P E 54E	Table Shiatsu (72 hours)	4
P E 54F	Chair Massage (60 hours)	3
P E 35	Care & Prevention/Athletic Injuries (72 hours)	4

Complete a total of 144 hours/four (4) units from the "Internship in Massage Therapy" course series. Thirty-six (36) hours/one (1) unit must be in applied massage (completing the Certificate of Achievement internship meets this requirement). The additional 108 hours/three (3) units may be either in applied massage or teaching assistant internships.

P E 54T,U,V	Internship in Massage Therapy courses (1, 2, 3 units - 36, 72, 108 hours)	
	additional hours = 108	additional units = 3

Complete a minimum of 7.5 units from the following: 7.5

BIOL 40C	Human Anatomy and Physiology (5) (84 hours)	
BUS 55	Introduction to Entrepreneurship (5) (60 hours)	
NUTR 62	Nutrition and Athletic Performance (2) (24 hours)	
P E 2Q*	Tai Chi (0.5) (24 hours)	
P E 70A	Orientation to Lifetime Fitness (2) (24 hours)	
P E 71*	Lifetime Wellness and Fitness Center Lab. (1) (36 hours)	
P E 77, 77X, 77Y	Special Projects in Physical Education** (0.5, 1, 1.5 units - 18, 36, 54 hours)	

*This repeatable course may only apply once.

** Special Projects in Physical Education for the Massage Therapy program need approval from the Massage Program Coordinator.

Major	Massage Therapy	52 units
GE	General Education (31-42 units)	
Electives	Elective courses req'd. when major units plus GE units total is less than 90	
	Total Units Required (1,020 hours minimum)	90 units

Mathematics

Associate in Science in Mathematics for Transfer

A.S.-T. Degree

The role of mathematics is vital and growing, providing solutions to problems in a wide range of sciences: social, biological, physical, behavioral, and management. As a whole, mathematics is necessary for understanding and expressing ideas in science, engineering, and human affairs. Mathematics is integrally related to computer science and statistics, which have proven invaluable to advancing research and modern industrial technology. The curriculum for the Associate in Science in Mathematics for Transfer academically prepares the student to transfer into the CSU system to complete a Baccalaureate degree in a similar major.

Student Learning Outcome

Upon completion, students will be prepared for successful entry into upper division courses in mathematics.

1. Meet the A.A./A.S. degree requirements for transfer.

(Page 48)

2. Complete the following.

MATH 1A	Calculus	5
MATH 1B	Calculus	5
MATH 1C	Calculus	5
MATH 1D	Calculus	5
MATH 2A	Differential Equations	5
MATH 2B	Linear Algebra	5
Major	Mathematics for Transfer	30 units
Transfer GE	CSU GE or IGETC for CSU pattern (47-61)	
Electives	CSU-transferrable elective courses required when the major units plus transfer GE units total is less than 90	
	Total Units Required	90 units

Medical Laboratory Technology

Certificate of Achievement-Advanced

Note: to receive the Medical Laboratory Advanced, the student must have an A.A./A.S. degree or higher.

The Medical Laboratory Technician (MLT) Certificate of Achievement-Advanced is available to students who have an associate or higher degree from an accredited US institution or the evaluated equivalent from foreign study. The certificate of achievement-advanced program is a 15-month course of study (including one summer) that prepares students for a career as a Medical Laboratory Technician through classroom study and supervised clinical training. The MLT program provides students with a quality education that complies with the established standards and guidelines of an accredited laboratory training program. Graduates of the certificate program are eligible to sit for a state approved national MLT certification examination.

Student Learning Outcomes - upon completion, students will be able to:

- pass a state approved national medical laboratory certification exam.

1. Meet the requirements for this certificate level. (Page 48)
2. Complete the following **prerequisites** and **requirements** with a "C" grade or better:

Prerequisites

State of California Phlebotomy Certification

Complete one (1) of the following sequences: 15-18

BIOL 40A	Human Anatomy and Physiology (5)
BIOL 40B	Human Anatomy and Physiology (5)
BIOL 40C	Human Anatomy and Physiology (5)

or

BIOL 6A	Form and Function in the Biological World (6)
BIOL 6B	Cell and Molecular Biology (6)
BIOL 6C	Evolution and Ecology (6)

Complete the following.

BIOL 26	Introductory Microbiology	6
CHEM 30A	Introduction to General, Organic and Biochemistry I	5
CHEM 30B	Introduction to General, Organic and Biochemistry II	5
	Prerequisite Units Required	31-34

Requirements

HTEC 80A	Clinical Hematology Lecture	4.5
HTEC 80	Clinical Hematology Laboratory	1.5
HTEC 81A	Clinical Urinalysis Lecture	1.5
HTEC 81	Clinical Urinalysis Laboratory	0.75
HTEC 82A	Clinical Coagulation Lecture	1.5
HTEC 82	Clinical Coagulation Laboratory	0.75
HTEC 83A	Clinical Microbiology Lecture	4.5
HTEC 83	Clinical Microbiology Laboratory	1.5
HTEC 84A	Clinical Immunology/Immunohematology Lecture	4.5
HTEC 84	Clinical Immunology/Immunohematology Laboratory	1.5
HTEC 85C	Clinical Chemistry I Lecture	4.5
HTEC 85A	Clinical Chemistry I Laboratory	1.5
HTEC 85D	Clinical Chemistry II Lecture	4.5
HTEC 85B	Clinical Chemistry II Laboratory	1.5
HTEC 180	Clinical Hematology/Urinalysis/Coagulation Practicum	6
HTEC 183	Clinical Microbiology Practicum	6
HTEC 184	Clinical Immunology/Immunohematology Practicum	4.5
HTEC 185	Clinical Chemistry Practicum	6
	Total Units Required,	
	Including Prerequisites	88-91

Medical Laboratory Technology

A.A. Degree

The Associate degree in Medical Laboratory Technology is a 24-month course of study (including summers) that prepares students for a career as a Medical Laboratory Technician through classroom study and supervised clinical training. The MLT Program provides students with a quality education that

complies with the established standards and guidelines of an accredited laboratory training program. Graduates of the degree program are eligible to sit for a state approved national MLT certification examination.

Student Learning Outcomes - upon completion, students will be able to:

- pass a state approved national medical laboratory certification exam.

1. For the major, complete the same prerequisites and requirements listed for the Medical Laboratory Technology Certificate of Achievement-Advanced (see above).
2. Meet De Anza's A.A./A.S. degree requirements. (Page 48)

Music

A.A. Degree

This degree program provides a foundation in music for students interested in a career in the musical entertainment industry or pursuing a baccalaureate degree in Music. Students are encouraged to take private instruction (not provided by the college) each term along with classes in their specialization.

Student Learning Outcomes - upon completion, students will be able to:

- demonstrate, through successful public performance, a synthesis of technique, memory, musicality and stage presence in both group and solo presentations.
- demonstrate proficiency equivalent to national lower division curriculum standards in music literacy for all historical periods, ear training and keyboard harmony.
- distinguish musical cultures, historical periods, forms and composers from each other while demonstrating an understanding of the roles of music in human culture.
- produce, notate, and perform music using contemporary technologies.

1. Meet the A.A./A.S. degree requirements. (Page 48)
2. Complete the following.

Advisory

MUSI 10A or qualifying score on the Music placement examination. Music placement examination offered upon request or during the first day of class in MUSI 3A.

Requirements

MUSI 3A	Comprehensive Musicianship	4
MUSI 3B	Comprehensive Musicianship	4
MUSI 3C	Comprehensive Musicianship	4
MUSI 4A	Comprehensive Musicianship II	4
MUSI 4B	Comprehensive Musicianship II	4
MUSI 4C	Comprehensive Musicianship II	4

*NOTE: MUSI 3A and 4A offered Fall quarter only.
MUSI 3B and 4B offered Winter quarter only.
MUSI 3C and 4C offered Spring quarter only.*

Complete one (1) course from the series: 1.5
MUSI 25G-N Performance Workshop (1.5 ea.)
(Select the appropriate one.)

<i>Complete one (1) course from the following:</i>		4
MUSI 1A	Introduction to Music: Western Cultures (4)	
MUSI 1B	Introduction to Music: Jazz Styles (4)	
MUSI 1C	Introduction to Music: World Music (4)	
MUSI 1D	Introduction to Music: Rock - from Roots to Rap (4)	

<i>Complete a minimum of 12 units from the following (choral or instrumental):</i>		12
MUSI 15A	Guitar Ensemble I (2)	
MUSI 15B	Guitar Ensemble II (2)	
MUSI 15C	Guitar Ensemble III (2)	
MUSI 20	De Anza Chorale (2)	
MUSI 21	Vintage Singers (2)	
MUSI 22	Early Music Study and Performance (1)	
MUSI 24	Women's Chorus (2)	
MUSI 27	Vocal Jazz Ensemble (2)	
MUSI 31	Chamber Orchestra (2)	
MUSI 34	Jazz Ensemble (2)	
MUSI 42	Symphonic Wind Ensemble (2)	
MUSI 45	Jazz Combos (2)	

<i>Complete a minimum of five (5) units from the following which do not duplicate those chosen from the lists above:</i>		5
MUSI 1A	Introduction to Music: Western Cultures (4)	
MUSI 1B	Introduction to Music: Jazz Styles (4)	
MUSI 1C	Introduction to Music: World Music (4)	
MUSI 1D	Introduction to Music: Rock - from Roots to Rap (4)	
MUSI 5A	Modal Counterpoint (3)	
MUSI 8	Intermediate Electronic Music (3)	
MUSI 9	Jazz Piano (1.5)	
MUSI 12A	Class Piano I (1.5)	
MUSI 12B	Class Piano II (1.5)	
MUSI 12C	Class Piano III (1.5)	
MUSI 13A	Beginning Singing I (1.5)	
MUSI 13B	Beginning Singing II (1.5)	
MUSI 14A	Classical Guitar I (1.5)	
MUSI 14B	Classical Guitar II (1.5)	
MUSI 14C	Classical Guitar III (1.5)	
MUSI 16	Jazz Blues and Popular Guitar (1.5)	
MUSI 18	Intermediate Piano (1.5)	
MUSI 25G-N	Performance Workshop series (1.5 ea.)	
MUSI 32A	Jazz Solo Voice I (1.5)	
MUSI 32B	Jazz Solo Voice II (1.5)	
MUSI 46	Beginning Winds and Percussion (1.5)	
MUSI 48	Jazz Improvisation (1.5)	
MUSI 51	Introduction to Electronic Music (3)	
MUSI 53	The Music Business (3)	
MUSI 58A	African and African-Influenced Percussion and Rhythms (1.5)	
MUSI 58B	Intermediate African and African-Influenced Percussion and Rhythms (1.5)	
MUSI 77 series	MUSI 77, 77X, 77Y	
	Special Projects in Music (1-3)	
Major	Music	46.5 units
GE	General Education (31-42 units)	
Electives	Elective courses req'd. when major units plus GE units total is less than 90	
<i>Total Units Required</i>		<i>90 units</i>

Nursing

Licensed Vocational Nurse (LVN) Transition to Registered Nurse A.S. Degree

Admission to the program is limited. The Licensed Vocational Nurse (LVN) Transition to Registered Nurse (RN) Program is a minimum of three (3) quarters in length, not including summer. LVN Transition to RN students enter the Registered Nursing program as advanced placement students as determined by the Director of the Nursing Program. Prior clinical experience in an acute setting will influence student's placement in the program. Admission to the program depends on space availability. The majority of courses are held in the daytime.

Current California LVN license and IV certification is required.

Graduates of this program are eligible to take the California State Board Examination for licensing (NCLEX-RN). Students are admitted throughout the year as advanced placements. Once admitted, the program is at least three (3) quarters in length (not including prerequisites).

Student Learning Outcomes - upon completion, students will be able to:

- take the professional licensure exam for Registered Nurse (NCLEX).
- provide competent nursing care as a novice RN in multiple health care settings.

Admission Criteria

Admission to the program is limited and based on the following:

- Completion of all prerequisites with the minimum grade requirements specified below.
- Completion of a Nursing Program application.
- Current California Vocational Nurse License.
- Intravenous Certification.
- Evidence of good health.
- Background check and drug testing prior to entry into the program. Clinical sites may limit student participation depending on findings, which may prevent the student from completing the graduation requirements.
- A minimum 75% academic record calculation using the Chancellor's Formula (see the Nursing Program web site).
- Passing result on the Admission Assessment Exam.
- Social Security card allowing employment in the U.S.

Prerequisites

These two (2) prerequisites or their equivalents must be completed with a "C" grade or better:

MATH 114	Intermediate Algebra	5
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Complete MATH 114, its equivalent or higher level mathematics, or get a qualifying score for MATH 114 on De Anza's mathematics assessment test.

Either ANTH 2 or SOC 1:

ANTH 2	Cultural Anthropology (4)	
SOC 1	Introduction to Sociology (4)	4

These nine (9) prerequisites or their equivalents must be completed with a "C" grade or better.

BIOL 40A*	Human Anatomy and Physiology	5
BIOL 40B*	Human Anatomy and Physiology	5
BIOL 40C*	Human Anatomy and Physiology	5
BIOL 26*	Introductory Microbiology	6
BIOL 45*	Introduction to Human Nutrition	4
PSYC 1	General Psychology	4
PSYC 14	Developmental Aspects of Psychology	4

Either EWRT 1A or ESL 5^:

EWRT 1A	Composition and Reading (5)	
ESL 5	ESL: Advanced Composition & Reading (5)	5

Either SPCH 1 or SPCH 10:

SPCH 1	Public Speaking (4)	
SPCH 10	Fundamentals of Oral Communication (4)	4

*Course must be completed within seven (7) years of nursing program admission screening.

^ ESL 5 restricted to students whose native language is not English.

Requirements

Admitted students complete the major courses and the Nursing General Education requirements to earn the degree.

Major Requirements*

Complete with a "C" grade or better:

NURS 85A	Psychiatric/Mental Health Nursing	2
NURS 85AL	Psychiatric/Mental Health Nursing (Clinical)	2.5
NURS 85	Advanced Medical/Surgical Concepts	2
NURS 85L	Advanced Medical/Surgical Concepts (Clinical)	2.5
NURS 86	Leadership/Management in Nursing	2
NURS 86L	Leadership/Management in Nursing (Clinical)	5
Total Units Required, Including Prerequisites		67

Recommended: NURS 150W Nursing Laboratory Skills

*Fewer or more major courses from the RN curriculum may be required at the discretion of the Executive Head of the Nursing program depending on the student's previous education.

Nursing A.S. Degree General Education Requirements

Complete with a minimum 2.0 GPA:

- One (1) course from GE Area C1 - Arts (4 units)
- One (1) course from GE Area C2 - Humanities (4 units)
- One (1) unit from GE Area E in PE or PEA activities
- One (1) Intercultural Studies course taken in Area C or D

Note: A.S. Degree General Education Areas A, B, and D are satisfied through completion of the prerequisites and major courses.

See the Nursing Program Web site for application guidelines and materials: www.deanza.edu/nursing

District Non-Discrimination Policy

It is the policy of the Foothill-De Anza Community College District not to discriminate on basis of race, sex, physical handicap, religion, color, creed, national origin, sexual orientation or age in any of its educational and employment programs and activities, its policies, practices and procedures.

Registered Nurse (RN)

A.S. Degree

Admission to the program is limited. The RN Program starts every quarter except summer quarter and it is six (6) quarters in length. Nursing classes are generally not offered in the summer. The majority of courses are held in the daytime.

The Associate Degree Nursing program is accredited by the California Board of Registered Nursing. The RN graduate is eligible to take the California State Board Examination for licensing (NCLEX-RN). Students are admitted to this program during the fall, winter and spring quarters. Once admitted, the program is six (6) quarters in length (not including prerequisites).

Student Learning Outcomes - upon completion, students will be able to:

- take the professional licensure exam for Registered Nurse (NCLEX).
- provide competent nursing care as a novice RN in multiple health care settings.

Admission Criteria

Admission to the program is limited and based on the following:

- Completion of all prerequisites with the minimum grade requirements specified below.
- Completion of a nursing program application.
- Evidence of good health.
- Background check and drug test (two times each): once each prior to entry into the program and once each prior to beginning Quarter 4 of the program. Clinical sites may limit student participation depending on findings, which may prevent the student from completing the graduation requirements.
- A minimum 75% academic record calculation using the Chancellor's Formula (see the Nursing Program web site).
- Passing result on the Admission Assessment Exam.
- Social Security card allowing employment in the U.S.

Prerequisites

The eleven (11) prerequisites in this section will be used for screening and admission into the RN program.

The following two (2) prerequisites must be completed with a passing grade of "C" or better/"P"(Pass):

NURS 50	Career Opportunities in Nursing (must be completed at De Anza)	2
MATH 114	Intermediate Algebra	5

Complete MATH 114, its equivalent or higher level mathematics, or get a qualifying score for MATH 114 on De Anza's mathematics assessment test.

The following nine (9) prerequisites or their equivalents must be completed with a "C" grade or better.

BIOL 40A*	Human Anatomy and Physiology	5
BIOL 40B*	Human Anatomy and Physiology	5
BIOL 40C*	Human Anatomy and Physiology	5
BIOL 26*	Introductory Microbiology	6
BIOL 45*	Introduction to Human Nutrition	4
PSYC 1	General Psychology	4
PSYC 14	Developmental Aspects of Psychology	4

Either EWRT 1A or ESL 5^:

EWRT 1A	Composition and Reading (5)	
ESL 5	ESL: Advanced Composition & Reading (5)	5

Either SPCH 1 or SPCH 10:

SPCH 1	Public Speaking (4)	
SPCH 10	Fundamentals of Oral Communication (4)	4

*Course must be completed within seven (7) years of nursing program admission screening.

^ ESL 5 restricted to students whose native language is not English.

Prerequisite/Corequisite

Complete one (1) of the following or its equivalent with a "C" grade or better and before or during the first quarter of the RN Program:

ANTH 2	Cultural Anthropology (4)	
SOC 1	Introduction to Sociology (4)	4
	Prerequisite Units Required	53

Requirements

Admitted students complete the major courses and the Nursing General Education requirements to earn the degree.

Major Requirements

Complete with a "C" grade or better:

NURS 81	Fundamental Nursing (Non Acute/Sub Acute Care)	4
NURS 81L	Fundamental Nursing (Non Acute/Sub Acute Care Clinical)	5
NURS 81P	Pharmacology I	1.5
NURS 82	Acute Fundamentals/Medical Surgical I	4
NURS 82L	Acute Fundamentals/Medical Surgical I (Clinical)	5
NURS 82P	Pharmacology II	1.5
NURS 83	Perinatal Nursing	2
NURS 83L	Perinatal Nursing (Clinical)	2.5
NURS 83A	Pediatric Nursing	2
NURS 83AL	Pediatric Nursing (Clinical)	2.5
NURS 83P	Pharmacology III	1.5
NURS 83PL	Pharmacology III Lab	0.5
NURS 84	Medical/Surgical II (Care of the Older Adult)	4
NURS 84L	Medical/Surgical II (Care of the Older Adult Clinical)	5
NURS 84C	Critical Thinking in Nursing	2
NURS 85	Advanced Medical/Surgical Concepts	2
NURS 85L	Advanced Medical/Surgical Concepts (Clinical)	2.5
NURS 85A	Psychiatric/Mental Health Nursing	2
NURS 85AL	Psychiatric/Mental Health Nursing (Clinical)	2.5
NURS 86	Leadership/Management in Nursing	2
NURS 86L	Leadership/Management in Nursing (Clinical)	5
	Total Units Required,	
	Including Prerequisites	111

Recommended: NURS 150,150W Nursing Laboratory Skills (0.5 - 1)

Nursing A.S. Degree General Education Requirements

Complete with a minimum 2.0 GPA:

- One (1) course from GE Area C1 - Arts (4 units)
- One (1) course from GE Area C2 - Humanities (4 units)
- One (1) unit from GE Area E in PE or PEA activities
- One (1) Intercultural Studies course taken in Area C or D

Note: A.S. Degree General Education Areas A, B, and D are satisfied through completion of the prerequisites and major courses.

Additional Information

California Nursing Assistants

Students with a current California Nursing Assistant Certificate who complete the required criteria for entrance into the Registered Nursing Program and are admitted to the program may take the following courses in place of NURS 81 and NURS 81L at the discretion of the Executive Head of the Nursing Program:

NURS 81N	CNA Transition (Non Acute/Sub Acute Care) (3)
NURS 81NL	CNA Transition (Non Acute/Sub Acute Care Clinical) (2)

Advanced placement due to prior nursing education

The student must first complete the screening requirements for entrance into the Registered Nursing Program and be admitted to the program. Placement is done on a space-available basis only after equivalency of previous nursing education has been evaluated by the Executive Head of the Nursing Program.

For LVN students transitioning to the RN Program, see the LVN Transition to RN curriculum.

District Non-Discrimination Policy

It is the policy of the Foothill-De Anza Community College District not to discriminate on basis of race, sex, physical handicap, religion, color, creed, national origin, sexual orientation or age in any of its educational and employment programs and activities, its policies, practices and procedures.

See the Nursing Program website for application guidelines and materials: www.deanza.edu/nursing

Paralegal Studies

Information for Paralegal Studies Students

The Paralegal Studies Program at De Anza College is approved by the American Bar Association. The primary goal of the program is to educate students for positions as paralegals where they can demonstrate the competency and ethical standards demanded of the profession. The program's specific objectives are:

1. Provide paralegal students with a well-rounded, balanced education founded on a beneficial mix of general education and legal education including theory and practical courses, and stressing understanding and reasoning rather than rote learning of facts.
2. Develop in paralegal students an understanding of the basic organization and operation of the federal and California state legal systems.
3. Promote the development of paralegals who understand and appreciate the role of and ethical responsibilities of paralegals in the legal field.
4. Develop in paralegal students the following practical skills:
 - a. Written and oral communication skills

- b. Ability to do basic legal research, including computer assisted legal research, demonstrating familiarity with both federal and state research tools
- c. Ability to do basic legal writing including office correspondence, interoffice memoranda, and memoranda of law
- d. In-depth knowledge and ability to function in the area of civil litigation including the ability to draft documents such as pleadings and motions
- e. Sufficient familiarity in one or more areas of law to function as a paralegal working in that substantive area

Paralegal graduates cannot give legal advice, appear in court, or otherwise engage in the unauthorized practice of law. The practice of law by non-attorneys is strictly prohibited by law.

Paralegal Studies

Certificate of Achievement-Advanced A.A. Degree

The Paralegal Studies certificate and degree programs prepare students to work in the legal field as paralegals under the supervision of attorneys. Paralegal duties include performing factual and legal research, drafting legal documents and correspondence, interviewing clients and witnesses, assisting attorneys in pretrial work, including document discovery and analysis, and at trials and hearings, organizing and maintaining case files and coordinating the use of technology in legal work.

Student Learning Outcomes - upon completion, students will be able to:

- evaluate, critique and analyze legal and factual information.
- synthesize and analyze legal and factual information through effective written and oral communication.
- compare and contrast the American and California legal systems within a global legal environment.
- research legally relevant facts from diverse source materials.
- assess the quality of information and utilize appropriate informational resources to evaluate a legal issue.

Certificate of Achievement-Advanced

For a Certificate of Achievement-Advanced, students must have an A.A./A.S. degree or higher; complete the required 46 units listed below for the Paralegal Studies A.A. Degree, and meet the requirements for this certificate level.

A.A. Degree

Complete the following and meet the A.A./A.S. degree requirements. (Page 48)

PARA 86	Legal Analysis	4
PARA 88	The Paralegal and Professional Responsibility	2
PARA 92A	Partnerships and Corporations	4
PARA 94	Introduction to California Law	4
PARA 95	Overview of American Law	4
PARA 96A	Introduction to Legal Research and Writing	4
PARA 97A	Civil Litigation Procedures	4
PARA 97B	Advanced Civil Litigation Procedures	4

Complete a minimum of 12 units from these major elective courses: 12

PARA 65 series	PARA 65W, 65X, 65Y, 65Z Current Paralegal Topics (1-4)
PARA 84	Trial Preparation (4)
PARA 85	Intellectual Property Law (4)
PARA 87	Personal Injury and Tort Litigation (4)
PARA 89	Landlord Tenant Law (4)
PARA 91A	California Family Law (4)
PARA 92B	Corporate Securities Regulations (4)
PARA 93	Bankruptcy Law (4)
PARA 96B	Advanced Legal Research and Writing (4)
PARA 96C	Computer Assisted Legal Research/Investig. (4)
PARA 98	Drafting Wills and Trusts (4)
PARA 99	California Probate Law and Procedures (4)

Complete a minimum of four (4) additional units from the above major elective course list or the following courses: 4

ADMJ 25	Law and Social Change (4)
ADMJ 61	Criminal Investigation (4)
ES 6	Introduction to Environmental Law (4)
ICS 29	Cultural Pluralism and American Law and Justice (4)
LIB 51	Business Resources on the World Wide Web (1)
PARA 3	Concepts of Criminal Law (5)
PARA 11	Federal Courts and Constitutional Law (4)
PARA 18	Business Law I (5)
PARA 52A	Legal Aspects of Real Estate in California I (4)
PARA 54	Youth and the Law (4)
PARA 64 series	PARA 64, 64X, 64Y, 64Z Paralegal Internship (1-4)
PARA 69	Paralegal Field Trips (1.5)
PARA 74A	Interviewing, Interrogation and Crisis Intervention (4)
PARA 75	Principles and Procedures of the Justice System (4)
PARA 90A	Legal Aspects of Evidence (4)
Major	Paralegal Studies 46 units
GE	General Education (31-42 units)
Electives	Elective courses req'd. when major units plus GE units total is less than 90
Total Units Required 90 units	

Photographic Arts

(Film and Digital)

A.A. Degree

This degree provides a comprehensive foundation in contemporary and traditional methods of photography. Digital imaging, traditional processing and printing, alternative processes, lighting, history and the visual language of photography are studied. Emphasis is on personal expression through creative process and technical excellence.

Student Learning Outcomes - upon completion, students will be able to:

- demonstrate accomplished skill in both dry (digital) and wet (analog) darkroom methods.
- create photographs that visually communicate ideas and concepts while engaging in the practices, theories and materials of the medium.

- critically analyze and assess diverse historical and contemporary photographic works.
- present finished photographic works for peer, professional or academic review.
- express artistic concepts and intent in written and oral formats.
- evaluate and critique photographic artwork and receive criticism from others.

1. Meet the A.A./A.S. degree requirements. (Page 48)

2. Complete the following.

F/TV 20	Basic Digital Film/Video Production	4
PHTG 1	Basic Photography	3
PHTG 4	Introduction to Digital Photography	3
PHTG 5	Intermediate Digital Photography	3

Complete two (2) courses from:

PHTG 2	Intermediate Photography (3)	6
PHTG 3	Advanced Photography (3)	
PHTG 54	Experimental Photography (3)	
PHTG 57A	Commercial Lighting I (3)	

Complete one (1) course from:

PHTG 20	History of Early Photography from Its Beginnings to 1925 (4)	4
PHTG 21	Contemporary Trends in Photography (4)	

Complete one (1) course from:

ARTS 2D	History of Art (Post-Impressionism to the Present) (4)	4
ARTS 3TE	Today's Working Artist (4)	

Complete one (1) course from the following:

ARTS 4A	Beginning Drawing (3)	3
ARTS 10A	Three-Dimensional Design (3)	
ARTS 14A	Watercolor Painting I (3)	
ARTS 15A	Acrylic Painting I (3)	
ARTS 16A	Oil Painting I (3)	
ARTS 18A	Ceramics (3)	
ARTS 37A	Sculpture (3)	

Complete a minimum of 11 units from the following that do not duplicate courses selected above: 11

ARTS 53A	Introduction to Visual Technology (3)	
ARTS 53B	Introduction to Visual Technology (3)	
ARTS 55A	Graphic Design - Communication (3)	
F/TV 2A	History of Cinema (1895-1950) (4)	
F/TV 2B	History of Cinema (1950-Present) (4)	
F/TV 50	Introduction to Film/Television Directing (4)	
F/TV 55A	Video Studio Production (4)	
HUMI 1	Creative Minds (4)	
HUMI 2	But Is It Art? Questions & Criticism (4)	
HUMI 15	Discussion on the Arts (4)	
PHTG 2	Intermediate Photography (3)	
PHTG 3	Advanced Photography (3)	
PHTG 4	Introduction to Digital Photography (3)	
PHTG 5	Intermediate Digital Photography (3)	
PHTG 7	Exploring Visual Expression (4)	
PHTG 20	History of Early Photography from Its Beginnings to 1925 (4)	
PHTG 21	Contemporary Trends in Photography (4)	
PHTG 57A	Commercial Lighting I (3)	
PHTG 57B	Commercial Lighting II (3)	
PHTG 58A	Photographic Photoshop I (3)	
PHTG 58B	Photographic Photoshop II (3)	
PHTG 77	Special Projects in Photography (2)	

PHTG 78 series	PHTG 78X, 78Y, 78Z	
	Special Topics in Photographic Studies (1-3)	
Major	Photographic Arts	41 units
GE	General Education (31-42 units)	
Electives	Elective courses req'd. when major units plus GE units total is less than 90	
	Total Units Required	90 units

Professional Photography

(Film and Digital)

Certificate of Achievement

This certificate program provides a foundation in the basics of photography including digital imaging, traditional processing and printing, and lighting. It also recognizes the importance of personal expression and the use of photography as a visual language. Students wishing to work in the industry, transfer, or complete an A.A. degree in Photography should consider completing this certificate.

Student Learning Outcomes - upon completion, students will be able to:

- demonstrate basic skills in both wet and dry darkroom methods as well as beginning lighting techniques.
- create photographs that visually communicate ideas and concepts while engaging the practices, theories and materials of the medium.
- evaluate and critique imagery and receive criticism from others.

1. Meet the requirements for this certificate level. (Page 48)

2. Complete the following.

PHTG 1	Basic Photography	3
PHTG 4	Introduction to Digital Photography	3
PHTG 5	Intermediate Digital Photography	3
PHTG 57A	Commercial Lighting I	3
PHTG 58A	Photographic Photoshop I	3

Complete one (1) course from:

PHTG 2	Intermediate Photography (3)	3
PHTG 3	Advanced Photography (3)	
PHTG 54	Experimental Photography (3)	
PHTG 57B	Commercial Lighting II (3)	
PHTG 58B	Photographic Photoshop II (3)	
	Total Units Required	18

Professional Photography

A.A. Degree

This degree program provides a comprehensive foundation in contemporary and traditional methods of photography. Digital imaging, processing and printing, lighting, history, business practices, and the visual language of photography are studied. Emphasis is on the photography techniques appropriate for those entering the industry today.

Student Learning Outcomes - upon completion, students will be able to:

- demonstrate advanced skills in both dry (digital) and wet (analog) darkroom methods as well as commercial studio techniques.

- create photographs that visually communicate ideas and concepts while engaging the practices, theories and materials of the medium.
- critically analyze and assess diverse historical and contemporary photographic works.
- present commercially viable photographic works for peer, professional or academic review.
- demonstrate understanding of basic business principles and relevant industry practices.
- communicate effectively in written and oral formats.

1. Meet the A.A./A.S. degree requirements. (Page 48)

2. Complete the following.

ARTS 53A	Introduction to Visual Technology	3
BUS 56	Human Relations in Business	5
F/TV 20	Basic Digital Film/Video Production	4
JOUR 2	Mass Communication and Its Impact on Society	4
PHTG 1	Basic Photography	3
PHTG 4	Introduction to Digital Photography	3
PHTG 5	Intermediate Digital Photography	3
PHTG 57A	Commercial Lighting I	3
PHTG 58A	Photographic Photoshop I	3

Complete a minimum of 12 units from the following: 12

F/TV 50	Introduction to Film/Television Directing (4)	
PHTG 2	Intermediate Photography (3)	
PHTG 3	Advanced Photography (3)	
PHTG 7	Exploring Visual Expression (4)	
PHTG 20*	Early History of Photography from Its Beginnings to 1925 (4)	
PHTG 21*	Contemporary Trends in Photography (4)	
PHTG 52	Photography Production Lab (1)	
PHTG 52X	Photography Production Lab (2)	
PHTG 54	Experimental Photography (3)	
PHTG 57B	Commercial Lighting II (3)	
PHTG 58B	Photographic Photoshop II (3)	
PHTG 77	Special Projects in Photography (2)	
PHTG 78 series	PHTG 78X, 78Y, 78Z	

Special Topics in Photographic Studies (1-3)

* Only one (1) of these two (2) courses may apply toward the 12 units.

Major	Professional Photography	43 units
GE	General Education (31-42 units)	
Electives	Elective courses req'd. when major units plus GE units total is less than 90	
	Total Units Required	90 units

Recommended

ARTS 8, BUS 10, BUS 55, other Photography courses, Occupational Work Experience, HUM1 1 or 2

Project Management Practitioner

Certificate of Achievement

This certificate program is designed for individuals who want to become project managers in their respective industries. Project Management is an important responsibility as more organizations use teams and project-based methods to get work done.

Using a practicum-based approach, students apply the Project Management Book of Knowledge (PMBOK) to develop skills to enhance teamwork and communication, and

project management skills to balance scope, quality, budget and scheduling for each project.

This certificate program introduces students to a career in project management and further prepares professionals who are already working in the field.

Student Learning Outcomes - upon completion, students will be able to:

- manage projects by applying Project Management Theory as defined by the Project Management Institute's (PMI) Project Management Book of Knowledge (PMBOK).
- lead the creation of a project plan for an organization's large-scale project with a large budget.
- apply risk management techniques to a project to balance scope, quality, budget, scheduling and team morale.
- write a vendor solicitation plan and use a collaborative approach for selecting vendors.
- successfully manage a vendor through a project's completion while providing all project participants with a clear picture of scope, quality, budget and schedule.

1. Meet the requirements for this certificate level. (Page 48)

2. Complete the following.

CIS 95A	Project Management - A Practicum	5
CIS 95B	Project Planning and Control - A Practicum	4
CIS 95C	Risk Assessment and Mitigation - A Practicum	4
CIS 95D	Managing Outsourcing - A Practicum	3
Complete one (1) course from the following:		3-5
CIS 79	Managing Technology Projects (5)	
	or BUS 88	
CIS 80A	Process Management (3)	
CIS 95E	CAPM and PMP Exam Preparation (4)	
	Total Units Required	19-21

Real Estate

Real Estate

Certificate of Achievement-Advanced A.A. Degree

The certificate and degree programs in Real Estate provide the student with a thorough understanding of the California residential real estate market from a buyer's, seller's and real estate professional's perspective. In addition, students completing the program meet the minimum requirements to sit for the California Real Estate Sales License and Broker's exam.

Student Learning Outcomes - upon completion, students will be able to:

- demonstrate knowledge of how real property is described, acquired, appraised, financed, encumbered and leased and how title to real property is held in California.
- demonstrate knowledge of the risks, returns, legal issues and ethical issues involved in the purchase, holding and sale of California real estate.
- qualify to take the California Department of Real Estate salesperson and broker examinations.

Certificate of Achievement-Advanced

1. Meet the requirements for this certificate level. (Page 48)	
2. Complete the following.	
BUS 18 Business Law I	5
REST 50 Real Estate Principles	4
REST 51 Real Estate Practices	4
REST 53 Real Estate Finance	4
REST 56A Real Estate Appraisal I	4
Complete a minimum of 16 units from the following:	16
ACCT 1A Financial Accounting I (5)	
BUS 10 Introduction to Business (5)	
REST 52A Legal Aspects of Real Estate in California I (4)	
REST 54 Real Estate Economics (4)	
REST 59 Survey of Real Estate Property Management (4)	
REST 61 Real Estate Investments (4)	
Total Units Required	37

Recommended

ACCT 67 Federal Income Tax (4)	
BUS 21 Business and Society (5)	
BUS 54 Business Mathematics (5)	
BUS 55 Introduction to Entrepreneurship (5)	
BUS 69 Investment Fundamentals (4)	
BUS 70 Principles of E-Business (5)	
BUS 90 Principles of Marketing (5)	

A.A. Degree

1. Meet the A.A./A.S. degree requirements. (Page 48)	
2. Complete the following.	
ACCT 1A Financial Accounting I	5
BUS 10 Introduction to Business	5
BUS 18 Business Law I	5
REST 50 Real Estate Principles	4
REST 51 Real Estate Practices	4
REST 53 Real Estate Finance	4
REST 56A Real Estate Appraisal I	4
Complete a minimum of 16 units from the following:	16
BUS 69 Investment Fundamentals (4)	
REST 52A Legal Aspects of Real Estate in California I (4)	
REST 54 Real Estate Economics (4)	
REST 59 Survey of Real Estate Property Management (4)	
REST 61 Real Estate Investments (4)	
Major Real Estate	47 units
GE General Education (31-42 units)	
Electives Elective courses req'd. when major units plus GE units total is less than 90	
Total Units Required	90 units

Recommended

ACCT 1B Financial Accounting II (5)	
ACCT 1C Managerial Accounting (5)	
ACCT 67 Federal Income Tax (4)	
ACCT 86 Computer Accounting Systems (4)	
BUS 21 Business and Society (5)	
BUS 54 Business Mathematics (5)	
BUS 55 Introduction to Entrepreneurship (5)	
BUS 87 Introduction to Selling (4)	
BUS 90 Principles of Marketing (5)	

For more program information see the California Department of Real Estate website: www.dre.ca.gov

Important information about the California Real Estate Appraiser's License

Real Estate courses at De Anza College are not designed to meet the general education requirements of the California Real Estate Appraiser's Licensing and Certification program. For further information, students interested in these licenses should contact the State of California Office of Real Estate Appraisers or go to their website at www.orea.ca.gov.

Speech Communication

Certificate of Achievement

Students earning the Speech Communication Certificate of Achievement learn the fundamentals of the Speech Communication discipline, which include Public Speaking, Group Communication, Interpersonal Communication, Organizational Communication, Mass Communication, Argumentation, and critical thinking. This program helps students communicate better in their academic and work environments.

Student Learning Outcomes - upon completion, students will be able to:

- display increasing confidence in their ability to use a range of speaking, listening, and collaboration skills.
- design and relate messages clearly for effective and appropriate oral communication.
- analyze, evaluate and respond competently to discourse by weighing research, examining evidence, and through critical reasoning.

1. Meet the requirements for this certificate level. (Page 48)
2. Complete the following.

Complete one (1) course from:	4
SPCH 1 Public Speaking (4)	
SPCH 10 Fundamentals of Oral Communication (4)	
Complete one (1) course from:	4-5
SPCH 8 Argumentation and Critical Inquiry in Oral Communication (4)	
SPCH 9 Argumentation: Analysis in Oral and Written Communication (5)	
SPCH 15 Critical Decision-Making in Groups (4)	
Complete a minimum of 10 units from the following which do not duplicate those taken above:	10
JOUR 2 Mass Communication and Its Impact on Society (4)	
SPCH 1 Public Speaking (4)	
SPCH 7 Intercultural Communication (4)	
SPCH 8 Argumentation and Critical Inquiry in Oral Communication (4)	
SPCH 9 Argumentation: Analysis in Oral and Written Communication (5)	
SPCH 10 Fundamentals of Oral Communication (4)	
SPCH 15 Critical Decision-Making in Groups (4)	
SPCH 16 Interpersonal Communication (4)	
SPCH 70 Effective Organizational Communication (4)	
SPCH 77 series SPCH 77, 77X, 77Y, 77Z	
Special Individual Projects in Speech Communication (1-4)	

SPCH 78 series SPCH 78W, 78X, 78Y, 78Z
Special Topics in Speech Comm. (1-4)

Note: up to four (4) units from SPCH 77, 78 series courses may apply.

Total Units Required 18-19

Speech Communication

A.A. Degree

De Anza's A.A. in Speech Communication is based on the ladder concept whereby students complete the core Certificate of Achievement Speech Communication courses that can transfer toward a Bachelors degree in Speech Communication. Students also develop greater knowledge and skill in expressing ideas verbally and nonverbally, learn to interpret, advocate and critically debate ideas, work productively in teams and groups, examine the role of culture in communication, and demonstrate the communication skills necessary to engage in personal, professional, civic, and social relationships. Areas of study include Public Speaking, Group Communication, Interpersonal Communication, Argumentation, Intercultural Communication, Organizational Communication, and Mass Communication. In addition to core coursework, students are required to declare a specialty area that allows them to make interdisciplinary connections and explore specific areas of interest.

Student Learning Outcomes - upon completion, students will be able to:

- display increasing confidence in ability to use a range of speaking, listening, and collaboration skills.
- design and relate messages clearly for effective and appropriate oral communication.
- analyze, evaluate and respond competently to discourse by weighing research, examining evidence, and through critical reasoning.

1. Meet the A.A./A.S. degree requirements. (Page 48)

2. Complete the following.

Complete one (1) course from:

SPCH 1	Public Speaking (4)	4
SPCH 10	Fundamentals of Oral Communication (4)	

Complete one (1) course from:

SPCH 8	Argumentation and Critical Inquiry in Oral Communication (4)	4-5
SPCH 9	Argumentation: Analysis in Oral and Written Communication (5)	

Complete the following:

JOUR 2	Mass Communication and Its Impact on Society	4
SPCH 7	Intercultural Communication	4
SPCH 15	Critical Decision-Making in Groups	4
SPCH 16	Interpersonal Communication	4
SPCH 70	Effective Organizational Communication	4
Specialty Area*	(contact an instructor to create)	12
Major	Speech Communication	40-41 units
GE	General Education (31-42 units)	
Electives	Elective courses req'd. when major units plus GE units total is less than 90	
Total Units Required		90 units

* Contact a full-time Speech Communication instructor to create your specialty area of study (12 units) at least one quarter prior to completing your course of study. Your specialty area description with signed approval from the Speech Communication Department must accompany your application for the degree.

Associate in Arts in Communication Studies for Transfer

A.A.-T. Degree

The Associate in Arts in Communication Studies for Transfer is intended for students who plan to complete a bachelor's degree in Communication Studies at a California State University (CSU) campus. Students completing this degree are guaranteed admission to the CSU system, but not to a particular campus or major. Students transferring to a CSU campus that does accept this degree will be required to complete no more than 60 (semester) units after transfer to earn a bachelor's degree. This degree may not be the best option for students intending to transfer to a particular CSU campus or to a university or college that is not part of the CSU system. In all cases, students should consult with a counselor for more information on university admission and transfer requirements.

Student Learning Outcomes - upon completion, students will be able to:

- display increasing confidence in the ability to use a range of speaking, listening and collaboration skills.
- design and relate messages clearly for effective and appropriate oral communication.
- analyze, evaluate, and respond competently to discourse by weighing research, examining evidence, and through critical reasoning.

1. Meet the A.A./A.S. degree requirements for transfer.

(Page 48)

2. Complete the following.

Complete one (1) course from:

SPCH 1	Public Speaking (4)	4
SPCH 10	Fundamentals of Oral Communication (4)	

Complete the following:

JOUR 2	Mass Communication and Its Impact on Society	4
SPCH 7	Intercultural Communication	4
SPCH 8	Argumentation and Critical Inquiry in Oral Communication	4
SPCH 15	Critical Decision-Making in Groups	4
SPCH 16	Interpersonal Communication	4
SPCH 70	Effective Organizational Communication	4

Major Communication Studies for Transfer 28 units

Transfer GE CSU GE or IGETC for CSU pattern (47-61)

Electives CSU-transferrable elective courses required when the major units plus transfer GE units total is less than 90

Total Units Required 90 units

Technical Writing

Certificate of Achievement

A.A. Degree

NOTE: The Technical Writing program is being phased out. Technical Writing classes will no longer be offered after spring quarter 2013.

In the certificate of achievement and A.A. degree programs students receive training in technical writing, project management, employment strategies, business communication, and technical publications and design in accordance with current industry trends. Students pursuing the certificate of achievement or the A.A. degree in Technical Writing obtain marketable skills to help them gain employment, reposition themselves for a new job or industry, or win promotions in their current field.

Student Learning Outcomes - upon completion, students will be able to:

- examine required competencies to gain employment in industry and demonstrate mastery of core competencies by designing a compelling cover letter and resume to effectively market their skill set.
- create various professional documents that showcase their ability to define purpose and audience, structure data and graphics into procedures and descriptions, think strategically, manage projects, and organize relevant self-produced materials in a professional portfolio.
- research, analyze, plan, schedule, design, write, and evaluate a technical manual that meets or exceeds the industry standard.
- utilize team communication skills and collaborative work strategies as part of a publication team to design and produce a camera-ready document or product, including selecting and evaluating graphics, type, and paper.

Certificate of Achievement

1. Meet the requirements for this certificate level. (Page 48)
2. Complete the following.

Requirements

TWRT 61	Introduction to Technical Writing	5
TWRT 62	Survey of Technical Writing	5
TWRT 63	Technical Publications	5
TWRT 64	Technical Writing Seminar	5
Total Units Required		20

Prerequisite and Corequisite information:

EWRT 1A is the prerequisite for TWRT 61.
 TWRT 61 is the prerequisite/corequisite for TWRT 62.
 (Concurrent enrollment is allowed for TWRT 61 and TWRT 62.)
 TWRT 61 is the prerequisite for TWRT 63.
 TWRT 62 is the prerequisite for TWRT 64.

The TWRT courses above are also listed under BUS and EWRT.

A.A. Degree

1. Meet the A.A./A.S. degree requirements. (Page 48)
2. Complete the Certificate of Achievement course requirements.

3. Complete a specialty area of study as described below.

25

Contact the Technical Writing department chair to create your specialty area of study (25 units minimum). Select courses from TWRT Special Topics or TWRT Special Projects courses and/or discipline areas such as:

- Computer Applications
- Computer Aided Design/Digital Imaging
- Computer Information Systems
- Graphic Design
- Journalism
- Photography

Your specialty area description with signed approval from the department chair must accompany your degree application.

Major	Technical Writing	45 units
GE	General Education (31-42 units)	
Electives	Elective courses req'd. when major units plus GE units total is less than 90	
Total Units Required		90 units



COURSE NUMBERING SYSTEM



General Guidelines for Courses Numbered:

1-49 transferable to UC (See information on limitations below.)

1-99 transferable to CSU

1-199 De Anza A.A./A.S. degree applicable

200+ non-degree applicable

See individual course listing in this catalog and class schedule for exceptions to guidelines.

UC Limitations to Transfer Course List

De Anza courses numbered 1-49 are generally transferable to UC. However, there are limitations and they are subject to change.

Visit www.ASSIST.org for updates. The 2012-2013 UC transferable course list should be available on ASSIST around October 2012.

2011-2012 UC Transfer Course Agreement (TCA)

Limitations

Refer to this summary of course limitations on the UC TCA when calculating the minimum 90 transferable quarter units required for transfer to the UC.

ADMJ/POLI/	ADMJ/PARA/POLI 11
PARA/SOC	and ADMJ/PARA/SOC 25 combined: maximum credit, one course
ARBC	ARBC 2 corresponds to two years of high school study
ARTS	ARTS 3TE and ARTS 3TEL must both be taken in order to receive transfer credit
BIOL	No credit for BIOL 10 or BIOL 11 if take after BIOL 6A, 6B or 6C
BUS	BUS 10 and BUS 21 combined: maximum credit, one course
CANT	CANT 1, 2, 3 and MAND 1, 2, 3 combined: maximum credit, one series
	CANT 2 corresponds to two years of high school study
CHEM	CHEM 1A, 1B and CHEM 30A, 30B combined: maximum credit, one series
	CHEM 10 and CHEM 30A combined: maximum credit, one course
	No credit for CHEM 10 or CHEM 30A if taken after CHEM 1A
CIS	Credit will be granted for CIS 15AG and CIS 15BG combined or CIS 26A
ESL	ESL 5 and ESL 6—Any or all of these courses combined: maximum credit, 12 units
ESCI	ESCI 19, ESCI 20, ESCI 21 and ESCI 30 combined: maximum credit, three courses
FREN	FREN 1, 2, 3, and FREN 10 combined: maximum credit, 15 units
F/TV	F/TV 20 and F/TV 22 combined: maximum credit, one course
	F/TV 2C and F/TV 2CW combined: maximum credit, one course
	FREN 2 and FREN 10 corresponds to two years of high school study
GERM	GERM 2 corresponds to two years of high school study



ITAL	ITAL 2 corresponds to two years of high school study
JAPN	JAPN 2 corresponds to two years of high school study
JOUR	JOUR 21A and JOUR 21B—Any or all of these courses combined: maximum credit, one course
KORE	KORE 2 corresponds to two years of high school study
MAND	MAND 1, 2, 3 and CANT 1, 2, 3 combined; maximum credit, one series
	MAND 2 corresponds to two years of high school study
MATH	MATH 1A and MATH 12 combined: maximum credit, one course
	MATH 10, MATH 23, PSYC 15 and SOC 15 combined: maximum credit, one course
	Effective Fall 2012, MATH 41, MATH 42 (formerly 52) and MATH 43 limited to a maximum 5 semester/7.5 quarter units for the combination of courses or for any portion completed
MUSI	No credit for MUSI 10A, 10B if taken after MUSI 3A, 3B
PERS	PERS 2 corresponds to two years of high school study
P E/PEA	UC grants a maximum of six (6) quarter units of credit for appropriate Physical Education Activity courses. See full course list with limitations at www.ASSIST.org
	Any or all of the following P E courses combined: maximum credit, 12 quarter units: P E 32B, 32F, 32G, 32H, 32I, 32J, 32K, 32L, 32M, 32N, 32P, 32S, 32T, 32W
PHYS	PHYS 2A, 2B, 2C and PHYS 4A, 4B, 4C, 4D combined: maximum credit, one series. Deduct credit for duplication of topics
	No credit for PHYS 10 if taken after PHYS 2A or PHYS 4A
PSYC/SOC	PSYC 15/SOC 15, MATH 10 and MATH 23 combined: maximum credit, one course
SIGN	SIGN 2 corresponds to two years of high school study
SPAN	SPAN 2 corresponds to two years of high school study
SPCH	SPCH 10 and SPCH 15 combined: maximum credit, one course
URDU	URDU 2 corresponds to two years of high school study
VIET	VIET 2 corresponds to two years of high school study
Variable Topics Courses	These courses are also called "Independent Studies," "Special Studies," "Special Topics," "Field Work," etc. Credit for variable topics courses is given only after a review of the scope and content of the course by the enrolling UC campus. This usually occurs after transfer and may require recommendations from faculty. Information about internships may also be presented for review, but credit for internships rarely transfers to UC. UC does not grant credit for variable topics courses in select majors due to credit restrictions. Credits CANNOT be counted toward minimum admissions requirement. See www.ASSIST.org for more information.

COURSE LISTINGS

Accounting

ACCT 1A Financial Accounting I 5 Units

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273; Mathematics 212 or equivalent. Five hours lecture (60 hours total per quarter).

The primary objective of this course is to help students learn how accounting meets the information needs of various users by developing and communicating information that is used in decision-making. Accordingly, the expected student outcome is the demonstration that the student can read, analyze and interpret external financial statements.

ACCT 1B Financial Accounting II 5 Units

Prerequisite: Accounting 1A. Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273; Mathematics 212 or equivalent. Five hours lecture (60 hours total per quarter).

The primary objective of this course is to help students learn how accounting meets the information needs of various users by developing and communicating information that is used in decision-making. Accordingly, the expected student outcome is the demonstration that the student can read, analyze and interpret external financial statements.

ACCT 1C Managerial Accounting 5 Units

Prerequisite: Accounting 1B. Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273; Mathematics 212 or equivalent. Five hours lecture (60 hours total per quarter).

Study the role of management accounting information in organizations for operational control, product and customer costing, and performance measurement.

ACCT 51A Intermediate Accounting 5 Units

Prerequisite: Accounting 1B. Five hours lecture (60 hours total per quarter). Principles, control, and theory of accounting for assets, financial statements, cash and cash flows, receivables, inventories, plant and equipment, intangible assets.

ACCT 51B Intermediate Accounting 5 Units

Prerequisite: Accounting 1B. Advisory: Accounting 51A. Five hours lecture (60 hours total per quarter). Principles, control, and theory of accounting for liabilities and equities, corporations, accounting changes, statements from incomplete records, price level and fair-value accounting.

ACCT 52 Advanced Accounting 5 Units

Prerequisite: Accounting 1B. Advisory: Accounting 51B. Five hours lecture (60 hours total per quarter). Presents financial accounting theories and practices related to business combinations and consolidated financial reporting. This includes the development of complex business structures and forms of business combinations; consolidated financial reporting for intercorporate acquisitions and operations; and the accounting for transactions of affiliated companies. Also includes accounting and reporting issues in the multinational business environment. Accounting theory and practice related to the formation, operation and liquidation of partnerships is covered.

ACCT 58 Auditing 5 Units

Prerequisite: Accounting 1B. Advisory: Accounting 51B. Five hours lecture (60 hours total per quarter). Study of environment, principle, and practices of financial statement audit. Topics include Generally Accepted Auditing Standards (GAAS), Sarbanes-Oxley Act 2002 regulatory requirements, internal controls and audit risk; audit planning, procedures, evidence, documentation and reports.

ACCT 64 Payroll and Business Tax Accounting 3 Units

Prerequisite: Accounting 1A. Advisory: English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263; Mathematics 212 or equivalent. Three hours lecture (36 hours total per quarter).

Fundamentals of payroll accounting using manual and computerized accounting systems. Theoretical and practical aspects of payroll accounting and reporting. Course includes federal and California payroll tax rules and forms.

ACCT 66 Cost Accounting 5 Units

Prerequisite: Accounting 1B. Advisory: Accounting 1C. Five hours lecture (60 hours total per quarter). Procedures, practices, and fundamentals used by accountants when costing products or services, evaluating and measuring performances, and reporting results to users of accounting information.

ACCT 67A Federal Income Tax 4 Units

(Formerly Accounting 67.) Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273; Mathematics 210 or equivalent; Accounting 1A (may be taken concurrently). (Also listed as Business 67A. Students may enroll in either department, but not both, for credit.) Four hours lecture (48 hours total per quarter). A study of current federal income tax law and the procedures for preparing an individual's tax return.

ACCT 67B Advanced Tax Accounting I 4 Units

(Formerly Accounting 68A.) Advisory: Accounting 67A or Business 67A. (Also listed as Business 67B. Students may enroll in either department, but not both, for credit.) Four hours lecture (48 hours total per quarter). A study of current federal income tax law and California income tax law as it relates to individuals and sole proprietorship taxes.

ACCT 68 Advanced Tax Accounting II 4 Units

(Formerly Accounting 68B.) Advisory: Accounting 1A. Four hours lecture (48 hours total per quarter). A study of current federal income tax law as it relates to corporations, partnerships, estates, trusts, and gift taxes. California tax law differences will be highlighted.

ACCT 75 Accounting for Government and Nonprofit Entities 5 Units

Prerequisite: Accounting 1B. Advisory: Accounting 1C. Five hours lecture (60 hours total per quarter). Presents the characteristics and principles of the financial policies and procedures followed by state, county and municipal governments, as well as public and private universities and hospitals, and certain nonprofit organizations. The course will emphasize the importance to governmental agencies of properly discharging their responsibilities to taxpayers. These responsibilities include the proper accounting for and budgeting of tax and related revenues and expenditures. The course will also emphasize the importance to nonprofit entities of meeting the financial reporting and management needs of various stakeholders such as donors, service providers and recipients, community members, and regulatory agencies. Funds, fund accounting, and the newest GASB and FASB pronouncements relating to accounting for governmental and nonprofit entities are also presented.

ACCT 86 Computer Accounting Systems 5 Units

Prerequisite: Accounting 1A. Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273. (Also listed as Computer Information Systems 86. Students may enroll in either department, but not both, for credit.) Five hours lecture (60 hours total per quarter). Fundamentals of computerized accounting using integrated general ledger software packages and electronic spreadsheet software. Conversion of a manual system to a computer system.

ACCT 87AH Computerized Accounting Programs I (Peachtree - Windows) 2 Units

Prerequisite: Accounting 1A. Four hours lecture-laboratory (48 hours total per quarter). Introduction to computerized accounting for service industry. Applications include general ledger setup, accounts payable, accounts receivable and payroll. Course will take advantage of new accounting software being used in industry.

ACCT 87AI Computerized Accounting Programs I (Quickbooks) 2 Units

Prerequisite: Accounting 1A. Four hours lecture-laboratory (48 hours total per quarter). Introduction to computerized accounting for service industry. Applications include general ledger setup, accounts payable, accounts receivable and payroll. Course will take advantage of new accounting software being used in industry.

ACCT 87AJ Computerized Accounting Programs I (Microsoft Dynamics GP) 2 Units

Prerequisite: Accounting 1A.

Four hours lecture-laboratory (48 hours total per quarter).

Introduction to computerized accounting for service industry. Applications include general ledger setup, accounts payable, accounts receivable and payroll. Course will take advantage of new accounting software being used in industry.

ACCT 88 Excel Spreadsheets for Accounting 2 Units

Prerequisite: Accounting 1A.

Advisory: English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263; Mathematics 212 or equivalent; Computer Applications and Office Systems 93AG-AN.

Two hours lecture (24 hours total per quarter).

Fundamentals of electronic spreadsheets using Microsoft Excel software. Concentration on solving accounting problems and completing accounting projects with Excel.

ACCT 105 Basic Financial Accounting Procedures 1 Unit

Advisory: English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263; Accounting 1A.

One hour lecture (12 hours total per quarter).

Procedural aspects of accounting; including the accounting equation, analysis of business transactions, debit and credit rules, and aspects of the accounting cycle.

Administration of Justice

ADMJ 1 Introduction to Administration of Justice 4 Units

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

(Also listed as Political Science 10. Students may enroll in either department, but not both, for credit.)

Four hours lecture (48 hours total per quarter).

The history and philosophy of the administration of justice in America. A study of the overall system from its European antecedents and development within the United States; identification of various subsystems and components; their role expectations and interrelationships; basic premise of crime, punishment and rehabilitation; the role of education in the administration of justice within a democracy.

ADMJ 3 Concepts of Criminal Law (CP 2) 4 Units

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

(Also listed as Paralegal 3 and Political Science 13. Students may enroll in only one department for credit.)

Four hours lecture (48 hours total per quarter).

Historical development, philosophy of law and constitutional provisions; definitions, classification of crime, and their application to the system of administration of justice; legal research, study of case law, methodology, and concepts of law as a social force in a multicultural, multiethnic society.

ADMJ 5 Community Relations 4 Units

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Four hours lecture (48 hours total per quarter).

Examination of interrelationships of Administration of Justice practitioners and multicultural, multiethnic communities.

ADMJ 11 Federal Courts and Constitutional Law 4 Units

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

(Also listed as Paralegal 11 and Political Science 11. Students may enroll in only one department for credit.)

Four hours lecture (48 hours total per quarter).

Federal court procedure and the impact of U.S. Constitutional law on federal and state law. Read and analyze the Constitution. Effect of U.S. Supreme Court cases on current constitutional interpretation.

ADMJ 25 Law and Social Change 4 Units

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

(Also listed as Paralegal 25 and Sociology 25. Students may enroll in only one department for credit.)

Four hours lecture (48 hours total per quarter).

Exploration of the use of law as an instrument for social change. Examination of the relationship between law and social change in cross-cultural settings. Analysis of legislation, case law, the process of conflict resolution and legal institutions as they relate to social change.

ADMJ 29 Cultural Pluralism and American Law and Justice 4 Units

(Formerly Administration of Justice 58.)

(See general education pages for the requirement this course meets.)

Advisory: English Writing 1A or English as a Second Language 5.

(Also listed as Intercultural Studies 29. Students may enroll in either department, but not both, for credit.)

Four hours lecture (48 hours total per quarter).

An interdisciplinary study of marginalized peoples and their relationship to the law. Examines the legal perspective on cultural diversity in the United States, including race, ethnicity, gender, class, religious background, disability, and sexual orientation. Analyzes how these groups interact with mainstream society through American law, concentrating on both historical and contemporary state and federal legislation and court rulings. Analyzes how the courts play a role in determining the status of minority groups.

ADMJ 50 Crime, Correction and Society 4 Units

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

(Also listed as Sociology 50. Students may enroll in either department, but not both, for credit.)

Four hours lecture (48 hours total per quarter).

A legal and sociological approach to understanding the fundamental ideas which have shaped correctional theories and practices. An in-depth study of adult sentencing, prisons, and jails subsystem including institutions by type and function, probation, parole and community based programs. A comprehensive examination of current correctional practices, punishment, rehabilitation, and community treatment programs with an emphasis on issues concerning race, ethnicity and gender.

ADMJ 51 Women in Crime 4 Units

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

(Also listed as Sociology 51. Students may enroll in either department, but not both, for credit.)

Four hours lecture (48 hours total per quarter).

An examination of the changing role of women in crime with emphasis on gender and cultural based differences related to victims, offenders and criminal justice professionals.

ADMJ 53 Criminal Law II 5 Units

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Five hours lecture (60 hours total per quarter).

An advanced course in criminal law emphasizing substantive California statutory criminal codes.

ADMJ 54 Youth and the Law 4 Units

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

(Also listed as Paralegal 54 and Sociology 54. Students may enroll in only one department for credit.)

Four hours lecture (48 hours total per quarter).

A legal and sociological approach to understanding the causes of juvenile delinquency; an examination of race, culture and gender in juvenile delinquency; community responses to delinquency; organization, functions and jurisdiction of both social and legal agencies; processing and detention; case disposition; statutes and court procedures.

ADMJ 55 Alcohol, Narcotics and Drug Abuse 4 Units

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Four hours lecture (48 hours total per quarter).

Designed to equip public service workers and the community with knowledge of the issues involved in drug abuse, including the history and classification of drugs and the problems facing society and the governing of illegal drug use.

ADMJ 56 Practical Writing for Administration of Justice 4 Units

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Four hours lecture (48 hours total per quarter).

Designed to acquaint the student with important developments, techniques and applications in the art and science of report writing for criminal justice professionals.

ADMJ 60 Patrol Procedures 4 Units

Prerequisite: Administration of Justice 75.

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Four hours lecture (48 hours total per quarter).

Responsibilities, techniques, and methods of police patrol. Practical experience in law enforcement techniques.

ADMJ 61 Criminal Investigation 4 Units

Prerequisite: Administration of Justice 3 or 75.

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Four hours lecture (48 hours total per quarter).

Fundamentals of crime investigation; techniques of crime scene search and recording; collection and preservation of physical evidence; use of scientific aids; modus operandi processes; sources of information; interviewing techniques.

ADMJ 62 Sexual Assault, Police and Community Response 4 Units

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

(Also listed as Psychology 63. Students may enroll in either department, but not both, for credit.)

Four hours lecture (48 hours total per quarter).

Societal and psychological aspects of sexual assault, the perpetrators and the victims; practical application of the police investigation, the criminal justice process, and social service intervention.

ADMJ 64 Administration of Justice Internship 1 Unit**ADMJ 64X 2 Units****ADMJ 64Y 3 Units****ADMJ 64Z 4 Units**

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Four hours laboratory per unit of supervised internship in an authorized office or agency (48 hours total for each unit of credit per quarter).

(Any combination of Administration of Justice 64, 64X, 64Y and 64Z may be taken up to six times, not to exceed 18 units, for credit.)

Program of work experience and study in law enforcement, corrections/probation, private security or human services under the supervision of the instructor and agency personnel.

ADMJ 69 Administration of Justice Field Trips 1 1/2 Units

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Three hours lecture-laboratory (36 hours total per quarter).

(May be taken up to two times for credit, as long as different subject matter is addressed each time.)

A survey of current conditions in law enforcement, probation, and corrections and visits to adult or juvenile detention and correctional facilities in Northern California.

ADMJ 73 Crime and Criminology 4 Units

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

(Also listed as Sociology 73. Students may enroll in either department, but not both, for credit.)

Four hours lecture (48 hours total per quarter).

Introduction to major types of crime and criminal behavior, examining demographics and measurement of crime, theories of causation and victimization, crime prevention and crime control.

ADMJ 74A Interviewing, Interrogation and Crisis Intervention 4 Units

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

(Also listed as Paralegal 74A and Psychology 74A. Students may enroll in only one department for credit.)

Four hours lecture (48 hours total per quarter).

Theories, principles and strategies of tactical and interpersonal communication necessary to interview victims, witnesses, and suspects; crisis intervention strategies for victims and witnesses of crime; communication with individuals from diverse backgrounds with consideration to race, ethnicity, gender, age and special needs.

ADMJ 75 Principles and Procedures of the Justice System 4 Units

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

(Also listed as Paralegal 75 and Political Science 75. Students may enroll in only one department for credit.)

Four hours lecture (48 hours total per quarter).

Procedures followed by law enforcement and courts in criminal cases; constitutional principles governing those procedures.

ADMJ 78 Correctional Investigation 4 Units

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Four hours lecture (48 hours total per quarter).

History and development of probation and parole systems, including current practices at the federal, state and local levels. Investigation techniques needed for preparation of pre-sentence investigation reports, use of these reports in the courts, probation and parole supervision, and correctional institutions.

ADMJ 90A Legal Aspects of Evidence (CP 4) 4 Units

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

(Also listed as Paralegal 90A. Students may enroll in either department, but not both, for credit.)

Four hours lecture (48 hours total per quarter).

The origin, development, and content of the rules of evidence; kinds of degrees of evidence and rules governing admissibility of evidence.

ADMJ 95 Overview of American Law 4 Units

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

(Also listed as Paralegal 95 and Political Science 95. Students may enroll in only one department for credit.)

Four hours lecture (48 hours total per quarter).

Overview of the major substantive areas of American law: Agency, contracts, constitutional law, corporations, criminal law, family law, property, torts, wills and estates.

Aerospace Studies

(Air Force Reserve Officers Training Corps) For information on Air Force ROTC courses, please see Military Studies.

Anthropology

ANTH 1 Physical Anthropology 4 Units

(See general education pages for the requirement this course meets.)

Advisory: English Writing 1A or English as a Second Language 5.

Four hours lecture (48 hours total per quarter).

Biological structure and evolution of primates with particular emphasis on Homo sapiens as a culture-bearing animal. Relationships between human and non-human primates; genetic, physical, and cultural variations in living human groups; social organization and gender roles in primate and human societies; and considerations of future human evolution.

ANTH 1L Physical Anthropology Laboratory 1 Unit

(See general education pages for the requirement this course meets.)

Prerequisite: Anthropology 1 (may be taken concurrently).

Three hours laboratory (36 hours total per quarter).

Laboratory course in which the students apply and practice the scientific methods, techniques and procedures used by physical anthropologists to understand human evolution, non-human primates and human variation. Students gain practical experience and a deeper understanding by participating in lab exercises, activities and experiments that explore human evolution, osteology, forensics, genetics, modern human variation, primate anatomy and behavior.

ANTH 2 Cultural Anthropology 4 Units

(See general education pages for the requirement this course meets.)

Advisory: English Writing 1A or English as a Second Language 5.

Four hours lecture (48 hours total per quarter).

The anthropological approach to the study of human behavior from a cross-cultural, comparative perspective. An exploration into the languages, subsistence, economics, sociopolitical systems, religions, and world views of diverse world cultures. An assessment of the dynamics of culture change and the future prospects for humanity.

ANTH 3 Introduction to Archaeology 4 Units

(Formerly Anthropology 55.)

(See general education pages for the requirement this course meets.)

Advisory: English Writing 1A or English as a Second Language 5.

Four hours lecture (48 hours total per quarter).

Introduction to the field of archaeology within the discipline of anthropology including discussion of scientific methods, the history of archaeology, field and laboratory methods used in the analysis of archaeological data, and theories used to interpret the past. This course explores how archaeologists recover, analyze material and reconstruct ancient cultures and societies. Archaeological ethics and real-world issues concerning looting, collecting, preservation, and the role of indigenous peoples will be examined.

ANTH 4 World Prehistory 4 Units

(See general education pages for the requirement this course meets.)

Advisory: English Writing 1A or English as a Second Language 5.

Four hours lecture (48 hours total per quarter).

Worldwide patterns of cultural transformation, from the earliest foraging societies to the development of agrarian states. The prehistoric interpretation of these changes based upon the comparison of archaeological evidence from Africa, Asia, Europe, the Middle East, the Americas, and Oceania.

ANTH 6 Linguistic Anthropology 4 Units
 (See general education pages for the requirement this course meets.)
 Advisory: English Writing 1A or English as a Second Language 5.
 Four hours lecture (48 hours total per quarter).
 A cross-cultural investigation into the relationship between language and culture: language as a human attribute; language structure, historical origins, diversification, and change; gender and cultural variations in language usage; comparative analysis and classification of world languages; the origins and development of writing; microelectronics and the advent of the information age; globalization and language.

ANTH 69 Early Childhood Education Principles and Practices (Cross-Cultural Emphasis) 3 Units
 Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.
 (Also listed as Child Development 69. Students may enroll in either department, but not both, for credit.)
 Three hours lecture (36 hours total per quarter).
 The underlying principles of early education, in which national, state, and local practices will be examined in contrast to options presented through ethnographic data of diverse cultures.

Arabic Language

ARBC 1 Elementary Arabic (First Quarter) 5 Units
 (Formerly Arabic 91.)
 Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.
 Five hours lecture (60 hours total per quarter).
 Introduction to the language and cultures of the Arabic-speaking world. Development and practice of elementary speaking, listening, reading, and writing skills in targeted language functions with Arabic as the primary language of instruction. Introduction to basic geographical, historical and cultural aspects of Arabic-speaking world areas. Language laboratory practice will be part of the regular instruction to reinforce pronunciation, grammar, syntax, and conversation.

ARBC 2 Elementary Arabic (Second Quarter) 5 Units
 (Formerly Arabic 92.)
 (See general education pages for the requirement this course meets.)
 Prerequisite: Arabic 1 (equivalent to one year of high school Arabic) or equivalent.
 Five hours lecture (60 hours total per quarter).
 Continuation of elementary speaking, listening, reading, and writing skills in targeted language functions, with Arabic as the primary language of instruction. Focus on greater structural accuracy and communicative competence. Study of basic geographical, historical, and cultural features of Arabic-speaking world areas.

ARBC 3 Elementary Arabic (Third Quarter) 5 Units
 (Formerly Arabic 93.)
 (See general education pages for the requirement this course meets.)
 Prerequisite: Arabic 2 (equivalent to two years of high school Arabic) or equivalent.
 Five hours lecture (60 hours total per quarter).
 Continuation of elementary speaking, listening, reading, and writing skills in targeted language functions, with Arabic as the primary language of instruction. Focus on greater structural accuracy and communicative competence. Study of basic geographical, historical, and cultural features of Arabic-speaking world areas.

ARBC 4 Intermediate Arabic (First Quarter) 5 Units
 (Formerly Arabic 94.)
 (See general education pages for the requirement this course meets.)
 Prerequisite: Arabic 3 (equivalent to three years of high school Arabic) or equivalent.
 Five hours lecture (60 hours total per quarter).
 Reading and discussion of texts dealing with the literature, arts, geography, history, and culture of the Arabic-speaking world. Review of the linguistic functions and grammar structures of first-year Arabic. Emphasis is placed on the functional usage of Arabic and communication in context in the four language skills: reading, writing, speaking and listening.

ARBC 5 Intermediate Arabic (Second Quarter) 5 Units
 (Formerly Arabic 95.)
 (See general education pages for the requirement this course meets.)
 Prerequisite: Arabic 4 (equivalent to four years of high school Arabic) or equivalent.
 Five hours lecture (60 hours total per quarter).
 Continuation of Intermediate Arabic. Reading and discussion of texts dealing with the literature, arts, geography, history, and culture of the Arabic-speaking world. Review of the linguistic functions and grammar structures of first-year Arabic. Emphasis is placed on the functional usage of Arabic and communication in context in the four language skills: reading, writing, speaking and listening.

ARBC 6 Intermediate Arabic (Third Quarter) 5 Units
 (Formerly Arabic 96.)
 (See general education pages for the requirement this course meets.)
 Prerequisite: Arabic 5 or equivalent.
 Five hours lecture (60 hours total per quarter).
 Continuation of intermediate Arabic. Reading and discussion of texts dealing with the literature, arts, geography, history, and culture of the Arabic-speaking world. Review of the linguistic functions and grammar structures of first-year Arabic. Emphasis is placed on the functional usage of Arabic and communication in context in the four language skills: reading, writing, speaking and listening.

Army Reserve Officers Training Corps

(ROTC) For information on Army ROTC, please see Military Studies.

Arts

ARTS 1A Introduction to the Visual Arts 4 Units
 (See general education pages for the requirement this course meets.)
 Advisory: English Writing 1A or English as a Second Language 5.
 Four hours lecture (48 hours total per quarter).
 An exploration of visual imagery throughout the world, for the purpose of refining visual literacy skills. Works of art will be studied by means of formal analysis and medium, the social experiences of artists, the function of works of art in their original environment, and comparison of works from different cultures. Primary emphasis will be on paintings, graphic works, and sculpture.

ARTS 1B Architecture Past and Present 4 Units
 (See general education pages for the requirement this course meets.)
 Advisory: English Writing 1A or English as a Second Language 5.
 Four hours lecture (48 hours total per quarter).
 An exploration of architecture throughout the world, for the purpose of refining visual literacy skills. Works of architecture will be studied comparatively with regard to form and function, and numerous architectural concepts will be examined.

ARTS 2A History of Art (Europe from Prehistory through Early Christianity) 4 Units
 (See general education pages for the requirement this course meets.)
 Advisory: English Writing 1A or English as a Second Language 5.
 Four hours lecture (48 hours total per quarter).
 An introduction to the discipline of art history through analysis of images, objects, and works of architecture produced from the prehistoric period of European history through approximately the year 600 C.E., including discussion of Stone Age, Mesopotamian, Egyptian, Greek, Etrurian, Roman, and Byzantine cultures.

ARTS 2B History of Art (Europe During the Middle Ages and the Renaissance) 4 Units
 (See general education pages for the requirement this course meets.)
 Advisory: English Writing 1A or English as a Second Language 5.
 Four hours lecture (48 hours total per quarter).
 An introduction to the discipline of art history through analysis of images, objects, and works of architecture produced from approximately 600 through 1600 C.E., including discussion of Islamic and European cultures during the Middle Ages, and the art of the Renaissance (including Mannerism) in both northern and southern Europe.

ARTS 2C History of Art (Europe from the Baroque Period through Impressionism) 4 Units
 (See general education pages for the requirement this course meets.)
 Advisory: English Writing 1A or English as a Second Language 5.
 Four hours lecture (48 hours total per quarter).
 An introduction to the discipline of art history through analysis of images, objects, and works of architecture produced in Europe from c. 1600 through the 1880s, including discussion of both northern and southern European cultures.

ARTS 2D History of Art (Europe and the United States from Post-Impressionism to the Present) 4 Units
 (See general education pages for the requirement this course meets.)
 Advisory: English Writing 1A or English as a Second Language 5.
 Four hours lecture (48 hours total per quarter).
 An introduction to the discipline of art history through analysis of images, objects, and works of architecture produced from the 1880s to the present, including discussion of numerous European and American cultural groups.

ARTS 2F History of Art (Multicultural Arts in the United States) 4 Units
 (See general education pages for the requirement this course meets.)
 Advisory: English Writing 1A or English as a Second Language 5.
 (Also listed as Intercultural Studies 5. Students may enroll in either department, but not both, for credit.)
 Four hours lecture (48 hours total per quarter).
 A cross-cultural introduction to American art history which includes interdisciplinary

Analysis of diverse art forms generated by artists of color, including African Americans, Asian Americans, Native Americans, Latina(o)s/Chicana(o)s, and Americans of non-European heritage. Significant attention will be given to issues considered important by each ethnicity or group as well as issues related to racism, gender, and social class. Traditions, values, and cultural expressions of diverse societies and their contributions to American visual culture are explored.

ARTS 2G History of Art (Arts of Asia) 4 Units

(See general education pages for the requirement this course meets.)

Advisory: English Writing 1A or English as a Second Language 5.

(Also listed as International Studies 10. Students may enroll in either department, but not both, for credit.)

Four hours lecture (48 hours total per quarter).

A general introduction to art through major Asian artistic traditions. Focuses upon paintings, sculptures, ceramics, and architecture and their religious, cultural, historical, and social contexts. Examines arts from China, Japan, India, Central Asia, Himalayas, and Southeast Asia and assesses the contributions of Asian art in a global context.

ARTS 2H History of Art: Native Arts of Mesoamerica and South America 4 Units

(Formerly Arts 67.)

(See general education pages for the requirement this course meets.)

Advisory: English Writing 1A or English as a Second Language 5.

(Also listed as International Studies 21. Students may enroll in either department, but not both, for credit.)

Four hours lecture (48 hours total per quarter).

A general introduction to the visual arts of the indigenous cultures of Mesoamerica, an area extending from northern Mexico through Central America, and the Andean region of South America. This course covers diverse art forms, including architecture, ceramics, weaving, painting and sculpture from antiquity to the present. Topics addressing the religious, cultural, social, economic and political contexts of the art will be explored. Compares indigenous arts of the Americas to other world art traditions and assesses the contributions of indigenous cultures in a global context.

ARTS 2J History of Art: Indigenous Arts of the World 4 Units

(See general education pages for the requirement this course meets.)

Advisory: English Writing 1A or English as a Second Language 5.

(Also listed as International Studies 22. Students may enroll in either department, but not both, for credit.)

Four hours lecture (48 hours total per quarter).

A general introduction to some of the many indigenous art traditions around the world, with emphasis placed upon traditional arts created for use in small-scale communities from the Americas, South Pacific region and Africa. Diverse art forms covered will include sculpture, painting, performance, ceramics, textiles and architecture from antiquity through the colonial period to the present. Topics addressing the religious, cultural, social, economic and political contexts of the art will be explored. Compares arts from indigenous peoples to other world art traditions and assesses the contributions of indigenous arts in a global context.

ARTS 2K History of Art: Visual Arts of Islam 4 Units

(See general education pages for the requirement this course meets.)

Advisory: English Writing 1A or English as a Second Language 5.

(Also listed as International Studies 23. Students may enroll in either department, but not both, for credit.)

Four hours lecture (48 hours total per quarter).

An exploration of the visual arts of Islam in a global context, including comparative analysis of the arts from diverse regions of the Islamic world. Examines artistic traditions of calligraphy, miniature painting, textiles, decorative arts and architecture from the beginnings of the Islamic faith to the present, and Islamic contributions to world art history. Includes interdisciplinary analysis of Islamic visual arts, emphasizing the cultural and religious contexts, as well as issues related to gender and social class.

ARTS 2L History of Art: Visual Arts of Africa 4 Units

(See general education pages for the requirement this course meets.)

Advisory: English Writing 1A or English as a Second Language 5.

(Also listed as International Studies 24. Students may enroll in either department, but not both, for credit.)

Four hours lecture (48 hours total per quarter).

A general introduction to the visual arts of Africa, covering diverse art forms, including sculpture, painting, performance, ceramics, textiles and architecture from antiquity through the colonial period to the present. Topics addressing the religious, cultural, social, economic and political contexts of the art will be explored. Compares arts from Africa to other world art traditions and assesses the contributions of African arts in a global context.

ARTS 3TC Women and Art 4 Units

(See general education pages for the requirement this course meets.)

Advisory: English Writing 1A or English as a Second Language 5.

(Also listed as Women's Studies 3C. Students may enroll in either department, but not both, for credit.)

Four hours lecture (48 hours total per quarter).

A history of women in relation to society and the visual arts from prehistory to the present. Social perceptions and obstacles relevant to women artists will

be discussed, and students will engage in cross-cultural comparison of works produced in western and non-western cultures made by women, and in which women serve as subject matter.

ARTS 3TD American Art: Public and Private 4 Units

(See general education pages for the requirement this course meets.)

Advisory: English Writing 1A or English as a Second Language 5.

Four hours lecture (48 hours total per quarter).

An introduction to the discipline of art history through analysis of art in the United States which emphasizes discussion of paintings, sculpture, and works of architecture produced for both public and private purposes, from the seventeenth century to the present day.

ARTS 3TE Today's Working Artist 4 Units

(See general education pages for the requirement this course meets.)

Co-requisite: Arts 3TE students must also enroll in Arts 3TEL.

Advisory: English Writing 1A or English as a Second Language 5.

Four hours lecture (48 hours total per quarter).

Focuses on the issues and challenges facing today's working artists. Topics include; the roots of international contemporary art, technological influences on current art practices, and the essential components for assembling a dynamic portfolio presentation. Students will participate in assigned projects requiring both theoretical analysis and hands-on studio work.

ARTS 3TEL Art History Laboratory 1 Unit

(See general education pages for the requirement this course meets.)

Co-requisite: Arts 3TEL students must also enroll in Arts 3TE.

Three hours laboratory (36 hours total per quarter).

Pass-No Pass (P-NP) course.

Utilization of studio equipment and materials related to projects assigned in Arts 3TE.

ARTS 4A Beginning Drawing 3 Units

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or

English as a Second Language 272 and 273; Arts 8.

Six hours lecture-laboratory (72 hours total per quarter).

(Any combination of Arts 4A, 4B, 4C and 4D may be taken up to six times, not to exceed 18 units, for the family of courses.)

An introductory course exploring the basic elements and principles of observational drawing, using traditional and experimental media.

ARTS 4B Intermediate Drawing 3 Units

Prerequisite: Arts 4A.

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or

English as a Second Language 272 and 273; Arts 8.

Six hours lecture-laboratory (72 hours total per quarter).

(Any combination of Arts 4A, 4B, 4C and 4D may be taken up to six times, not to exceed 18 units, for the family of courses.)

An intermediate drawing course focusing on the creative interpretation of subject matter utilizing a variety of experimental, as well as traditional, techniques and media.

ARTS 4C Life Drawing 3 Units

Prerequisite: Arts 4A.

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or

English as a Second Language 272 and 273; Arts 4B, 4D and 8.

Six hours lecture-laboratory (72 hours total per quarter).

(Any combination of Arts 4A, 4B, 4C and 4D may be taken up to six times, not to exceed 18 units, for the family of courses.)

A beginning drawing course focusing on the representation and interpretation of the human figure; with attention to drawing from life.

ARTS 4D Representational Drawing 3 Units

(Formerly Arts 74.)

Prerequisite: Arts 4A.

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or

English as a Second Language 272 and 273; Arts 8.

Six hours lecture-laboratory (72 hours total per quarter).

(Any combination of Arts 4A, 4B, 4C and 4D may be taken up to six times, not to exceed 18 units, for the family of courses.)

An intermediate level drawing course concentrating on observation and depiction of volume and perspective in a variety of drawing media.

ARTS 8 Two-Dimensional Design 3 Units

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or

English as a Second Language 272 and 273.

Six hours lecture-laboratory (72 hours total per quarter).

A foundation course in the use of fundamental design elements and principles for two-dimensional art.

ARTS 10A Three-Dimensional Design 3 Units

Advisory: English Writing 200 and Reading 200 (or Language Arts 200),

or English as a Second Language 261, 262 and 263; Mathematics 210 or equivalent.

Six hours lecture-laboratory (72 hours total per quarter).

(May be taken two times for credit.)

Introduction to design elements and principles as they apply to three-dimensional space and form. Idea explorations in various media including wire, clay, plaster, paper, wood metals and found objects.

ARTS 10B	Intermediate Three-Dimensional Design	3 Units	ARTS 16A	Oil Painting I	3 Units
<i>Prerequisite:</i> Arts 10A. <i>Advisory:</i> English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263; Mathematics 210 or equivalent. Six hours lecture-laboratory (72 hours total per quarter). (May be taken two times for credit.) Further exploration and continuation of three-dimensional design focusing on individual projects. Use of various materials including wood, metals, plastic sheet and resin. Introduction of mold making and casting.			<i>Prerequisite:</i> Arts 4A and 12. <i>Advisory:</i> English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273. Six hours lecture-laboratory (72 hours total per quarter). (Any combination of Arts 16A, 16B and 16C may be taken up to six times, not to exceed 18 units, for the family of courses.) An introductory oil painting course exploring the application of the medium as it relates to the production of artwork through the translation of visual information. Preparation, concept and craft are fundamental as applied to aesthetic concerns.		
ARTS 12	Design and Color	3 Units	ARTS 16B	Oil Painting II	3 Units
<i>Prerequisite:</i> Arts 4A and 8. <i>Advisory:</i> English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273. Six hours lecture-laboratory (72 hours total per quarter). A fundamental course exploring theory and color in the visual arts.			<i>Prerequisite:</i> Arts 16A. <i>Advisory:</i> English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273. Six hours lecture-laboratory (72 hours total per quarter). (Any combination of Arts 16A, 16B and 16C may be taken up to six times, not to exceed 18 units, for the family of courses.) A continuation of Arts 16A with further emphasis on basic techniques that relate to the unusual characteristics of the medium. Conceptual studies, color theory and aesthetics are primary concerns. Surfaces other than canvas will be required.		
ARTS 14A	Watercolor Painting I	3 Units	ARTS 16C	Oil Painting III	3 Units
(Formerly Arts 14.) <i>Advisory:</i> English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273. Six hours lecture-laboratory (72 hours total per quarter). (Any combination of Arts 14A, 14B and 14C may be taken up to six times, not to exceed 18 units, for the family of courses as long as the topics/projects are different each time.) A comprehensive introduction to transparent watercolor painting with emphasis on basic techniques.			<i>Prerequisite:</i> Arts 16B. <i>Advisory:</i> English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273. Six hours lecture-laboratory (72 hours total per quarter). (Any combination of Arts 16A, 16B and 16C may be taken up to six times, not to exceed 18 units, for the family of courses.) A continuation of Arts 16B with emphasis on processes rather than techniques. Primary concerns include shaped canvasses, glazing techniques, ideas, expression, and aesthetics relating to the oil medium.		
ARTS 14B	Watercolor Painting II	3 Units	ARTS 17	Introduction to Muralism: Democracy in Action	3 Units
<i>Advisory:</i> English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273. Six hours lecture-laboratory (72 hours total per quarter). (Any combination of Arts 14A, 14B and 14C may be taken up to six times, not to exceed 18 units, for the family of courses as long as the topics/projects are different each time.) A continuation of Arts 14A with further emphasis on basic transparent watercolor techniques that relate to the unusual characteristics of the medium, including the use of watercolor pencils.			(Formerly Arts 64.) <i>Advisory:</i> English Writing 1A or English as a Second Language 5. Six hours lecture-laboratory (72 hours total per quarter). Explores the application of traditional mural making processes and techniques in combination with the practices of building community through civic engagement. Examines the connection between the arts and community and the role they can play in building bridges and strengthening democratic practices.		
ARTS 14C	Watercolor Painting III	3 Units	ARTS 18A	Ceramics	3 Units
<i>Advisory:</i> English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273. Six hours lecture-laboratory (72 hours total per quarter). (Any combination of Arts 14A, 14B and 14C may be taken up to six times, not to exceed 18 units, for the family of courses as long as the topics/projects are different each time.) A continuation of Arts 14B with emphasis on transparent and opaque watercolor techniques. Assignments in class will explore the aesthetic concerns of developing styles, ideas, content and self expression within the watercolor medium.			<i>Advisory:</i> English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263. Six hours lecture-laboratory (72 hours total per quarter). (May be taken two times for credit. Students build upon previous experience and develop higher-level skills.) Survey of ceramic construction techniques. Use of surface decoration, glazes, and ceramic kiln firing.		
ARTS 15A	Acrylic Painting I	3 Units	ARTS 18B	Ceramics (Beginning Wheel Throwing)	3 Units
<i>Prerequisite:</i> Arts 4A and 12. <i>Advisory:</i> English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273. Six hours lecture-laboratory (72 hours total per quarter). (Any combination of Arts 15A, 15B and 15C may be taken up to six times, not to exceed 18 units, for the family of courses.) An introductory course in acrylic painting with emphasis on basic techniques in both traditional and contemporary techniques that relate to the unusual characteristics of the medium.			<i>Prerequisite:</i> Arts 18A. <i>Advisory:</i> English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263. Six hours lecture-laboratory (72 hours total per quarter). (May be taken two times for credit. Students build upon previous experience and develop higher-level skills.) Beginning techniques of throwing on the potter's wheel. Forming, shaping, trimming, and decorating basic wheel thrown pieces. Use of stoneware firing techniques and processes in Ceramics (Arts 18A).		
ARTS 15B	Acrylic Painting II	3 Units	ARTS 18C	Ceramics (Intermediate Wheel Throwing)	3 Units
<i>Prerequisite:</i> Arts 15A. <i>Advisory:</i> English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273. Six hours lecture-laboratory (72 hours total per quarter). (Any combination of Arts 15A, 15B and 15C may be taken up to six times, not to exceed 18 units, for the family of courses.) A continuation of Arts 15A with further emphasis on basic techniques that relate to the unusual characteristics of the medium. Surfaces other than canvas will be introduced allowing for more varied results.			<i>Prerequisite:</i> Arts 18B. <i>Advisory:</i> English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263. Six hours lecture-laboratory (72 hours total per quarter). (May be taken two times for credit. Students build upon previous experience and develop higher-level skills.) Intermediate techniques of throwing on the potter's wheel. Forming, shaping, trimming, and surface development of intermediate wheel thrown pieces. Builds upon throwing techniques and processes in Beginning Wheel Throwing (Arts 18B).		
ARTS 15C	Acrylic Painting III	3 Units	ARTS 18D	Ceramics Hand Building	3 Units
<i>Prerequisite:</i> Arts 15B. <i>Advisory:</i> English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273. Six hours lecture-laboratory (72 hours total per quarter). (Any combination of Arts 15A, 15B and 15C may be taken up to six times, not to exceed 18 units, for the family of courses.) A continuation of Arts 15B with emphasis on processes rather than techniques. Problems in class will relate to aesthetic concerns of idea, content and expression within the acrylic medium.			(Formerly Arts 66D.) <i>Prerequisite:</i> Arts 18A. <i>Advisory:</i> English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263. Six hours lecture-laboratory (72 hours total per quarter). (May be taken two times for credit. Students build upon previous experience and develop higher-level skills.) Ceramic construction techniques: use of pinch, coil and slab processes. Use of a variety of clay bodies and various firing techniques associated with functional and non-functional ceramic work.		

ARTS 18E	Ceramics (Advanced Wheel Throwing)	3 Units	ARTS 20	Ceramics Individual Laboratory	2 Units
(Formerly Arts 80.) Prerequisite: Arts 18C. Advisory: English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263. Six hours lecture-laboratory (72 hours total per quarter). (May be taken two times for credit. Students build upon previous experience and develop higher-level skills.) Advanced techniques of throwing on the potter's wheel. Introduction to combined forms and developing the vessel as an aesthetic object. Development of shapes, function and individual expression with clay.			Prerequisite: Arts 18A. Advisory: English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263. Six hours laboratory (72 hours total per quarter). (May be taken up to six times for credit. Students build upon previous experience and develop higher-level skills.) Supervised use of ceramic studio equipment for independent skill development; hand building, wheel throwing, kiln firing.		
ARTS 19G	Ceramic Glaze Calculation	3 Units	ARTS 37A	Sculpture	3 Units
Prerequisite: Arts 18A. Advisory: English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263. Six hours lecture-laboratory (72 hours total per quarter). (May be taken two times for credit. Students build upon previous experience and develop higher-level skills.) Glaze calculation, application, study of ceramic materials, kiln firing techniques with student developed glazes.			Advisory: English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263; Mathematics 210 or equivalent; Arts 10A. Six hours lecture-laboratory (72 hours total per quarter). (Any combination of Arts 37A, 37B and 37C may be taken up to six times, not to exceed 18 units, as long as the topics are different each time.) Beginning sculpture, with an emphasis on idea development, visual investigation and the sculpture making process, including construction, carving, casting and mixed media.		
ARTS 19H	Ceramics Raku	3 Units	ARTS 37B	Intermediate Sculpture	3 Units
Prerequisite: Arts 18A. Advisory: English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263. Six hours lecture-laboratory (72 hours total per quarter). (May be taken two times for credit. Students build upon previous experience and develop higher-level skills.) Historical development, firing techniques, glaze, kilns and clay-bodies, for the Raku ceramic process.			Prerequisite: Arts 37A. Advisory: English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263; Mathematics 210 or equivalent. Six hours lecture-laboratory (72 hours total per quarter). (Any combination of Arts 37A, 37B and 37C may be taken up to six times, not to exceed 18 units, as long as the topics are different each time.) Intermediate sculpture with emphasis on further formulation of idea development, visual investigation and its making process. Additional materials and processes will be examined.		
ARTS 19I	Ceramic Sculpture	3 Units	ARTS 37C	Advanced Sculpture	3 Units
Prerequisite: Arts 18A. Advisory: English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263. Six hours lecture-laboratory (72 hours total per quarter). (May be taken two times for credit. Students build upon previous experience and develop higher-level skills.) Use of clay as a sculptural and expressive medium: texture, surface, dimensionality, and form.			Prerequisite: Arts 37B. Advisory: English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263; Mathematics 210 or equivalent. Six hours lecture-laboratory (72 hours total per quarter). (Any combination of Arts 37A, 37B and 37C may be taken up to six times, not to exceed 18 units, as long as the topics are different each time.) Advanced sculpture with an emphasis on idea development, visual investigation and the sculpture making process. Additional materials and processes will be examined and demonstrated.		
ARTS 19J	Ceramic Techniques	3 Units	ARTS 50	Ceramics Primitive Firing	3 Units
Prerequisite: Arts 18A. Advisory: English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263. Six hours lecture-laboratory (72 hours total per quarter). (May be taken two times for credit. Students build upon previous experience and develop higher-level skills.) Techniques of hand-building and wheel construction combined: experimental glazing and texturing treatments.			Prerequisite: Arts 18A. Advisory: English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263. Six hours lecture-laboratory (72 hours total per quarter). (May be taken two times for credit. Students build upon previous experience and develop higher-level skills.) Construction and utilization of primitive fire kilns, including pit, sawdust, raku, and dung. Practical experience in firing technique.		
ARTS 19K	Ceramic Decoration	3 Units	ARTS 51	Ceramics Kiln Construction	3 Units
Prerequisite: Arts 18A. Advisory: English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263. Six hours lecture-laboratory (72 hours total per quarter). (May be taken two times for credit. Students build upon previous experience and develop higher-level skills.) Surface treatments and refinement used in the production of stoneware, earthenware, and porcelain.			(Formerly Arts 19L.) Prerequisite: Arts 18A. Advisory: English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263. Six hours lecture-laboratory (72 hours total per quarter). (May be taken two times for credit. Students build upon previous experience and develop higher-level skills.) Design, construction and utilization of kilns, including raku, high fire, gas and electric. Practical experience in firing technique.		
ARTS 19M	Ceramics Low Fire	3 Units	ARTS 53A	Introduction to Visual Technology	3 Units
Prerequisite: Arts 18A. Advisory: English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263. Six hours lecture-laboratory (72 hours total per quarter). (May be taken two times for credit. Students build upon previous experience and develop higher-level skills.) Survey of earthenware as a ceramic material. Use of surface decoration, glazes, and ceramic kiln firing.			Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273; Arts 8. Six hours lecture-laboratory (72 hours total per quarter). A survey of the computer based electronic technology used by visual artists and designers. Student projects explore the creative potential of basic program options and experience how each relates to today's electronic media environment. Introductory use of Adobe Photoshop, Adobe Illustrator, Adobe Flash and Adobe InDesign.		
ARTS 19N	Ceramics Porcelain	3 Units	ARTS 53B	Introduction to Visual Technology	3 Units
(Formerly Arts 64N.) Prerequisite: Arts 18A. Advisory: English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263. Six hours lecture-laboratory (72 hours total per quarter). (May be taken two times for credit. Students build upon previous experience and develop higher-level skills.) Survey of porcelain as a ceramic material. Use of surface decoration, glazes, and ceramic kiln firing.			Prerequisite: Arts 53A. Six hours lecture-laboratory (72 hours total per quarter). Introductory use of art and design software for the computer. Emphasis on the creative process and the computer as a tool used by artists and designers today. Software used is Adobe Photoshop.		

ARTS 55A	Graphic Design-Communication	3 Units	ARTS 59	History of Graphic Design	4 Units
<i>Prerequisite: Arts 53A.</i>			<i>Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.</i>		
<i>Six hours lecture-laboratory (72 hours total per quarter).</i>			<i>Four hours lecture (48 hours total per quarter).</i>		
The analysis and interpretation of the elements and principles of design as applied to the practice of graphic design and visual communication. Emphasis on the design process from visualization to production. Software used includes Adobe Photoshop, Adobe Illustrator and Adobe InDesign.			A history of word and image from the Industrial Revolution, through the Modernist Era and the Information Age. Emphasis is placed on the impact of industrial technology in the first half of the Twentieth Century and the importance of graphic design in the global village. Topics will include the origins of printing and typography in the industrial age and postmodern design.		
ARTS 55B	Graphic Design-Communication	3 Units	ARTS 63	Business Practices for Graphic Designers	3 Units
<i>Prerequisite: Arts 55A.</i>			<i>Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.</i>		
<i>Six hours lecture-laboratory (72 hours total per quarter).</i>			<i>Three hours lecture (36 hours total per quarter).</i>		
Continuation of the analysis and interpretation of the elements and principles of design as applied to the practice of graphic design and visual communication. Emphasis on the design process from visualization to production techniques. Software used includes Adobe Photoshop, Adobe Illustrator and Adobe InDesign.			Introduction to the range of business practices used by artists and designers in the visual communications industry. Emphasis will be placed on legal rights and issues as they relate to the professional artist/client relationship. Topics will include pricing and marketing, salaries and trade customs, standard contracts, and new technology issues.		
ARTS 55C	Graphic Design-Communication: Production Techniques	3 Units	ARTS 65	Graphic Design for the World Wide Web	3 Units
<i>Prerequisite: Arts 55B or demonstration of appropriate technical abilities suitable to course level.</i>			<i>Prerequisite: Arts 53B.</i>		
<i>Six hours lecture-laboratory (72 hours total per quarter).</i>			<i>Six hours lecture-laboratory (72 hours total per quarter).</i>		
Intermediate course in the preparation of art for reproduction on the printed page, interactive media, and the World Wide Web. Emphasis is placed on specific studio procedures as well as computer production alternatives used by professionals in the field of graphic design. Software used includes Adobe Photoshop, Adobe Illustrator, Adobe InDesign and Adobe Flash.			Hands on Web page design fundamentals with an emphasis on the creative integration of type and image as related to the World Wide Web. Topics will include: navigation software, site content and organization, site layout, scanning and importing imagery, file formats, grids, white space, visual hierarchy, corporate identity/branding and typography issues. The primary software programs used are Adobe Photoshop CS and Adobe Illustrator CS.		
ARTS 56	Graphic Design/Page Layout for Electronic Publishing	3 Units	ARTS 70	Viewing Bay Area Art Museums and Galleries	1 Unit
<i>Prerequisite: Arts 53A.</i>			<i>Advisory: English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263.</i>		
<i>Advisory: Arts 55A.</i>			<i>Three hours laboratory (36 hours total per quarter).</i>		
<i>Six hours lecture-laboratory (72 hours total per quarter).</i>			<i>(May be taken up to six times for credit as long as the topics/projects are different each time.)</i>		
Analysis and interpretation of the elements and principles of design as applied to the practice of publication design. Emphasis on the design process as it relates to the use of the computer to create type and image in electronic publishing. Primary software presented is Adobe InDesign. Other programs used are Adobe Photoshop and Adobe Illustrator.			Designed to develop skills in art gallery/museum viewing and critical analysis of content of exhibits, collections and/or lectures.		
ARTS 57	Graphic Design-Communication: Typography	3 Units	ARTS 71	Gallery and Exhibition Design	3 Units
<i>Prerequisite: Arts 55B.</i>			<i>Advisory: English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263; Arts 4A or 8.</i>		
<i>Six hours lecture-laboratory (72 hours total per quarter).</i>			<i>Six hours lecture-laboratory (72 hours total per quarter).</i>		
Interpretation of the elements and principles of design as applied to the use of typography in graphic design. Emphasis on the integration and selection of letter forms and type styles as they relate to the production for the printed page, multimedia design and the World Wide Web. Software used includes Adobe Photoshop, Adobe Illustrator and Adobe InDesign.			The practical experience in all aspects of exhibition design and installation of art exhibits in galleries and museums. Emphasis on design theory and the evaluation and analysis of the communicative, cultural, aesthetic, technical factors involved in the production of exhibits.		
ARTS 58A	Furniture Design	3 Units	ARTS 72	Internship in Art	1 Unit
<i>Advisory: English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263; Mathematics 210 or equivalent; Arts 10A.</i>			<i>Advisory: English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263; Arts 1A, 4A, 8, 10A, and 71.</i>		
<i>Six hours lecture-laboratory (72 hours total per quarter).</i>			<i>Three hours laboratory (36 hours total per quarter).</i>		
<i>(Any combination of Arts 58A, 58B and 58C may be taken up to six times, not to exceed 18 units, as long as the topics are different each time.)</i>			<i>(May be taken up to six times for credit as long as the topics/projects are different each time.)</i>		
Beginning furniture design with emphasis on developing basic skills in design, construction and craftsmanship.			Directed professional experience in art museums/galleries, art businesses, and art in schools programs in the Bay Area that emphasize the application of skills and knowledge obtained in Gallery and Exhibition Design (Arts 71), Beginning Drawing (Arts 4A), Two-Dimensional Design (Arts 8), and Three-Dimensional Design (Arts 10A).		
ARTS 58B	Intermediate Furniture Design	3 Units	ARTS 83A	Digital Imaging Software (Photoshop)	4 Units
<i>Prerequisite: Arts 58A.</i>			<i>(Formerly Arts 112A.)</i>		
<i>Advisory: English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263; Mathematics 210 or equivalent.</i>			<i>Advisory: English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263; Computer Applications and Office Systems 90GA.</i>		
<i>Six hours lecture-laboratory (72 hours total per quarter).</i>			<i>(Also listed as Computer Applications and Office Systems 83A. Students may enroll in either department, but not both, for credit.)</i>		
<i>(Any combination of Arts 58A, 58B and 58C may be taken up to six times, not to exceed 18 units, as long as the topics are different each time.)</i>			<i>Eight hours lecture-laboratory (96 hours total per quarter).</i>		
Intermediate furniture design, with an emphasis on a broader range of skills in design, construction and craftsmanship.			Basic and intermediate principles using digital imaging software to produce graphics for websites and business documents.		
ARTS 58C	Advanced Furniture Design	3 Units	ARTS 85	Motion Graphics	3 Units
<i>Prerequisite: Arts 58B.</i>			<i>Prerequisite: Arts 55B.</i>		
<i>Advisory: English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263; Mathematics 210 or equivalent.</i>			<i>(Also listed as Film/Television 85. Students may enroll in either department, but not both, for credit.)</i>		
<i>Six hours lecture-laboratory (72 hours total per quarter).</i>			<i>Six hours lecture-laboratory (72 hours total per quarter).</i>		
<i>(Any combination of Arts 58A, 58B and 58C may be taken up to six times, not to exceed 18 units, as long as the topics are different each time.)</i>			The analysis and interpretation of the art and design involved in the production of graphic design to be viewed in non-print media (film, CRT & LCD screens). The creative integration of "type" and "image" in motion is stressed through the use of directed laboratory exercises. Primary software presented is Adobe After Effects. Other software used includes Adobe Photoshop, Adobe Illustrator and Adobe Flash.		
Advanced furniture design, with an emphasis on individual projects and further development on skills in design, construction and craftsmanship.					

ARTS 86**Electronic Illustration Techniques****3 Units***Prerequisite: Arts 53B.**Six hours lecture-laboratory (72 hours total per quarter).*

Introduction to industry standard software related to the creation and implementation of computer generated illustration. Emphasis is placed on verbal visual relationships and the integration of type and image in contemporary illustration. Topics will include: illustration software options, concept and problem solving, style and personal expression, packaging illustration, charts/diagrams/graphs, and 3D illustration dynamics. The primary software program presented is Adobe Illustrator CS. Adobe Photoshop CS will also be used.

ARTS 113A**Web Authoring Software (Dreamweaver)****4 Units**

Advisory: English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263; Computer Applications and Office Systems 90GA and 102N.

(Also listed as Computer Applications and Office Systems 113A. Students may enroll in either department, but not both, for credit.)

Eight hours lecture-laboratory (96 hours total per quarter).

Pass-No Pass (P-NP) course.

Basic and intermediate principles of building Web pages/sites using Web authoring software. Introduction to Web authoring terminology and software. This course is for the content person to develop and maintain an effective website.

ARTS 114A**Web Graphics/Animation Software (Flash)****3 Units**

Advisory: English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263; Computer Applications and Office Systems 83A or Arts 83A.

(Also listed as CAD and Digital Imaging 114A and Computer Applications and Office Systems 114A. Students may enroll in only one department for credit.)

Six hours lecture-laboratory (72 hours total per quarter).

Pass-No Pass (P-NP) course.

Basic and intermediate principles of graphics/animation for the Web. Web graphics/animation terminology and software. This course is for the content person to build a website.

Astronomy**ASTR 4****Solar System Astronomy****5 Units**

(See general education pages for the requirement this course meets.)

Advisory: English Writing 1A or English as a Second Language 5.

Five hours lecture (60 hours total per quarter).

Analyze the physical principles, logic, and development of solar system astronomy from ancient times through the present. Examine earth and sky relationships, exploration of the solar system by spacecraft and earth-based methods, similarities and differences between Earth and other planets, theories of the origin of our planetary system, and properties of other stars' planetary systems. Includes multimedia planetarium demonstrations.

ASTR 10**Stellar Astronomy****5 Units**

(See general education pages for the requirement this course meets.)

Advisory: English Writing 1A or English as a Second Language 5.

Five hours lecture (60 hours total per quarter).

Analyze the physical principles, logic, and development of stellar astronomy from ancient times to the present, with emphasis on recent developments. Examine the relationship of Earth to its deep-space environment and contrast the Sun to other types of stars. Synthesize the organization in space and time of the hierarchy of the cosmos from stellar systems through the universe on its largest observable scale, and investigate the observational strategies and equipment that are used to investigate it.

ASTR 77**Special Projects in Astronomy****1 Unit****ASTR 77X****2 Units****ASTR 77Y****3 Units**

Prerequisite: Consent of instructor and division dean.

Three hours laboratory for each unit of credit (36 total hours for each unit of credit per quarter).

(Any combination of Astronomy 77, 77X and 77Y may be taken up to six times, not to exceed 18 units, as long as the projects are different each time.)

Pass-No Pass (P-NP) course.

Individual research in Astronomy. Specific projects to be determined in consultation with the instructor. Outside reading and written report(s) required. These projects are on topics not covered in the regular Astronomy curriculum and require the approval of the PSM&E Division Dean.

Automotive Technology**AUTO 50A****Introduction to Automotive Principles****4 Units**

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273; Mathematics 212 or equivalent.

Four hours lecture (48 hours total per quarter).

A selective study of the automobile's engine systems. Knowledge and skills necessary for basic repair, maintenance, and troubleshooting of today's engine systems. May be used to fulfill the prerequisite to the Automotive Technology Program.

AUTO 50B**Applied Automotive Principles****2 Units**

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or

English as a Second Language 272 and 273; Mathematics 212 or equivalent;

Automotive Technology 50A (may be taken concurrently).

Four hours lecture-laboratory (48 hours total per quarter).

Basic lecture-laboratory experiences in automotive repair and maintenance as related to the engine and its supporting systems.

AUTO 51A**Introduction to Automotive Principles - Chassis Systems****4 Units**

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or

English as a Second Language 272 and 273; Mathematics 212 or equivalent.

Four hours lecture (48 hours total per quarter).

A selective study of the automobile's chassis and drive line systems. Knowledge and skills necessary for basic repair, maintenance, and troubleshooting of today's chassis and drive line systems. Can be used to fulfill the prerequisite to the Automotive Technology Program.

AUTO 51B**Applications of Automotive Principles - Chassis Systems****2 Units**

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or

English as a Second Language 272 and 273; Mathematics 212 or equivalent;

Automotive Technology 51A (may be taken concurrently).

Four hours lecture-laboratory (48 hours total per quarter).

Basic lecture-laboratory experiences in automotive repair and maintenance as related to: suspension, steering, braking and drive line components.

AUTO 53A**Automotive Mechanisms****3 Units**

Prerequisite: Approved Automotive Technology Course Sequence Contract.

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or

English as a Second Language 272 and 273; Mathematics 212 or equivalent.

Six hours lecture-laboratory (72 hours total per quarter).

The application of physical principles to the operation of mechanical, hydraulic, and hydromechanical systems, using an applied physics technique.

AUTO 53B**Automotive Electromechanical Systems****2 Units**

Prerequisite: Approved Automotive Technology Course Sequence Contract.

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or

English as a Second Language 272 and 273; Mathematics 212 or equivalent.

Four hours lecture-laboratory (48 hours total per quarter).

Electrical theories, testing and measuring procedures, circuit construction and schematic interpretation. Application of the principles of magnetism. Fundamentals of operation of semiconductors in electronic devices and controls.

AUTO 57A**Career Research and Employment in the Automotive Industry****2 Units**

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or

English as a Second Language 272 and 273.

Two hours lecture (24 hours total per quarter).

Career research in the automotive industry: job search, applications and resumes, employer-employee relationships, job interviews.

AUTO 60**Automotive Electrical Systems****9 Units**

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or

English as a Second Language 272 and 273; Mathematics 212 or equivalent;

Automotive Technology 50A and 50B.

Nine hours lecture (108 hours total per quarter).

Principles of electricity, electronics, cranking, and charging systems. Testing, diagnosis and repair of these systems.

AUTO 60A**Electrical Schematic Diagnosis****4 1/2 Units**

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or

English as a Second Language 272 and 273; Mathematics 212 or equivalent;

Automotive Technology 60.

Four and one-half hours lecture (54 hours total per quarter).

Theory of operation for electrical, electronic, and electromechanical accessory systems. Understanding and using wiring diagrams, schematics, and other diagnostic information to troubleshoot electrical, electronic, and electromechanical systems. Preparation for Automotive Service Excellence (ASE) examination in Areas A6, A8 and L1.

AUTO 60B Automotive Electronics 4 1/2 Units

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273; Mathematics 212 or equivalent; Automotive Technology 50A, 50B, 60 and 60A.

Four and one-half hours lecture (54 hours total per quarter).

Application of computer control principles to automotive systems. Operation of automotive electronic control systems, including commonly used sensors, actuators, and displays. Introduction to diagnostic methods and test equipment for automotive electronic control systems. Preparation for Automotive Service Excellence (ASE) examination in Areas A6, A8 and L1.

AUTO 60C Automotive Ignition, Fuel and Emission Systems 9 Units

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273; Mathematics 212 or equivalent; Automotive Technology 50A, 50B, 60, 60A and 60B.

Nine hours lecture (108 hours total per quarter).

Introduction to components, subsystems, and functions of ignition, fuel delivery, carburetor and fuel injection systems (engine management). Introduction to automotive emission controls. Basic diagnosis, service, and repair procedures. Preparation for Automotive Service Excellence (ASE) examination in Areas A6, A8 and L1.

AUTO 60D Ignition Analysis and Oscilloscope Diagnosis 4 1/2 Units

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273; Mathematics 212 or equivalent; Automotive Technology 50A, 50B, 60, 60A, 60B and 60C.

Four and one-half hours lecture (54 hours total per quarter).

Ignition system principles of operation and diagnosis. Use of electronic test equipment in ignition system diagnosis. Preparation for Automotive Service Excellence (ASE) certification examinations in Areas A6, A8, and L1.

AUTO 60E Automotive Fuel Injection 4 1/2 Units

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273; Mathematics 212 or equivalent; Automotive Technology 50A, 50B, 60, 60A, 60B, 60C and 60D.

Four and one-half hours lecture (54 hours total per quarter).

Theory of operation and service of electronic fuel injection systems. Component parts and their functions and overall system theory. Diagnostic and repair methods using standard test and repair equipment. Preparation for Automotive Service Excellence (ASE) examination in Areas A8 and L1.

AUTO 60F No-Start Diagnosis 4 1/2 Units

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273; Mathematics 212 or equivalent; Automotive Technology 50A, 50B, 60, 60A, 60B, 60C, 60D and 60E.

Four and one-half hours lecture (54 hours total per quarter).

Principles of troubleshooting procedures and techniques to analyze and repair of "no-start" problems in the fuel, ignition, and electrical systems of an automobile. Preparation for Automotive Service Excellence (ASE) examination in Areas A6, A8, and L1.

AUTO 60G Advanced Scan Tool Diagnosis 4 1/2 Units

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273; Mathematics 212 or equivalent; Automotive Technology 50A, 50B, 60, 60A, 60B, 60C, 60D and 60E.

Four and one-half hours lecture (54 hours total per quarter).

Advanced drivability diagnosis using a scan tool. Using the onboard diagnostic capabilities of vehicles built since 1980. Advanced scan data analysis. Using PC capabilities to store and analyze diagnostic information. Preparation for Automotive Service Excellence (ASE) examination in Areas A6, A8 and L1.

AUTO 60H Advanced Drivability and Onboard Diagnostics 4 1/2 Units

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273; Mathematics 212 or equivalent; Automotive Technology 50A, 50B, 60, 60A, 60B, 60C, 60D and 60E.

Four and one-half hours lecture (54 hours total per quarter).

Survey of onboard diagnostic systems from 1980 to the present. Advanced electronic diagnostic procedures using an automotive scan tool. Preparation for Automotive Service Excellence (ASE) examination in Areas A6, A8, and L1.

AUTO 60J Advanced Lab Scope and Waveform Diagnosis 4 1/2 Units

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273; Mathematics 212 or equivalent; Automotive Technology 50A, 50B, 60, 60C, 60D, 60E, 60F and 60G.

Four and one-half hours lecture (54 hours total per quarter).

Diagnosis of automotive electronic systems using a laboratory oscilloscope and a power graphing meter. Related use of other basic test equipment, including a digital multimeter and scan tool. Advanced waveform analysis. Preparation for Automotive Service Excellence (ASE) examination in Areas A6, A8 and L1.

AUTO 60K Automotive Body Electrical Systems 4 1/2 Units

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273; Mathematics 212 or equivalent; Automotive Technology 60A and 60B.

Four and one-half hours lecture (54 hours total per quarter).

Theory of operation for body electrical, electronic, and electromechanical systems. Understanding the functions of automotive body electrical systems. Utilization of special diagnostic equipment for body electrical systems and subsystems. Appropriate repair protocol for applied body electrical systems. Symptom to system diagnosis. Preparation for Automotive Service Excellence (ASE) examination in Area A6.

AUTO 60M Hybrid Electric Vehicles 4 1/2 Units

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273; Mathematics 212 or equivalent; Automotive Technology 60A, 60B and 60G.

Four and one-half hours lecture (54 hours total per quarter).

Understanding the functions of automotive hybrid propulsion systems. Operating characteristics of hybrid drive systems. Integration of high voltage power supplies and energy storage systems. Operating fundamentals of DC to DC converters. Relationship of internal combustion engines and motor generators. Function and design of regenerative braking systems. Operation of hybrid transmission systems and power splitting devices. Application of the high expansion ratio cycle. Understanding safety aspects of service hybrid electric vehicles. Utilization of special diagnostic equipment for hybrid electrical systems and related subsystems. Appropriate repair protocol for hybrid electrical systems. Maintenance and servicing of hybrid vehicles.

AUTO 60N Hybrid Vehicle Safety and Maintenance 2 Units

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273; Mathematics 210 or 212 or equivalent; Automotive Technology 60A and 60B.

Two hours lecture (24 hours total per quarter).

Explores the use of hybrid electric power for vehicle transportation. Topics will include: safety, maintenance of hybrid propulsion and internal combustion systems, drivability, and storage battery technology. Various designs of hybrid vehicles and their integrated systems from multiple manufacturers will be discussed. This course also fulfills the Toyota Technician Education Network training requirement for the T-256 course. This course is suitable for students interested in alternative fuels or power and energy technology.

AUTO 61A Automotive Brake Systems 4 1/2 Units

(Formerly Automotive Technology 61.)

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273; Mathematics 212 or equivalent; Automotive Technology 50A and 50B.

Four and one-half hours lecture (54 hours total per quarter).

Operation of automotive brake systems. Repair, maintenance and troubleshooting.

AUTO 61B Electronically Controlled Brake Systems 4 1/2 Units

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273; Mathematics 212 or equivalent; Automotive Technology 61A.

Four and one-half hours lecture (54 hours total per quarter).

Computer controlled automotive brake systems, including service, maintenance, troubleshooting and repair procedures.

AUTO 62A Automotive Suspension, Steering, and Alignment 9 Units

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273; Mathematics 212 or equivalent; Automotive Technology 50A and 50B.

Nine hours lecture (108 hours total per quarter).

Operation of automotive suspension, steering and alignment systems. Overview of maintenance, repair and troubleshooting procedures.

AUTO 62B Advanced Wheel Alignment 9 Units

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273; Mathematics 212 or equivalent; Automotive Technology 62A.

Nine hours lecture (108 hours total per quarter).

Advanced study of wheel alignment systems. Emphasis is placed on diagnostic inspection and repair procedures.

AUTO 63 Automatic Transmissions and Transaxles 9 Units

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273; Mathematics 212 or equivalent; Automotive Technology 50A and 50B.

Nine hours lecture (108 hours total per quarter).

Principles of operation, service and repair procedures for automatic transmissions and transaxles. Hydraulic and mechanical system operation. Power flow and component repair techniques. Preparation for Automotive Service Excellence (ASE) certification examination in Area A2.

AUTO 63A Automotive Drive Train 4 1/2 Units

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273; Mathematics 212 or equivalent; Automotive Technology 50A and 50B.
 Four and one-half hours lecture (54 hours total per quarter).
 Principles of operation of automotive drive train components. Service and repair procedures, product problem discussions and demonstrations. Preparation for Automotive Service Excellence (ASE) certification examination in Area A3.

AUTO 63B Automatic Transmission 4 1/2 Units

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273; Mathematics 212 or equivalent; Automotive Technology 50A and 50B.
 Four and one-half hours lecture (54 hours total per quarter).
 Principles of operation, service and repair procedures of automatic transmissions. Hydraulic and mechanical system operation. Preparation for Automotive Service Excellence (ASE) certification examination in Area A2.

AUTO 63C Automotive Transaxles 4 1/2 Units

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273; Mathematics 212 or equivalent; Automotive Technology 50A and 50B.
 Four and one-half hours lecture (54 hours total per quarter).
 Automatic transaxle operation. Theory of operation, service and repair techniques as related to automatic transaxles. Power flow and component repair techniques. Preparation for Automotive Service Excellence (ASE) certification examination in Area A2.

AUTO 63D Transmission Diagnostic and Repair Techniques 4 1/2 Units

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273; Mathematics 212 or equivalent; Automotive Technology 50A and 50B.
 Four and one-half hours lecture (54 hours total per quarter).
 Diagnostic and repair techniques for automatic transmissions and transaxles. Emphasis on development of diagnostic procedures and repair techniques. Preparation for Automotive Service Excellence (ASE) certification examinations in Areas A2 and A3.

AUTO 64 Automotive Machining and Engine Repair 9 Units

(Formerly Automotive Technology 64A and 64B.)
Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273; Mathematics 212 or equivalent; Automotive Technology 50B.
 Nine hours lecture (108 hours total per quarter).
 Repair and rebuilding of engine cylinder heads and block components, engine assembly and testing. Includes theory, diagnosis, disassembly, cleaning, inspection and failure analysis. Preparation for Automotive Service Excellence (ASE) examinations in Areas A1 and M1, M2 and M3.

AUTO 64HP High Performance Engine Preparation 9 Units

Advisory: Automotive Technology 64; English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273; Mathematics 212 or equivalent.
 Nine hours lecture (108 hours total per quarter).
 Precision and performance engine preparation. Includes selection and matching of engine and valve train components for maximum efficiency and output.

AUTO 65P Clean Air Car Course 7 Units

Prerequisite: Automotive Technology 60, 60B, 60E and one year of related automotive experience.
Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273; Mathematics 212 or equivalent.
 Seven hours lecture (84 hours total per quarter).
 Automotive technician training program for California's Inspection and Maintenance Program (I&M Program). Course content is mandated by the BAR.

AUTO 65R California ASE Alternative Training A6 2 Units

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273; Mathematics 212 or equivalent; Automotive Technology 60, 60A and 60B.
 Two hours lecture (24 hours total per quarter).
 Review of On-board Diagnostics Generation I (OBDI). Extensive coverage of On-board Diagnostics Generation II (OBDDI) operating system, testing procedures and strategies. Preparation for Automotive Service Excellence (ASE) examination in Areas A6, A8, L1 and Inspection and Maintenance (I&M) technician update requirements.

AUTO 65S California ASE Alternative Training A8 2 Units

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273; Mathematics 212 or equivalent; Automotive Technology 60, 60A, 60B and 60C.
 Two hours lecture (24 hours total per quarter).
 An approved course by the Bureau of Automotive Repair (BAR) as an alternative to meet the ASE A8 certification prerequisites for obtaining a smog technician license.

AUTO 65V California ASE Alternative Training L1 2 1/2 Units

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273; Mathematics 212 or equivalent; Automotive Service Excellence (ASE) Certification A6 and A8.
 Two and one-half hours lecture (30 hours total per quarter).
 Approved by the Bureau of Automotive Repair (BAR) as an alternative to meet the ASE L1 certification prerequisites for obtaining a smog technician license.

AUTO 65W Advanced Clean Air Car Course 2 1/2 Units

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273; Mathematics 212 or equivalent; Automotive Service Excellence (ASE) Certification A6, A8 & L1.
 Two and one-half hours lecture (30 hours total per quarter).
 Automotive technician training program for California's Inspection and Maintenance Program (I&M Program). This course meets the Bureau of Automotive Repair (BAR) requirement for obtaining an Advanced Emissions Specialist (EA) Smog Check License.

AUTO 66 Automotive Air Conditioning 4 1/2 Units

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273; Mathematics 212 or equivalent; Automotive Technology 60.
 Four and one-half hours lecture (54 hours total per quarter).
 Operation and service of automotive air conditioning refrigeration and electrical control systems. Includes retrofitting. Emphasis on diagnosis and repair of systems. Preparation for Automotive Service Excellence (ASE) certification examination in Area A7.

AUTO 69X Smog Check Update 1 Unit**AUTO 69Y 1 1/2 Units****AUTO 69Z 2 Units**

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273; Mathematics 212 or equivalent; Current CA Smog Check License.
 One hour lecture for each unit of credit (12 hours total for each unit of credit per quarter).
 (Any combination of Automotive Technology 69X, 69Y, and 69Z may be taken up to six times for credit.)

Legally mandated course by the California Bureau of Automotive Repair (BAR) to obtain a renewal Smog Check License every two years. This applies to all State Licensed Smog Check Technicians. The latest Smog Check Program changes and updates will be covered. The State Smog Check License renewal examination will be given at the end of the course. The BAR will specify the number of units required during each two year cycle.

AUTO 91A Automotive Brake Systems 5 Units

Prerequisite: Approved Automotive Technology Course Sequence Contract.
Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273; Mathematics 212 or equivalent; Automotive Technology 50A and 50B.
 Ten hours lecture-laboratory (120 hours total per quarter).
 Repair, maintenance and troubleshooting of automotive braking systems.

AUTO 91B Active Brake Systems 1 1/2 Units

Prerequisite: Approved Automotive Technology Course Sequence Contract; Automotive Technology 91A.
 Three hours lecture-laboratory (36 hours total per quarter).
 Repair, maintenance and troubleshooting of automotive active/anti-lock brake systems.

AUTO 92A Automotive Steering and Suspension 5 Units

Prerequisite: Approved Automotive Technology Course Sequence Contract.
Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273; Mathematics 212 or equivalent; Automotive Technology 51A and 51B.
 Ten hours lecture-laboratory (120 hours total per quarter).
 Repair, maintenance and troubleshooting of suspension and steering systems.

AUTO 92B Automotive Alignment 5 Units

Prerequisite: Approved Automotive Technology Course Sequence Contract; Automotive Technology 92A.
 Ten hours lecture-laboratory (120 hours total per quarter).
 Automotive alignment systems, including repair, maintenance and troubleshooting. Service and repair procedures.

AUTO 92C	Automotive Electronic Chassis Controls	1 1/2 Units	AUTO 94C	Automotive Machining and Engine Service	5 Units
<i>Prerequisite:</i> Approved Automotive Technology Course Sequence Contract; Automotive Technology 92B. <i>Three hours lecture-laboratory (36 hours total per quarter).</i> Computer controlled automotive suspension and steering systems, including repair, maintenance, troubleshooting, and service procedures.			<i>Prerequisite:</i> Approved Automotive Technology Course Sequence Contract; Automotive Technology 94B. <i>Advisory:</i> English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273; Mathematics 212 or equivalent. <i>Ten hours lecture-laboratory (120 hours total per quarter).</i> Reconditioning engine short block assemblies and components including balancing, assembly and testing.		
AUTO 92D	Uni-Body Alignment	1 1/2 Units	AUTO 94D	Automotive Machining and Engine Service	5 Units
<i>Prerequisite:</i> Approved Automotive Technology Course Sequence Contract; Automotive Technology 92C. <i>Three hours lecture-laboratory (36 hours total per quarter).</i> Gaging, analyzing, repairing and alignment of uni-body systems.			<i>Prerequisite:</i> Approved Automotive Technology Course Sequence Contract; Automotive Technology 94C. <i>Advisory:</i> English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273; Mathematics 212 or equivalent. <i>Ten hours lecture-laboratory (120 hours total per quarter).</i> Precision and performance engine preparation with emphasis on improvements in volumetric efficiency. Includes selection and matching of components for maximum efficiency within mandated emissions requirements.		
AUTO 93A	Automotive Final Drive Train	5 Units	AUTO 94E	Automotive Machining and Engine Service	5 Units
<i>Prerequisite:</i> Approved Automotive Technology Course Sequence Contract. <i>Advisory:</i> English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273; Mathematics 212 or equivalent. <i>Ten hours lecture-laboratory (120 hours total per quarter).</i> Components of the final drive train including design features and service techniques.			<i>(Formerly Automotive Technology 94EA.)</i> <i>Prerequisite:</i> Automotive Technology 94D. <i>Advisory:</i> English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273; Mathematics 212 or equivalent. <i>Ten hours lecture-laboratory (120 hours total per quarter).</i> Complete automotive machine shop practice including engine repair, assembly, testing, and installation. Researching service and installation procedures and parts and labor estimating.		
AUTO 93B	Standard Transaxles	1 1/2 Units	AUTO 94F	Automotive Machining and Engine Service	5 Units
<i>Prerequisite:</i> Approved Automotive Technology Course Sequence Contract. <i>Advisory:</i> English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273; Mathematics 212 or equivalent. <i>Three hours lecture-laboratory (36 hours total per quarter).</i> Standard transaxles: power flow, service requirements and repair procedures.			<i>(Formerly Automotive Technology 94EB.)</i> <i>Prerequisite:</i> Automotive Technology 94E. <i>Advisory:</i> English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273; Mathematics 212 or equivalent. <i>Ten hours lecture-laboratory (120 hours total per quarter).</i> Practice and skill development with emphasis on precision and productivity in rebuilding, servicing, and installing engines. Research and prepare equipment operation and maintenance instructions.		
AUTO 93C	Automatic Transmissions	5 Units	AUTO 94F	Automotive Machining and Engine Service	5 Units
<i>Prerequisite:</i> Approved Automotive Technology Course Sequence Contract. <i>Advisory:</i> English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273; Mathematics 212 or equivalent. <i>Ten hours lecture-laboratory (120 hours total per quarter).</i> Operation of automatic transmissions including torque converters, hydraulic control, planetary gear train, clutch and band operation. Inspection and repair procedures for automatic transmissions.			<i>(Formerly Automotive Technology 94EB.)</i> <i>Prerequisite:</i> Automotive Technology 94E. <i>Advisory:</i> English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273; Mathematics 212 or equivalent. <i>Ten hours lecture-laboratory (120 hours total per quarter).</i> Practice and skill development with emphasis on precision and productivity in rebuilding, servicing, and installing engines. Research and prepare equipment operation and maintenance instructions.		
AUTO 93D	Automatic Transaxles	1 1/2 Units	AUTO 99A	Automotive Electricity, Battery and Cranking Systems	6 1/4 Units
<i>Prerequisite:</i> Approved Automotive Technology Course Sequence Contract. <i>Advisory:</i> English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273; Mathematics 212 or equivalent. <i>Three hours lecture-laboratory (36 hours total per quarter).</i> A detailed study of automatic transaxles. Power flow, service requirements and repair procedures will be covered.			<i>Prerequisite:</i> Approved Automotive Technology Course Sequence Contract; Automotive Technology 50B. <i>Advisory:</i> English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273; Mathematics 212 or equivalent. <i>Twelve and one-half hours lecture-laboratory (150 hours total per quarter).</i> <i>(May be taken up to three times for credit.)</i> Automotive electricity including the electron theory, fundamentals of circuit construction and interpretation, principles of magnetism as applied to electric motors, relays and coils. Diagnosis, troubleshooting and servicing of automotive battery and cranking systems including system repair procedures. Developing skills in the use of test equipment including the DVOM and electrical load testing tools for the analysis and diagnosis of these types of electrical systems.		
AUTO 93E	Diagnostic Techniques	1 Unit	AUTO 99B	Automotive Charging, Ignition and Accessory Systems	6 1/4 Units
<i>Prerequisite:</i> Approved Automotive Technology Course Sequence Contract. <i>Advisory:</i> English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273; Mathematics 212 or equivalent. <i>Two hours lecture-laboratory (24 hours total per quarter).</i> Diagnostic techniques for problem solving in the automotive and light duty truck powertrain.			<i>Prerequisite:</i> Approved Automotive Technology Course Sequence Contract; Automotive Technology 99A. <i>Advisory:</i> English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273; Mathematics 212 or equivalent. <i>Twelve and one-half hours lecture-laboratory (150 hours total per quarter).</i> <i>(May be taken up to three times for credit.)</i> The fundamentals of automotive electronic devices as they apply to the automotive charging and ignition systems. Emphasis on diagnosis of these systems using test instruments including the oscilloscope. Introduction to automotive accessory systems including wiring and repair techniques. Skill development in the understanding of the electrical wiring diagram networks as provided by manufacturers.		
AUTO 93F	Automotive Transmission Service	5 Units	AUTO 99C	Introduction to Engine Performance Systems	6 1/4 Units
<i>Prerequisite:</i> Approved Automotive Technology Course Sequence Contract. <i>Advisory:</i> English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273; Mathematics 212 or equivalent. <i>Ten hours lecture-laboratory (120 hours total per quarter).</i> Operation of rear axles, transfer cases, clutches, automatic and standard transmissions and transaxles. Diagnostic, inspection and repair procedures for these powertrain components.			<i>Prerequisite:</i> Approved Automotive Technology Course Sequence Contract; Automotive Technology 99B. <i>Advisory:</i> English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273; Mathematics 212 or equivalent. <i>Twelve and one-half hours lecture-laboratory (150 hours total per quarter).</i> <i>(May be taken up to three times for credit.)</i> Electronically controlled automotive systems. Fundamentals of automotive microprocessors and automotive onboard computers. Testing techniques for system input and output devices. Diagnosis, troubleshooting, and repairing the automotive fuel supply system including carburetion and feedback carburetion.		
AUTO 94A	Principles of Four Stroke Cycle Gas and Diesel Engines	5 Units			
<i>Prerequisite:</i> Approved Automotive Technology Course Sequence Contract; Automotive Technology 50B. <i>Advisory:</i> English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273; Mathematics 212 or equivalent. <i>Ten hours lecture-laboratory (120 hours total per quarter).</i> Shop operations specific to engine repair and rebuilding including safety and hazardous waste management. Emphasis on theory, diagnosis, disassembly, cleaning, inspection and failure analysis.					
AUTO 94B	Automotive Machining and Engine Service	5 Units			
<i>Prerequisite:</i> Approved Automotive Technology Course Sequence Contract; Automotive Technology 94A. <i>Advisory:</i> English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273; Mathematics 212 or equivalent. <i>Ten hours lecture-laboratory (120 hours total per quarter).</i> Reconditioning cylinder heads and related valve train components including crack detection, repair, testing and assembly. Resurfacing cylinder heads.					

B Diagnosis, troubleshooting, and repair techniques for no-start conditions. Procedure development for analyzing and repairing common problems of fuel, ignition, electrical and basic engine mechanical systems which effect engine performance of the automobile.

AUTO 99D Intermediate Engine Performance Systems 6 1/4 Units

Prerequisite: Approved Automotive Technology Course Sequence Contract; Automotive Technology 99C.

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273; Mathematics 212 or equivalent. Twelve and one-half hours lecture-laboratory (150 hours total per quarter). (May be taken up to three times for credit.)

Electronically controlled engine performance systems. Diagnosing, troubleshooting, and repairing the automotive fuel-injection systems of domestic automobiles. Testing techniques for system input and output devices using automotive scanners and oscilloscopes.

AUTO 99E Basic Engine Performance Diagnostic Procedures 6 1/4 Units

Prerequisite: Approved Automotive Technology Course Sequence Contract; Automotive Technology 99D.

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273; Mathematics 212 or equivalent. Twelve and one-half hours lecture-laboratory (150 hours total per quarter). (May be taken up to three times for credit.)

Automotive technician training program to include each system which aids in increasing fuel economy and in the reduction of emissions and pollutants from the automobile. Diagnosing and troubleshooting the systems controlling automotive performance and drive-ability.

AUTO 99F Intermediate Engine Performance Diagnostic Procedures 6 1/4 Units

Prerequisite: Approved Automotive Technology Course Sequence Contract; Automotive Technology 99E.

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273; Mathematics 212 or equivalent. Twelve and one-half hours lecture-laboratory (150 hours total per quarter). (May be taken up to three times for credit.)

Performance tuning of automotive gasoline engines. Emphasis on reference material dealing with repair procedures, specifications, and efficient tune-up procedures. Intermediate level for usage of computer scanners and oscilloscopes. Diagnosing, troubleshooting, and repairing the systems designed for the control of engine temperature.

Biology

BIOL 5 Biology of Birds 5 Units

(See general education pages for the requirement this course meets.)

Advisory: English Writing 1A or English as a Second Language 5.

Four hours lecture, three hours laboratory (84 hours total per quarter).

A general introduction to the biology of birds and the relationships between birds and people around the world. Examines general avian anatomy and physiology with emphasis on diversity and bird identification and the ecology, behavior and conservation of selected bird species.

BIOL 6A Form and Function in the Biological World 6 Units

(See general education pages for the requirement this course meets.)

Prerequisite: A satisfactory score on the Chemistry Placement Exam or a grade of C or better in either Chemistry 1A or 50.

Advisory: English Writing 1A or English as a Second Language 5.

Four hours lecture, six hours laboratory (120 hours total per quarter).

Introduction to biology and scientific methods for students beginning the biology major series. Study of the structure and physiological processes of living organisms, with an emphasis on plants and animals.

BIOL 6B Cell and Molecular Biology 6 Units

Prerequisite: Biology 6A.

Advisory: English Writing 1A or English as a Second Language 5; Mathematics 114 or equivalent.

Four hours lecture, six hours laboratory (120 hours total per quarter).

Introduction to cellular structure and function, biological molecules, bioenergetics, molecular genetics, and cell proliferation. The laboratory includes extensive hands-on experimentation in molecular biology.

BIOL 6C Ecology and Evolution 6 Units

Prerequisite: Biology 6A and 6B, with a grade of C or better.

Advisory: English Writing 1A or English as a Second Language 5; Mathematics 114 or equivalent.

Four hours lecture, six hours laboratory (120 hours total per quarter).

Principles of ecology and evolution. Includes ecology of populations, communities, ecosystems and biomes as well as evolution of populations, and the origin of species and higher taxa. The laboratory portion of the course includes a research project designed, researched and presented by students.

BIOL 8 Biology of Women 4 Units

(See general education pages for the requirement this course meets.)

Advisory: English Writing 1A or English as a Second Language 5.

Four hours lecture (48 hours total per quarter).

Designed for non-science majors to explore women's anatomical and physiological characteristics and their management for good health. The emphasis is on the biological processes and principles organizing a "typical" female life progression, with a secondary focus on the structural and functional dimorphism of human body systems. It also aims at recognizing components of the scientific process distorted in the historical view of women and the impact that societal and cultural biases have on behavior and on female health issues.

BIOL 10 Introductory Biology 5 Units

(Not open to students who have completed Biology 6A, 6B, 6C or equivalent.)

(See general education pages for the requirement this course meets.)

Advisory: English Writing 1A or English as a Second Language 5.

Four hours lecture, three hours laboratory (84 hours total per quarter).

An introduction to biology as a branch of the biological sciences and to its basic unifying principles, with selected application to the scientific method, evolutionary concepts, genetic modification, biotechnology, ecology, ecological crises and human impacts.

BIOL 11 Human Biology 5 Units

(Not open to students who have completed Biology 6A, 6B, 6C or equivalent.)

(See general education pages for the requirement this course meets.)

Advisory: English Writing 1A or English as a Second Language 5.

Four hours lecture, three hours laboratory (84 hours total per quarter).

A general introduction to biology and its principles, emphasizing the biology of humans. The course will cover the unifying principles of biology, with emphasis on the basic anatomy and physiology of the human body, as well as on contemporary health issues and their impacts on cultural, ethnic and gender groups.

BIOL 13 Marine Biology 5 Units

(See general education pages for the requirement this course meets.)

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Four hours lecture, three hours laboratory (84 hours total per quarter).

Introduction to physical and chemical oceanography, marine animals, marine plants, and marine ecology with major emphasis on natural history of marine life. Bays, estuaries and open oceans are described as habitats. Marine biology as a branch of the biological sciences, employs the scientific method.

BIOL 15 California Ecology 5 Units

(See general education pages for the requirement this course meets.)

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Four hours lecture, three hours laboratory (84 hours total per quarter).

An introduction to ecology and field biology as a branch of the biological sciences and its relationship to the scientific method. A review of plant and animal adaptations to the natural environments and the impact of pollution, degradation of habitat, and human population on life.

BIOL 26 Introductory Microbiology 6 Units

Prerequisite: (Biology 40A, 40B and 40C) or (Biology 6A, 6B and 6C), or equivalent, all with a grade of C or better.

Four hours lecture, six hours laboratory (120 hours total per quarter).

Introduction to the sciences and the scientific method as exemplified by the study of microbiology. Morphology, metabolism, growth and genetics of bacteria and other microorganisms; chemical and physical means of control; the disease process and immunity. The importance of microorganisms to humankind; techniques and methods of microbiology.

BIOL 40A Human Anatomy and Physiology 5 Units

Prerequisite: Satisfactory score on the Biology 40A Placement Test or Chemistry 1A or Chemistry 50 or Chemistry 30A with a grade of C or better.

Advisory: English Writing 1A or English as a Second Language 5.

Four hours lecture, three hours laboratory (84 hours total per quarter).

An introduction to the disciplines of anatomy and physiology. Basic principles of human anatomy and physiology as exemplified in the study of cell chemistry, cell biology, histology and the integumentary, skeletal and muscular systems with emphasis on homeostatic mechanisms.

BIOL 40B Human Anatomy and Physiology 5 Units

Prerequisite: Biology 40A with a grade of C or better.

Four hours lecture, three hours laboratory (84 hours total per quarter).

Study of the nervous, circulatory, and respiratory systems.

BIOL 40C Human Anatomy and Physiology 5 Units

Prerequisite: Biology 40A and 40B, with a grade of C or better.

Four hours lecture, three hours laboratory (84 hours total per quarter).

Study of the endocrine system, lymphatic system, digestive system, metabolism, urinary and reproductive systems, embryological development and classical Mendelian and modern biochemical genetics including genetic engineering.

BIOL 45 Introduction to Human Nutrition 4 Units

Prerequisite: (Biology 40A, 40B and 40C) or (Biology 6A, 6B and 6C), or equivalent, all with a grade of C or better.

Advisory: English Writing 1A or English as a Second Language 5.

Four hours lecture (48 hours total per quarter).

The chemical classification of nutrients, their functions within the human body, and the effects of nutritional deficiencies and excesses. The relationship of dietary intakes to health and disease.

BIOL 54G Applied Human Anatomy and Physiology: Levels of Organization 1 1/2 Units

(Not open to students with credit in Biology 6A, 6B or 6C; or Biology 40A, 40B or 40C; or equivalent.)

Advisory: English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263.

One hour lecture, one and one-half hours laboratory (30 hours total per quarter).

Survey of human anatomy and physiology with emphasis on homeostatic limits of the human body. Topics to be discussed include basic introduction and body organization, chemical basis of life, the cell and its metabolism, tissues, and the skin. (Especially designed for students planning careers in medical assisting, Licensed Vocational Nursing, education, speech, home economics, psychology, physical education and/or recreation.)

BIOL 54H Applied Human Anatomy and Physiology: Support, Movement, and Integration 1 1/2 Units

(Not open to students with credit in Biology 6A, 6B or 6C; or Biology 40A, 40B or 40C; or equivalent.)

Advisory: English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263.

One hour lecture, one and one-half hours laboratory (30 hours total per quarter).

Survey of human anatomy and physiology with emphasis on homeostatic limits of the human body. Topics to be discussed include the skeletal, muscular and nervous systems including somatic and special senses.

(Especially designed for students planning careers in medical assisting, Licensed Vocational Nursing, education, speech, home economics, psychology, physical education and/or recreation.)

BIOL 54I Applied Human Anatomy and Physiology: Coordination and Transport 1 1/2 Units

(Not open to students with credit in Biology 6A, 6B or 6C; or Biology 40A, 40B or 40C; or equivalent.)

Advisory: English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263.

One hour lecture, one and one-half hours laboratory (30 hours total per quarter).

Survey of human anatomy and physiology with emphasis on homeostatic limits of the human body. Topics to be discussed include the endocrine, cardiovascular, and lymphatic systems and the blood.

(Especially designed for students planning careers in medical assisting, Licensed Vocational Nursing, education, speech, home economics, psychology, physical education and/or recreation.)

BIOL 54J Applied Human Anatomy and Physiology: Absorption, Excretion, and Reproduction 1 1/2 Units

(Not open to students with credit in Biology 6A, 6B or 6C; or Biology 40A, 40B or 40C; or equivalent.)

Advisory: English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263.

One hour lecture, one and one-half hours laboratory (30 hours total per quarter).

Survey of human anatomy and physiology with emphasis on homeostatic limits of the human body. Topics to be discussed include the respiratory, urinary, reproductive, and digestive systems, water and electrolyte balance, nutrition and pregnancy.

(Especially designed for students planning careers in medical assisting, Licensed Vocational Nursing, education, speech, home economics, psychology, physical education and/or recreation.)

BIOL 77 Special Projects in Biology 1 Unit
BIOL 77X 2 Units
BIOL 77Y 3 Units

(Formerly Biology 49, 49X and 49Y respectively.)

Prerequisite: Consent of instructor and division dean.

Three hours laboratory for each unit of credit (36 hours total for each unit of credit per quarter).

(Any combination of Biology 77, 77X and 77Y may be taken up to six times, not to exceed 18 units, as long as the projects are different each time.)

Individual research in the biological sciences. Specific projects determined in consultation with the instructor. Outside reading and written report required.

Biotechnology

(See Foothill College catalog.)

Business

BUS 10 Introduction to Business 5 Units
 (Formerly Business 20.)

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Five hours lecture (60 hours total per quarter).

An overview of the business disciplines, including a brief introduction to marketing, accounting, finance, management, human resources, information technologies, economics, international business, business planning, and the role of business in society.

BUS 18 Business Law I 5 Units

Advisory: English Writing 1A or English as a Second Language 5; Business 10. (Also listed as Paralegal 18. Students may enroll in either department, but not both, for credit.)

Five hours lecture (60 hours total per quarter).

The American legal system and laws applicable to business emphasizing contract, sales and agency laws, the impact of the legal system on business, and ethical considerations in the business environment.

BUS 21 Business and Society 5 Units

(See general education pages for the requirement this course meets.)

Advisory: English Writing 1A or English as a Second Language 5.

Five hours lecture (60 hours total per quarter).

An introduction to the study of the interactions and interdependencies between business, government, and society. Course will examine many individual cases of conflict between business and society, both current and historical, and will guide students to explore the lessons these cases hold for all current and future business managers.

BUS 54 Business Mathematics 5 Units

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273; Mathematics 210 or equivalent.

Five hours lecture (60 hours total per quarter).

Basic mathematical operations and concepts as related to business and personal finance.

BUS 55 Introduction to Entrepreneurship 5 Units

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Five hours lecture (60 hours total per quarter).

A practical study of the operations and essential skills required in small and start-up businesses. Emphasis on the opportunities and problems faced by entrepreneurs in obtaining, managing and financing an independent business. This course will prepare students for developing business plans.

BUS 56 Human Relations in the Workplace 5 Units

(See general education pages for the requirement this course meets.)

Advisory: English Writing 1A or English as a Second Language 5.

Five hours lecture (60 hours total per quarter).

Human relations behavior in organizations emphasizing personal and interpersonal relationships. Examination of motivation, communication skills, leadership skills, emotional and physical wellness, diversity, and ethical behavior for promoting effectiveness on the job.

BUS 57 Human Resource Management 4 Units

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273; Business 10 or 56.

Four hours lecture (48 hours total per quarter).

Introductory course designed to teach fundamental components of the Human Resource function. Focus on understanding and applying various roles of Human Resources (recruitment, legal issues, selection, assessment and development, compensation, benefits) provides to employees and the organization to meet individual, organizational diversity and societal objectives.

BUS 58 The Business Plan 4 Units

Advisory: Business 55.

Four hours lecture (48 hours total per quarter).

Effectively organize the resources required to establish a new business and obtain financing by writing an analysis of the prospective business enterprise.

BUS 59 Promoting Your Small Business 5 Units

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Five hours lecture (60 hours total per quarter).

Affordable methods of promotion for small businesses. Emphasis on Internet marketing, public relations, relationship marketing, database marketing, and guerrilla marketing tactics. A promotion plan for the students' (existing or planned) businesses will be developed.

BUS 60 International Business Management 5 Units

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273; Mathematics 210 or equivalent.

Five hours lecture (60 hours total per quarter).

International Business and its functions in a diverse global economy. Understanding cross-border trade and investment; distance, time zone and language issues; national differences in government regulation, culture and business systems.

BUS 61 Introduction to Technical Writing 5 Units

Prerequisite: English Writing 1A or English as a Second Language 5.

(Also listed as English Writing 61 and Technical Writing 61. Students may enroll in only one department for credit.)

Five hours lecture (60 hours total per quarter).

Technical writing skills focusing on basic techniques of exposition for the technical field, functional description, process writing, technical vocabulary, correct usage, and accurate editing.

BUS 62 Survey of Technical Writing 5 Units

Prerequisite: Business 61 or English Writing 61 or Technical Writing 61 (may be taken concurrently).

(Also listed as English Writing 62 and Technical Writing 62. Students may enroll in only one department for credit.)

Five hours lecture (60 hours total per quarter).

Technical writing skills focusing on short document formats, production of sections of various technical documents, and incorporation of graphics within text.

BUS 63 Technical Publications 5 Units

Prerequisite: Business 61 or English Writing 61 or Technical Writing 61.

(Also listed as English Writing 63 and Technical Writing 63. Students may enroll in only one department for credit.)

Five hours lecture (60 hours total per quarter).

Technical writing and editing skills applied through individual and group assignments with emphasis on planning, scheduling, and producing longer reports, manuals, and instructions. Development of organizational skills and individual documentation solutions.

BUS 64 Technical Writing Seminar 5 Units

Prerequisite: Business 62 or 63; or English Writing 62 or 63; or Technical Writing 62 or 63.

(Also listed as English Writing 64 and Technical Writing 64. Students may enroll in only one department for credit.)

Five hours lecture (60 hours total per quarter).

Technical communication and editing skills applied through the preparation and presentation of a complete document according to the standards of the student's chosen technical field.

BUS 65 Leadership 5 Units

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Five hours lecture (60 hours total per quarter).

Develop effectiveness in leadership situations and understand the complex challenges of leadership. Adapt leadership techniques to build successful relationships in a culturally diverse world.

BUS 67A Federal Income Tax 4 Units

(Formerly Business 67.)

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273; Mathematics 210 or equivalent; Accounting 1A (may be taken concurrently).

(Also listed as Accounting 67A. Students may enroll in either department, but not both, for credit.)

Four hours lecture (48 hours total per quarter).

A study of current federal income tax law and the procedures for preparing an individual's tax return.

BUS 67B Advanced Tax Accounting I 4 Units

(Formerly Business 68A.)

Advisory: Accounting 67A or Business 67A.

(Also listed as Accounting 67B. Students may enroll in either department, but not both, for credit.)

Four hours lecture (48 hours total per quarter).

A study of current federal income tax law and California income tax law as it relates to individuals and sole proprietorship taxes.

BUS 69 Investment Fundamentals 4 Units

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273; Mathematics 210 or equivalent.

Four hours lecture (48 hours total per quarter).

Introduction to securities investment: securities characteristics and rights; selection and purchase of stock; analysis of financial statements; investment methods; technical market and stock analysis; impact on financial planning.

BUS 70 Principles of E-Business 5 Units

Requisite/Advisory: None.

Five hours lecture (60 hours total per quarter).

Theory and practice of effectively conducting and managing business over the Internet. Insights into e-business models, strategy, technology, auctions, and marketing. Students are expected to complete computer assignments.

BUS 85 Business Communication 3 Units

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273; Computer Applications and Office Systems 84A.

Three hours lecture (36 hours total per quarter).

Application of writing skills to business communications; public relations functions of business correspondence.

BUS 87 Introduction to Selling 4 Units

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273; Mathematics 210 or equivalent.

Four hours lecture (48 hours total per quarter).

Application of business and behavioral sciences in a selling environment. Building successful relationships in a culturally diverse world.

BUS 89 Advertising 5 Units

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Five hours lecture (60 hours total per quarter).

Historical, economic, and social aspects of advertising: role of the advertising agency; media alternatives and the development of creative advertising copy; development of advertising budgets; analysis of successful advertising campaigns.

BUS 90 Principles of Marketing 5 Units

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Five hours lecture (60 hours total per quarter).

Fundamentals of marketing: product planning and development; pricing strategies; marketing channels.

BUS 91 Introduction to Personal Finance 3 Units

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Three hours lecture (36 hours total per quarter).

Introduction to a range of personal financial planning fundamentals including spending habits, taxes, saving, investing, and insurance. Planning for major life events such as paying for college, buying a home, and retiring comfortably.

BUS 96 Principles of Management 5 Units

(Formerly Business 96A.)

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Five hours lecture (60 hours total per quarter).

Roles, functions, and responsibilities of management; the external environments and their impact on management.

CAD and Digital Imaging

CADI 51 Geometric Dimensioning and Tolerancing 2 Units

(Formerly CAD and Digital Imaging 51C.)

Requisite/Advisory: None.

Four hours lecture-laboratory (48 hours total per quarter).

Geometric dimensioning and tolerancing, utilizing ANSI Y14.5M standards as they apply to engineering and manufacturing drawings and machining.

**CADI 56 Special Projects in CAD 1 Unit
CADI 56X 2 Units
CADI 56Y 3 Units**

Prerequisite: Consent of instructor and division dean.

Three hours laboratory for each unit of credit (36 hours total for each unit of credit per quarter).

(Any combination of CAD and Digital Imaging 56, 56X and 56Y may be taken up to six times, not to exceed 18 units, as long as the projects are different each time.)

Projects advancing student's knowledge and experience in a selected area of CAD. Students will complete project objectives/requirements as determined in 3, 4, and 5 of the Special Projects Contract.

CADI 58B Unigraphics NX (Beginning) 4 Units

Requisite/Advisory: None.

Eight hours lecture-laboratory (96 hours total per quarter).

Fundamentals of computer-aided design and drafting using Unigraphics software. Application of Unigraphics in creating manufacturing models.

CDI 58C	Unigraphics NX (Beginning)	4 Units	CDI 63E	SolidWorks (SURFACES)	4 Units
<i>Requisite/Advisory: None.</i>			<i>Requisite/Advisory: None.</i>		
<i>Eight hours lecture-laboratory (96 hours total per quarter).</i>			<i>Eight hours lecture-laboratory (96 hours total per quarter).</i>		
Fundamentals of computer-aided design and drafting using Unigraphics software.			Surface design using SolidWorks software. Application of surfaces in creating product models and molds for industry.		
Application of Unigraphics in creating manufacturing models.					
CDI 58D	Unigraphics NX (Beginning)	4 Units	CDI 63F	SolidWorks (SURFACES)	4 Units
<i>Requisite/Advisory: None.</i>			<i>Requisite/Advisory: None.</i>		
<i>Eight hours lecture-laboratory (96 hours total per quarter).</i>			<i>Eight hours lecture-laboratory (96 hours total per quarter).</i>		
Fundamentals of computer-aided design and drafting using Unigraphics software.			Surface design using SolidWorks software. Application of surfaces in creating product models and molds for industry.		
Application of Unigraphics in creating manufacturing models.					
CDI 60C	SolidWorks (Beginning)	4 Units	CDI 67D	SolidWorks (Simulation)	4 Units
<i>Requisite/Advisory: None.</i>			<i>Requisite/Advisory: None.</i>		
<i>Eight hours lecture-laboratory (96 hours total per quarter).</i>			<i>Eight hours lecture-laboratory (96 hours total per quarter).</i>		
Fundamentals of computer-aided design and drafting using SolidWorks software.			Application of Simulation to validate and optimize 3D models by measuring stress and displacement distributions of new designs through simulating responses to structural and thermal loads.		
Application of SolidWorks in creating manufacturing models.					
CDI 60D	SolidWorks (Beginning)	4 Units	CDI 67E	SolidWorks (Simulation)	4 Units
<i>Requisite/Advisory: None.</i>			<i>Requisite/Advisory: None.</i>		
<i>Eight hours lecture-laboratory (96 hours total per quarter).</i>			<i>Eight hours lecture-laboratory (96 hours total per quarter).</i>		
Fundamentals of computer-aided design and drafting using SolidWorks software.			Application of Simulation to validate and optimize 3D models by measuring stress and displacement distributions of new designs through simulating responses to structural and thermal loads.		
Application of SolidWorks in creating manufacturing models.					
CDI 60E	SolidWorks (Beginning)	4 Units	CDI 67F	SolidWorks (Simulation)	4 Units
<i>Requisite/Advisory: None.</i>			<i>Requisite/Advisory: None.</i>		
<i>Eight hours lecture-laboratory (96 hours total per quarter).</i>			<i>Eight hours lecture-laboratory (96 hours total per quarter).</i>		
Fundamentals of computer-aided design and drafting using SolidWorks software.			Application of Simulation to validate and optimize 3D models by measuring stress and displacement distributions of new designs through simulating responses to structural and thermal loads.		
Application of SolidWorks in creating manufacturing models.					
CDI 60F	SolidWorks (Beginning)	4 Units	CDI 70C	Pro/ENGINEER Wildfire (Beginning)	4 Units
<i>Requisite/Advisory: None.</i>			<i>Requisite/Advisory: None.</i>		
<i>Eight hours lecture-laboratory (96 hours total per quarter).</i>			<i>Eight hours lecture-laboratory (96 hours total per quarter).</i>		
Fundamentals of computer-aided design and drafting using SolidWorks software.			Fundamentals of part design, using Pro/ENGINEER. Application of operating system, software, hardware, and peripherals in creating 3-D manufacturing models with Pro/ENGINEER.		
Application of SolidWorks in creating manufacturing models.					
CDI 61C	SolidWorks (Intermediate)	4 Units	CDI 70D	Pro/ENGINEER Wildfire (Beginning)	4 Units
<i>Prerequisite: CAD and Digital Imaging 60C.</i>			<i>Requisite/Advisory: None.</i>		
<i>Eight hours lecture-laboratory (96 hours total per quarter).</i>			<i>Eight hours lecture-laboratory (96 hours total per quarter).</i>		
Intermediate-level application of SolidWorks in creating solid models and drawings.			Fundamentals of part design, using Pro/ENGINEER. Application of operating system, software, hardware, and peripherals in creating 3-D manufacturing models with Pro/ENGINEER.		
Introduction to surface features and basic surfacing techniques.					
CDI 61D	SolidWorks (Intermediate)	4 Units			
<i>Prerequisite: CAD and Digital Imaging 60D.</i>					
<i>Eight hours lecture-laboratory (96 hours total per quarter).</i>					
Intermediate-level application of SolidWorks in creating solid models and drawings.					
Introduction to surface features and basic surfacing techniques.					
CDI 61E	SolidWorks (Intermediate)	4 Units	CDI 70E	Creo Parametric (Beginning)	4 Units
<i>Prerequisite: CAD and Digital Imaging 60E.</i>			<i>Requisite/Advisory: None.</i>		
<i>Eight hours lecture-laboratory (96 hours total per quarter).</i>			<i>Eight hours lecture-laboratory (96 hours total per quarter).</i>		
Intermediate-level application of SolidWorks in creating solid models and drawings.			Fundamentals of part design, using Creo Parametric (formally Pro/ENGINEER).		
Introduction to surface features and basic surfacing techniques.			Application of operating system, software, hardware, and peripherals in creating 3D manufacturing models with Creo Parametric.		
CDI 61F	SolidWorks (Intermediate)	4 Units	CDI 71C	Pro/ENGINEER Wildfire (Intermediate)	4 Units
<i>Prerequisite: CAD and Digital Imaging 60F.</i>			<i>Prerequisite: CAD and Digital Imaging 70C.</i>		
<i>Eight hours lecture-laboratory (96 hours total per quarter).</i>			<i>Eight hours lecture-laboratory (96 hours total per quarter).</i>		
Intermediate-level application of SolidWorks in creating solid models and drawings.			Assembly creation and drawing output using Pro/ENGINEER.		
Introduction to surface features and basic surfacing techniques.					
CDI 62C	SolidWorks (Advanced)	4 Units	CDI 71D	Pro/ENGINEER Wildfire (Intermediate)	4 Units
<i>Prerequisite: CAD and Digital Imaging 61C.</i>			<i>Prerequisite: CAD and Digital Imaging 70D.</i>		
<i>Eight hours lecture-laboratory (96 hours total per quarter).</i>			<i>Eight hours lecture-laboratory (96 hours total per quarter).</i>		
Advanced CAD modeling techniques using SolidWorks. Emphasis is on surface modeling and "top-down" design.			Assembly creation and drawing output using Pro/ENGINEER.		
CDI 62D	SolidWorks (Advanced)	4 Units	CDI 71E	Creo Parametric (Intermediate)	4 Units
<i>Prerequisite: CAD and Digital Imaging 61D.</i>			<i>Prerequisite: CAD and Digital Imaging 70E.</i>		
<i>Eight hours lecture-laboratory (96 hours total per quarter).</i>			<i>Eight hours lecture-laboratory (96 hours total per quarter).</i>		
Advanced CAD modeling techniques using SolidWorks. Emphasis is on surface modeling and "top-down" design.			Assembly creation and drawing output using Creo Parametric (formally Pro/ENGINEER).		
CDI 62E	SolidWorks (Advanced)	4 Units	CDI 72C	Pro/ENGINEER Wildfire (Advanced)	4 Units
<i>Prerequisite: CAD and Digital Imaging 61E.</i>			<i>Prerequisite: CAD and Digital Imaging 71C.</i>		
<i>Eight hours lecture-laboratory (96 hours total per quarter).</i>			<i>Eight hours lecture-laboratory (96 hours total per quarter).</i>		
Advanced CAD modeling techniques using SolidWorks. Emphasis is on surface modeling and "top-down" design.			Advanced design and photo-rendering modules and capabilities from Pro/ENGINEER are used to create unique designs and display them in a realistic, lifelike setting.		
CDI 62F	SolidWorks (Advanced)	4 Units	CDI 72D	Pro/ENGINEER Wildfire (Advanced)	4 Units
<i>Prerequisite: CAD and Digital Imaging 61F.</i>			<i>Prerequisite: CAD and Digital Imaging 71D.</i>		
<i>Eight hours lecture-laboratory (96 hours total per quarter).</i>			<i>Eight hours lecture-laboratory (96 hours total per quarter).</i>		
Advanced CAD modeling techniques using SolidWorks. Emphasis is on surface modeling and "top-down" design.			Advanced design and photo-rendering modules and capabilities from Pro/ENGINEER are used to create unique designs and display them in a realistic, lifelike setting.		
CDI 63D	SolidWorks (SURFACES)	4 Units			
<i>Requisite/Advisory: None.</i>					
<i>Eight hours lecture-laboratory (96 hours total per quarter).</i>					
Surface design using SolidWorks software. Application of surfaces in creating product models and molds for industry.					

CDI 72E	Creo Parametric (Advanced)	4 Units
<i>Prerequisite: CAD and Digital Imaging 71E.</i>		
<i>Eight hours lecture-laboratory (96 hours total per quarter).</i>		
Advanced design and photo-rendering modules and capabilities from Creo Parametric (formally Pro/ENGINEER) are used to create unique designs and display them in a realistic, lifelike setting.		
CDI 73C	Pro/ENGINEER Wildfire (Pro/ SHEETMETAL)	4 Units
<i>Prerequisite: CAD and Digital Imaging 70C.</i>		
<i>Eight hours lecture-laboratory (96 hours total per quarter).</i>		
Principles of sheet metal design using Pro/ENGINEER Pro/SHEETMETAL.		
CDI 73D	Pro/ENGINEER Wildfire (Pro/ SHEETMETAL)	4 Units
<i>Prerequisite: CAD and Digital Imaging 70D.</i>		
<i>Eight hours lecture-laboratory (96 hours total per quarter).</i>		
Principles of sheet metal design using Pro/ENGINEER Pro/SHEETMETAL.		
CDI 73E	Creo Parametric (Sheetmetal)	4 Units
<i>Prerequisite: CAD and Digital Imaging 70E.</i>		
<i>Eight hours lecture-laboratory (96 hours total per quarter).</i>		
Principles of sheet metal design using Creo Parametric (formally Pro/ENGINEER).		
CDI 74C	Pro/ENGINEER Wildfire (Pro/ SURFACE)	4 Units
<i>Prerequisite: CAD and Digital Imaging 70C.</i>		
<i>Eight hours lecture-laboratory (96 hours total per quarter).</i>		
Surface design using Pro/ENGINEER software. Application of surfaces in creating product models for industry.		
CDI 74D	Pro/ENGINEER Wildfire (Pro/ SURFACE)	4 Units
<i>Prerequisite: CAD and Digital Imaging 70D.</i>		
<i>Eight hours lecture-laboratory (96 hours total per quarter).</i>		
Surface design using Pro/ENGINEER software. Application of surfaces in creating product models for industry.		
CDI 74E	Creo Parametric (Surface)	4 Units
<i>Prerequisite: CAD and Digital Imaging 70E.</i>		
<i>Eight hours lecture-laboratory (96 hours total per quarter).</i>		
Surface design using Creo Parametric (formally Pro/ENGINEER) software. Application of surfaces in creating product models for industry.		
CDI 77C	Pro/ENGINEER Wildfire (Pro/ MECHANICA)	4 Units
<i>Prerequisite: CAD and Digital Imaging 70C.</i>		
<i>Eight hours lecture-laboratory (96 hours total per quarter).</i>		
Application of Pro/MECHANICA to validate and optimize 3D models by measuring stress and displacement distributions of new designs through simulating responses to structural loads.		
CDI 77D	Pro/ENGINEER Wildfire (Pro/ MECHANICA)	4 Units
<i>Prerequisite: CAD and Digital Imaging 70D.</i>		
<i>Eight hours lecture-laboratory (96 hours total per quarter).</i>		
Application of Pro/MECHANICA to validate and optimize 3D models by measuring stress and displacement distributions of new designs through simulating responses to structural loads.		
CDI 77E	Creo Parametric (Mechanica)	4 Units
<i>Prerequisite: CAD and Digital Imaging 70E.</i>		
<i>Eight hours lecture-laboratory (96 hours total per quarter).</i>		
Application of Creo Parametric (Mechanica) (formally Pro/ENGINEER MECHANICA) to validate and optimize 3D models by measuring stress and displacement distributions of new designs through simulating responses to structural loads.		
CDI 80C	AutoCAD (Beginning)	4 Units
<i>Requisite/Advisory: None.</i>		
<i>Eight hours lecture-laboratory (96 hours total per quarter).</i>		
Principles and applications of computer-aided design and drafting using AutoCAD software. Emphasis on 2D drawings and dimensioning.		
CDI 80D	AutoCAD (Beginning)	4 Units
<i>Requisite/Advisory: None.</i>		
<i>Eight hours lecture-laboratory (96 hours total per quarter).</i>		
Principles and applications of computer-aided design and drafting using AutoCAD software. Emphasis on 2D drawings and dimensioning.		
CDI 80E	AutoCAD (Beginning)	4 Units
<i>Requisite/Advisory: None.</i>		
<i>Eight hours lecture-laboratory (96 hours total per quarter).</i>		
Principles and applications of computer-aided design and drafting using AutoCAD software. Emphasis on 2D drawings and dimensioning.		

CDI 81C	AutoCAD (Intermediate)	4 Units
<i>Prerequisite: CAD and Digital Imaging 80C.</i>		
<i>Eight hours lecture-laboratory (96 hours total per quarter).</i>		
Intermediate mechanical design using AutoCAD software. Emphasis is on the CAD design process and drawing production. Drawings will be produced in 2-D and 3-D.		
CDI 81D	AutoCAD (Intermediate)	4 Units
<i>Prerequisite: CAD and Digital Imaging 80D.</i>		
<i>Eight hours lecture-laboratory (96 hours total per quarter).</i>		
Intermediate mechanical design using AutoCAD software. Emphasis is on the CAD design process and drawing production. Drawings will be produced in 2-D and 3-D.		
CDI 81E	AutoCAD (Intermediate)	4 Units
<i>Prerequisite: CAD and Digital Imaging 80E.</i>		
<i>Eight hours lecture-laboratory (96 hours total per quarter).</i>		
Intermediate mechanical design using AutoCAD software. Emphasis is on the CAD design process and drawing production. Drawings will be produced in 2-D and 3-D.		
CDI 83C	AutoDesk REVIT Architecture	4 Units
<i>Requisite/Advisory: None.</i>		
<i>Eight hours lecture-laboratory (96 hours total per quarter).</i>		
Application of REVIT Architecture in creating building designs and extracting documents.		
CDI 83D	AutoDesk REVIT Architecture	4 Units
<i>Requisite/Advisory: None.</i>		
<i>Eight hours lecture-laboratory (96 hours total per quarter).</i>		
Application of REVIT Architecture in creating building designs and extracting documents.		
CDI 83E	AutoDesk REVIT Architecture	4 Units
<i>Requisite/Advisory: None.</i>		
<i>Eight hours lecture-laboratory (96 hours total per quarter).</i>		
Application of REVIT Architecture in creating building designs and extracting documents.		
CDI 85C	AutoDesk Inventor	4 Units
<i>Requisite/Advisory: None.</i>		
<i>Eight hours lecture-laboratory (96 hours total per quarter).</i>		
Fundamentals of computer-aided design and drafting using AutoDesk Inventor software. Application of Inventor in creating manufacturing models.		
CDI 85D	AutoDesk Inventor	4 Units
<i>Requisite/Advisory: None.</i>		
<i>Eight hours lecture-laboratory (96 hours total per quarter).</i>		
Fundamentals of computer-aided design and drafting using AutoDesk Inventor software. Application of Inventor in creating manufacturing models.		
CDI 85E	AutoDesk Inventor	4 Units
<i>Requisite/Advisory: None.</i>		
<i>Eight hours lecture-laboratory (96 hours total per quarter).</i>		
Fundamentals of computer-aided design and drafting using AutoDesk Inventor software. Application of Inventor in creating manufacturing models.		
CDI 95A	CATIA (Beginning)	4 Units
<i>Requisite/Advisory: None.</i>		
<i>Eight hours lecture-laboratory (96 hours total per quarter).</i>		
Fundamentals of computer-aided design and drafting using CATIA software. Application of CATIA in creating manufacturing models.		
CDI 95B	CATIA (Beginning)	4 Units
<i>Requisite/Advisory: None.</i>		
<i>Eight hours lecture-laboratory (96 hours total per quarter).</i>		
Fundamentals of computer-aided design and drafting using CATIA software. Application of CATIA in creating manufacturing models.		
CDI 101	CAD Technology Laboratory (Creo)	1/2 Unit
CDI 101X		1 Unit
CDI 101Y		1 1/2 Units
CDI 101Z		2 Units
<i>Co-requisite: CAD and Digital Imaging 70A-H, 71A-H, 72A-H, 73A-H, 74A-H or 77A-H.</i>		
<i>Three hours laboratory for each unit of credit (36 hours total for each unit of credit per quarter).</i>		
<i>(Any combination of CAD and Digital Imaging 101, 101X, 101Y and 101Z may be taken up to six times for credit as long as the projects are different each time.)</i>		
<i>Pass-No Pass (P-NP) course.</i>		
Self-paced projects and computer based training on Creo software. Instruction is in the use of CAD technology using projects from other Creo courses. Learning assistance is provided in a designated De Anza center by an approved De Anza instructor who is trained in Creo software. Students will use the classroom available only CBT (Computer based Training) module available for the CAD system. All projects will be derived from this CBT.		

CDI 102	CAD Technology Laboratory (SolidWorks)	1/2 Unit
CDI 102X		1 Unit
CDI 102Y		1 1/2 Units
CDI 102Z		2 Units
<i>Co-requisite: CAD and Digital Imaging 60A-H, 61A-H, 62A-H or 67A-H.</i>		
<i>Three hours laboratory for each unit of credit (36 hours total for each unit of credit per quarter).</i>		
<i>(Any combination of CAD and Digital Imaging 102, 102X, 102Y and 102Z may be taken up to six times for credit as long as the projects are different each time.)</i>		
<i>Pass-No Pass (P-NP) course.</i>		
Self-paced projects and computer based training on SolidWorks software. Instruction is in the use of CAD technology using projects from other SolidWorks courses. Learning assistance is provided in a designated De Anza center by an approved De Anza instructor who is trained in SolidWorks software. Students will use the classroom available only CBT (Computer based Training) module available for the CAD system. All projects will be derived from this CBT.		
CDI 103	CAD Technology Laboratory (AutoDESK)	1/2 Unit
CDI 103X		1 Unit
CDI 103Y		1 1/2 Units
CDI 103Z		2 Units
<i>Co-requisite: CAD and Digital Imaging 80A-H, 81A-H or 83A-H.</i>		
<i>Three hours laboratory for each unit of credit (36 hours total for each unit of credit per quarter).</i>		
<i>(Any combination of CAD and Digital Imaging 103, 103X, 103Y and 103Z may be taken up to six times for credit as long as the projects are different each time.)</i>		
<i>Pass-No Pass (P-NP) course.</i>		
Self-paced projects and computer based training on AutoDESK software. Instruction is in the use of CAD technology using projects from other AutoDESK courses. Learning assistance is provided in a designated De Anza center by an approved De Anza instructor who is trained in AutoDESK software. Students will use the classroom available only CBT (Computer based Training) module available for the CAD system. All projects will be derived from this CBT.		
CDI 104	CAD Technology Laboratory (Inventor)	1/2 Unit
CDI 104X		1 Unit
CDI 104Y		1 1/2 Units
CDI 104Z		2 Units
<i>Co-requisite: CAD and Digital Imaging 85A-H.</i>		
<i>Three hours laboratory for each unit of credit (36 hours total for each unit of credit per quarter).</i>		
<i>(Any combination of CAD and Digital Imaging 104, 104X, 104Y and 104Z may be taken up to six times for credit as long as the projects are different each time.)</i>		
<i>Pass-No Pass (P-NP) course.</i>		
Self-paced projects and computer based training on Inventor software. Instruction is in the use of CAD technology using projects from other Inventor courses. Learning assistance is provided in a designated De Anza center by an approved De Anza instructor who is trained in Inventor software. Students will use the classroom available only CBT (Computer based Training) module available for the CAD system. All projects will be derived from this CBT.		
CDI 105	CAD Technology Laboratory (NX)	1/2 Unit
CDI 105X		1 Unit
CDI 105Y		1 1/2 Units
CDI 105Z		2 Units
<i>Co-requisite: CAD and Digital Imaging 58A-H.</i>		
<i>Three hours laboratory for each unit of credit (36 hours total for each unit of credit per quarter).</i>		
<i>(Any combination of CAD and Digital Imaging 105, 105X, 105Y and 105Z may be taken up to six times for credit as long as the projects are different each time.)</i>		
<i>Pass-No Pass (P-NP) course.</i>		
Self-paced projects and computer based training on NX software. Instruction is in the use of CAD technology using projects from other NX courses. Learning assistance is provided in a designated De Anza center by an approved De Anza instructor who is trained in NX software. Students will use the classroom available only CBT (Computer based Training) module available for the CAD system. All projects will be derived from this CBT.		
CDI 106	CAD Technology Laboratory (CATIA)	1/2 Unit
CDI 106X		1 Unit
CDI 106Y		1 1/2 Units
CDI 106Z		2 Units
<i>Co-requisite: CAD and Digital Imaging 95A-H.</i>		
<i>Three hours laboratory for each unit of credit (36 hours total for each unit of credit per quarter).</i>		
<i>(Any combination of CAD and Digital Imaging 106, 106X, 106Y and 106Z may be taken up to six times for credit as long as the projects are different each time.)</i>		
<i>Pass-No Pass (P-NP) course.</i>		

Self-paced projects and computer based training on CATIA software. Instruction is in the use of CAD technology using projects from other CATIA courses. Learning assistance is provided in a designated De Anza center by an approved De Anza instructor who is trained in CATIA software. Students will use the classroom available only CBT (Computer based Training) module available for the CAD system. All projects will be derived from this CBT.

CDI 114A Web Graphics/Animation Software (Flash) 3 Units

Advisory: English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263; Computer Applications and Office Systems 83A or Arts 83A.
(Also listed as Arts 114A and Computer Applications and Office Systems 114A. Students may enroll in only one department for credit.)
Six hours lecture-laboratory (72 hours total per quarter).
Pass-No Pass (P-NP) course.
 Basic and intermediate principles of graphics/animation for the Web. Web graphics/animation terminology and software. This course is for the content person to build a website.

Cantonese

CANT 1 Elementary Cantonese (First Quarter) 5 Units

(See general education pages for the requirement this course meets.)
Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.
Five hours lecture (60 hours total per quarter).
 Cantonese language and culture of Southeast China in the region of Guangdong Province is presented and studied. Basic speaking, listening, reading and writing of Cantonese will be introduced within a cultural context. Emphasis will be on language as an expression of culture.

CANT 2 Elementary Cantonese (Second Quarter) 5 Units

(See general education pages for the requirement this course meets.)
Prerequisite: Cantonese 1 (equivalent to one year of high school Cantonese) or equivalent.
Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.
Five hours lecture (60 hours total per quarter).
 Further development of material presented in Cantonese 1. Presentation and study of the second quarter elementary-level of Cantonese language and the culture of Guangdong Province. Basic speaking, listening, reading and writing of Cantonese will be continued and practiced within a cultural context. Emphasis will be on language as an expression of culture.

CANT 3 Elementary Cantonese (Third Quarter) 5 Units

(See general education pages for the requirement this course meets.)
Prerequisite: Cantonese 2 (equivalent to two years of high school Cantonese) or equivalent.
Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.
Five hours lecture (60 hours total per quarter).
 Further development of material presented in Cantonese 1 and Cantonese 2. Presentation and study of the third quarter elementary-level of Cantonese language and the culture of Guangdong Province. Basic speaking, listening, reading and writing of Cantonese will be further introduced within a cultural context. Emphasis will be on language as an expression of culture.

CANT 60A Cantonese - Introductory Conversation (First Quarter) 3 Units

Requisite/Advisory: None.
Three hours lecture (36 hours total per quarter).
 An introduction to the language and cultures of Cantonese-speaking communities. Spoken Cantonese will be introduced with focus on pronunciation and vocabulary, in connection with elements of Chinese and Cantonese culture necessary to understand the language. Intensive drills in the patterns and idioms of daily speech will be supported by sufficient grammar to give flexibility in the spoken language.

CANT 60B Cantonese - Introductory Conversation (Second Quarter) 3 Units

Prerequisite: Cantonese 60A or equivalent.
Three hours lecture (36 hours total per quarter).
 The next course in the introductory conversation Cantonese sequence, following Cantonese 60A. Continues the introduction to the language and culture of Cantonese-speaking communities. The vocabulary and grammatical structures mastered in Cantonese 60A will be consolidated and further developed, in conjunction with elements of Chinese and Cantonese culture. Emphasis will be on practical communication for everyday use, particularly conversational fluency.

CANT 60C**Cantonese - Introductory Conversation (Third Quarter)****3 Units***Prerequisite: Cantonese 60B or equivalent.**Three hours lecture (36 hours total per quarter).*

The next course in the introductory conversation Cantonese sequence, following Cantonese 60B. Continues the introduction to the language and culture of Cantonese-speaking communities. The vocabulary and grammatical structures mastered in Cantonese 60B will be consolidated and further developed, in conjunction with elements of Chinese and Cantonese culture. Focus will be on speaking and comprehension proficiency.

CANT 61A**Cantonese - Intermediate Conversation (First Quarter)****3 Units***Prerequisite: Cantonese 60C or equivalent.**Three hours lecture (36 hours total per quarter).*

The first course in the intermediate conversation Cantonese sequence, following Cantonese 60C. Continues the introduction to the language and culture of Cantonese-speaking communities in the world. The vocabulary and grammatical structures mastered in Cantonese 60C will be consolidated and further developed, in conjunction with elements of Chinese and Cantonese culture. Elements of Cantonese for business are introduced such as business setting interactions.

CANT 61B**Cantonese - Intermediate Conversation (Second Quarter)****3 Units***Prerequisite: Cantonese 61A or equivalent.**Three hours lecture (36 hours total per quarter).*

The next course in the intermediate conversation Cantonese sequence, following Cantonese 61A. Continues the introduction to the language and culture of Cantonese-speaking communities in the world. The vocabulary and grammatical structures mastered in Cantonese 61A will be consolidated and further developed, in conjunction with elements of Chinese and Cantonese culture and history to be discussed in class. Elements of Chinese for business are further introduced such as meeting discussions.

CANT 61C**Cantonese - Intermediate Conversation (Third Quarter)****3 Units***Prerequisite: Cantonese 61B or equivalent.**Three hours lecture (36 hours total per quarter).*

The high intermediate level of conversation, following Cantonese 61B. Continues the introduction to the language and culture of Cantonese-speaking communities in the world. The vocabulary and grammatical structures mastered in Cantonese 61B will be consolidated and further developed, in conjunction with elements of Chinese and Cantonese culture and history. Current events from newspaper/media will be discussed and elements of Chinese for business are further introduced such as every day commercial transactions.

Career Life Planning**CLP 70****Self-Assessment****4 Units***(See general education pages for the requirement this course meets.)**(Students may enroll in either Career Life Planning 70 or 75, but not both, for credit.)**Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.**Four hours lecture (48 hours total per quarter).*

Examine the decision-making process by exploring theories in career development and other factors such as familial, social, and cultural issues that influence career and lifestyle choices. Utilize self-assessment inventories to identify individual interests, values, skills, and personality types as they relate to career/college major options. Become familiar with career development software, related technology and develop skills to enhance the job search process.

CLP 75**College Major and Career Options****2 Units***(Students may enroll in either Career Life Planning 70 or 75, but not both, for credit.)**Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.**Two hours lecture (24 hours total per quarter).**Pass-No Pass (P-NP) course.*

Identify your compatible college majors and career options by completing a variety of self-assessment inventories. Examine how individual, family, social, and cultural perspectives influence the college major and career decision-making process. Review college major and career myths, the purpose and structure of higher education, and organizational structures found in employment settings.

Chemistry**CHEM 1A****General Chemistry****5 Units***(See general education pages for the requirement this course meets.)**Prerequisite: Chemistry 50 or satisfactory score on Chemistry Placement Test; Mathematics 114 or equivalent.**Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.**Three hours lecture, six hours laboratory (108 hours total per quarter).*

An introduction to the structure and reactivity of matter at the molecular level. Application of critical reasoning to modern chemical theory and structured numerical problem solving. Development of molecular structure from rudimentary quantum mechanics, including an introduction to ionic and covalent bonding. Chemical problem solving involving both formula and reaction stoichiometry employing the unit analysis method. Application of Kinetic Molecular Theory to the study of classical gas laws and an introduction to thermochemistry.

CHEM 1B**General Chemistry****5 Units***Prerequisite: Chemistry 1A with a grade of C or better.**Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.**Three hours lecture, six hours laboratory (108 hours total per quarter).*

Continuation of an introduction to the principles of chemistry. Investigation of reversible reactions from the standpoints of kinetics, thermodynamics, and equilibrium. Application of equilibrium to the reactions of acids and bases.

CHEM 1C**General Chemistry and Qualitative Analysis****5 Units***Prerequisite: Chemistry 1B with a grade of C or better.**Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.**Three hours lecture, six hours laboratory (108 hours total per quarter).*

Introduction to electrochemistry, the chemistry of transition metals, and the chemistry of organic compounds. Identification of ions using qualitative analysis methods.

CHEM 10**Introductory Chemistry****5 Units***(See general education pages for the requirement this course meets.)**Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273; Mathematics 212 or equivalent.**Four hours lecture, three hours laboratory (84 hours total per quarter).*

An introduction to the discipline of chemistry, including chemical laboratory techniques and methods and a survey of important chemical principles. The course emphasizes chemistry as a subject of scientific inquiry and is designed to give the student a general appreciation for chemistry as a science.

CHEM 12A**Organic Chemistry****5 Units***Prerequisite: Chemistry 1C with a grade of C or better.**Advisory: English Writing 1A or English as a Second Language 5.**Three hours lecture, six hours laboratory (108 hours total per quarter).*

An introduction to the physical properties and chemical behavior of important classes of organic compounds, focusing on hydrocarbons and haloalkanes. Emphasis on retrosynthesis, spectroscopic structure determination, and reaction mechanism. Laboratory experiments involving the synthesis of simple compounds and the characterization of those compounds using gas chromatography (GC), and infrared (IR) and nuclear magnetic resonance (NMR) spectroscopy. For chemistry majors or those in closely allied fields such as biochemistry and chemical engineering.

CHEM 12B**Organic Chemistry****5 Units***Prerequisite: Chemistry 12A with a grade of C or better.**Advisory: English Writing 1A or English as a Second Language 5.**Three hours lecture, six hours laboratory (108 hours total per quarter).*

An exploration of the physical properties and chemical behavior of important classes of organic compounds, focusing on: polyenes; aromatic compounds; alcohols, thiols, and ethers; and aldehydes and ketones and their derivatives. Emphasis on retrosynthesis, spectroscopic structure determination, and reaction mechanism. Laboratory experiments involving the synthesis of simple compounds and the characterization of those compounds using chromatography and infrared (IR), ultraviolet-visible (UV-Vis), and nuclear magnetic resonance (NMR) spectroscopy. For chemistry majors or those in closely allied fields such as biochemistry and chemical engineering.

CHEM 12C**Organic Chemistry****5 Units***Prerequisite: Chemistry 12B with a grade of C or better.**Advisory: English Writing 1A or English as a Second Language 5.**Three hours lecture, six hours laboratory (108 hours total per quarter).*

An exploration of the physical properties and chemical behavior of important classes of organic compounds, focusing on amines, carboxylic acids, and carboxylic acid derivatives, with an introduction to the chemistry of terpenes, lipids, carbohydrates, and proteins. Emphasis on retrosynthesis, spectroscopic structure determination, and reaction mechanism. Laboratory experiments involving the multi-step synthesis of organic compounds and the characterization of those compounds using chromatography and infrared (IR) and nuclear magnetic resonance (NMR) spectroscopy. For chemistry majors or those in closely allied fields such as biochemistry and chemical engineering.

CHEM 30A Introduction to General, Organic and Biochemistry I 5 Units

(See general education pages for the requirement this course meets.)

Prerequisite: Mathematics 114 or equivalent.

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Four hours lecture, three hours laboratory (84 hours total per quarter).

This is a two-part class to be taken in sequence by students entering allied health fields. The focus of the first part of this class is an introduction to general chemistry. This course begins with a discussion of various measurement tools. This will be followed with a discussion of energy and matter which will be followed by a discussion of the discovery of an atom. The next set of topics will cover an introduction to elements, compounds, and types of bonding in compounds followed by various types of chemical reactions and stoichiometric calculations based on chemical equations. Properties of gases and solutions will be discussed. The course concludes with a discussion of acid-base chemistry and nuclear chemistry.

CHEM 30B Introduction to General, Organic and Biochemistry II 5 Units

(See general education pages for the requirement this course meets.)

Prerequisite: Chemistry 30A or Chemistry 50 or Chemistry 1A.

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Four hours lecture, three hours laboratory (84 hours total per quarter).

This class is for students entering the allied health fields. The focus of the second part of Introduction to General, Organic, and Biochemistry is organic and biochemistry. The topics included in organic chemistry are: hydrocarbons, alcohols, thiols, ethers, carboxylic acids, esters, amines, and amides. Various physical and chemical properties of these organic substances will be studied along with nomenclature and structural features. The topics included in biochemistry are: carbohydrates, fatty acids and lipids, amino acids and proteins, nucleic acids and DNA. Various physical and chemical properties of these biological molecules will be studied. A brief introduction to metabolism will also be discussed.

CHEM 50 Preparation Course for General Chemistry 5 Units

Prerequisite: Mathematics 114 or equivalent.

Advisory: English Writing 1A or English as a Second Language 5.

Four hours lecture, three hours laboratory (84 hours total per quarter).

An introduction to the core theory and problem-solving techniques of chemistry as preparation for Chemistry 1A and other science related fields. An introduction to gravimetric and volumetric analysis, rudimentary laboratory equipment and operations, and the preparation and maintenance of a laboratory notebook.

CHEM 77 Special Projects in Chemistry 1 Unit
CHEM 77X 2 Units
CHEM 77Y 3 Units

Prerequisite: Consent of instructor and division dean.

Three hours laboratory for each unit of credit (36 hours total for each unit of credit per quarter).

(Any combination of Chemistry 77, 77X and 77Y may be taken up to six times, not to exceed 18 units, as long as the projects are different each time.)

Pass-No Pass (P-NP) course.

Individual special reading, writing, or study projects in chemistry as determined in consultation with the instructor.

Child Development

C D 10G Child Development (The Early Years) 4 Units

(See general education pages for the requirement this course meets.)

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

(Also listed as Psychology 10G. Students may enroll in either department, but not both, for credit.)

Four hours lecture (48 hours total per quarter).

An examination of human growth and development from conception to middle childhood with particular attention given to current theoretical and research perspectives within a diverse society. Observational study of children with analysis of factors influencing development including conditions that put children at risk. (This course meets NAEYC Standards 1 and 3; NBPTS Standards 1 and 4; and CEC Standards 1, 2 and 3.)

C D 10H Child Development (Middle Childhood and Adolescence) 4 Units

(See general education pages for the requirement this course meets.)

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

(Also listed as Psychology 10H. Students may enroll in either department, but not both, for credit.)

Four hours lecture (48 hours total per quarter).

An examination of human growth and development both typical and atypical from school age through adolescence with particular attention given to current theoretical

and research perspectives within a diverse society.

(This course meets NAEYC Standards 1 and 3; NBPTS Standards 1 and 4; and CEC Standards 1, 2 and 3.)

C D 12 Child, Family and Community Interrelationships 4 Units

(See general education pages for the requirement this course meets.)

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Four hours lecture (48 hours total per quarter).

An introduction to the study of the developing person in a societal context including the interrelationship of family, schools and community. (Applicable standards to this course: NAEYC Standards; Standard 2 Building Family and Community Relationship; NBPTS Early Childhood Generalist Standards; Standard 2 Equity, Fairness and Diversity; Standard 7 Family, Community Partnerships; Standard 9 Reflective Practice; CEC/DEC Standards; Standard 9 Professional and Ethical Practice; Standard 10 Collaboration.)

C D 50 Principles and Practices of Teaching Young Children 3 Units

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Three hours lecture (36 hours total per quarter).

The underlying theoretical principles of developmentally appropriate practices applied to programs, environments, and teaching strategies.

(Applicable standards for this course: NAEYC Standard 4 Teaching and Learning; 4a Connecting with children and families; 4b Using developmentally effective approaches; Standard 5 Becoming a Professional 5a-5e; NBPTS Standard IV promoting Child Development and Learning; Standard IX Reflective Practice; CEC/DEC Standard 3 Individual learning differences; Standard 5 Learning environments and social interactions; Standard 9 Professional and ethical practice.)

C D 51 Student Teaching Practicum 5 Units

Prerequisite: Child Development 10G, 54, and two other Child Development curriculum courses (Child Development 53, 55, 61 or 63).

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Ten hours lecture-laboratory (120 hours total per quarter).

(May be taken up to three times for credit as long as experience is different each time.)

Laboratory experience with guided supervision working with children from infancy through the school age years. Emphasis will be on making connections between theory and practice, using observation and interactions to understand children's development, implementing developmentally appropriate, child centered approaches to teaching and learning and developing professional behaviors and attitudes.

(This course meets the NAEYC Standards 1, 2, 3, 4, and 5; and NBPTS Standards 1 through 9.)

C D 52 Observation and Assessment of the Young Child 3 Units

Prerequisite: Child Development 10G and 50.

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Three hours lecture (36 hours total per quarter).

Observation strategies and formal assessment methodologies used to understand children's development, age-appropriate curriculum and the classroom setting. (This course meets NAEYC Standards 3a-3d; NBPTS Standards 3 and 4; and DEC Standard 8 Assessment.)

C D 53 Creative Art for the Young Child 3 Units

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Three hours lecture (36 hours total per quarter).

Overview of creative activities for children from infancy through the school years. Emphasis is on design, presentation and assessment of developmentally appropriate activities that use sensory, child centered materials to enhance imagination, creative thinking, problem solving, divergent thinking and self-expression in young children. Special attention is given to creating a climate that supports creative exploration and the role of the teacher in promoting growth and development of creativity in each child.

(This course meets NAEYC Standards 1a, 1b, 1c; 4a, 4b, 4d; NBPTS Standards I, II, IV, VI; and CDE/DEC Standards CC1- K10, CC4-S2; EC4-S1; CC7, S10, S11, S13; EC7-S2.)

C D 54 Curriculum for Early Childhood Programs 3 Units

Prerequisite: Child Development 10G (may be taken concurrently).

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Three hours lecture (36 hours total per quarter).

Curriculum development with emphasis on planning curriculum that is emergent, developmentally and individually appropriate and inclusive.

(This course meets NAEYC Standards 1 and 4; and NBPTS Standards 4, 5 and 6.)

C D 55 Literacy Development and Activities for the Young Child 3 Units

Advisory: Child Development 10G and/or Child Development 50. Three hours lecture (36 hours total per quarter).

Theories of language acquisition and the process of language development in monolingual and young English language learners. Introduction to methods and materials that enhance emerging language and literacy for infants through school-age children in a culturally diverse society.

(This course meets NAEYC Standards: 1a, 1b, 1c; 3a, 3b, 3c; 4b, 4c, 4d.)

C D 56 Understanding and Working with English Language Learners 3 Units

Advisory: Completion of Child Development 10G (or Psychology 10G) and 55; English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

(Also listed as Education 56. Students may enroll in either department, but not both, for credit.)

Three hours lecture (36 hours total per quarter).

Developmental and cultural examination of the dual language learner in early childhood programs. Theories and developmental sequence of bilingual language acquisition. Role of teacher and methods for supporting the dual language child. (This course meets NAEYC Standard 4b: Teaching and learning: Using developmentally effective approaches; NBPTS Early childhood/Generalist Standard II: Equity, Fairness and Diversity; CEC Special Education Content Standards, Standard 2: Development & Characteristics of Learners; Standard 6: Language.)

C D 57 Self-Assessment for Teachers of Young Children: Field Experience 3 Units

Prerequisite: Child Development 10G or Psychology 10G.

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Two hours lecture, three hours laboratory (60 hours total per quarter).

Use of self-assessment techniques for individualized teacher preparation with emphasis on understanding the development of the child, teaching, guidance techniques, and assessment of personal effectiveness in the classroom. Students will use field placement to practice and develop skills.

C D 58 Infant/Toddler Development 4 Units

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Four hours lecture (48 hours total per quarter).

Development of physical, cognitive, social and emotional development from infancy to age three with emphasis on cultural diversity and family partnerships. Program planning based on observation of individual infants and communication with parents. Evaluation of assessment tools and methods for infants and toddlers, including administration, and interpretation. Development of needs and service plans for individual infants.

(This course meets NAEYC Standards 1-5; NBPTS Standards 4 and 5; and DEC Standard 5 Family Based Practices.)

C D 59G Supervision and Administration of Child Development Programs (Management Systems) 4 Units

Prerequisite: A minimum of 12 units of Child Development course work, which includes Child Development 10G.

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Four hours lecture (48 hours total per quarter).

A study of the development of management systems for the supervision and administration of various kinds of early childhood programs in the context of a diverse society. Emphasis is on program planning, organizational structure, program operation, program evaluation, budgeting, and personnel management.

C D 59H Supervision and Administration of Child Development Programs (Leadership Skills) 4 Units

Prerequisite: A minimum of 12 units of Child Development course work, which includes Child Development 10G.

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Four hours lecture (48 hours total per quarter).

A study of the methods and principles of leadership as they apply to administration of programs in early childhood settings. Emphasis is on personnel management, leadership styles and skills, interpersonal communication, ethical and professional standards and an awareness of the sociopolitical context of early childhood programs.

C D 60 Exceptional Children 3 Units

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Three hours lecture (36 hours total per quarter).

Characteristics and causes of exceptionality and the inclusion of children with disabilities in childhood settings (infant - adolescence), includes discussion of developmental disabilities, family, and community involvement. Implementation of State and Federal law, as well as the examination of attitudes and feelings about exceptionality.

(This course meets NAEYC Standards 1a, 2a, 2c, 3a; CEC/DEC Standards CC2-K1-7, CC3-K1, CC5-K4, CC8-K1-5; and NBPTS Standards 2, 3, 8.)

C D 61 Music and Movement (Developmental Foundations) 3 Units

(See general education pages for the requirement this course meets.)

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Three hours lecture (36 hours total per quarter).

A developmental introduction to music and movement experiences. Students will have opportunities to engage in and to reflect on how music and movement fosters healthy development in children and adults. Students will also have opportunities to see how music and movement defines and is linked to cultural experience and to who we are as individuals.

C D 63 Math and Science Activities for the Young Child 3 Units

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Three hours lecture (36 hours total per quarter).

Design and assess developmentally appropriate activities and environments that foster curiosity and problem solving in young children. Emphasis on constructivist theories of cognitive development as a foundation for planning and implementing math and science curriculum for each child.

(This course meets NAEYC Standards 1a, 1b, 1c, 4b, 4c, 5a, 5b, 5c; NBPTS Standards I-VI; CED/DEC Standards CC4-S2, EC4-S1, CC7-K1, CC7-S1, CC7-S10, CC7-S11, CC7-S13, EC7-S4.)

C D 64 Health, Safety, and Nutrition for the Young Child 3 Units

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Three hours lecture (36 hours total per quarter).

Health, safety, and nutritional practices needed for the protection and improvement of the health of preschool children. Includes infant, child, and adult first aid. CPR can be taken in the community through the Red Cross, American Heart Association or at De Anza College Health 57E.

(This course meets the California State requirements for health, safety, and nutrition.) (According to the NAEYC (National Association for Educators of Young Children) standards: students prepared in associate degree programs use their understanding of young children's characteristics and needs, and of multiple interacting influences on children's development and learning, to relate environments, that are healthy, respectful, supportive, and challenging for all children.)

C D 65 Programs for School-Age Child Care 3 Units

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Three hours lecture (36 hours total per quarter).

Before and after school programs for children in kindergarten through sixth grade with emphasis on developmental characteristics, program philosophy, licensing requirements, program content, and criteria for evaluation.

(This course meets NAEYC Standards 1 and 4 and NBPTS 4, 5 and 6 standards.)

C D 66 Montessori Methods and Materials 3 Units

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273; Child Development 10G.

Three hours lecture (36 hours total per quarter).

Philosophical foundations and the environmental components of the Montessori Method in early childhood education.

C D 67 Supervision and Administration of Child Development Programs (Adult Supervision) 3 Units

Prerequisite: Child Development 10G, 12 and 54.

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Three hours lecture (36 hours total per quarter).

A study of the methods and principles of supervising student teachers, assistant teachers, parents and volunteers in early childhood classrooms. Emphasis is on the role of teachers supervising other adults while simultaneously addressing the classroom needs of children, parents and the program.

C D 68 Teaching in a Diverse Society 3 Units

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.
Three hours lecture (36 hours total per quarter).
 Examination of the development of social identities in diverse societies including theoretical and practical implications of oppression and privilege as they apply to young children, families, programs, classrooms and teaching. Various classroom strategies will be explored emphasizing culturally and linguistically appropriate anti-bias approaches supporting all children in becoming competent members of a diverse society.

(This course meets NAEYC Standards 1a, 1b, 1c, 2a, 2b, 2c, 4a, 4b, 5b, 5c; NBPTS Standards II, VII; CEC/DEC Standards CC2-K3, CC2-K4, EC2-K4, CC3-K3, CC3-K4, CC5-K9, CC5-K10, CC6-K1, CC6-K2, CC6-K3, CC9-K1, CC9-S6, CC10-S3.)

C D 69 Early Childhood Education Principles and Practices (Cross-Cultural Emphasis) 3 Units

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.
(Also listed as Anthropology 69. Students may enroll in either department, but not both, for credit.)
Three hours lecture (36 hours total per quarter).

The underlying principles of early education, in which national, state, and local practices will be examined in contrast to options presented through ethnographic data of diverse cultures.

C D 70 Seminar in Parenting the Preschool Child 1 Unit

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.
One hour lecture (12 hours total per quarter).
(May be taken up to six times for credit as long as the topics are different each time.)
Pass-No Pass (P-NP) course.

A seminar for parents, teachers and other adults interested in the parenting of children, primarily (but not exclusively) two to five years old. Students will explore and examine the ways to strengthen families. Students will also learn about optimal environments to support the healthy growth and development of children and parents. (This course meets the NAEYC Standard 2; NBPTS Standard 7; and DEC/CEC Standard 3.)

C D 71 Constructive Guidance and Positive Discipline in Early Childhood 3 Units

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.
Three hours lecture (36 hours total per quarter).
 Explores the principals and techniques that promote high self-esteem and positive behaviors in young children.
 (This course meets NAEYC Standards 1a, 1c, 2b, 4a, 4b; DEC/CEC Standards CC3-K3, EC3-S1, CC6-K3; and NBPTS Standard 2.)

C D 72 Partnerships with Families in Early Childhood Education 3 Units

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.
Three hours lecture (36 hours total per quarter).
 An examination of the key principles and effective approaches in family support practice; strategies to communicate and involve families in early childhood education. (This course meets NAEYC Standard 2, Building Families and Community Relationships; NBPTS Generalist Standard VII, Family and Community Partnerships; and CEC/DEC Standard 10, Collaboration.)

C D 73 Early Childhood Mental Health 3 Units

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.
(Also listed as Education 73. Students may enroll in either department, but not both, for credit.)
Three hours lecture (36 hours total per quarter).
 Examination of mental health milestones at each stage of a child's development. Overview of psychological theory in infant/early childhood mental health. Assessment and screening to identify early childhood mental health challenges. Implementation of mental health interventions and strategies. An exploration of how early experiences in the first 5 years of life can impact the physical and psychological development and well-being of children throughout the lifespan.
 (This course meets NAEYC Standard 1: Promoting Child Development and Learning; Standard 3: Observing, Documenting and Assessing to Support Young Children and Families; NBPTS Early Childhood/General Standards, 2dEd. Standard I: Understanding Young Children, Standard III: Assessment, Standard VI: Multiple Teaching Strategies for Meaningful Learning; and CEC Special Education: Standard 2: Development and Characteristics of Learners, Standard 4 Instructional Strategies.)

C D 74 Early Childhood Mental Health Seminar and Fieldwork 3 Units

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.
(Also listed as Education 74. Students may enroll in either department, but not both, for credit.)
Two hours lecture, three hours laboratory (60 hours total per quarter).

Provides an overview of different approaches to early identification and intervention with children and their families and will help students develop basic support skills for use in dealing with high-risk families, including those with exceptional emotional, social, or physical needs.

(This course meets NAEYC Standard 3, Standard 4b; NBPTS Early Childhood/Generalist Standard I, III, VI, IX; and CEC Special Education Content Standards, Standards 4, 5 and 8.)

C D 75 Social Emotional Development in Early Childhood 3 Units

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.
Three hours lecture (36 hours total per quarter).

Social emotional development and how peer, family, gender, teachers and society influence this development. The impact of variations in development on learning and life outcomes.

(This course meets NAEYC Standards 1a, 1b, 1c, 2b, 4a; CEC/DEC Standards CC2-K1; and NBPTS Standards 1 and 4.)

C D 77 Special Projects in Child Development 1/2 Unit

C D 77W 1 Unit
C D 77X 2 Units
C D 77Y 3 Units

Prerequisite: Consent of instructor and division dean.

Advisory: English Writing 1A or English as a Second Language 5.

Three hours laboratory for each unit of credit (36 hours total for each unit of credit per quarter).

(Any combination of Child Development 77, 77W, 77X and 77Y may be taken up to six times, not to exceed 18 units, as long as the projects are different each time.)

Designed for students with a Child Development Permit at the Master Teacher level or above. Offers students the opportunity to research a topic of interest in the field of Child Development. Involved research of a topic of interest to the student. Research may include a review of the literature, interviews and other fieldwork such as exploring community resources or investigating a common teaching practice for effectiveness.

(This course meets NAEYC Standard 4c, Understanding Content Knowledge in ECE and Standard 5, Becoming a Professional; NBPTS Standards IX, Reflective Practice; and DEC-CEC Standard 9 Professional & Ethical Practice.)

C D 80 Design, Program Development, and Daily Operation of Family Child Care 3 Units

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.
Three hours lecture (36 hours total per quarter).

An overview of family childcare as a business and as a program for children. Starting your own childcare business, budget and contracts, licensing and safety requirements will be addressed. Relevant program issues such as designing indoor/outdoor environments, daily schedule, curriculum, child guidance, accommodations for all children and parent partnerships will be presented.

C D 90 Facilitating Inclusion in Early Childhood Programs: Intervention Strategies 3 Units

Prerequisite: Child Development 10G and 60.

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.
Three hours lecture (36 hours total per quarter).

Expands upon a student's ability to work effectively with all children in early childhood programs and more specifically with infants, toddlers and preschoolers with disabilities and other special needs in inclusive environments. Focus will include theories, research, and practical applications of best practices from both the fields of Early Childhood Education and Early Intervention/Early Childhood Special Education. Students will learn to design practical and effective intervention strategies for individual children with special needs within the context of natural environments and will learn to work in collaboration with IFSP/IEP teams.

(This course meets NAEYC Standards 1a, 1c, 2b, 3a, 3b, 3d, 4b; CEC/DEC Standards CC3-K4, CCK-5, CC4-S1-6, EC4-S1-3, CC5-K3, CC5-S1-5; and NBPTS Standards 2 and 4.)

C D 101W Current Issues in Child Development 1 Unit

C D 101X 2 Units
C D 101Y 3 Units
C D 101Z 4 Units

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

One hour lecture for each unit of credit (12 hours total for each unit of credit per quarter).

(Any combination of Child Development 101W, 101X, 101Y and 101Z may be taken up to six times, not to exceed 18 units, as long as the topics/projects are different each time.)

In-service workshop for teachers, aides, and parent volunteers to increase awareness of contemporary professional issues in Child Development.

C D 102W Curriculum for Child Development Personnel 1 Unit

C D 102X 2 Units

C D 102Y 3 Units

C D 102Z 4 Units

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

One hour lecture for each unit of credit (12 hours total for each unit of credit per quarter).

(Any combination of Child Development 102W, 102X, 102Y and 102Z may be taken up to six times, not to exceed 18 units, as long as the topics/projects are different each time.)

In-service workshop for teachers, aides, and parent volunteers to improve skills and knowledge in the area of curriculum for Child Development personnel.

C D 103W Topics in Preschool Program Administration 1 Unit

C D 103X 2 Units

C D 103Y 3 Units

C D 103Z 4 Units

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

One hour lecture for each unit of credit (12 hours total for each unit of credit per quarter).

(Any combination of Child Development 103W, 103X, 103Y and 103Z may be taken up to six times, not to exceed 18 units, as long as the topics/projects are different each time.)

In-service workshop for program directors, site supervisors, head teachers, or others with administrative or supervisory responsibility to improve skills and knowledge in the area of Child Development program administration.

Computer Applications and Office Systems

NOTE: The CAOS program is being phased out. CAOS classes will no longer be offered after spring quarter 2013. See <http://caos.deanza.edu/selfpacedcourses.html> for details.

CAOS 83A Digital Imaging Software (Photoshop) 4 Units

(Formerly Computer Applications and Office Systems 112A.)

Advisory: English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263; Computer Applications and Office Systems 90GA.

(Also listed as Arts 83A. Students may enroll in either department, but not both, for credit.)

Eight hours lecture-laboratory (96 hours total per quarter).

Basic and intermediate principles using digital imaging software to produce graphics for websites and business documents.

CAOS 84A Business English I 2 Units

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273; Mathematics 114 or equivalent.

Four hours lecture-laboratory (48 hours total per quarter).

Pass-No Pass (P-NP) course.

Review of English grammar, punctuation, usage, and writing skills and applications of these skills to basic business communications.

CAOS 90GA Computer Literacy I (PC) 2 Units

Advisory: English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263.

Four hours lecture-laboratory (48 hours total per quarter).

Pass-No Pass (P-NP) course.

Introduction to a computer - hardware and software. Theory and interactive learning activities using word processing, spreadsheet, presentation graphics, database, e-mail, operating systems, and Internet applications.

CAOS 91AN Word Processing I (Word 2010) 2 Units

Advisory: English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263.

Four hours lecture-laboratory (48 hours total per quarter).

Pass-No Pass (P-NP) course.

Concepts and applications using a word processing computer software program.

CAOS 91BN Word Processing II (Word 2010) 2 Units

Prerequisite: Computer Applications and Office Systems 91AN.

Advisory: English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263.

Four hours lecture-laboratory (48 hours total per quarter).

Pass-No Pass (P-NP) course.

Advanced word processing concepts and applications using a computer software program.

CAOS 93AN Spreadsheet I (Excel 2010) 2 Units

Advisory: English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263; Computer Applications and Office Systems 90GA.

Four hours lecture-laboratory (48 hours total per quarter).

Pass-No Pass (P-NP) course.

A general introduction to basic data manipulation skills and techniques used with spreadsheets: editing, computation, database management, graphing.

CAOS 93BN Spreadsheet II (Excel 2010) 2 Units

Prerequisite: Computer Applications and Office Systems 93AN.

Advisory: English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263.

Four hours lecture-laboratory (48 hours total per quarter).

Pass-No Pass (P-NP) course.

Advanced spreadsheet design using unique spreadsheet features: graphing, information retrieval, table searches, financial business calculations for decision making.

CAOS 95N Database I (Access 2010) 2 Units

(Formerly Computer Applications and Office Systems 110N.)

Advisory: English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263; Computer Applications and Office Systems 90GA or 102N.

Four hours lecture-laboratory (48 hours total per quarter).

Pass-No Pass (P-NP) course.

Use of database software to create, search, modify and arrange information.

CAOS 97N Introduction to Business Graphics (Office 2010) 2 Units

(Formerly Computer Applications and Office Systems 130N.)

Advisory: English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263; Computer Applications and Office Systems 90GA.

Four hours lecture-laboratory (48 hours total per quarter).

Pass-No Pass (P-NP) course.

Introduction to presentation software using Microsoft PowerPoint. Course provides hands-on experience to produce text, graphic, chart and graph images for professional presentations.

CAOS 98U Internship, Business/Computer Systems Division 1 Unit

CAOS 98V 2 Units

CAOS 98W 3 Units

CAOS 98X 4 Units

CAOS 98Y 5 Units

CAOS 98Z 6 Units

Advisory: English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263.

Four hours laboratory per unit of supervised internship in an authorized office or agency (48 hours total for each unit of credit per quarter).

(Any combination of Computer Applications and Office Systems 98U-Z may be taken up to six times, not to exceed 18 units, for credit. During each internship, students will be placed at different employer locations, different working environments, and/or given different assignments within the same company or department--thus providing the students with various opportunities to learn different skills. Students may repeat the same internship location and working environment if the student, employer, and instructor believe it would provide the student with increased work experience.)

Off-campus/on campus supervised experiential education/internship for Business/Computer Systems Division students in research or business office environments related to student's major. Practical application of knowledge, skills and abilities acquired in student's major. Opportunity for additional hands-on training. Exposure to varied corporate, state and federal protocols, methodologies and practices in a professional environment.

CAOS 102N Microsoft Windows I (Windows 7) 1 Unit

Advisory: English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263; Computer Applications and Office Systems 90GA.

Two hours lecture-laboratory (24 hours total per quarter).

Pass-No Pass (P-NP) course.

Use of an operating environment which extends the Microsoft Disk Operating System (MS DOS) and the use of the Microsoft Windows Desktop Applications programs.

CAOS 1041 Ten-Key on the Microcomputer 1/2 Unit

Advisory: English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263; Computer Applications and Office Systems 173.

One hour lecture-laboratory (12 hours total per quarter).

Pass-No Pass (P-NP) course.

Development of ten-key numeric data entry skills. Emphasis on developing speed and accuracy in entering numeric data in an office environment.

CAOS 1040 Introduction to Filing 1 Unit

Advisory: English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263; Computer Applications and Office Systems 173 and 102N.

Two hours lecture-laboratory (24 hours total per quarter).

Pass-No Pass (P-NP) course.

Entry-level concepts and terminology of filing rules for an office environment.

CAOS 107G Business Office Math 2 Units

Advisory: English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263.

Four hours lecture-laboratory (48 hours total per quarter).

Pass-No Pass (P-NP) course.

Review of basic math skills with emphasis on business applications and critical thinking problems. Instruction and application exercises involving math tasks needed for employment.

CAOS 108 Personal Computer Security Basics 4 Units

Advisory: English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263; Computer Applications and Office Systems 90GA or equivalent.

(Also listed as Computer Information Systems 108. Students may enroll in either department, but not both, for credit.)

Four hours lecture (48 hours total per quarter).

Beginner's computer security course for small office or home users. Learn to stop hackers, worms, viruses, spyware, Web bugs and identity theft. Learn vulnerabilities found in Web browsers, e-mail and operating systems. Protect against online purchase dangers, install firewalls, manage cookies, restrict ports, analyze log files, evaluate wireless networks and examine encryption.

CAOS 113A Web Authoring Software (Dreamweaver) 4 Units

Advisory: English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263; Computer Applications and Office Systems 90GA and 102N.

(Also listed as Arts 113A. Students may enroll in either department, but not both, for credit.)

Eight hours lecture-laboratory (96 hours total per quarter).

Pass-No Pass (P-NP) course.

Basic and intermediate principles of building Web pages/sites using Web authoring software. Introduction to Web authoring terminology and software. This course is for the content person to develop and maintain an effective website.

CAOS 114A Web Graphics/Animation Software (Flash) 3 Units

Advisory: English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263; Computer Applications and Office Systems 83A or Arts 83A.

(Also listed as Arts 114A and CAD and Digital Imaging 114A. Students may enroll in only one department for credit.)

Six hours lecture-laboratory (72 hours total per quarter).

Pass-No Pass (P-NP) course.

Basic and intermediate principles of graphics/animation for the Web. Web graphics/animation terminology and software. This course is for the content person to build a website.

CAOS 170F Windows 7 Administration 4 1/2 Units

Advisory: English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263; Computer Applications and Office Systems 102N.

(Also listed as Computer Information Systems 170F. Students may enroll in either department, but not both, for credit.)

Four hours lecture, one and one-half hours laboratory (66 hours total per quarter).

Provides knowledge and skills to setup, configure, use, and support Windows 7 operating system. Course covers Windows 7 features including installing, upgrading, configuring and troubleshooting. Learn how to configure Windows security, network connectivity and subsystems. Additional topics include configuring/troubleshooting mobile computing and learning how to use Windows 7's built-in applications.

CAOS 173 Keyboarding Skill Development 1 Unit

Advisory: English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263.

Two hours lecture-laboratory (24 hours total per quarter).

(May be taken up to three times for credit.)

Pass-No Pass (P-NP) course.

Speed and accuracy development in keyboarding skills.

CAOS 176 Telephone Communications 1 Unit

Advisory: English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263.

Two hours lecture-laboratory (24 hours total per quarter).

Pass-No Pass (P-NP) course.

Techniques for handling incoming and outgoing phone calls, listening skills and customer relations.

Computer Information Systems**CIS 2 Computers and the Internet in Society 4 Units**

(See general education pages for the requirement this course meets.)

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Four hours lecture (48 hours total per quarter).

A critical examination of the capabilities and uses of the Internet, computers and cellular communications, and how they are changing business, law, politics, health, education, entertainment, and society.

CIS 3 Business Information Systems 4 1/2 Units

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Four hours lecture, one and one-half hours laboratory (66 hours total per quarter).

Introduction to management information systems, systems design and development, data communications, data management, office automation, computer hardware and software concepts. Use of common software packages for business applications including word processing, spreadsheets, database, and Internet web tools.

CIS 14A Visual Basic .NET Programming I 4 1/2 Units

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Four hours lecture, one and one-half hours laboratory (66 hours total per quarter).

Programming in Visual Basic. Emphasis on Windows programming using the Visual Basic environment. The development of well-structured VB projects using forms, buttons, labels, picture boxes, and text boxes.

CIS 14B Visual Basic .NET Programming II 4 1/2 Units

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273; Computer Information Systems 14A or equivalent.

Four hours lecture, one and one-half hours laboratory (66 hours total per quarter).

Develop professional looking and deployable Visual Basic applications using advanced controls, user-created classes, incorporating databases with ADO.NET 3.5, calling APIs, and creating Web applications.

CIS 15AG Introduction to Computer Programming Using C 4 1/2 Units

(Students may receive credit for either Computer Information Systems (15AG and 15BG) or 26A, but not both.)

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273; Mathematics 114 or equivalent; Computer Information Systems 50.

Four hours lecture, one and one-half hours laboratory (66 hours total per quarter).

Problem solving, algorithms and structured program design. Programming, testing and debugging of well-structured programs in C. Introduction to data types, expressions, control structures, functions, sequential files, and one-dimensional arrays.

CIS 15BG Intermediate Problem Solving in C 4 1/2 Units

(Students may receive credit for either Computer Information Systems (15AG and 15BG) or 26A, but not both.)

Prerequisite: Computer Information Systems 15AG.

Four hours lecture, one and one-half hours laboratory (66 hours total per quarter).

A systematic approach to the design, construction and management of computer programs, emphasizing design, programming style, documentation, testing and debugging techniques. Strings, multidimensional arrays and structures. Pointers: their use in arrays, parameters and dynamic allocation. Introduction to linked lists.

CIS 15C Data Structures 4 1/2 Units

Prerequisite: Computer Information Systems 15BG or 26A.

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273; Mathematics 212 or equivalent.

Four hours lecture, one and one-half hours laboratory (66 hours total per quarter).

Stacks, queues, linked lists, trees, heaps, and graphs; internal and external sorting; use of recursion; hashing; structured programming; and abstract data type concepts; team project.

CIS 18A Introduction to UNIX/LINUX 4 1/2 Units

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273; Computer Information Systems 10. Four hours lecture, one and one-half hours laboratory (66 hours total per quarter).

Introduction to the features of the UNIX/LINUX operating system including text editing, text file manipulation, electronic mail, Internet utilities, directory structures, input/output handling, and shell features.

CIS 18B Advanced UNIX/LINUX 4 1/2 Units

Prerequisite: Computer Information Systems 14A or 15AG; and Computer Information Systems 18A.

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Four hours lecture, one and one-half hours laboratory (66 hours total per quarter).

Coverage of regular expressions, grep, sed, and awk utilities.

CIS 18C Shell Programming 4 1/2 Units

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273; any introductory programming course and Computer Information Systems 18B.

Four hours lecture, one and one-half hours laboratory (66 hours total per quarter).

Programming in bash shell, Bourne shell, Korn shell, and C shell.

CIS 21JA Introduction to 8086/IA 32 Processor Assembly Language 4 1/2 Units

Prerequisite: Computer Information Systems 15BG or 26A.

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273; Mathematics 210 or equivalent.

Four hours lecture, one and one-half hours laboratory (66 hours total per quarter).

Introduction to the syntax and semantics of 8086 and IA32 assembly language, standard instruction set, selected pseudo and macro instructions, arrays, 8086/286/386/486/Pentium features.

CIS 21JB Advanced Programming: Series 86 and IA32/Pentium Assembly Language 4 1/2 Units

Prerequisite: Computer Information Systems 21JA.

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273; Mathematics 210 or equivalent.

Four hours lecture, one and one-half hours laboratory (66 hours total per quarter).

Coverage of theory and application of advanced programming techniques, with emphasis on combining multiple modules in a single program, inter-program connection, interrupt level programming and macro writing, recursive and re-entrant techniques.

CIS 26A C as a Second Programming Language 4 1/2 Units

(This course is intended for students who are competent in another programming language. Students may receive credit for either Computer Information Systems 15AG and 15BG) or 26A, but not both.)

Prerequisite: An Introductory Programming Language course such as Computer Information Systems 14A.

Four hours lecture, one and one-half hours laboratory (66 hours total per quarter).

An introduction to the C programming language and its applications. Topics covered include: basic input/output, structured program design and implementation, basic control structures and keywords, arrays and pointers, character and string manipulation, arithmetic expressions, and functions and program modularization.

CIS 26B Advanced C Programming 4 1/2 Units

Prerequisite: Computer Information Systems 15BG or 26A.

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273; Mathematics 212 or equivalent.

Four hours lecture, one and one-half hours laboratory (66 hours total per quarter).

Applications of advanced features of C and the C-library functions including: binary and random-access input/output, dynamic data structures, bit manipulation, string parsing and string-to-numeric conversion, event and error processing, function pointers, recursion, and variable-length argument list functions.

CIS 27 Programming in C++ for C Programmers 4 1/2 Units

(Students may receive credit for either Computer Information Systems 71A and 71B) or 27, but not both.)

Prerequisite: Computer Information Systems 15BG or 26A.

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Four hours lecture, one and one-half hours laboratory (66 hours total per quarter).

A comprehensive introduction to the C++ programming language and its applications.

CIS 28 Object Oriented Analysis and Design 4 1/2 Units

Prerequisite: Computer Information Systems 27 or 35A or equivalent experience. Four hours lecture, one and one-half hours laboratory (66 hours total per quarter).

Defines and illustrates the object oriented paradigm for analyzing, designing and implementing object oriented computer applications. Trade-offs between various object oriented techniques will be illustrated with a series of real world applications to allow the student to optimize his/her solutions for robustness and reuse.

CIS 29 Advanced C++ Programming 4 1/2 Units

(Formerly Computer Information Systems 52G.)

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273; Computer Information Systems 27.

Four hours lecture, one and one-half hours laboratory (66 hours total per quarter).

Advanced topics in C++ including: namespace, string and stringstream classes, cast operators, multiple inheritance, exception handling, compilation concepts, libraries, templates, the Standard Template Library and programming style.

CIS 30A Introduction to C# Programming 4 1/2 Units

(Formerly Computer Information Systems 65A.)

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Four hours lecture, one and one-half hours laboratory (66 hours total per quarter).

Introduction to C# programming, .Net Environment, computing context, primitive types, flow of control constructs, operators, text I/O, objects and classes, interfaces, packages, GUI, exceptions, and threads.

CIS 30B Advanced C# Programming 4 1/2 Units

(Formerly Computer Information Systems 65B.)

Prerequisite: Computer Information Systems 30A.

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Four hours lecture, one and one-half hours laboratory (66 hours total per quarter).

Emphasis on foundation technologies in C# that enable you to write server side programs in C#. Concepts include inner classes, collections, exceptions, file I/O, reflections, cloning, and multi-threading.

CIS 31 Operating System Concepts 5 Units

Advisory: Computer Information Systems 15BG and 21JA.

Five hours lecture (60 hours total per quarter).

Concepts and use of operating systems: multiprogramming and multiprocessing systems; processes and threads, mutual exclusion, indefinite postponement, deadlocks; scheduling considerations and security management.

CIS 33A Programming in PERL 4 1/2 Units

(Formerly Computer Information Systems 33.)

Prerequisite: Computer Information Systems 18A and either Computer Information Systems 15BG or 26A.

Advisory: English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263.

Four hours lecture, one and one-half hours laboratory (66 hours total per quarter).

A complete coverage of the core PERL language. Topics covered will include: basic loops and control structures, the elemental data types and operators, subroutines and variable scoping, regular expressions and text parsing, manipulation of files and directories, advanced list processing with grep and map, references, built-in functions and core modules, and advanced input/output including random-access files and formatting.

CIS 33B Advanced PERL Programming 4 1/2 Units

Prerequisite: Computer Information Systems 33A and either Computer Information Systems 15BG or Computer Information Systems 26A.

Four hours lecture, one and one-half hours laboratory (66 hours total per quarter).

Exploration of advanced topics from the core PERL distribution and essential non-core modules. Topics include reference-based data structures, object-oriented programming, connecting to SQL-based relational databases, non-relational database and file structures, process creation and management, and TCP/IP Client/Server programming.

CIS 35A Introduction to Java Programming 4 1/2 Units

(Students may receive credit for either Computer Information Systems 61A and 61B) or 35A, but not both.)

Prerequisite: Computer Information Systems 15BG or 26A.

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Four hours lecture, one and one-half hours laboratory (66 hours total per quarter).

Introduction to Java programming, computing context, primitive types, flow of control constructs, operators, text I/O, objects and classes, interfaces, packages, GUI and exceptions.

CIS 35B	Advanced Java Programming	4 1/2 Units	CIS 64B	Introduction to SQL	4 1/2 Units
<i>Prerequisite:</i> Computer Information Systems 35A.			<i>Prerequisite:</i> Computer Information Systems 64A.		
<i>Advisory:</i> English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.			<i>Advisory:</i> English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.		
Four hours lecture, one and one-half hours laboratory (66 hours total per quarter).			Four hours lecture, one and one-half hours laboratory (66 hours total per quarter).		
Emphasis on foundation technologies in Java that enable you to write server side programs in Java. Concepts include inner classes, collections, exceptions, file I/O, reflections, cloning, swing, multi-threading and JavaBeans.			Introduction to Oracle SQL (Structured Query Language), DML (Data Manipulation Language) processing techniques, DDL (Data Definition Language) techniques, selecting and sorting data, joins, SQL functions, Oracle objects, Oracle data processing concepts to maintain large database systems.		
CIS 50	Introduction to Computers, Data Processing, and Applications	3 Units	CIS 64C	Introduction to PL/SQL	4 1/2 Units
<i>Advisory:</i> English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.			<i>Prerequisite:</i> Computer Information Systems 64B.		
Three hours lecture (36 hours total per quarter).			<i>Advisory:</i> English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.		
Computer information systems (IS) basic terms and concepts. Important IS trends. Using systems development to build information systems. Survey of functions and components of an information system including applications software, systems software, telecommunications, networks, the Internet and Web. Social and organization issues.			Four hours lecture, one and one-half hours laboratory (66 hours total per quarter).		
CIS 53	Distributed Processing Using Java	4 1/2 Units	Oracle PL/SQL features cover data definition and data manipulation using expressions, control structures, and Oracle objects. Error handling, predefined packages, triggers, transactions and advanced PL/SQL features.		
<i>Prerequisite:</i> Computer Information Systems 35B.			CIS 64D	Database Tuning	3 Units
<i>Advisory:</i> English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.			<i>Prerequisite:</i> Computer Information Systems 64C.		
Four hours lecture, one and one-half hours laboratory (66 hours total per quarter).			<i>Advisory:</i> English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.		
Distributed computing using Java features including: JDBC, Java Servlets, Java Server Pages, RMI, Enterprise JavaBeans, Java Transaction Services, XML and Java. Introduction to Web Services.			Three hours lecture (36 hours total per quarter).		
CIS 57	Web Site Administration	4 1/2 Units	Emphasis on importance of Performance Tuning, techniques for tuning several Oracle components, optimizing database for high volume transactions and Data Warehouses.		
<i>Prerequisite:</i> Computer Information Systems 66 and 89A.			CIS 66	Introduction to Data Communication and Networking	5 Units
<i>Advisory:</i> English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263.			<i>Advisory:</i> English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263; Computer Information Systems 3 or 50.		
Four hours lecture, one and one-half hours laboratory (66 hours total per quarter).			Five hours lecture (60 hours total per quarter).		
Introduction to establishing, configuring, managing and controlling access to Internet servers.			Concepts of communication, data communications and networks. Overview of connectivity options, common protocols, local and wide area networks.		
CIS 61A	Introduction to Computer Programming Using Java	4 1/2 Units	CIS 67A	Local Area Networks	4 Units
(Students may receive credit for either Computer Information Systems (61A and 61B) or 35A, but not both.)			<i>Advisory:</i> Computer Information Systems 66.		
<i>Advisory:</i> English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273; Mathematics 114 or equivalent.			Four hours lecture (48 hours total per quarter).		
Four hours lecture, one and one-half hours laboratory (66 hours total per quarter).			Fundamental concepts of Local Area Network architecture and protocols. Emphasis on basic concepts needed to design, configure, and implement Local Area Networks.		
This course is an introduction to computer programming. Its primary objective is to teach problem solving using the Java programming language. Emphasis will be placed on structured procedural programming with an introduction to object-oriented programming. This course is designed primarily for computer science and related transfer majors.			Emphasis on the evolution of Fast Traditional Ethernet, Fast Ethernet, Gigabit Ethernet, Ten-Gigabit Ethernet, ATM, and wireless LANs.		
CIS 61B	Intermediate Problem Solving in Java	4 1/2 Units	CIS 67B	Introduction to Wide Area Networking	4 Units
(Students may receive credit for either Computer Information Systems (61A and 61B) or 35A, but not both.)			<i>Advisory:</i> Computer Information Systems 67A.		
<i>Prerequisite:</i> Computer Information Systems 61A.			Four hours lecture (48 hours total per quarter).		
Four hours lecture, one and one-half hours laboratory (66 hours total per quarter).			Fundamental concepts of telephony, telecommunication, and wide area networking.		
A systematic approach to the design, construction and management of computer programs, emphasizing design, programming style, documentation, testing and debugging techniques. Strings, multi-dimensional arrays and Classes. References: their use in arrays, parameters and containment. Introduction to linked lists.			Emphasis on analog and digital transmission techniques. Emphasis on circuit-switching and packet-switching. Exploration of optimization in telecommunication.		
CIS 63	Systems Design	4 1/2 Units	CIS 71A	Beginning Programming Methodologies in C++	4 1/2 Units
<i>Advisory:</i> English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.			(Students may receive credit for either Computer Information Systems (71A and 71B) or 27, but not both.)		
Four hours lecture, one and one-half hours laboratory (66 hours total per quarter).			<i>Advisory:</i> English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273; Mathematics 114 or equivalent.		
Current tools of structured systems analysis and design: data flow diagrams, structure charts, HIPO charts, VTOCs, data structure/dictionaries, decision trees and tables, pseudo code.			Four hours lecture, one and one-half hours laboratory (66 hours total per quarter).		
CIS 64A	Data Base Management Systems	4 1/2 Units	This course is an introduction to computer programming. Its primary objective is to teach problem solving using the C++ programming language. Emphasis will be placed on structured procedural programming with an introduction to object-oriented programming. This course is designed primarily for computer science and related transfer majors.		
<i>Prerequisite:</i> Computer Information Systems 15BG.			CIS 71B	Intermediate Programming Methodologies in C++	4 1/2 Units
<i>Advisory:</i> English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.			(Students may receive credit for either Computer Information Systems (71A and 71B) or 27, but not both.)		
Four hours lecture, one and one-half hours laboratory (66 hours total per quarter).			<i>Prerequisite:</i> Computer Information Systems 71A.		
Rudiments of data base design, implementation and use. Basic understanding of various data modeling techniques. Overview and comparison of data base management systems. Emphasis on relational data bases; introduction to SQL.			Four hours lecture, one and one-half hours laboratory (66 hours total per quarter).		
			A systematic approach to the design, construction and management of computer programs, emphasizing design, programming style, documentation, testing and debugging techniques. Strings, multidimensional arrays, structures, and classes. Pointers: their use in arrays, parameters and dynamic allocation. Introduction to linked lists.		

CIS 71C	Data Abstraction and Structures	4 1/2 Units	CIS 75E	Enterprise Emergency Response Planning	2 Units
<i>Prerequisite: Computer Information Systems 71B or equivalent.</i> <i>Advisory: Mathematics 212 or equivalent.</i> Four hours lecture, one and one-half hours laboratory (66 hours total per quarter). Application of software engineering techniques to the design and development of large programs; data abstraction and structures and associated algorithms: stacks, queues, linked lists, trees, graphs, and hash tables; internal and external sorting; use of recursion; team project.			<i>Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.</i> Two hours lecture (24 hours total per quarter). Learn how to plan for emergency response, recover from a disaster and how to mitigate risks. System Administrators, IT managers and Analysts would benefit from this course as well as technologists wanting to broaden their impact.		
CIS 73	UNIX/LINUX Systems Programming	4 1/2 Units	CIS 76	Introduction to Network Security	4 Units
<i>Prerequisite: Computer Information Systems 18A and 26B.</i> Four hours lecture, one and one-half hours laboratory (66 hours total per quarter). Coverage of systems programming in the UNIX/LINUX/Posix environments, with emphasis on low-level UNIX/LINUX/Posix system calls from C programs and Shell scripts. Discussion of differences in major UNIX/LINUX/Posix environments.			<i>Prerequisite: Computer Information Systems 75A.</i> <i>Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273; Mathematics 212 or equivalent.</i> Four hours lecture (48 hours total per quarter). Network security using the standard protocols and algorithms. All three goals of security including confidentiality, integrity, and availability will be discussed. Attacks on security including active and passive are discussed and elaborated on. Two major techniques of security, cryptography and steganography, are described with emphasis on cryptography. The emphasis is on mechanisms and services provided by the network security.		
CIS 74	Computer Software Quality Assurance	4 1/2 Units	CIS 77	Special Projects in Computer Information Systems	1 Unit
<i>Advisory: Computer Information Systems 50.</i> Four hours lecture, one and one-half hours laboratory (66 hours total per quarter). Analysis of types of software; software development life cycle; top down design and structured programming; modularization; standards and practices; software configuration management; software testing; documentation; software error types, causes; software quality assurance plans and procedures; software discrepancy reports, analysis; software visibility for managers.			<i>CIS 77X</i> <i>CIS 77Y</i> (Formerly Computer Information Systems 96, 96X and 96Y respectively.) <i>Prerequisite: Approved Special Projects Contract and appropriate technical background to support the completion of project objectives.</i> <i>Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.</i> Three hours laboratory for each unit of credit (36 hours total for each unit of credit per quarter). (Hours to be individually arranged.) (Any combination of Computer Information Systems 77, 77X and 77Y may be taken up to six times, not to exceed 18 units, as long as the projects are different each time.) Design, implement, and document a special computer programming project.		
CIS 75A	Internet Concepts and TCP/IP Protocols	5 Units	CIS 79	Managing Technology Projects	4 1/2 Units
<i>Prerequisite: Computer Information Systems 66.</i> <i>Advisory: Computer Information Systems 26A or Computer Information Systems 15AG; English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.</i> Five hours lecture (60 hours total per quarter). The architecture and underlying protocols of the Internet. The Internet will be examined as a layered product. Layers discussed will include mid-level packet delivery and address computation and high-level client/server applications using the TCP/IP Protocol Suite.			<i>Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.</i> Four hours lecture, one and one-half hours laboratory (66 hours total per quarter). Introduction to the theory and practice of the design and management of technology projects, including planning, performing, and monitoring of projects. Subjects explored are estimating costs and schedules, analyzing client expectations, guiding diverse groups of people toward a common goal, while earning a profit. Use of common software packages for project management.		
CIS 75B	Internet Programming with TCP/ IP	4 1/2 Units	CIS 80A	Process Management	3 Units
<i>Prerequisite: Computer Information Systems 26B and 75A.</i> <i>Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.</i> Four hours lecture, one and one-half hours laboratory (66 hours total per quarter). Writing client/server applications using the TCP/IP protocol suite. All server classes - "well known", iterative, concurrent, and polling - will be explored and used. Typical Internet programming problems will be addressed including resource availability, machine addressing, and differences in data representation between communicating computers.			<i>Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.</i> Three hours lecture (36 hours total per quarter). Learn the basics of process mapping in examining work flow and relationships to improve the efficiency of an organization, improve communication and understanding, and find ways to optimize a process.		
CIS 75C	Enterprise Security Threats Management	4 1/2 Units	CIS 86	Computer Accounting Systems	5 Units
<i>Prerequisite: Computer Information Systems 75A or equivalent experience.</i> <i>Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.</i> Four hours lecture, one and one-half hours laboratory (66 hours total per quarter). Learn how to apply Enterprise Security Concepts to monitor security threats, outages and analyze such results. Learn to predict hacker's mindset and respond to hacker attack. Raise awareness in your workplace about security policy and procedures. System Administrators, IT Managers and Analysts would benefit from this course as well as technologists wanting to broaden their impact.			<i>Prerequisite: Accounting 1A.</i> <i>Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.</i> (Also listed as Accounting 86. Students may enroll in either department, but not both, for credit.) Five hours lecture (60 hours total per quarter). Fundamentals of computerized accounting using integrated general ledger software packages and electronic spreadsheet software. Conversion of a manual system to a computer system.		
CIS 75D	Enterprise Security Policy Management	3 Units	CIS 89A	Web Page Development	3 Units
<i>Prerequisite: Computer Information Systems 75A or equivalent experience.</i> <i>Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.</i> Two hours lecture, three hours laboratory (60 hours total per quarter). Learn how to secure your enterprise network by creating a security policy and create procedures to maintain security policy. Learn to perform risk analysis and assessment on enterprise security. System Administrators, IT Managers and Analysts would benefit from this course as well as technologists wanting to broaden their impact.			<i>Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273; Computer Information Systems 18A.</i> Two hours lecture, three hours laboratory (60 hours total per quarter). Fundamentals of Web page design and creation: designing, encoding, and maintaining pages on the World Wide Web using HTML/XHTML.		
			CIS 89C	Client-Side Programming with JavaScript	4 1/2 Units
			<i>Advisory: Computer Information Systems 89A, and Computer Information Systems 14A or 15G.</i> Four hours lecture, one and one-half hours laboratory (66 hours total per quarter). Fundamentals of client-side programming for Web pages requiring data collection or other user interaction. Students will create Web pages that execute on the client (personal system) using JavaScript.		

CIS 95A Project Management - A Practicum 5 Units

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.
Five hours lecture (60 hours total per quarter).
 Focus on your role as a Project Manager; selecting a project; selecting a team; documentation and tracking of a project using Project Manager Book of Knowledge (PMBOK) Theory.

CIS 95B Project Planning and Control - A Practicum 4 Units

Prerequisite: Computer Information Systems 95A or equivalent experience.
Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.
Four hours lecture (48 hours total per quarter).
 Create a project scope statement that will act as a basis for creating a project plan. Build a project plan that integrates time, resources and communication with cost and quality of work. Plan controls to proactively mitigate risks.

CIS 95C Risk Assessment and Mitigation - A Practicum 4 Units

Prerequisite: Computer Information Systems 95A or equivalent experience.
Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.
Four hours lecture (48 hours total per quarter).
 Focus on responding to uncertain events or conditions for a positive or negative effect on project objectives. Implement techniques for planning for risks and learn to change project plans to reduce the probability and/or impact of the risk.

CIS 95D Managing Outsourcing - A Practicum 3 Units

Prerequisite: Computer Information Systems 95A or equivalent experience.
Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.
Three hours lecture (36 hours total per quarter).
 Learn to acquire goods and services from an outer organization using procurement and solicitation processes. Perform contract administration till completion and settlement of contract.

CIS 95E CAPM and PMP Exam Preparation 4 Units

Prerequisite: Computer Information Systems 95A or equivalent experience.
Four hours lecture (48 hours total per quarter).
 Prepares the student for attempting the Project Management Professional (PMP) or Certified Associate in Project Management (CAPM) examination provided by Project Management Institute (PMI). Topics include management of integration, scope, time, cost, quality, human resources, communications, risk and procurement.

CIS 108 Personal Computer Security Basics 4 Units

Advisory: English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263; Computer Applications and Office Systems 90GA or equivalent.
(Also listed as Computer Applications and Office Systems 108. Students may enroll in either department, but not both, for credit.)
Four hours lecture (48 hours total per quarter).
 Beginner's computer security course for small office or home users. Learn to stop hackers, worms, viruses, spyware, Web bugs and identity theft. Learn vulnerabilities found in Web browsers, e-mail and operating systems. Protect against online purchase dangers, install firewalls, manage cookies, restrict ports, analyze log files, evaluate wireless networks and examine encryption.

CIS 140A Automated Web Page Testing with Selenium IDE 2 Units

Prerequisite: Computer Information Systems 89A or equivalent.
Co-requisite: Computer Information Systems 140A students must also enroll in Computer Information Systems 89C.
Advisory: Computer Information Systems 74.
One hour lecture, three hours laboratory (48 hours total per quarter).
 An introduction to the open-source Selenium Integrated Development Environment (SIDE) used for automating the testing of web pages. Topics covered will include: download and installation; user forums; record/replay; use of globbing and regular expressions within patterns; use of XPath and DOM expressions to locate page elements; test suite creation; the Selenium command set; the use of JavaScript snippets as arguments to Selenium commands; and the use of JavaScript within user extensions.

CIS 170F Windows 7 Administration 4 1/2 Units

Advisory: English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263; Computer Applications and Office Systems 102N.
(Also listed as Computer Applications and Office Systems 170F. Students may enroll in either department, but not both, for credit.)
Four hours lecture, one and one-half hours laboratory (66 hours total per quarter).
 Provides knowledge and skills to setup, configure, use, and support Windows 7 operating system. Course covers Windows 7 features including installing, upgrading,

configuring and troubleshooting. Learn how to configure Windows security, network connectivity and subsystems. Additional topics include configuring/troubleshooting mobile computing and learning how to use Windows 7's built-in applications.

CIS 200W Topics in Computer Information Systems 1 Unit

CIS 200X 2 Units
CIS 200Y 3 Units
CIS 200Z 4 Units

Credit course - Does not apply to De Anza Associate degree.
Requisite/Advisory: None.
One hour lecture for each unit of credit (12 hours total for each unit of credit per quarter).
(Any combination of Computer Information Systems 200W, 200X, 200Y and 200Z may be taken up to six times, not to exceed 18 units, as long as the topics are different each time.)
 A planned program of exposure to fundamental concepts and applications of selected Computer Information Systems topics. Concepts and theories as applied to the specific topic.

Counseling

COUN 80X Special Topics in Counseling 1 Unit
COUN 80Y 2 Units
COUN 80Z 3 Units

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.
One hour lecture for each unit of credit (12 hours total for each unit of credit per quarter).
(Any combination of Counseling 80X, 80Y and 80Z may be taken up to six times, not to exceed 18 units, as long as the topics are different each time.)
 Selected counseling topics with a focus on academic and personal development.

COUN 200 Orientation to College 1/2 Unit
COUN 200X 1 Unit

(Formerly Counseling 100 and 100X respectively.)
Credit course - Does not apply to De Anza Associate degree.
Requisite/Advisory: None.
Two hours lecture-laboratory for each unit of credit (24 hours total for each unit of credit per quarter).
Pass-No Pass (P-NP) course.
 An orientation to De Anza College that includes programs, services, policies, degrees, certificates, transfer requirements, and college culture. Focus will be on strategies needed for academic success and the development of a two quarter Educational Plan.

Dance

DANC 22 Body Awareness and Conditioning for Dancers 1 Unit

(See general education pages for the requirement this course meets.)
Advisory: English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263.
Two hours lecture-laboratory (24 hours total per quarter).
(Dance 22 may be taken up to three times for credit.)
 Principles of dance and conditioning through floor work derived from ballet, contemporary dance and other psycho-physical disciplines. Topics may include but are not limited to: body mechanics, muscle groups critical to dance, flexibility, alignment, self-assessment, dance injury prevention, and strengthening the mind-body connection.

DANC 22K Theory and Technique of Ballet I 1 Unit

(See general education pages for the requirement this course meets.)
Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273; Dance 22.
Two hours lecture-laboratory (24 hours total per quarter).
(Any combination of Dance 22K and 22L, may be taken up to six times for credit for the family of courses.)
 Introduction to the discipline and creative art of classical ballet, including the development of elementary movement techniques, a working ballet vocabulary, exposure to great works and artists from a global perspective, theory and practice of barre and center floor exercises.

DANC 22L Theory and Technique of Ballet II 2 Units

(See general education pages for the requirement this course meets.)
Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273; Dance 22K.
Four hours lecture-laboratory (48 hours total per quarter).
(Any combination of Dance 22K and 22L, may be taken up to six times for credit for the family of courses.)

Principles and practice of the discipline and creative art of classical ballet, combining: traditional techniques of Russian, French, and Italian schools; barre and center floor work emphasizing alignment/centering, motion through space, and the acquisition of an intermediate working ballet vocabulary.

DANC 23A Theory and Technique of Contemporary (Modern) Dance I 1 Unit

(See general education pages for the requirement this course meets.)

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Two hours lecture-laboratory (24 hours total per quarter).

(Any combination of Dance 23A and 23B, may be taken up to six times for credit for the family of courses.)

Introduction to the discipline and creative art of contemporary dance. Students will be exposed to a basic movement theory, technique and repertoire from global artists.

DANC 23B Theory and Technique of Contemporary (Modern) Dance II 2 Units

(See general education pages for the requirement this course meets.)

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273; Dance 23A.

Four hours lecture-laboratory (48 hours total per quarter).

(Any combination of Dance 23A and 23B, may be taken up to six times for credit for the family of courses.)

The discipline and creative art of contemporary dance focusing on practice, theory, technique, and movement explorations in time and space, developing a working intermediate contemporary dance vocabulary.

DANC 23H Dance Composition 2 Units

Advisory: English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263.

Four hours lecture-laboratory (48 hours total per quarter).

(Dance 23H may be taken twice for credit, for a total of four units.)

Introduction to the fundamental elements and techniques of individual and group dance composition.

DANC 23L Theory and Technique of Hip-Hop I (Popular American Dance) 1 Unit

(See general education pages for the requirement this course meets.)

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Two hours lecture-laboratory (24 hours total per quarter).

(Any combination of Dance 23L and 23M, may be taken up to six times for credit for the family of courses.)

An introduction to the discipline of creative arts through hip-hop dance with an integrated fitness approach that focuses on developing the stabilization muscles of the center of the body. Concentration will be on muscles of the torso, back, hips, inner and outer thighs, chest and abdominals will be used in conjunction with breathing, posture, and muscle awareness. Exposure to great works and artists of the field. Development of a working hip-hop dance vocabulary. Theory and practice of basic technique.

DANC 23M Theory and Technique of Hip-Hop II (Popular American Dance II) 2 Units

(See general education pages for the requirement this course meets.)

Prerequisite: Dance 23L.

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Four hours lecture-laboratory (48 hours total per quarter).

(Any combination of Dance 23L and 23M, may be taken up to six times for credit for the family of courses.)

Explorations in the discipline of creative arts through the theory and practice of hip-hop dance intermediate/advanced level technique, with an integrated fitness approach that focuses on developing the stabilization muscles of the center of the body. Concentration will be on muscles of the torso, back, hips, inner and outer thighs, chest and abdominals will be used in conjunction with breathing, posture, and muscle awareness. Exposure to great works and multicultural artists of the field. Development of a working hip-hop dance vocabulary and performance skills.

DANC 24A Theory and Technique of Social Dance I 1 Unit

(See general education pages for the requirement this course meets.)

Advisory: English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263.

Two hours lecture-laboratory (24 hours total per quarter).

(Any combination of Dance 24A, 24B and 24C, may be taken up to six times for credit for the family of courses.)

Introduction to the discipline and creative art of social dance. Exposure to basic forms of social dance in a ballroom context. Developing a working vocabulary of traditional social dance movements and an understanding of the cultural and historical contexts that produced the specific dance styles.

DANC 24B Theory and Technique of Social Dance II 1 Unit

(See general education pages for the requirement this course meets.)

Advisory: English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263.

Two hours lecture-laboratory (24 hours total per quarter).

(Any combination of Dance 24A, 24B and 24C, may be taken up to six times for credit for the family of courses.)

Introduction to the discipline and creative art of social dance, part two. Exposure to basic forms of social dance in a ballroom context. Developing a working vocabulary of traditional social dance movements and an understanding of the cultural and historical contexts that produced the specific dance.

DANC 24C Theory and Technique of Social Dance III 1 Unit

(See general education pages for the requirement this course meets.)

Advisory: English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263.

Two hours lecture-laboratory (24 hours total per quarter).

(Any combination of Dance 24A, 24B and 24C, may be taken up to six times for credit for the family of courses.)

The art of social dance at the advanced level. Expanded exposure to basic forms of social dance in a ballroom context. Developing a working vocabulary of traditional social dance movements and an understanding of the cultural and historical contexts that produced the specific dance styles.

DANC 25A Theory and Technique of Salsa Dance I 1 Unit

(See general education pages for the requirement this course meets.)

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Two hours lecture-laboratory (24 hours total per quarter).

(Dance 25A may be taken up to three times for credit as long as the topics are different each time.)

Introduction to the discipline and creative art of salsa dance. Exposure to basic forms of social dance in a salsa dance context. Developing a working vocabulary of traditional salsa dance movements and an understanding of the cultural and historical contexts that produced the specific dance styles.

DANC 25B Theory and Technique of Salsa Dance II 2 Units

(Formerly Dance 65B.)

(See general education pages for the requirement this course meets.)

Prerequisite: Dance 25A.

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Four hours lecture-laboratory (48 hours total per quarter).

(Dance 25B may be taken up to six times for credit.)

An intermediate/advance discipline and creative art of salsa dance. Exposure to intermediate/advanced forms of social dance in a salsa dance context. Developing a working vocabulary of traditional salsa dance movements and an understanding of the cultural and historical contexts that produced the specific dance styles.

DANC 27A Dance Workshop (Student Productions, the De Anza Dancers) 1 Unit

DANC 27B 2 Units
DANC 27C 3 Units
DANC 27D 4 Units

Advisory: English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263.

Two hours lecture-laboratory for each unit of credit (24 hours total for each unit of credit per quarter).

(Any combination of Dance 27A, 27B, 27C and 27D may be taken up to three times for credit.)

An introduction to the basic techniques of dance production and performance.

DANC 37A Theory and Technique of Jazz Dance I 1 Unit

(See general education pages for the requirement this course meets.)

Advisory: English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263.

Two hours lecture-laboratory (24 hours total per quarter).

(Any combination of Dance 37A and 37B, may be taken up to six times for credit.)

Introduction to the discipline and creative art of jazz dance. Body conditioning, exposure to the history of major international influences, artists, and works. The development of a working vocabulary; and practice of basic techniques.

DANC 37B	Theory and Technique of Jazz Dance II	2 Units
(See general education pages for the requirement this course meets.) Prerequisite: Dance 37A. Advisory: English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263. Four hours lecture-laboratory (48 hours total per quarter). (Any combination of Dance 37A and 37B, may be taken up to six times for credit.) Exploring elements of time, space, shape and motion as related to jazz dance. Body conditioning, exposure to major international influences, artists, and works. The development of a working vocabulary in significant jazz dance styles; and practice of intermediate level techniques.		
DANC 38A	Appreciation of Dance	4 Units
(See general education pages for the requirement this course meets.) Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273. Four hours lecture (48 hours total per quarter). A study of dance as a cultural phenomenon, form of communication, socialization, recreation, artistic expression, and entertainment. Exploring the history, traditions and works of outstanding artists.		
DANC 48	Technical Production for Dance and Theatre	2 Units
(Formerly Dance 58.) Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273. (Also listed as Theatre Arts 48. Students may enroll in either department, but not both, for credit.) Four hours lecture-laboratory (48 hours total per quarter). (Any combination of Dance 48 and Theatre Arts 48 may be taken up to three times as long as the topics/projects in musical drama, dance concert, etc. are different each time.) Introduction to the theoretical, technical and craft of dance and theatre production with practical experience in public presentation.		
DANC 49A	Topics in Theory and Technique of World Dance	1 Unit
(Formerly Dance 50A.) (See general education pages for the requirement this course meets.) Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273. Two hours lecture-laboratory (24 hours total per quarter). (Dance 49A may be taken up to six times as long as the topics in specific dances and cultures are different each time.) Introduction to the art of world dance. Course will provide exposure to forms of dance from an international perspective. Students will learn to perform the basic skills of classical, traditional, and folk dances from various world cultures, while developing a working vocabulary of traditional dance movements. Students will attempt to gain an understanding and appreciation of the cultural and historical contexts that produced the specific dance forms.		
DANC 78L	Special Topics in Dance	1/2 Unit
DANC 78M		1 Unit
DANC 78N		2 Units
DANC 78P		3 Units
DANC 78Q		4 Units
Prerequisite: Enrollment by audition. Advisory: English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263. Two hours lecture-laboratory for each unit of credit (24 hours total for each unit of credit per quarter). (Any combination of Dance 78L-Q may be taken up to three times for credit, not to exceed 12 units, as long as the topics are different each time.) Special topics that incorporate theory and practice within the discipline of dance.		

Drama

(See Dance and/or Theatre Arts)

Economics

ECON 1	Principles of Macroeconomics	4 Units
(See general education pages for the requirement this course meets.) Advisory: English Writing 1A or English as a Second Language 5. Four hours lecture (48 hours total per quarter). An introduction to macroeconomics. Topics covered will include recessions and inflation, national income accounting, money and the banking system, money and the price level, classical macro theory, Keynesian macro theory, monetary and fiscal policy, and international trade.		

ECON 2	Principles of Microeconomics	4 Units
(See general education pages for the requirement this course meets.) Advisory: English Writing 1A or English as a Second Language 5. Four hours lecture (48 hours total per quarter). Examines fundamental microeconomic issues; the allocation of resources and the production function, pricing of output and factors of production; the distribution of wealth and income; consumer motivations and behavior; the nature and behavior of business firms and markets under various degrees of competition; current problems.		

ECON 78I	Economic Issues in Today's World	3 Units
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ECON 78J		4 Units
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(Formerly Economics 40I and 40J respectively.)
Advisory: English Writing 1A or English as a Second Language 5; Economics 1 or 2.
Three hours lecture for the three unit course (36 hours total per quarter); four hours lecture for the four unit course (48 hours total per quarter).
Basic economic analysis of current economic issues. Each topic studied is selected according to its currency and relevance to analysis. Examines fundamental economics issues within the context of current socio-political activity within the local or national economic environment. By learning the economic way of thinking, our students develop the ability to analyze complex, often ill-defined problems, and to think strategically about both intended and unintended consequences. The study of Economics develops a student's ability to organize thoughts, analyze complex issues, and to make clear and persuasive recommendations. These skills explain why economics majors score higher on law school admissions tests than other majors, and receive among the highest starting salaries. Recent classes have involved experimental economic techniques and their application to the understanding and testing of theory; the changing European economic community; liberal, conservative and radical perspectives on current economic policy; the restructuring of the California and United States economy; public finance options for local, state and federal government units; the use of simulations and modeling in economic analysis; political economy; and, experimental and behavioral economic theories and practices.

Education

EDUC 1	Introduction to Elementary Education in a Diverse Society	3 Units
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Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.
Two hours lecture, three hours laboratory (60 hours total per quarter).
Examination of principles and practices of elementary education in today's society including observations and supervised participation in the elementary school setting.

EDUC 46	Mathematics for Elementary Education	5 Units
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(See general education pages for the requirement this course meets.)
Prerequisite: Mathematics 114 with a grade of C or better, or a qualifying score on Intermediate Algebra Placement Test within the past calendar year.
Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.
(Also listed as Mathematics 46. Students may enroll in either department, but not both, for credit.)
Five hours lecture (60 hours total per quarter).
Designed for prospective elementary and middle school teachers. An introduction to the discipline of mathematics as the use of logical, quantitative, and spatial reasoning in the abstraction, modeling, and problem solving of real-world situations. The main topics in the course include the origins of mathematics, mathematical reasoning and problem solving strategies, theory of sets, integers and integral number theory, rational numbers and proportion, real numbers and decimal notation, and measurement. Throughout the course students will experience the learning of mathematics in a way that models how they can create an active learning environment for their future students.

EDUC 56	Understanding and Working with English Language Learners	3 Units
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Advisory: Completion of Child Development 10G (or Psychology 10G) and 55; English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.
(Also listed as Child Development 56. Students may enroll in either department, but not both, for credit.)
Three hours lecture (36 hours total per quarter).
Developmental and cultural examination of the dual language learner in early childhood programs. Theories and developmental sequence of bilingual language acquisition. Role of teacher and methods for supporting the dual language child. (This course meets NAEYC Standard 4b: Teaching and learning: Using developmentally effective approaches; NBPTS Early childhood/Generalist Standard II: Equity, Fairness and Diversity; CEC Special Education Content Standards, Standard 2: Development & Characteristics of Learners; Standard 6: Language.)

EDUC 58 Children's Literature 4 Units

(See general education pages for the requirement this course meets.)

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

(Also listed as English Literature 58. Students may enroll in either department, but not both, for credit.)

Four hours lecture (48 hours total per quarter).

Study of the literature of children (pre-elementary through young adult) with an emphasis on poetry, picture books, folk tales, myths, fiction, fantasy, and nonfiction from a variety of cultures, ethnicities and historical periods. Evaluation of the literary quality and the cultural and historical meaning of individual works. Study of the use of children's literature as an educational tool both in the classroom and outside of it.

EDUC 73 Early Childhood Mental Health 3 Units

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

(Also listed as Child Development 73. Students may enroll in either department, but not both, for credit.)

Three hours lecture (36 hours total per quarter).

Examination of mental health milestones at each stage of a child's development. Overview of psychological theory in infant/early childhood mental health. Assessment and screening to identify early childhood mental health challenges. Implementation of mental health interventions and strategies. An exploration of how early experiences in the first 5 years of life can impact the physical and psychological development and well-being of children throughout the lifespan.

(This course meets NAEYC Standard 1: Promoting Child Development and Learning; Standard 3: Observing, Documenting and Assessing to Support Young Children and Families; NBPTS Early Childhood/General Standards, 2dEd. Standard I: Understanding Young Children, Standard III: Assessment, Standard VI: Multiple Teaching Strategies for Meaningful Learning; and CEC Special Education: Standard 2: Development and Characteristics of Learners, Standard 4 Instructional Strategies.)

EDUC 74 Early Childhood Mental Health Seminar and Fieldwork 3 Units

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

(Also listed as Child Development 74. Students may enroll in either department, but not both, for credit.)

Two hours lecture, three hours laboratory (60 hours total per quarter).

Provides an overview of different approaches to early identification and intervention with children and their families and will help students develop basic support skills for use in dealing with high-risk families, including those with exceptional emotional, social, or physical needs.

(This course meets NAEYC Standard 3, Standard 4b; NBPTS Early Childhood/Generalist Standard I, III, VI, IX; and CEC Special Education Content Standards, Standards 4, 5 and 8.)

Engineering**ENGR 10 Introduction to Engineering 4 1/2 Units**

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273; Mathematics 210 or equivalent.

Three hours lecture, five hours laboratory (96 hours total per quarter).

An introduction to engineering design through a variety of projects, including experimentation, data analysis, and development of computer skills. Exposure to several engineering disciplines through problem solving for the purpose of providing information to assist students in a choice of major.

ENGR 35 Statics 4 Units

Prerequisite: Engineering 10; Mathematics 1B; Physics 4A.

Three hours lecture, three hours laboratory (72 hours total per quarter).

Principles of statics as applied to particles and rigid bodies in two and three dimensions. Vector solutions for concentrated and distributed loads. Determination of centroids and moments of inertia and the effects of dry friction. Programming computer solutions.

ENGR 37 Introduction to Circuit Analysis 5 Units

Prerequisite: Mathematics 1D; Physics 4B (may be taken concurrently).

Five hours lecture (60 hours total per quarter).

Introduction to the analysis of lumped, linear, bilateral circuits. Basic equations, elementary network differential equations; natural and forced response of simple circuits. Development of steady state sinusoidal circuit analysis for the network differential equations.

ENGR 77 Special Projects in Engineering 1 Unit
ENGR 77X 2 Units
ENGR 77Y 3 Units

Prerequisite: Consent of instructor and division dean.

Three hours laboratory for each unit of credit (36 hours total for each unit of credit per quarter).

(Any combination of Engineering 77, 77X and 77Y may be taken up to six times, not to exceed 18 units, as long as the projects are different each time.)

Individual special reading, writing, or study projects in Engineering as determined in consultation with the instructor.

English

For courses in reading, vocabulary, and spelling, see "Reading." Placement in English is based on results of standardized tests prior to enrollment. To enroll in English Writing 1A, a student must demonstrate competence in reading and writing skills.

Competence in reading is demonstrated by a satisfactory score on a standard test (see schedule of classes for details) or satisfactory completion of Reading 211, including instructor's recommendation.

Competence in writing is demonstrated by a satisfactory score on a standard test (see schedule of classes for details) or satisfactory completion of English Writing 211, including instructor's recommendation.

Students scoring below the qualifying score for Reading 211 in the reading test should enroll in Reading 200. Those scoring below the qualifying score for English Writing 211 on the writing test should enroll in English Writing 200.

English/Literature

Some courses in this department have recommended competencies. These are determined by placement tests; students who have not taken placement tests or who are unsure of their scores should call the Assessment Office at 408.864.8717.

ELIT 6 Cinema and the African American (An Historical Analysis of African Americans in American Cinema) 4 Units

(See general education pages for the requirement this course meets.)

Advisory: English Writing 1A or English as a Second Language 5.

(Also listed as Intercultural Studies 14 and Film/Television 48. Students may enroll in only one department for credit.)

Four hours lecture (48 hours total per quarter).

A survey of the image and role of the American film industry. Particular attention will be given to the development of images of racial stereotypes, those works attempting a historical portrayal of the African American experience and the roles played by key African Americans in the evolution of film as an art and feature films as an industry in the United States.

ELIT 10 Introduction to Fiction 4 Units

(See general education pages for the requirement this course meets.)

Advisory: English Writing 1A or English as a Second Language 5.

Four hours lecture (48 hours total per quarter).

Intensive study of fiction; reading, discussion and analysis of structure and meaning in selected novels and short stories.

ELIT 11 Introduction to Poetry 4 Units

(See general education pages for the requirement this course meets.)

Advisory: English Writing 1A or English as a Second Language 5.

Four hours lecture (48 hours total per quarter).

Intensive study of poetry; reading, discussion, and analysis of structure and meaning in selected poems.

ELIT 12 Introduction to Dramatic Literature 4 Units

(See general education pages for the requirement this course meets.)

Advisory: English Writing 1A or English as a Second Language 5.

Four hours lecture (48 hours total per quarter).

Intensive study of dramatic literature; reading, discussion, and analysis of structure and meaning in selected plays.

ELIT 17 Introduction to Shakespeare 4 Units

(See general education pages for the requirement this course meets.)

Advisory: English Writing 1A or English as a Second Language 5.

Four hours lecture (48 hours total per quarter).

Analysis of representative Shakespearean sonnets, histories, tragedies, and comedies, placed within the literary and social context of the Renaissance as well as the context of contemporary culture.

ELIT 19 Introduction to the Bible as Literature 4 Units

(See general education pages for the requirement this course meets.)

Advisory: English Writing 1A or English as a Second Language 5.

Four hours lecture (48 hours total per quarter).

An introduction to the study of the Bible, in English, from a literary, cultural, and historical point of view, with consideration of its influence on our culture. Selected readings from Hebrew Bible, Greek New Testament, and Apocrypha.

ELIT 20 Major Authors 4 Units

(See general education pages for the requirement this course meets.)

Prerequisite: English Writing 1A.

Four hours lecture (48 hours total per quarter).

(May be taken two times for credit as long as the topic differs each time.)

Reading and analysis of representative works of one, two, or three major authors through lecture, discussion, and critical writing. Emphasis on author or authors' stylistic innovations as well as historical, class, cultural, ethnic, and gender issues relevant to the texts and biographies.

ELIT 21	Women in Literature	4 Units	ELIT 48A	Major American Writers (Colonial to Romantic, 1620-1865)	4 Units
(See general education pages for the requirement this course meets.) Advisory: English Writing 1A or English as a Second Language 5. (Also listed as Women's Studies 21. Students may enroll in either department, but not both, for credit.) Four hours lecture (48 hours total per quarter). Intensive study of representative literary works by or about women including an analysis of different historical, cultural, and critical perspectives.			(See general education pages for the requirement this course meets.) Advisory: English Writing 1A or English as a Second Language 5. Four hours lecture (48 hours total per quarter). Reading and critical analysis of representative works by diverse writers such as William Bradford, Anne Bradstreet, Jonathan Edwards, Ben Franklin, Thomas Jefferson, James Fenimore Cooper, Edgar Allan Poe, Nathaniel Hawthorne, Herman Melville, Frederick Douglass, Harriet Jacobs, Harriet Beecher Stowe, Elias Boudinot, Chief Seattle, Sojourner Truth, Ralph Waldo Emerson, Margaret Fuller, Henry David Thoreau.		
ELIT 22	Mythology and Folklore	4 Units	ELIT 48B	Major American Writers (The Advent of Realism, 1865-1914)	4 Units
(See general education pages for the requirement this course meets.) Advisory: English Writing 1A or English as a Second Language 5. Four hours lecture (48 hours total per quarter). An intercultural survey of prehistoric, historic, and contemporary world mythology and folklore which examines the relationship between a culture's myths and folktales and its art, literature, and social values.			(See general education pages for the requirement this course meets.) Advisory: English Writing 1A or English as a Second Language 5. Four hours lecture (48 hours total per quarter). Reading and critical analysis of representative works by major writers such as Walt Whitman, Emily Dickinson, Mark Twain, Henry James, William Dean Howells, Charlotte Perkins Gilman, Charles Chesnutt, Mary Wilkins Freeman, Kate Chopin, Stephen Crane, Booker T. Washington, W.E.B. DuBois, Black Elk, and Robert Frost.		
ELIT 24	Asian American Literature	4 Units	ELIT 48C	Major American Writers (The Modern Age, 1914-the Present)	4 Units
(Formerly English Literature 52.) (See general education pages for the requirement this course meets.) Prerequisite: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273. (Also listed as Intercultural Studies 24. Students may enroll in either department, but not both, for credit.) Four hours lecture (48 hours total per quarter). Introduction to Asian American literature. Readings in Twentieth and Twenty-First Century works, with an emphasis on three relevant themes: problems of identity as it relates to class, gender, mixed heritages, and sexuality; politics and the history of Asian American activism and resistance; and diversity of cultures within the Asian American community.			(See general education pages for the requirement this course meets.) Advisory: English Writing 1A or English as a Second Language 5. Four hours lecture (48 hours total per quarter). Reading and critical analysis of representative works by major writers such as Faulkner, Hemingway, Hurston, Morrison, Fitzgerald, Hughes, Wright, Ellison, Williams, Cisneros, Stevens, Sexton, Eliot, Vonnegut, Pynchon, O'Connor, Plath, Carver, Wilson, and O'Neill.		
ELIT 25	Introduction to Linguistics	4 Units	ELIT 58	Children's Literature	4 Units
(See general education pages for the requirement this course meets.) Advisory: English Writing 1A or English as a Second Language 5. (Also listed as Linguistics 1. Students may enroll in either department, but not both, for credit.) Four hours lecture (48 hours total per quarter). Introduction to the nature of language. Origin and development of spoken and written languages, how people learn languages, and how languages change, with emphasis on the history of English. Basics of linguistic description including systems of phonetics and phonology, semantics, morphology and syntax. Study of general linguistic principles as they apply across languages.			(See general education pages for the requirement this course meets.) Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273. (Also listed as Education 58. Students may enroll in either department, but not both, for credit.) Four hours lecture (48 hours total per quarter). Study of the literature of children (pre-elementary through young adult) with an emphasis on poetry, picture books, folk tales, myths, fiction, fantasy, and nonfiction from a variety of cultures, ethnicities and historical periods. Evaluation of the literary quality and the cultural and historical meaning of individual works. Study of the use of children's literature as an educational tool both in the classroom and outside of it.		
ELIT 39	Contemporary Literature	4 Units	ELIT 78	Special Topics in Literature	1 Unit
(See general education pages for the requirement this course meets.) Advisory: English Writing 1A or English as a Second Language 5. Four hours lecture (48 hours total per quarter). Critical examination of representative, contemporary literary works of the post-WWII period, with emphasis on more recent works and intercultural offerings. Attention to key trends, styles, and issues in a global context.			ELIT 78X		2 Units
ELIT 44	International Literature (Fiction)	4 Units	ELIT 78Y		3 Units
(See general education pages for the requirement this course meets.) Advisory: English Writing 1A or English as a Second Language 5. Four hours lecture (48 hours total per quarter). Reading and critical analysis of representative works of international fiction, including works from Africa, Asia, Latin America, Pacific Islands, and Australia. Literary, cultural, and cross-cultural interpretation, evaluation, and comparison. Cross-cultural interpretation and literary analysis of short stories and novels.			ELIT 78Z		4 Units
ELIT 46A	Major British Writers (Medieval and Renaissance)	4 Units	Advisory: English Writing 1A or English as a Second Language 5, or recommendation of instructor or counselor. One hour lecture for each unit of credit (12 hours total for each unit of credit per quarter). (Any combination of English Literature 78, 78X, 78Y and 78Z may be taken up to six times, not to exceed 18 units, as long as the topics are different each time.) Intensive study and analysis of a special topic in literature.		
(See general education pages for the requirement this course meets.) Advisory: English Writing 1A or English as a Second Language 5. Four hours lecture (48 hours total per quarter). Reading and critical analysis of representative works by major writers such as Chaucer, Shakespeare and Milton.			ELIT 97	Special Topics: Shakespeare in Performance	2 Units
ELIT 46B	Major British Writers (Neo- Classical and Romantic)	4 Units	Advisory: English Writing 1A or English as a Second Language 5. Four hours lecture-laboratory (48 hours total per quarter). (May be taken six times for credit, as the topics are different each time.) Discussions of selected plays and an extended field trip to live performances of the plays at the annual Oregon Shakespeare Festival. Costs to be borne by the student.		
(See general education pages for the requirement this course meets.) Advisory: English Writing 1A or English as a Second Language 5; or consent of the instructor. Four hours lecture (48 hours total per quarter). Reading and critical response to representative works by major writers such as Pope, Behn, Swift, Johnson, Wordsworth, Coleridge, Percy and Mary Godwin Shelley, Keats, Austen, Montagu, and the Bronte sisters.					
ELIT 46C	Major British Writers (Neo- Classical and Romantic)	4 Units			
(See general education pages for the requirement this course meets.) Advisory: English Writing 1A or English as a Second Language 5. Four hours lecture (48 hours total per quarter). Reading and critical response to representative works by major writers such as the Brontes, Tennyson, Barrett Browning, Browning, Dickens, Arnold, Hopkins, Wilde, Lawrence, Hardy, Yeats, Conrad, Joyce, Eliot, Beckett, Woolf and Auden.					
ELIT 46C	Major British Writers (Victorian and Modern)	4 Units			
(See general education pages for the requirement this course meets.) Advisory: English Writing 1A or English as a Second Language 5. Four hours lecture (48 hours total per quarter). Reading and critical response to representative works by major writers such as the Brontes, Tennyson, Barrett Browning, Browning, Dickens, Arnold, Hopkins, Wilde, Lawrence, Hardy, Yeats, Conrad, Joyce, Eliot, Beckett, Woolf and Auden.					

English/Writing

Some courses in this department have recommended competencies. These are determined by placement tests; students who have not taken placement tests or who are unsure of their scores should call the Assessment Office at 408.864.8717.

EWRT 1A	Composition and Reading	5 Units
(See general education pages for the requirement this course meets.) Prerequisite: English Writing 211 and Reading 211 (or Language Arts 211); or equivalent placement (normally based on results of the English Placement Tests). Five hours lecture (60 hours total per quarter). Introduction to university level reading and writing, with an emphasis on analysis. Close examination of a variety of texts (personal, popular, literary, professional, academic) from culturally diverse traditions. Practice in common rhetorical strategies used in academic writing. Composition of clear, well-organized, and well-developed essays, with varying purposes and differing audiences, from personal to academic.		

EWRT 1B Reading, Writing and Research 5 Units*(See general education pages for the requirement this course meets.)**Prerequisite: English Writing 1A.**Five hours lecture (60 hours total per quarter).*

Development of analytical, integrative skills in reading and writing. Academic (interpretive, analytical, argumentative) writing based largely on reading of literary/imaginative texts linked by a common theme or issue. Outside research leading to analysis, comparison, and synthesis in documented research paper.

EWRT 1C Literature and Composition 5 Units*(See general education pages for the requirement this course meets.)**Prerequisite: English Writing 1B.**Five hours lecture (60 hours total per quarter).*

Applies the analytical, critical, and synthesis skills developed in English Writing 1A and 1B to the ways meaning can be made in diverse cultural, social, and historical contexts in prose, poetry, and drama by reading and analyzing texts and critical interpretations and by composing critical responses, analyses, and arguments.

EWRT 2 Critical Reading, Writing and Thinking 5 Units*(See general education pages for the requirement this course meets.)**Prerequisite: English Writing 1A.**Five hours lecture (60 hours total per quarter).*

Develops critical thinking skills and the ability to apply these skills to reading and writing. Develop analytical and argumentative academic essays based on reading of complex texts, and the use of outside research leading to analysis, comparison, and synthesis and a documented research paper.

EWRT 30 Introduction to Creative Writing 4 Units*(Formerly English Writing 52.)**(See general education pages for the requirement this course meets.)**Prerequisite: English Writing 211 and Reading 211 (or Language Arts 211).**Four hours lecture (48 hours total per quarter).*

Introduction to the writing of fiction, poetry, drama, and creative nonfiction, through both critical analysis and intensive practice.

EWRT 40 Fiction Writing 4 Units*Prerequisite: English Writing 211 and Reading 211 (or Language Arts 211).**Four hours lecture (48 hours total per quarter).*

Development of fiction writing skills through critical analysis and intensive practice.

EWRT 41 Poetry Writing 4 Units*Prerequisite: English Writing 211 and Reading 211 (or Language Arts 211).**Four hours lecture (48 hours total per quarter).*

Development of poetry writing skills through critical analysis and intensive practice.

EWRT 42 Writing It Real: Creative Nonfiction and Memoir Writing 4 Units*(Formerly English Writing 54.)**Prerequisite: English Writing 211 and Reading 211 (or Language Arts 211).**Four hours lecture (48 hours total per quarter).*

Development of skills in writing creative nonfiction and memoir through critical analysis and intensive practice.

EWRT 61 Introduction to Technical Writing* 5 Units*Prerequisite: English Writing 1A or English as a Second Language 5.**(Also listed as Business 61 and Technical Writing 61. Students may enroll in only one department for credit.)**Five hours lecture (60 hours total per quarter).*

Technical writing skills focusing on basic techniques of exposition for the technical field, functional description, process writing, technical vocabulary, correct usage, and accurate editing.

EWRT 62 Survey of Technical Writing* 5 Units*Prerequisite: Business 61 or English Writing 61 or Technical Writing 61 (may be taken concurrently).**(Also listed as Business 62 and Technical Writing 62. Students may enroll in only one department for credit.)**Five hours lecture (60 hours total per quarter).*

Technical writing skills focusing on short document formats, production of sections of various technical documents, and incorporation of graphics within text.

EWRT 63 Technical Publications* 5 Units*Prerequisite: Business 61 or English Writing 61 or Technical Writing 61.**(Also listed as Business 63 and Technical Writing 63. Students may enroll in only one department for credit.)**Five hours lecture (60 hours total per quarter).*

Technical writing and editing skills applied through individual and group assignments with emphasis on planning, scheduling, and producing longer reports, manuals, and instructions. Development of organizational skills and individual documentation solutions.

EWRT 64 Technical Writing Seminar* 5 Units*Prerequisite: Business 62 or 63; or English Writing 62 or 63; or Technical Writing 62 or 63.**(Also listed as Business 64 and Technical Writing 64. Students may enroll in only one department for credit.)**Five hours lecture (60 hours total per quarter).*

Technical communication and editing skills applied through the preparation and presentation of a complete document according to the standards of the student's chosen technical field.

**EWRT 65 Literary Magazine 1 Unit
EWRT 65X 2 Units***Advisory: English Writing 1A or English as a Second Language 5.**(Also listed as Journalism 65W and 65X. Students may enroll in either department, but not both, for credit.)**Two hours lecture-laboratory for the one-unit course (24 hours total per quarter); two hours lecture-laboratory and three hours laboratory for the two unit course (60 hours total per quarter).**(Any combination of English Writing 65, 65X and Journalism 65W, 65X may be taken up to six times for credit. Submissions vary each quarter, so content is different. Students build upon previous experience and develop higher-level skills.)*

Collaborative evaluation and selection of fiction, poetry, photography, drawings, and other literary and artistic work for literary magazine. Magazine design and production. (Additional editorial, production, management, or marketing work for English Writing 65X and Journalism 65X.)

**EWRT 77 Special Projects in English 1 Unit
EWRT 77X 2 Units
EWRT 77Y 3 Units***(Formerly English Writing 56, 56X and 56Y respectively.)**Prerequisite: Consent of instructor and division dean.**Advisory: English Writing 1A or English as a Second Language 5.**Three hours laboratory for each unit of credit (36 hours total for each unit of credit per quarter).**(Any combination of English Writing 77, 77X and 77Y may be taken up to six times for credit, not to exceed 18 units, as long as the projects are different each time.)**Pass-No Pass (P-NP) course.*

Special reading, writing, or study projects in English as determined in consultation with the instructor.

EWRT 97 Introduction to Peer Tutoring in Writing 3 Units*Prerequisite: English Writing 1A or English as a Second Language 5; must be hired to work as a De Anza tutor.**(Also listed as Learning Assistance 97. Students may enroll in either department, but not both, for credit.)**Three hours lecture (36 hours total per quarter).*

Required training for De Anza writing tutors. Introduction to the theory and practice of tutoring writing, including strategies and approaches to help students from diverse linguistic backgrounds at various stages of the writing process. Students read about, observe, discuss, write about and practice the craft of tutoring writing. After an initial orientation, students in the class begin tutoring, and reflect on their tutoring experiences as part of the class.

EWRT 200 Fundamentals of Writing 5 Units*(Formerly English Writing 100A.)**Credit course - Does not apply to De Anza Associate degree.**Prerequisite: Qualifying score on the English Placement Test.**Five hours lecture (60 hours total per quarter).**(May be taken two times for credit.)**Pass-No Pass (P-NP) course.*

Practice focused, purposeful writing in several formats to different audiences with a variety of sentence structures responding to, engaging with or inspired by written or visual texts. Edit writing to correct errors in the major conventions of Standard Written English.

EWRT 211 Preparatory Reading and Writing Skills 5 Units*(Formerly English Writing 100.)**Credit course - Does not apply to De Anza Associate degree.**Prerequisite: English Writing 200 and Reading 200 (or Language Arts 200); or a qualifying score on the English Placement Test.**Five hours lecture (60 hours total per quarter).**Pass-No Pass (P-NP) course.*

Develop the abilities necessary for college-level reading and essay writing. Emphasize writing in response to critical questions about assigned texts.

***NOTE: The Technical Writing program is being phased out. Technical Writing classes will no longer be offered after spring quarter 2013 with the exception of TWRT 64 which will end after fall 2013.**

EWRT 274	Grammar and Proofreading for Academic Writing	4 Units	ESL 213	Vocabulary and Idioms in Context	1/2 Unit
<i>(Formerly English Writing 174.)</i> Credit course - Does not apply to De Anza Associate degree. (Recommended for students whose native language is not English and students who wish to improve their grammar and proofreading skills.) Prerequisite: English as a Second Language 261, 262 and 263; or English Writing 200. (Also listed as English as a Second Language 274. Students may enroll in either department, but not both, for credit.) Four hours lecture (48 hours total per quarter). Focus on helping students become successful academic writers by addressing their needs (a) to understand grammatical structures fundamental to college writing and (b) to develop effective proofreading skills.			ESL 213X <i>(English as a Second Language 213 was formerly English as a Second Language 113.)</i> Credit course - Does not apply to De Anza Associate degree. (Restricted to students whose native language is not English.) Prerequisite: English as a Second Language 244. One hour lecture-laboratory for the one-half unit course (12 hours total per quarter); two hours lecture-laboratory for the one unit course (24 hours total per quarter). Pass-No Pass (P-NP) course. Vocabulary expansion: reading and listening exposure to vocabulary and idioms in a variety of contexts with follow-up spoken and written practice.		1 Unit
English as a Second Language			ESL 214 English for Academic Skills 1/2 Unit Credit course - Does not apply to De Anza Associate degree. Prerequisite: English as a Second Language 261, 262 and 263. One hour lecture-laboratory (12 hours total per quarter). (May be taken up to three times for credit.) Pass-No Pass (P-NP) course. Academic skills with emphasis on improving skills in reading, writing and aurally comprehending academic English to prepare students for college-level general education courses.		
ESL 5	Advanced Composition and Reading	5 Units	ESL 216	Advanced Reading Practice	1/2 Unit
<i>(See general education pages for the requirement this course meets.)</i> Prerequisite: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273; or a qualifying score on the English as a Second Language Placement Test. Five hours lecture (60 hours total per quarter). Close reading and analysis of a variety of personal, societal, academic, and literary texts representing culturally diverse perspectives. Practice of the techniques of expository, response, and argumentative writing based on personal experience, critical reading, and critical thinking. Composition of clear, organized, and well-developed essays with varied rhetorical strategies and for differing audiences.			ESL 216X <i>(English as a Second Language 216 was formerly English as a Second Language 116.)</i> Credit course - Does not apply to De Anza Associate degree. (Restricted to students whose native language is not English.) Prerequisite: English as a Second Language 252. One hour lecture-laboratory for the one-half unit course (12 hours total per quarter); two hours lecture-laboratory for the one unit course (24 hours total per quarter). Pass-No Pass (P-NP) course. Extensive reading to expand vocabulary, develop critical reading skills, and improve ability to analyze reading selections through small group discussion.		1 Unit
ESL 6	Critical Reading and Research for Writing	5 Units	ESL 222	Reading Comprehension	1/2 Unit
<i>(See general education pages for the requirement this course meets.)</i> (Restricted to students whose native language is not English.) Prerequisite: English Writing 1A or English as a Second Language 5. Five hours lecture (60 hours total per quarter). Development of analytical, integrative, and research skills in reading and writing. Academic writing based largely on analytic and interpretive reading of culturally diverse literature and texts. Library and Internet research leading to analysis, comparison, and synthesis in documented research papers.			<i>(Formerly English as a Second Language 224.)</i> Credit course - Does not apply to De Anza Associate degree. (Restricted to students whose native language is not English.) Prerequisite: English as a Second Language 244. One hour lecture-laboratory (12 hours total per quarter). (May be taken up to three times for credit.) Pass-No Pass (P-NP) course. Reading practice and vocabulary development to improve comprehension of topics and issues reported by the news media.		
ESL 200	High Beginning English as a Second Language	10 Units	ESL 223	Reading and Vocabulary Building	1/2 Unit
Credit course - Does not apply to De Anza Associate degree. Prerequisite: Qualifying score on the English as a Second Language Placement Test. Ten hours lecture (120 hours total per quarter). Development of English speaking, listening, reading and writing skills. Practice in listening to and using basic forms of conversational English with comprehensible pronunciation. Development of basic reading comprehension and vocabulary. Practice in writing simple and compound sentences, short narratives, explanations and descriptions.			ESL 223X <i>(English as a Second Language 223 was formerly English as a Second Language 123.)</i> Credit course - Does not apply to De Anza Associate degree. (Restricted to students whose native language is not English.) Prerequisite: English as a Second Language 234. One-hour lecture-laboratory for the one-half unit course (12 hours total per quarter); two hours lecture-laboratory for the one unit course (24 hours total per quarter). Pass-No Pass (P-NP) course. Develop an appreciation for reading and sharing ideas in English while improving reading skills, retention, and vocabulary.		1 Unit
ESL 210	Practice in Speaking and Conversation	1/2 Unit	ESL 230	Studies in American Language and Culture	1 Unit
Credit course - Does not apply to De Anza Associate degree. (Restricted to students whose native language is not English.) Prerequisite: English as a Second Language 244. One hour lecture-laboratory (12 hours total per quarter). (May be taken up to three times for credit.) Pass-No Pass (P-NP) course. English speaking and conversation skills practiced in a variety of contexts to develop vocabulary, comprehensibility and cultural awareness.			ESL 230W ESL 230X ESL 230Y Credit course - Does not apply to De Anza Associate degree. (Restricted to students whose native language is not English.) Requisite/Advisory: None. One hour lecture for each unit of credit (12 hours total for each unit of credit per quarter). Pass-No Pass (P-NP) course. Develop conversation, discussion and listening skills for clear communication in a variety of contexts. Investigate and analyze customs and attitudes in American culture from a multicultural perspective.		2 Units 3 Units 4 Units
ESL 211	Listening in Context	1/2 Unit			
ESL 211X		1 Unit			
<i>(English as a Second Language 211 was formerly English as a Second Language 111.)</i> Credit course - Does not apply to De Anza Associate degree. (Restricted to students whose native language is not English.) Prerequisite: English as a Second Language 251. One hour lecture-laboratory for the one-half unit course (12 hours total per quarter); two hours lecture-laboratory for the one unit course (24 hours total per quarter). Pass-No Pass (P-NP) course. English listening practice in a variety of contexts to expand vocabulary, comprehensibility and cultural awareness.					

ESL 234	Low Intermediate English as a Second Language (Formerly English as a Second Language 134.) Credit course - Does not apply to De Anza Associate degree. (Restricted to students whose native language is not English.) Prerequisite: Qualifying score on the English as a Second Language Placement Test. Ten hours lecture (120 hours total per quarter). Development of English speaking, listening, reading and writing skills. Practice in listening to and using basic forms of conversational English to ask and answer questions on a variety of cultural topics. Development of basic reading comprehension and vocabulary. Practice in writing simple and compound sentences, short narratives, explanations, and descriptions.	10 Units	ESL 261	Low Advanced Listening and Speaking (Formerly English as a Second Language 161.) Credit course - Does not apply to De Anza Associate degree. (Restricted to students whose native language is not English.) Prerequisite: English as a Second Language 251 or a qualifying score on the English as a Second Language Placement Test. Co-requisite: English as a Second Language 261 students may also enroll in English as a Second Language 262 and 263 concurrently. Three hours lecture (36 hours total per quarter). Speaking and listening: emphasis on comprehension and analysis of information; expression of students' ideas using a variety of levels of sophistication. Development of listening, pronunciation and note-taking skills.	3 Units
ESL 244	Intermediate English as a Second Language (Formerly English as a Second Language 144.) Credit course - Does not apply to De Anza Associate degree. (Restricted to students whose native language is not English.) Prerequisite: Qualifying score on the English as a Second Language Placement Test; or English as a Second Language 234 with a grade of C or better. Ten hours lecture (120 hours total per quarter). Development of English speaking, listening, reading and writing skills. Includes pronunciation practice, vocabulary building skills, writing short compositions and discussion of cross-cultural topics.	10 Units	ESL 262	Low Advanced Reading Credit course - Does not apply to De Anza Associate degree. (Restricted to students whose native language is not English.) Prerequisite: English as a Second Language 252 and 253; or a qualifying score on the English as a Second Language Placement Test. Co-requisite: English as a Second Language 262 students may also enroll in English as a Second Language 261 and 263 concurrently. Three hours lecture (36 hours total per quarter). Development of advanced reading comprehension, vocabulary building skills, and improved reading rate in extended written materials.	3 Units
ESL 251	High Intermediate Listening and Speaking Credit course - Does not apply to De Anza Associate degree. (Restricted to students whose native language is not English.) Prerequisite: English as a Second Language 244; or a qualifying score on the English as a Second Language Placement Test. Co-requisite: English as a Second Language 251 students may also take English as a Second Language 252 and 253 concurrently. Three hours lecture (36 hours total per quarter). English speaking and listening practice in a variety of contexts. Development of vocabulary appropriate in both formal and informal situations.	3 Units	ESL 263	Low Advanced Grammar and Writing Credit course - Does not apply to De Anza Associate degree. (Restricted to students whose native language is not English.) Prerequisite: English as a Second Language 252 and 253; or a qualifying score on the English as a Second Language Placement Test. Co-requisite: English as a Second Language 263 students may also enroll in English as a Second Language 261 and 262 concurrently. Four hours lecture (48 hours total per quarter). Develop skills for writing clear, organized, well-developed, multiple paragraph compositions that demonstrate analytical thinking and level-appropriate grammar, sentence structure and vocabulary.	4 Units
ESL 252	High Intermediate Reading (Formerly English as a Second Language 152.) Credit course - Does not apply to De Anza Associate degree. (Restricted to students whose native language is not English.) Prerequisite: English as a Second Language 244; or a qualifying score on the English as a Second Language Placement Test. Co-requisite: English as a Second Language 252 students may also take English as a Second Language 251 and 253 concurrently. Three hours lecture (36 hours total per quarter). Development of high intermediate English reading comprehension and vocabulary building skills in extended written materials.	3 Units	ESL 272	Advanced Reading and Vocabulary (Formerly English as a Second Language 172.) Credit course - Does not apply to De Anza Associate degree. (Restricted to students whose native language is not English.) Prerequisite: English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 262 and 263; or a qualifying score on the English as a Second Language Placement Test. Co-requisite: English as a Second Language 272 students may also enroll in English as a Second Language 273 concurrently. Five hours lecture (60 hours total per quarter). Development of academic vocabulary and reading skills through extensive reading of college level material in English.	5 Units
ESL 253	High Intermediate Grammar and Writing Credit course - Does not apply to De Anza Associate degree. (Restricted to students whose native language is not English.) Prerequisite: English as a Second Language 244; or a qualifying score on the English as a Second Language Placement Test. Co-requisite: English as a Second Language 253 students may also enroll in English as a Second Language 251 and 252 concurrently. Four hours lecture (48 hours total per quarter). Develop skills in using level-specific grammar and sentence structure in writing. Write organized and well-developed descriptive, narrative, and explanatory paragraphs.	4 Units	ESL 273	Introduction to the Essay (Formerly English as a Second Language 173.) Credit course - Does not apply to De Anza Associate degree. (Restricted to students whose native language is not English.) Prerequisite: English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263 with a grade of C or better; or a qualifying score on the English as a Second Language Placement Test. Co-requisite: English as a Second Language 273 students may also enroll in English as a Second Language 272 concurrently. Five hours lecture (60 hours total per quarter). Principles of essay writing.	5 Units
ESL 254	American Language and Culture Through Movies and Television Shows Credit course - Does not apply to De Anza Associate degree. (Restricted to students whose native language is not English.) Prerequisite: English as a Second Language 251; or a qualifying score on the English as a Second Language Placement Test. Three hours lecture (36 hours total per quarter). Pass-No Pass (P-NP) course. Develop an understanding of American culture, language, common idioms and slang through viewing and discussing American films and television.	3 Units	ESL 274	Grammar and Proofreading for Academic Writing (Formerly English as a Second Language 174.) Credit course - Does not apply to De Anza Associate degree. (Recommended for students whose native language is not English and students who wish to improve their grammar and proofreading skills.) Prerequisite: English as a Second Language 261, 262 and 263; or English Writing 200. (Also listed as English Writing 274. Students may enroll in either department, but not both, for credit.) Four hours lecture (48 hours total per quarter). Focus on helping students become successful academic writers by addressing their needs (a) to understand grammatical structures fundamental to college writing and (b) to develop effective proofreading skills.	4 Units
ESL 260	Accent Reduction (for Non-Native Speakers) (Formerly English as a Second Language 160.) Credit course - Does not apply to De Anza Associate degree. (Restricted to students whose native language is not English.) Advisory: English as a Second Language 251. Two hours lecture, three hours laboratory (60 hours total per quarter). Pass-No Pass (P-NP) course. Emphasis on production of speech that is intelligible and accurate, through study and practice of English language sound system, stress, linking, reduction, rhythm, and intonation patterns.	3 Units			

ESL 280	English As a Second Language for Child Development and Education	1 Unit
ESL 280X		2 Units
ESL 280Y		3 Units
Credit course - Does not apply to De Anza Associate degree. (Restricted to students whose native language is not English and who are enrolled in the Child Development Department.) Co-requisite: English as a Second Language 280, 280X and 280Y students must also enroll in Child Development 10G or 10H; and Child Development 12, 50, 51, 54, 56 and 64. Advisory: English as a Second Language 251, 252, and 253; or a qualifying score on the English as a Second Language placement test. One hour lecture for each unit of credit (12 hours total for each unit of credit per quarter). Language support for non-native English speakers taking Child Development courses, including listening/speaking, reading, writing, and vocabulary building strategies and test-taking and study skills to help students successfully understand Child Development courses, textbooks, class and group discussions, and writing and interview assignments.		
Environmental Science		
ESCI 1	Environmental Science	4 Units
(Formerly Environmental Science 51.) (See general education pages for the requirement this course meets.) Advisory: English Writing 1A or English as a Second Language 5. Four hours lecture (48 hours total per quarter). An introduction to environmental science as a branch of the sciences and its relation to the scientific field including the scientific method. Review of the principles, concepts and terminology of the environmental sciences and ecological literacy including restoration ecology, landscape ecology, sustainable studies and ecosystem management. Agenda 21 and other environmental indicator tools as they relate to human use of the earth's systems including the hydrosphere, atmosphere, lithosphere and biosphere and the impact on cultural, ethnic and gender groups will be explored. (One-day field trip outside of scheduled class time may be required for this course.)		
ESCI 1L	Environmental Science Laboratory	1 Unit
(Formerly Environmental Science 51L.) (See general education pages for the requirement this course meets.) Co-requisite: Environmental Science 1L students must also enroll in, or have completed, Environmental Science 1. Advisory: English Writing 1A or English as a Second Language 5. Three hours laboratory (36 hours total per quarter). An introduction to environmental science as a branch of the sciences including the scientific method and its relation to the scientific field in a laboratory and field setting. Applications of scientific, environmental, ecological and sustainability principles as they relate to human societies will be explored.		
ESCI 19	Environmental Biology	5 Units
(Formerly Biology 19.) (See general education pages for the requirement this course meets.) Advisory: English Writing 1A or English as a Second Language 5. Four hours lecture, three hours laboratory (84 hours total per quarter). An introduction to environmental biology as a branch of the environmental sciences and its relation to the scientific field. Review of the principles of environmental biology, ecology and conservation as they relate to natural resource use, the biodiversity crisis, pollution, human population and the impacts on all cultural, ethnic and gender groups. (Field trip outside of scheduled class time may be required for this course.)		
ESCI 20	Introduction to Biodiversity	5 Units
(Formerly Biology 20.) (See general education pages for the requirement this course meets.) Advisory: English Writing 1A or English as a Second Language 5; Environmental Science 19. Four hours lecture, three hours laboratory (84 hours total per quarter). Introduction to biodiversity conservation as a branch of the environmental sciences, conservation biology and related scientific fields. Includes survey of species and ecosystem diversity, elements of biological classification; evolutionary trends and the mechanisms of evolution; ecology and the importance and problems of biodiversity conservation today.		
ESCI 21	Biodiversity 2	5 Units
Advisory: English Writing 1A or English as a Second Language 5. Four hours lecture, three hours laboratory (84 hours total per quarter). A survey of the California Floristic Province, emphasizing the ways California's biodiversity is sampled and studied. Includes hands-on fieldwork surveying vegetation and animal populations; discussion of societal impacts of biodiversity loss and conservation; and the importance of biodiversity conservation today. (Off-campus field trips will be required.)		

ESCI 30	Conservation Biology	5 Units
(Formerly Biology 30.) (See general education pages for the requirement this course meets.) Advisory: English Writing 1A or English as a Second Language 5. Four hours lecture, three hours laboratory (84 hours total per quarter). An introduction to conservation biology as a branch of the environmental sciences with particular focus on maintaining genetic, species and ecological diversity of life on Earth. Contemporary bio-conservation issues will be explored and adaptive, community-based conservation techniques applied to develop practical problem-solving approaches to the biodiversity crisis including habitat fragmentation. In addition cultural, economic and philosophical aspects of biodiversity conservation will be explored. (Off-campus field trips will be required.)		
ESCI 50	Introduction to Wildlife Corridor Technician: Connectivity	4 Units
Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273. Four hours lecture (48 hours total per quarter). Explores wildlife corridors (connectivity) practice and technology in the 21st century including the scientific principles of corridor ecology, landscape ecology and ecosystem (adaptive) management. Applies the principles (theory) of wildlife corridor technology to assist in the preservation, protection and restoration of native species and ecosystems.		
ESCI 52	Wildlife Corridor Technician: Animal Tracking Techniques	4 Units
Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273. Four hours lecture (48 hours total per quarter). Explores the techniques of animal tracking and observation. Applies the field (practical) techniques used in wildlife corridor technology to assist in the preservation, protection and restoration of native species and ecosystems.		
ESCI 53	Wildlife Corridor Technician: Data Collection	1 Unit
Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273. Three hours laboratory (36 hours total per quarter). Explores the data collection techniques, protocol and equipment utilized in wildlife corridor technology. Applies the data collection techniques used in the wildlife corridor discipline to assist in the preservation, protection and restoration of native species and ecosystems.		
ESCI 54	Wildlife Corridor Technician: Data Analysis	3 Units
Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273. Three hours lecture (36 hours total per quarter). Explores the data analysis techniques (including least cost path analysis), protocol and equipment utilized in wildlife corridor technology. Applies the data analysis techniques utilized in the wildlife corridor discipline to assist in the preservation, protection and restoration of native species and ecosystems.		
ESCI 55	Wildlife Corridor Technician: Corridor Design	3 Units
Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273. Three hours lecture (36 hours total per quarter). Examines the process of wildlife corridor (connectivity) design in the 21st century, incorporating the principles and challenges of corridor ecology, ecosystem (adaptive) management and the urban-wildlife interface. Applies the principles of wildlife corridor design to assist in the preservation, protection and restoration of native species and ecosystems.		
ESCI 56	Wildlife Corridor Technician: Plant Survey Techniques	3 Units
Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273. Three hours lecture (36 hours total per quarter). Examines the plant survey techniques and plant community ecology principles utilized in wildlife corridor design, preservation or restoration. Applies these plant survey techniques to assist in the preservation, protection and restoration of native species and ecosystems.		
ESCI 57	Wildlife Corridor Technician: Advanced Tracking	2 Units
Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273. Six hours laboratory (72 hours total per quarter). Advanced tracking field studies lab course exploring wildlife movement and activities along the 37th parallel (Santa Cruz Mountains through the Diablo Range). Applies the principles of wildlife corridor technology to assist in the preservation, protection and restoration of native species and ecosystems.		

ESCI 58 Wildlife Corridor Technician: Advanced Tracking 2 4 Units

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Twelve hours laboratory (144 hours total per quarter).

Advanced tracking, level 2, field studies lab course exploring wildlife movement, activities and analysis along the 37th parallel (Santa Cruz Mountains through the Diablo Range) and statewide (C to C: Coyote Valley to Carrizo Plains National Monument). Applies the advanced tracking principles and techniques to a statewide corridor case study (California's New Model for Corridors, Connectivity, Children & Capital) to assist in the preservation, protection and restoration of native species and ecosystems statewide.

ESCI 61 Introduction to Photovoltaic (PV) Technology 3 Units

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Three hours lecture (36 hours total per quarter).

An introduction to the fundamentals of photovoltaic (PV) basics including how solar cells convert sunlight to electricity, solar potential, types of solar systems, system size requirement and design, net metering options, rebate programs, and related topics for your home or business. An emphasis on the benefits of renewable energy technology as well as how to understand and review multiple bids and analyzing the economics of a PV installation. Good introductory course for students considering the North American Board of Certified Energy Practitioners (NABCEP) certification program.

(Out-of-class field trips may be required for this course.)

ESCI 63 Photovoltaic (PV) Technology Field Project 2 Units

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273; Environmental Science 61.

Six hours laboratory (72 hours total per quarter).

A photovoltaic (PV) technology field studies course emphasizing hands-on learning of solar angle/orientation and energy use calculation, PV systems design and installation for residential and commercial projects. Good field studies course for students considering the North American Board of Certified Energy Practitioners (NABCEP) certification program.

(Out-of-class field trips are required for this course.)

ESCI 77 Special Projects in Environmental Science 1 Unit

ESCI 77X 2 Units
ESCI 77Y 3 Units

Prerequisite: Consent of instructor and division dean.

Three hours laboratory for each unit of credit (36 hours total for each unit of credit per quarter).

(Any combination of Environmental Science 77, 77X and 77Y may be taken up to six times, not to exceed 18 units, as long as the projects are different each time.) Individual research in environmental science. Specific projects determined in consultation with the instructor. Outside reading and written report required.

ESCI 81 Introduction to Ecotourism in the 21st Century 1 Unit

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

One hour lecture (12 hours total per quarter).

Explore the newly emerging field of ecotourism in the 21st century including the principles of ecosystem management and restoration ecology and community-based coalition models throughout the Americas. Apply the community-based ecotourism model of collaboration to local environmental case studies to preserve, protect and restore native species and ecosystems.

ESCI 82 Central Coast Wildlife Corridors: Coyote Valley 1 Unit

ESCI 82X 2 Units
ESCI 82Y 3 Units
ESCI 82Z 4 Units

Requisite/Advisory: None.

Three hours laboratory for each unit of credit (36 hours total for each unit of credit per quarter).

(Any combination of Environmental Science 82, 82X, 82Y and 82Z may be taken up to six times, not to exceed 18 units, as long as the topics are different each time.)

An exploration of the Coyote Valley Wildlife Corridor as an integral component of the Central Coast Wildlife Corridor Regional Landscape (CCWCRL). This field studies course will emphasize wildlife field identification techniques, animal tracking and bird survey protocols, field observation and data collection. These field studies will assist in the long-term preservation, protection and restoration of native species and ecosystems of the Central Coast Region.

ESCI 83 Central Coast Wildlife Corridors: Salinas River Drainage 1 Unit

ESCI 83X 2 Units
ESCI 83Y 3 Units
ESCI 83Z 4 Units

Requisite/Advisory: None.

Three hours laboratory for each unit of credit (36 hours total for each unit of credit per quarter).

(Any combination of Environmental Science 83, 83X, 83Y and 83Z may be taken up to six times, not to exceed 18 units, as long as the topics are different each time.)

An exploration of the Salinas River Wildlife Corridor as an integral component of the Central Coast Wildlife Corridor Regional Landscape (CCWCRL). This field studies course will emphasize wildlife field identification techniques, animal tracking and bird survey protocols, field observation and data collection. These field studies will assist in the long-term preservation, protection and restoration of native species and ecosystems of the Central Coast Region.

ESCI 84 Central Coast Wildlife Corridors: San Benito River Drainage 1 Unit

ESCI 84X 2 Units
ESCI 84Y 3 Units
ESCI 84Z 4 Units

Requisite/Advisory: None.

Three hours laboratory for each unit of credit (36 hours total for each unit of credit per quarter).

(Any combination of Environmental Science 84, 84X, 84Y and 84Z may be taken up to six times, not to exceed 18 units, as long as the topics are different each time.)

An exploration of the San Benito River drainage Wildlife Corridor as an integral component of the Central Coast Wildlife Corridor Regional Landscape (CCWCRL). This field studies course will emphasize wildlife field identification techniques, animal tracking and bird survey protocols, field observation and data collection. These field studies will assist in the long-term preservation, protection and restoration of native species and ecosystems of the Central Coast Region.

ESCI 85 Central Coast Wildlife Corridors: Pajaro River Drainage 1 Unit

ESCI 85X 2 Units
ESCI 85Y 3 Units
ESCI 85Z 4 Units

Requisite/Advisory: None.

Three hours laboratory for each unit of credit (36 hours total for each unit of credit per quarter).

(Any combination of Environmental Science 85, 85X, 85Y and 85Z may be taken up to six times, not to exceed 18 units, as long as the topics are different each time.)

An exploration of the Pajaro River drainage Wildlife Corridor as an integral component of the Central Coast Wildlife Corridor Regional Landscape (CCWCRL). This field studies course will emphasize wildlife field identification techniques, animal tracking and bird survey protocols, field observation and data collection. These field studies will assist in the long-term preservation, protection and restoration of native species and ecosystems of the Central Coast Region.

ESCI 86 Central Coast Wildlife Corridors: Pacheco Pass 1 Unit

ESCI 86X 2 Units
ESCI 86Y 3 Units
ESCI 86Z 4 Units

Requisite/Advisory: None.

Three hours laboratory for each unit of credit (36 hours total for each unit of credit per quarter).

(Any combination of Environmental Science 86, 86X, 86Y and 86Z may be taken up to six times, not to exceed 18 units, as long as the topics are different each time.)

An exploration of the Pacheco Pass Wildlife Corridor as an integral component of the Central Coast Wildlife Corridor Regional Landscape (CCWCRL). This field studies course will emphasize wildlife field identification techniques, animal tracking and bird survey protocols, field observation and data collection. These field studies will assist in the long-term preservation, protection and restoration of native species and ecosystems of the Central Coast Region.

ESCI 87	Central Coast Wildlife Corridors: Diablo Range	1 Unit	E S 2	Humans, the Environment, and Sustainability	4 Units
ESCI 87X		2 Units	(Formerly Environmental Studies 52.)		
ESCI 87Y		3 Units	(See general education pages for the requirement this course meets.)		
ESCI 87Z		4 Units	Advisory: English Writing 1A or English as a Second Language 5.		
Requisite/Advisory: None.			Four hours lecture (48 hours total per quarter).		
Three hours laboratory for each unit of credit (36 hours total for each unit of credit per quarter).			A study of human evolution, biology and ecology, including human civilizations, past and present, and the interaction with the environment. Environmental worldviews (ethics), past and present, of the various cultural, ethnic, gender and socioeconomic groups will be explored.		
(Any combination of Environmental Science 87, 87X, 87Y and 87Z may be taken up to six times, not to exceed 18 units, as long as the topics are different each time.)			(One field trip may be required outside of class time.)		
An exploration of the Diablo Range Wildlife Corridor as an integral component of the Central Coast Wildlife Corridor Regional Landscape (CCWCRL). This field studies course will emphasize wildlife field identification techniques, animal tracking and bird survey protocols, field observation and data collection. These field studies will assist in the long-term preservation, protection and restoration of native species and ecosystems of the Central Coast Region.			E S 3	Imagery of the Environment	4 Units
			(Formerly Environmental Studies 53.)		
			(See general education pages for the requirement this course meets.)		
			Advisory: English Writing 1A or English as a Second Language 5.		
			Four hours lecture (48 hours total per quarter).		
			An introduction to the academic discipline of Environmental Studies through historical and contemporary analysis of nature-based imagery. What those representations indicate about past and present environmental changes will be discussed. Roles of the artist as naturalist, scientist and conservationist will be explored, as well as visual representation by a diverse range of cultural groups.		
			(One field trip outside of class may be required for this course.)		
ESCI 88	Central Coast Wildlife Corridors: Santa Cruz Mountains	1 Unit	E S 6	Introduction to Environmental Law	4 Units
ESCI 88X		2 Units	(Formerly Environmental Studies 60.)		
ESCI 88Y		3 Units	Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.		
ESCI 88Z		4 Units	Four hours lecture (48 hours total per quarter).		
Requisite/Advisory: None.			Today's environmental careers demand proficiency in environmental law. Environmental law is a critical subject of study as it is one of the primary ways that we, as a society, create and establish environmental protections. Includes information regarding laws about land use, energy, natural resources, air, water, and hazardous materials and waste. Current events, citizen action and impacts on various cultural, ethnic, and gender groups will be discussed.		
Three hours laboratory for each unit of credit (36 hours total for each unit of credit per quarter).			E S 50	Introduction to Environmental Protection and Pollution Prevention	4 Units
(Any combination of Environmental Science 88, 88X, 88Y and 88Z may be taken up to six times, not to exceed 18 units, as long as the topics are different each time.)			Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.		
An exploration of the Santa Cruz Mountains Wildlife Corridor as an integral component of the Central Coast Wildlife Corridor Regional Landscape (CCWCRL). This field studies course will emphasize wildlife field identification techniques, animal tracking and bird survey protocols, field observation and data collection. These field studies will assist in the long-term preservation, protection and restoration of native species and ecosystems of the Central Coast Region.			Four hours lecture (48 hours total per quarter).		
ESCI 90	Santa Clara County Field Studies: Tule Elk	1 Unit	An introduction to the field of environmental protection and pollution prevention, surveying the areas of environmental law and regulation, environmental health, pollution control (treating or capturing pollution/waste at its source prior to release into the environment) and pollution prevention (reducing or eliminating pollution/waste at its source through use of the "three R's": Reduce-Reuse-Recycle). Includes overviews of: 1) U.S. and California environmental laws, regulations, and policies, 2) Environmental health issues, 3) Pollution control technologies, 4) Pollution prevention approaches and techniques (Life Cycle Assessment, Design for the Environment, Product Stewardship, Green Building, Green Chemistry, Energy Management, Water Conservation, etc.) and 4) Environmental Management Systems (EMS), including ISO 14001 and Sustainability Management Plans (SMP).		
Requisite/Advisory: None.			E S 55	Ten Steps to Effective Learning in Environmental Studies	1 Unit
One hour lecture (12 hours total per quarter).			Advisory: English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263.		
Field observation of the tule elk (<i>Cervus elaphus nannodes</i>) found in Santa Clara County, California with an emphasis on the history of tule elk reintroduction, habitat utilization, home range characteristics, behaviors and other natural history insights. The underlying social, economic and political issues associated with the near extinction and restoration of this subspecies of North American elk will be discussed. (Off-campus field trips will be required.)			One hour lecture (12 hours total per quarter).		
ESCI 91	Santa Clara County Field Studies: American Badger	1 Unit	Effective learning strategies in environmental studies including energy management technology, conservation biology, environmental education, ecological restoration, watershed management, environmental law, and other related coursework. Effective learning strategies throughout all disciplines will be discussed. Students will prepare a personal 10-step learning strategies plan. Emphasis on strategies to enhance learning for all cultural, ethnic, and gender groups.		
Requisite/Advisory: None.			E S 56	Introduction to Environmental Health	4 Units
One hour lecture (12 hours total per quarter).			Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.		
Field observation of the American badger (<i>taxidea taxus</i>) found in Santa Clara County, California with an emphasis on habitat utilization, home range characteristics, behaviors and other natural history insights. The underlying social, economic and political issues associated with the decline and listing as a species of special concern for this mammal will be discussed. (Off-campus field trips will be required.)			Four hours lecture (48 hours total per quarter).		
ESCI 92	Santa Clara County Field Studies: Raptors	1 Unit	Explores the effects that environmental hazards - such as air and water pollution, industrial and hazardous wastes, food and water-borne diseases, and pesticides and other toxic chemical-containing products, including consumer products - have on human health. Investigates laws, regulations, standards and policies governing environmental and occupational exposure and the means to reduce human health risks from such exposure through the risk assessment and risk management processes.		
Requisite/Advisory: None.			E S 58	Introduction to Green Building	1 Unit
One hour lecture (12 hours total per quarter).			Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.		
Field observation of raptors (bird of prey) found in Santa Clara County, California with an emphasis on the natural history such as habitat utilization, breeding biology, behaviors, identification and migration. Local conservation issues associated with raptors will also be looked at. (Off-campus field trips will be required.)			One hour lecture (12 hours total per quarter).		

Environmental Studies

E S 1	Introduction to Environmental Studies	4 Units
(See general education pages for the requirement this course meets.)		
Advisory: English Writing 1A or English as a Second Language 5.		
Four hours lecture (48 hours total per quarter).		
An interdisciplinary study of the use of the earth's natural resources by human civilizations, past and present, and the role that economics, ethics, law, history, politics, culture and gender inequity have played in resource use and distribution. (One field trip may be required outside of class time.)		

E including LEED (Leadership in Energy and Environmental Design), assembling a green team, assessing the impact of construction and buildings on society, and an overview of key stakeholders in the construction field.

E S 61A Environmental Protection and Pollution Prevention with Emphasis on Local and Regional Communities 4 Units

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Four hours lecture (48 hours total per quarter).

Explores environmental protection and pollution prevention with emphasis on local and regional communities. Topics are presented in a case study format and include regulatory and land use decisions as they relate to environmental agency principles. Special emphasis is placed on the California Environmental Quality Act (CEQA).

E S 61B Environmental Protection and Pollution Prevention with Emphasis on the State and Federal Levels 4 Units

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Four hours lecture (48 hours total per quarter).

Examines environmental protection and pollution prevention, focusing on state and federal agencies, their missions, guiding principles, philosophies, key contacts and current issues. Specific agencies considered include the California Environmental Protection Agency (Cal/EPA) and its underlying units (Air Resources Board, State Water Resources Control Board, Dept. of Toxic Substances Control, Dept. of Pesticide Regulation, and Office of Environmental Health Hazard Assessment), the California Natural Resources Agency and its underlying units (Dept. of Conservation, Dept. of Fish and Game, Dept. of Forestry and Fire Protection, Dept. of Parks and Recreation, Dept. of Resources Recycling and Recovery, and Dept. of Water Resources), the U.S. Environmental Protection Agency and agencies under the U.S. Dept. of the Interior.

E S 62A Introduction to ISO 14001 and Sustainability Management Plans (SMP) 1 Unit

Advisory: English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263.

One hour lecture (12 hours total per quarter).

Explores the emerging field of voluntary compliance of environmental regulation including Sustainability Management Plans (SMP), in the U.S. and abroad. Assess ISO 14001, a voluntary environmental standard developed by the International Organization for Standardization (ISO), as a strategy to minimize an organization's environmental impact.

E S 62B ISO 14001: Environmental Management Systems (EMS) and Sustainability Management Plans (SMP) 1 Unit

Advisory: English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263.

One hour lecture (12 hours total per quarter).

The next step in ISO 14001 implementation is the development of an Environmental Management System (EMS) and Sustainability Management Plans (SMP). Explore a step-by-step approach, using a consensus-based model, to develop an ISO 14001 EMS and SMP.

E S 62C ISO 14001: Integration of an Environmental Management System (EMS) and Sustainability Management Plan (SMP) 1 Unit

Advisory: English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263.

One hour lecture (12 hours total per quarter).

Explores strategies and principles in the adoption, implementation and integration of an ISO 14001 Environmental Management System (EMS) and Sustainability Management Plan (SMP) for an organization including both internal and external stakeholders in environmental management.

E S 62D ISO 14001: Voluntary Audit 1 Unit

Advisory: English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263.

One hour lecture (12 hours total per quarter).

Explores strategies and procedures utilized in the process of voluntary audits of an ISO 14001 Environmental Management System (EMS) and a Sustainability Management Plan (SMP) by an organization.

E S 63 Agenda 21: Blueprint for Sustainability 1 Unit

Requisite/Advisory: None.

One hour lecture (12 hours total per quarter).

An overview of Agenda 21, an action plan to implement the principles and agreements of the Rio de Janeiro Summit in 1992, the largest-ever meeting of 179 nations. Examines the seven central themes of Agenda 21 to ensure that all people benefit by the implementation of it regardless of race, ethnicity or socioeconomic status.

E S 64 AB 32 (CA Global Warming Solutions Act of 2006) 1 Unit

Requisite/Advisory: None.

One hour lecture (12 hours total per quarter).

An overview of California's Global Warming Solutions Act of 2006, AB 32. The course also includes an overview of strategies to implement this act within an organization and a look at the reduction of greenhouse gas emissions (GHG) by three percent per year.

E S 65 Environmental Stewardship 1 Unit

Advisory: English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263.

One hour lecture (12 hours total per quarter).

Explores the role of environmental citizenship including personal responsibility and participation in local environmental case studies along the 37th parallel. Develop an understanding of environmental stewardship principles, including those of other cultural, ethnic and gender groups, and the use of such practices in establishing common ground for community-based decision-making.

E S 66 Environmental Leadership 1 Unit

Advisory: English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263.

One hour lecture (12 hours total per quarter).

Explores the role of environmental leadership in the 21st Century, including development and implementation of leadership skills and models. Apply those leadership skills and models developed to address local environmental case studies.

E S 67 Environmental Team-Building 1 Unit

Advisory: English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263.

One hour lecture (12 hours total per quarter).

Explores the concept of team-building in the 21st Century, including development and implementation of team-building skills and models. Apply those team-building skills and models developed to address local environmental case studies.

E S 68 Community-Based Coalitions and Stakeholders 1 Unit

Advisory: English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263.

One hour lecture (12 hours total per quarter).

Explores the concept of environmental community-based coalitions in the 21st Century, including identifying and integrating key stakeholders. Apply the community-based model of collaboration to address local environmental case studies.

E S 69 Energy Reliability and Your Organization 1 Unit

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

One hour lecture (12 hours total per quarter).

An overview of strategies to assist in preparing an energy management action plan for your organization and staff. The strategies include model board policy, administrative guidelines, assembling an energy management action team, assessing the impact of energy policy on society, and an overview of key stakeholders in the energy field. (One out-of-class field trip may be required for this course.)

E S 70 Introduction to Energy Management Technology 1 Unit

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

One hour lecture (12 hours total per quarter).

An overview of the field of Energy Management and its importance in today's society, including future implications, and discussion of careers and impact on modern culture and society. This module introduces the whole building concept and related energy and conservation issues including the building envelope, HVAC systems, lighting, energy management and controls and renewable energy technologies. (One out-of-class field trip may be required for this course.)

E S 70LX Energy Management Technology and Principles of Building Performance Laboratory 1 Unit

E S 70LY 2 Units
E S 70LZ 3 Units

Prerequisite: Environmental Studies 70 (may be taken concurrently).

Advisory: English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263.

Three hours laboratory for each unit of credit (36 hours total for each unit of credit per quarter).

Examines Energy Management Technology and the importance and applications of building performance, controls and monitoring using the Kirsch and campus-wide lab setting. This module introduces building performance tools and equipment, energy audit technology, and an overview of the whole building concept and related energy and conservation strategies.

(Out-of-class field trips will be required for this course.)

E S 71	The Building Envelope	1 Unit	E S 75	Electric Power Systems	1 Unit
<i>Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.</i> <i>One hour lecture (12 hours total per quarter).</i> An introduction to the building shell as the primary physical component of any facility which controls energy flow between the interior and exterior of the building. The goal is to develop a qualitative and analytical understanding of the thermal performance of major building envelope components. Topics include walls, doors, glazing (windows), roofing and building skin as well as climatic responsive building design. (One out-of-class field trip may be required for this course.)			<i>Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.</i> <i>One hour lecture (12 hours total per quarter).</i> An introduction to electric power systems, focusing on distribution components such as transformers, switch gear, distribution panels, and wiring. Power systems analysis, preventive maintenance, and record keeping techniques will be discussed. Emphasis will be placed on opportunities within a facilities distribution system to save energy, increase equipment life, and reduce unscheduled outages. (One out-of-class field trip may be required for this course.)		
E S 71LX	The Building Envelope and Climate Responsive Building Design and Construction Laboratory	1 Unit	E S 76	Energy Star Products	1 Unit
E S 71LY		2 Units	<i>Advisory: English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263.</i> <i>One hour lecture (12 hours total per quarter).</i> An introduction to Energy Star products including high efficiency, high performance commercial, industrial and residential equipment and appliances that reduce energy consumption and save money.		
E S 71LZ		3 Units			
<i>Prerequisite: Environmental Studies 71 (may be taken concurrently).</i> <i>Advisory: English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263.</i> <i>Three hours laboratory for each unit of credit (36 hours total for each unit of credit per quarter).</i> Examines the building shell as the primary physical component of any facility which controls energy flow between the interior and exterior of the building using the Kirsch and campus-wide lab setting. The goal is to experience a hands-on understanding of the thermal performance of major building envelope components. Topics include walls, doors, glazing (windows), roofing and building skin as well as climatic responsive building design and construction. (Out-of-class field trips will be required for this course.)			E S 76A Solar Thermal Systems 1 Unit <i>(Formerly Environmental Studies 77.)</i> <i>Advisory: English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263.</i> <i>One hour lecture (12 hours total per quarter).</i> An overview of solar thermal systems including water heating technologies which reduce energy use to generate hot water including maintaining equipment and insulation, reducing hot water use and water temperatures, reducing heat losses from the system, and utilizing waste heat sources and renewable energy technologies, including solar.		
E S 72	Heating, Ventilating and Air Conditioning (HVAC) Systems	1 Unit	E S 77X	Special Projects in Environmental Studies	1 Unit
<i>Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.</i> <i>One hour lecture (12 hours total per quarter).</i> An introduction to HVAC systems, the systems that provide heating, cooling, humidity control, filtration, and comfort control to facilities. Examines various HVAC systems and their interrelationship with other building systems. Students will consider HVAC technologies that can help facilities managers achieve the goals of lowering energy costs, becoming more environmentally friendly, and enhancing indoor air quality. (One out-of-class field trip may be required for this course.)			E S 77Y 2 Units E S 77Z 3 Units <i>Prerequisite: Consent of instructor and division dean.</i> <i>Three hours laboratory for each unit of credit (36 hours total for each unit of credit per quarter).</i> <i>(Any combination of Environmental Studies 77X, 77Y and 77Z may be taken up to six times, not to exceed 18 units, as long as the projects are different each time.)</i> Individual research in environmental studies. Specific projects determined in consultation with the instructor. Outside reading and written report required.		
E S 72LX	Heating, Ventilating and Air Conditioning (HVAC) Systems Laboratory	1 Unit	E S 78	Energy Management Systems and Controls	1 Unit
E S 72LY		2 Units	<i>Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.</i> <i>One hour lecture (12 hours total per quarter).</i> Describes the most commonly used controls and energy management systems in commercial and institutional applications. Topics will include complex automatic systems for major energy-consuming equipment, as well as simple controls, including time clocks, occupancy sensors, photocells, and programmable thermostats. Computer-based energy management systems, as well as control systems to reduce peak electrical demand will be discussed. (One out-of-class field trip may be required for this course.)		
E S 72LZ		3 Units			
<i>Prerequisite: Environmental Studies 72 (may be taken concurrently).</i> <i>Advisory: English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263.</i> <i>Three hours laboratory for each unit of credit (36 hours total for each unit of credit per quarter).</i> Examines HVAC systems, the systems that provide heating, cooling, humidity control, filtration, and comfort control to facilities. Examines various HVAC systems and their interrelationship with other building systems using the Kirsch Center for Environmental Studies and campus-wide lab setting. Students will consider HVAC technologies that can help facilities managers achieve the goals of lowering energy costs, becoming more environmentally friendly, and enhancing indoor air quality. (Out-of-class field trips will be required for this class.)			E S 78LX Energy Management Systems and Controls Laboratory 1 Unit E S 78LY 2 Units E S 78LZ 3 Units <i>Prerequisite: Environmental Studies 78 (may be taken concurrently).</i> <i>Advisory: English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263.</i> <i>Three hours laboratory for each unit of credit (36 hours total for each unit of credit per quarter).</i> Examines the controls and energy management systems in commercial, residential and institutional applications. Topics will include complex automatic systems for major energy-consuming equipment, as well as simple controls, including time clocks, occupancy sensors, photocells, and programmable thermostats. Students will interact with computer-based energy management systems, as well as control systems to reduce peak electrical demand both at the Kirsch Center for Environmental Studies as well in the campus-wide lab setting. (Out-of-class field trips will be required for this course.)		
E S 73	Electric Motors and Drives	1 Unit	E S 79 Renewable and Alternative Energy Systems 1 Unit <i>Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.</i> <i>One hour lecture (12 hours total per quarter).</i> An introduction to the potential for renewable and alternative energy systems when adding power generation capacity for a site or large facility. Life-cycle cost comparisons between renewable energy systems and conventional power generation and the added potential of reducing peak power demand will be emphasized. Topics include photovoltaic power systems, wind energy systems, and fuel cells. (One out-of-class field trip may be required for this course.)		
<i>Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.</i> <i>One hour lecture (12 hours total per quarter).</i> Examines the opportunities for lowering energy consumption through energy-efficient motors and motor controls, including an introduction to the technology of high efficiency motors and variable frequency drives. Techniques to increase current carrying capacity, improve voltage to equipment, reduce power losses, and lower electric bills will be discussed. (One out-of-class field trip may be required for this course.)					
E S 74	Lighting Distribution Systems	1 Unit			
<i>Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.</i> <i>One hour lecture (12 hours total per quarter).</i> Provides an introduction to the fundamentals of lighting and energy management lighting techniques. Discusses the different types of lighting and day-lighting applications used in commercial and institutional buildings, while describing the quality and quantity of lighting needed for certain applications, measuring efficiency, color rendering, ballasts, etc. Lighting design that provides visual comfort at lower energy costs will be emphasized. (One out-of-class field trip may be required for this course.)					

E S 79LX	Renewable and Alternative Energy Systems Laboratory	1 Unit	E S 91X	Environmental Education and Nature-Based Learning	2 Units
E S 79LY		2 Units	E S 91Z		4 Units
E S 79LZ		3 Units	<i>(Formerly Environmental Studies 100X and 100Z respectively.)</i>		
<i>Prerequisite: Environmental Studies 79 (may be taken concurrently).</i>			<i>Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.</i>		
<i>Three hours laboratory for each unit of credit (36 hours total for each unit of credit per quarter).</i>			<i>Two hours lecture for the two unit course (24 hours total per quarter); four hours lecture for the four unit course (48 hours total per quarter).</i>		
Examines renewable and alternative energy systems for residential, commercial and other large-scale applications. Life-cycle cost comparisons between renewable energy systems (including aspects of passive solar design) and conventional power generation and the added potential of reducing peak power demand will be emphasized. Students will explore the photovoltaic power systems, wind energy systems, solar thermal systems and fuel cells either located at the Kirsch Center Environmental Studies, campus-wide lab setting or other off-campus sites. (Out-of-class field trips will be required for this class.)			Environmental education for educators emphasizing environmental and ecological concepts, nature-based learning and other curricula, interpretive techniques, development of classroom lesson plans, a review of field trip sites and other resources available to educators. The Cheeseman Environmental Studies Area and local field trip sites will be explored. Teaching environmental curricula to various cultural, ethnic and socioeconomic groups will be discussed. (Local field trips may be required.)		
E S 80	California Field Studies	1 Unit	E S 93	Sustainability Across the Curriculum	1 Unit
E S 80X		2 Units	<i>Requisite/Advisory: None.</i>		
E S 80Y		3 Units	<i>One hour lecture (12 hours total per quarter).</i>		
E S 80Z		4 Units	An overview of strategies needed to implement sustainability courses across the curriculum in academic institutions utilizing the seven central themes of Agenda 21. The critical role of education and educators in communicating the link between human and planetary health and in building a sustainable society will be examined.		
<i>Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.</i>			E S 95	Introduction to Environmental Careers	1 Unit
<i>One hour lecture for each unit of credit (12 hours total for each unit of credit per quarter).</i>			<i>Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.</i>		
Field observation of California's native plants and animals in aquatic and terrestrial ecosystems, with an emphasis on endangered, rare, protected and reintroduced species. The underlying social, economic and political issues associated with habitat and species loss will be discussed, as well as impacts on various cultural, ethnic and socio-economic groups. (Off-campus field trips may be required.)			<i>One hour lecture (12 hours total per quarter).</i>		
E S 85A	California Native Plants and Animals	2 Units	Learn about saving the planet through environmental careers, including ecosystem management, restoration ecology, corridors ecology, energy management technology, environmental stewardship, environmental education, watershed management, environmental law, pollution prevention and more. Opportunities for internships and employment in business, industry, public agencies, academia and nonprofit agencies will be explored. Students will prepare an academic plan for their two- or four-year degree, certificate or workplace.		
<i>Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.</i>			E S 95A	Environmental Studies Internship	1 Unit
<i>Two hours lecture (24 hours total per quarter).</i>			E S 95B		2 Units
Environmental education and interpretative methods focusing on the native plants and animals of California with an emphasis on local case studies and endangered species. Interpretive techniques utilized in environmental education will be reviewed. Prepares students to lead tours of the Cheeseman Environmental Study Area (ESA), outdoor lab. Teaching environmental education and interpretive techniques to various ethnic, cultural and socioeconomic groups will be explored. (Field project required.)			E S 95C		3 Units
E S 85B	Cheeseman Environmental Study Area Interpretive Training and Other Docent	2 Units	E S 95D		4 Units
Activities			<i>Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.</i>		
<i>Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.</i>			<i>One hour lecture for each unit of credit (12 hours total for each unit of credit per quarter).</i>		
<i>One hour lecture, three hours laboratory (48 hours total per quarter).</i>			A work experience internship seminar. The seminar will prepare student interns for internships in business, industry or government related to the student's field of study. The internship must occur during the last year of study prior to completion of a degree or certificate program.		
Interpretative techniques of environmental education and environmental outreach utilizing the Cheeseman Environmental Study Area outdoor lab and the Kirsch Center for Environmental Studies. Students will refine the techniques required for leading tours and interpreting California native plant and animal communities in the Environmental Study Area, as well as in any other outdoor settings. Students will lead tours through the Cheeseman Environmental Study Area and the Kirsch Center for Environmental Studies. Strategies for teaching environmental education and nature-based learning with various cultural, ethnic and socio-economic groups will also be explored. (Off-campus field trips are required for this course.)			E S 96	Environmental Stewardship of the Earth's Natural Resources for Educators	2 Units
E S 86	Global Field Studies	4 Units	E S 96Z		4 Units
<i>Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.</i>			<i>Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.</i>		
<i>Four hours lecture (48 hours total per quarter).</i>			<i>Two hours lecture for the two unit course (24 hours total per quarter); four hours lecture for the four unit course (48 hours total per quarter).</i>		
Field observation of the native plants and animals of aquatic and terrestrial ecosystems of various natural areas worldwide, including tropical regions of the Americas, with an emphasis on endangered, rare, protected and reintroduced species. Social, economic and political issues associated with habitat and species loss as well as the impacts on cultural, ethnic and socioeconomic groups will be explored. (Field trip required. Note that this field studies class may require a trip abroad.)			Explores environmental stewardship principles and concepts as an essential component of education in the 21st Century. Explores stewardship of the Earth's natural resources at the local, state, national and international levels including policy, mission statements and guiding principles of resource agencies, special districts, academic institutions, non-profits, citizen groups and others. Assesses the value to students, our communities and our environment of integrating stewardship of the Earth's natural resources into the standard-based curriculum for K-12 and community college core curriculum including an emphasis on all cultural, ethnic and socioeconomic groups.		
E S 90	Environmental Research and Field Methods	4 Units	E S 97	Environmental Leadership Teaching and Learning Model for Educators	2 Units
<i>Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.</i>			E S 97Z		4 Units
<i>Four hours lecture (48 hours total per quarter).</i>			<i>Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.</i>		
Explores the various methods used to conduct research and field studies on environmental topics. Application of legal policy and field research principles and techniques, including review of local case studies. Preparation of press releases, reports on current environmental issues, persuasive oral advocacy of environmental topics and case law research.			<i>Two hours lecture for the two unit course (24 hours total per quarter); four hours lecture for the four unit course (48 hours total per quarter).</i>		
			Explores environmental leadership principles and concepts integrated into a teaching and learning model as an essential component of education in the 21st Century. Explores the role of leadership training in protection of the Earth's natural resources and the value of the institutionalization of leadership guidelines into mission statements, guiding principles and policies of resource agencies, special districts, academic institutions, non-profits and citizen groups. Assesses the value to students, our communities and our environment of integrating environmental leadership into the standard-based curriculum for K-12 and the community college core curriculum including an emphasis on all cultural, ethnic and socioeconomic groups.		

E S 98	Environmental Team-Building and Community-Based Coalitions for Educators	2 Units
E S 98Z		4 Units
<i>Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.</i> <i>Two hours lecture for the two unit course (24 hours total per quarter); four hours lecture for the four unit course (48 hours total per quarter).</i> Explores environmental team-building principles and concepts integrated into teaching and learning as an essential component of education in the 21st Century. Explores the role of team-building goals in protection of the Earth's natural resources and the value of institutionalizing team-building at the local, state, national and international levels including mission statements, guiding principles and policies of resource agencies, special districts, academic institutions, non-profits and citizen groups and others. Assesses the value to students, our communities and our environment of integrating team-building on behalf of the Earth's natural resources into the standard-based curriculum for K-12 and the community college core curriculum including an emphasis on all cultural, ethnic and socioeconomic groups.		

Film and Television Production

F/TV 1	Introduction to Film	4 Units
<i>(See general education pages for the requirement this course meets.)</i> <i>Advisory: English Writing 1A or English as a Second Language 5.</i> <i>Four hours lecture (48 hours total per quarter).</i> An introduction to the international art of cinema through the techniques and procedures of filmmaking, including screenwriting, cinematography, directing, editing, and sound; through the formal properties of film, such as mise-en-scene, structure, and style; through the relationships between film and society, and through the critical analysis of works of film art.		
F/TV 2A	History of Cinema (1895-1950)	4 Units
F/TV 2AW		4 1/2 Units
<i>(See general education pages for the requirement this course meets.)</i> <i>(Students may enroll in either Film/Television 2A or Film/Television 2AW, but not both, for credit.)</i> <i>Advisory: English Writing 1A or English as a Second Language 5.</i> <i>Four hours lecture for the four unit course (48 hours total per quarter); four and one-half hours lecture for the four and one-half unit course (54 hours total per quarter).</i> A survey of the international development of the motion picture to 1950 as a distinct form of artistic expression, through classic films, notable artists, and key events; an investigation of the aesthetic, technological, economic, and social factors that contributed to the evolution of film; an examination of the value systems reflected in and shaped by these works from diverse cultures. F/TV 2AW will cover expanded topics in historiography, such as problems and approaches to historical film research and analysis.		
F/TV 2B	History of Cinema (1950-Present)	4 Units
F/TV 2BW		4 1/2 Units
<i>(See general education pages for the requirement this course meets.)</i> <i>(Students may enroll in either Film/Television 2B or Film/Television 2BW, but not both, for credit.)</i> <i>Advisory: English Writing 1A or English as a Second Language 5.</i> <i>Four hours lecture for the four unit course (48 hours total per quarter); four and one-half hours lecture for the four and one-half unit course (54 hours total per quarter).</i> A survey of the international development of the motion picture since 1950 as a distinct form of artistic expression, through classic films, notable artists, and key events; an investigation of the aesthetic, technological, economic, and social factors that contributed to the evolution of film; an examination of the value systems reflected in and shaped by these works from diverse cultures. F/TV 2BW will cover expanded topics in historiography, such as problems and approaches to historical film research and analysis.		
F/TV 2C	Contemporary World Cinema	4 Units
F/TV 2CW		4 1/2 Units
<i>(Formerly Film/Television 95A and 95AW respectively.)</i> <i>(See general education pages for the requirement this course meets.)</i> <i>(Students may enroll in either Film/Television 2C or Film/Television 2CW, but not both for credit.)</i> <i>Advisory: English Writing 1A or English as a Second Language 5.</i> <i>Four hours lecture for the four unit course (48 hours total per quarter); four and one-half hours lecture for the four and one-half unit course (54 hours total per quarter).</i> Critical survey of contemporary world cinema as art, business, technology and cultural artifact. Provides critical methodology and practical tools for analyzing and interpreting the work of notable film artists, current international film movements and genres, and transnational and globalized media developments. F/TV 2CW will cover expanded topics in historiography, such as problems and approaches to historical film research and analysis.		

F/TV 10	Introduction to Electronic Media	4 Units
<i>(See general education pages for the requirement this course meets.)</i> <i>Advisory: English Writing 1A or English as a Second Language 5.</i> <i>Four hours lecture (48 hours total per quarter).</i> A survey course of the history, aesthetics, technology and social impacts of electronic media, including film, broadcasting and the Internet. Explores the role of government, advertising, audiences, and emerging technologies, their futures and impacts on global societies.		
F/TV 20	Basic Digital Film/Video Production	4 Units
<i>Advisory: Film/Television 54, 54X, 54Y or 54Z (may be taken concurrently).</i> <i>Three hours lecture, three hours laboratory (72 hours total per quarter).</i> Digital video production, film-style production techniques including digital video and HD formats: camera operation and procedures, basic principles and techniques of sound and scriptwriting; and film and nonlinear editing.		
F/TV 22	16mm Film Production I	4 Units
<i>Prerequisite: Film/Television 20.</i> <i>Co-requisite: Film/Television 22 students must also enroll in Film/Television 54, 54X, 54Y or 54Z.</i> <i>Three hours lecture, two hours lecture-laboratory (60 hours total per quarter).</i> Logistics, scriptwriting, sound recording, film and sound editing. Methods by which visual and aural elements of a motion picture may be organized. The study and analysis of exemplary motion pictures as well as of the student's own work.		
F/TV 41	Film Genres	4 Units
<i>Advisory: English Writing 1A or English as a Second Language 5.</i> <i>Four hours lecture (48 hours total per quarter).</i> <i>(May be taken up to three times for credit.)</i> Analysis of specific film genres such as action-adventure, comedy, film noir, gangster, horror, musical, science fiction, thriller, war film or western within global, historical, social, cultural, industrial and aesthetic contexts. The genre studied changes each quarter (see subtitle in quarterly class schedule).		
F/TV 42	National Cinemas	4 Units
<i>Advisory: English Writing 1A or English as a Second Language 5.</i> <i>Four hours lecture (48 hours total per quarter).</i> <i>(May be repeated up to three times, not to exceed 12 units, as long as the topic matter is different each time.)</i> Analysis of selected national cinemas in terms of major periods, themes and formal parameters, and in relation to both national and international cultural histories. The national cinema studied changes each quarter (see subtitle in quarterly class schedule).		
F/TV 43	Film Artists	4 Units
<i>Advisory: English Writing 1A or English as a Second Language 5.</i> <i>Four hours lecture (48 hours total per quarter).</i> <i>(May be repeated up to three times, not to exceed 12 units, as long as the topic matter is different each time.)</i> Analysis of the works of specific film artists, such as directors Alfred Hitchcock or Spike Lee; or analysis of the works of artists practicing a specific film craft, such as screenwriting, acting, cinematography or editing. The topic studied changes each quarter (see subtitle in quarterly schedule of classes).		
F/TV 45	History of Experimental Film/Video	4 Units
<i>Advisory: English Writing 1A or English as a Second Language 5.</i> <i>Four hours lecture (48 hours total per quarter).</i> A survey of various experimental styles and practices in film and video, addressing the artists and historical developments of these media formats. The course situates experimental film and video work within the larger contexts of artistic traditions as well as networks of production and reception.		
F/TV 48	Cinema and the African American (An Historical Analysis of African Americans in American Cinema)	4 Units
<i>(See general education pages for the requirement this course meets.)</i> <i>Advisory: English Writing 1A or English as a Second Language 5.</i> <i>(Also listed as Intercultural Studies 14 and English Literature 6. Students may enroll in only one department for credit.)</i> <i>Four hours lecture (48 hours total per quarter).</i> A survey of the image and role of the American film industry. Particular attention will be given to the development of images of racial stereotypes, those works attempting a historical portrayal of the African American experience and the roles played by key African Americans in the evolution of film as an art and feature films as an industry in the United States.		
F/TV 50	Introduction to Film/Television Directing	4 Units
<i>Prerequisite: Film/Television 20.</i> <i>Co-requisite: Film/Television 50 students must also enroll in Film/Television 54, 54X, 54Y or 54Z.</i> <i>Three hours lecture, two hours lecture-laboratory (60 hours total per quarter).</i> Development and execution of short, single-camera-style projects focusing on the skills of directing and editing.		

F/TV 51A Intermediate Digital Film and Video Production 4 Units

Prerequisite: Film/Television 20.

Co-requisite: Film/Television 51A students must also enroll in Film/Television 54, 54X, 54Y or 54Z.

Three hours lecture, two hours lecture-laboratory (60 hours total per quarter). Principles of digital video in the preproduction and production of a short project using cameras, lighting and sound equipment and post production digital editing.

F/TV 52A 16mm/35mm Film Production I 4 Units

Prerequisite: Film/Television 22.

Co-requisite: Film/Television 52A students must also enroll in Film/Television 54, 54X, 54Y or 54Z.

Three hours lecture, three hours laboratory (72 hours total per quarter).

Advanced sound film editing, laboratory procedures, interior and exterior lighting techniques, color cinematography. Emphasis on individual student projects.

F/TV 52B 16mm/35mm Film Production II 4 Units

Prerequisite: Film/Television 52A.

Co-requisite: Film/Television 52B students must also enroll in Film/Television 54, 54X, 54Y or 54Z.

Three hours lecture, three hours laboratory (72 hours total per quarter).

(May be taken two times for credit as long as the topics are different each time.)

Advanced production and post-production techniques, including sync-sound production and editing, music editing, preparing for the sound mix. Emphasis on individual projects.

F/TV 53 Non-Linear Editing 4 Units

Prerequisite: Film/Television 20.

Co-requisite: Film/Television 53 students must also enroll in Film/Television 54, 54X, 54Y or 54Z.

Three hours lecture, two hours lecture-laboratory (60 hours total per quarter).

Concepts and techniques of non-linear digital film and video editing, including organization of the editing process, working the timeline and audio editing, with emphasis on the principles and aesthetics of film and video editing.

F/TV 54 Film/Television Production Laboratory 1/2 Unit

F/TV 54X 1 Unit

F/TV 54Y 2 Units

F/TV 54Z 3 Units

Co-requisite: Film/Television 54, 54X, 54Y and 54Z students must also enroll in Film/Television 20 or any other Film/Television production course.

Three hours laboratory for each unit of credit (36 hours total for each unit of credit per quarter).

(Any combination of Film/Television 54, 54X, 54Y and 54Z may be taken up to six times, not to exceed 18 units, as long as the topics/projects are different each time.)

Instruction in the use of film and television laboratory equipment and facilities to fulfill assigned projects in other film and television production courses.

F/TV 55A Video Studio Production 4 Units

Advisory: English Writing 1A or English as a Second Language 5.

Three hours lecture, three hours laboratory (72 hours total per quarter).

An introduction to multi-camera television studio production procedures and techniques, with emphasis on camera, audio, graphics, scripting, directing, and producing.

F/TV 57A Nonfiction Workshop I: The Documentary 4 Units

Prerequisite: Film/Television 20.

Co-requisite: Film/Television 57A students must also enroll in Film/Television 54, 54X, 54Y or 54Z.

Three hours lecture, two hours lecture-laboratory (60 hours total per quarter).

Nonfiction concepts, principles, and techniques as related to the production of a documentary video. Examination of the historical roots in nonfiction film and television. Emphasis on production work in documentary programs.

F/TV 57B Nonfiction Workshop II: The Documentary 4 Units

Prerequisite: Film/Television 57A.

Co-requisite: Film/Television 57B students must also enroll in Film/Television 54, 54X, 54Y or 54Z.

Three hours lecture, two hours lecture-laboratory (60 hours total per quarter).

Advanced techniques in nonfiction film and television, including cinematography, sound, lighting, post-production editing, and directing. Analysis of the modern film and television documentary. Emphasis on production of a documentary video.

F/TV 58R Film/Television Production Workshop 1/2 Unit

F/TV 58S 1 Unit

F/TV 58T 2 Units

F/TV 58U 3 Units

F/TV 58V 4 Units

F/TV 58W 5 Units

F/TV 58X 6 Units

F/TV 58Y 7 Units

F/TV 58Z 8 Units

Prerequisite: Film/Television 20.

Two hours lecture-laboratory for each unit of credit (24 hours total for each unit of credit per quarter).

(Any combination of Film/Television 58R-Z may be taken up to six times, not to exceed 18 units, as long as the topics/projects are different each time.)

A workshop in film or video production in which the student works independently, or with a crew, to produce a film or video to refine skills in camera, lighting, directing, post-production, and other related skills. The number of units is dependent on the production.

F/TV 59 Role of the Media Producer 4 Units

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Four hours lecture (48 hours total per quarter).

Roles and responsibilities of the media producer. Skills and knowledge required in developing a production proposal; including development, audience analysis, location scouting, production schedule, budgeting and distribution.

F/TV 60A Screenwriting Fundamentals for Film/Video I 4 Units

Advisory: English Writing 1A or English as a Second Language 5.

Four hours lecture (48 hours total per quarter).

Introduction to scriptwriting for film and video; the role of the script in media production; format and structure in the script; the basic skills of scriptwriting for fiction and nonfiction.

F/TV 60B Screenwriting Fundamentals for Film/Video II 4 Units

Prerequisite: Film/Television 60A.

Advisory: English Writing 1A or English as a Second Language 5.

Four hours lecture (48 hours total per quarter).

Intermediate course in scriptwriting for fiction and nonfiction film and video projects; examination of structure and characterization in dramatic narrative; consideration of approach and structure in nonfiction; emphasis on development and revision of script projects.

F/TV 60C Screenwriting Fundamentals for Film/Video III 4 Units

Prerequisite: Film/Television 60B.

Advisory: English Writing 1A or English as a Second Language 5.

Four hours lecture (48 hours total per quarter).

Advanced course in scriptwriting for fiction and nonfiction film and video projects; examination of classical and experimental structures in fiction and nonfiction; further practice in the development and revision of script projects.

F/TV 62 Lighting for Film and Television 4 Units

Requisite/Advisory: None.

Three hours lecture, two hours lecture-laboratory (60 hours total per quarter).

Introduction to the basic principles of studio and location lighting for film, television, animated, and composited production. Focus on evaluation of the aesthetic style and techniques of media lighting in professional production. An analysis and application of basic electricity, lighting instruments, dimming equipment, light color, media, and gaffer equipment. Practical experience in film and television productions.

F/TV 63A Location Recording and Sound Design 3 Units

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Two hours lecture, two hours lecture-laboratory (48 hours total per quarter).

Study of the art and techniques of film, video and media audio recording. Emphasis on preproduction and production in studio and on location. Examines the aesthetics of design and the technologies of analog and digital audio, and manipulation of sound in the aural and recorded environment. Practical experience in audio production.

F/TV 63B Audio Post Production 3 Units

Prerequisite: Film/Television 20 (may be taken concurrently).

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Two hours lecture, two hours lecture-laboratory (48 hours total per quarter).

Concepts and techniques of audio post production for film and video, including nonlinear audio editing, sound effect scoring, foley, cutting sound to picture and mixing.

F/TV 64A Fiction Screenwriting I 4 Units

Prerequisite: Film/Television 60B or 60C.

Advisory: English Writing 1A or English as a Second Language 5.

Four hours lecture (48 hours total per quarter).

Fictional screenwriting geared toward the planning, outlining and structuring of an original three-act feature-length fiction screenplay and the writing of the first-act.

F/TV 64B	Fiction Screenwriting II	4 Units	(Any combination of Film/Television 80A and Theatre Arts 80A may be taken two times for credit as long as the topics/projects are different each time.) The basic fundamentals of acting for the camera are explored. Exercises, demonstrations and improvisations are used to practice the techniques of acting. Scenes are rehearsed, taped and critiqued.
Prerequisite: Film/Television 64A. Advisory: English Writing 1A or English as a Second Language 5. Four hours lecture (48 hours total per quarter). An intensive seminar in writing feature-length fiction screenplays. Practice in the development and completion of a three-act narrative script focusing on plot, character development, arcs, turning points and journeys.			
F/TV 64C	Fiction Screenwriting III	4 Units	
Prerequisite: Film/Television 64B. Advisory: English Writing 1A or English as a Second Language 5. Four hours lecture (48 hours total per quarter). An intensive workshop in the re-writing of feature-length fiction screenplays; strengthening the plot, character development, arcs, turning points and journeys; preparing the material for submission to the marketplace; pitching and strategies in breaking into the entertainment industry will be discussed.			
F/TV 65	Current Practices in the Film/Video Profession	4 Units	
Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273. Four hours lecture (48 hours total per quarter). (May be taken up to three times, not to exceed 12 units, as long as the subject matter is different each time.) Current creative, technical, economic and employment conditions in film and video from the perspective of film and television working professionals.			
F/TV 75K	Japanese Animation	4 Units	
Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273. Four hours lecture (48 hours total per quarter). An examination of the post-1960s evolution of animated films in Japan, a national cinema famed for its exciting range of subject matter and outstanding graphics. Screening of exemplary and influential works by distinguished artists, writing collectives and production studios. Close analysis of social content, reflections of history, adaptations of literature and artistic technique.			
F/TV 78W	Special Topics in Film Studies	1 Unit	
F/TV 78X		2 Units	
(Formerly Film/Television 76W and 76X respectively.) Advisory: English Writing 1A or English as a Second Language 5. One hour lecture for each unit of credit (12 hours total for each unit of credit per quarter). (Any combination of Film/Television 78W and 78X may be taken up to six times for credit as long as topics are different each time.) Concentrated investigation of an influential film artist, studio, national cinema, genre, movement, or historical period. The topic studied is different for each section of this course and may include Bay Area film festival and nonprofit organization screenings and events (see course note in the quarterly schedule of classes).			
F/TV 79G	Workshop with Professional Traditional Animator	3 Units	
Requisite/Advisory: None. Two hours lecture, two hours lecture-laboratory (48 hours total per quarter). (Any combination of Film/Television 79G and 79H may be taken up to six times, not to exceed 18 units, as long as the topics/projects are different each time.) Intensive workshop in a specialized area of drawn or puppet animation production (e.g. writing, storyboard, layout, fabrication, lighting, motion design, soundtrack construction, etc.) with an instructor with full-time experience on feature films or national television commercials at a major Bay Area animation studio (Industrial Light & Magic, Wild Brain, Twitching Image/Skellington, Phil Tippet Studios, etc.). Repeatable as instructors, topics and/or student productions vary.			
F/TV 79H	Workshop with Professional Computer Animator	3 Units	
Requisite/Advisory: None. Two hours lecture, two hours lecture-laboratory (48 hours total per quarter). (Any combination of Film/Television 79G and 79H may be taken up to six times, not to exceed 18 units, as long as the topics/projects are different each time.) Intensive workshop in a specialized area of computer animation production (e.g. character/prop modeling, texturing, lighting, skeletal articulation; animation, special visual effects or compositing techniques) with an instructor with full-time experience on feature films or national television commercials at a major Bay Area animation studio (Industrial Light & Magic, Pixar, PDI/Dreamworks, Wild Brain, Phil Tippet, Electronic Arts, etc.). Repeatable as instructors, software, topics and/or student productions vary.			
F/TV 80A	Theory and Technique of Acting for the Camera	3 Units	
(Formerly Film/Television 86A.) Prerequisite: Theatre Arts 20A. Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273. (Also listed as Theatre Arts 80A. Students may enroll in either department, but not both, for credit.) Six hours lecture-laboratory (72 hours total per quarter).			
F/TV 80B	Theory and Technique of Advanced Acting for the Camera	3 Units	
(Formerly Film/Television 86B.) Prerequisite: Theatre Arts 80A or Film/Television 80A. Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273. (Also listed as Theatre Arts 80B. Students may enroll in either department, but not both, for credit.) Six hours lecture-laboratory (72 hours total per quarter). (Any combination of Film/Television 80B and Theatre Arts 80B may be taken two times for credit as long as the topics/projects are different each time.) A continuation of Acting for the Camera through further exploration of equipment used in media performance: blue screen acting, ear prompting, teleprompting and microphone applications in voice recording and voice over. Continued exploration and skill building of techniques used in performance before the camera including but not limited to advanced character development, make-up techniques and special problems in character preparation for feature film.			
F/TV 80G	Independent Projects in Animation	2 Units	
Prerequisite: Consent of Animation Program Director. Four hours lecture-laboratory (48 hours total per quarter). (Film/Television 80G may be taken up to six times for credit as long as the project or the stage of film production are different each time.) Advanced individual and group creative projects in animation production or animation history.			
F/TV 85	Motion Graphics	3 Units	
Prerequisite: Arts 55B. (Also listed as Arts 85. Students may enroll in either department, but not both, for credit.) Six hours lecture-laboratory (72 hours total per quarter). The analysis and interpretation of the art and design involved in the production of graphic design to be viewed in non-print media (film, CRT & LCD screens). The creative integration of "type" and "image" in motion is stressed through the use of directed laboratory exercises. Primary software presented is Adobe After Effects. Other software used includes Adobe Photoshop, Adobe Illustrator and Adobe Flash.			
F/TV 92	Topics: Guest Artist/Industry Professional	1/2 Unit	
Requisite/Advisory: None. One hour lecture-laboratory (12 hours total per quarter). (May be taken up to six times for credit as long as the topics are different each time.) The investigation of techniques and procedures utilized by a guest artist for the production and development of their work. Concepts, theory, and practice pertaining to the specific topic as predetermined by the guest artist or industry professional.			
F/TV 98G	Fiction Workshop (The Writer, Producer, Director)	3 Units	
Prerequisite: Film/Television 20. Six hours lecture-laboratory (72 hours total per quarter). (Any combination of Film/Television 98G, 98H and 98J may be taken up to six times, not to exceed 18 units, as long as the topics/projects are different each time.) Advanced workshop in the writing, producing or directing of complex scenes or multiple scene works of narrative/dramatic film or video.			
F/TV 98H	Fiction Workshop (The Technical Crew)	3 Units	
Prerequisite: Film/Television 20. Six hours lecture-laboratory (72 hours total per quarter). (Any combination of Film/Television 98G, 98H and 98J may be taken up to six times, not to exceed 18 units, as long as the topics/projects are different each time.) Advanced workshop in cinematography, art direction, sound recording, and other techniques and craft skills essential to the production of narrative/dramatic film and video projects.			
F/TV 98J	Fiction Workshop (Editing/Post Production)	3 Units	
Prerequisite: Film/Television 20. Six hours lecture-laboratory (72 hours total per quarter). (Any combination of Film/Television 98G, 98H and 98J may be taken up to six times, not to exceed 18 units, as long as the topics/projects are different each time.) Advanced workshop in the post-production phase including elements of picture and sound editing and sound mixing for narrative/dramatic film and video projects.			

F French

FREN 1	Elementary French (First Quarter)	5 Units
<i>(See general education pages for the requirement this course meets.)</i> <i>Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.</i> <i>Five hours lecture (60 hours total per quarter).</i> Introduction to the language and cultures of the French-speaking countries. Basic speaking, listening, reading and writing of French will be introduced and practiced within a cultural framework. Emphasis will be on language as an expression of culture.		
FREN 2	Elementary French (Second Quarter)	5 Units
<i>(See general education pages for the requirement this course meets.)</i> <i>Prerequisite: French 1 (equivalent to one year of high school French) or equivalent.</i> <i>Five hours lecture (60 hours total per quarter).</i> Further development of material presented in French 1. Continuation of introduction to the language and cultures of the French-speaking countries. Basic speaking, listening, reading and writing of French will be introduced and practiced within a cultural framework. Emphasis will be on language as an expression of culture.		
FREN 3	Elementary French (Third Quarter)	5 Units
<i>(See general education pages for the requirement this course meets.)</i> <i>Prerequisite: French 2 (equivalent to two years of high school French) or equivalent.</i> <i>Five hours lecture (60 hours total per quarter).</i> Further development of material presented in French 1 and French 2. Completion of introduction to the language and cultures of the French-speaking countries. Basic speaking, listening, reading and writing of French will be introduced and practiced within a cultural framework. Emphasis will be on language as an expression of culture.		
FREN 4	Intermediate French (First Quarter)	5 Units
<i>(See general education pages for the requirement this course meets.)</i> <i>Prerequisite: French 3 (equivalent to three years of high school French) or equivalent.</i> <i>Five hours lecture (60 hours total per quarter).</i> Reading and discussion of texts dealing with the literature, arts, geography, history and culture of the French-speaking world. Review of the linguistic functions and grammar structures of first-year French. Development of reading, writing, speaking and listening skills at the first intermediate level.		
FREN 5	Intermediate French (Second Quarter)	5 Units
<i>(See general education pages for the requirement this course meets.)</i> <i>Prerequisite: French 4 (equivalent to four years of high school French) or equivalent.</i> <i>Five hours lecture (60 hours total per quarter).</i> Reading and discussion of texts dealing with the literature, arts, geography, history and culture of the French-speaking world. Review of the linguistic functions and grammar structures of first-year French. Development of reading, writing, speaking and listening skills at the second intermediate level.		
FREN 6	Intermediate French (Third Quarter)	5 Units
<i>(See general education pages for the requirement this course meets.)</i> <i>Prerequisite: French 5 or equivalent.</i> <i>Five hours lecture (60 hours total per quarter).</i> Reading and discussion of texts dealing with the literature, arts, geography, history and culture of the French-speaking world. Review of the linguistic functions and grammar structures of first-year French. Development of reading, writing, speaking and listening skills at the third intermediate level.		
FREN 10	Intensive French (First Year)	15 Units
<i>Advisory: English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263.</i> <i>Fifteen hours lecture (180 hours total per quarter).</i> Development and practice of skills for oral and written communication supported by essentials of grammar, syntax, vocabulary and pronunciation. Language of instruction is primarily French.		
FREN 13A	French - Intermediate Conversation (First Quarter)	3 Units
<i>Prerequisite: French 3 (equivalent to three years of high school French) or equivalent.</i> <i>Three hours lecture (36 hours total per quarter).</i> Review and development of conversational skills in the targeted functions studied in first-year French with attention to fluency, vocabulary, idiom, and pronunciation. Practice in conversational exchanges and strategies at the fourth-quarter level. Discussion of culturally relevant topics and situations.		

FREN 13B	French - Intermediate Conversation (Second Quarter)	3 Units
<i>Prerequisite: French 4 (equivalent to four years of high school French); or French 13A; or equivalent.</i> <i>Three hours lecture (36 hours total per quarter).</i> Continued practice and development of conversational skills in the targeted functions studied in French 13A with increased attention to fluency, vocabulary, idiom, and pronunciation. Practice in conversational exchanges and strategies emphasizing improvisational skills at the fifth-quarter level. Discussion of culturally relevant topics and situations.		
FREN 13C	French - Advanced Conversation	3 Units
<i>Prerequisite: French 5 or 13B or equivalent.</i> <i>Three hours lecture (36 hours total per quarter).</i> Continued practice and development of conversational skills in the targeted functions studied in French 13A and 13B, with greater communicative competence. Increased control of conversational exchanges and strategies at the sixth-quarter level. Discussion of culturally relevant topics and situations.		
FREN 60A	French - Introductory Conversation (First Quarter)	3 Units
<i>(Formerly French 90A.)</i> <i>Requisite/Advisory: None.</i> <i>Three hours lecture (36 hours total per quarter).</i> A practical course in the French language, approached by intensive drills in the patterns and idioms of daily speech supported by sufficient grammar to give flexibility in the spoken language.		
FREN 60B	French - Introductory Conversation (Second Quarter)	3 Units
<i>(Formerly French 90B.)</i> <i>Prerequisite: French 60A.</i> <i>Three hours lecture (36 hours total per quarter).</i> Further development of material presented in French 60A. Continuation of intensive drills in the patterns of idioms of daily speech at the second-quarter level.		
FREN 60C	French - Introductory Conversation (Third Quarter)	3 Units
<i>(Formerly French 90C.)</i> <i>Prerequisite: French 60B.</i> <i>Three hours lecture (36 hours total per quarter).</i> Further development of material presented in French 60A and 60B. Continuation of intensive drills in the patterns of idioms of daily speech at the third-quarter level.		
FREN 77	Special Projects in French	1 Unit
FREN 77X		2 Units
FREN 77Y		3 Units
<i>Prerequisite: Consent of instructor and division dean.</i> <i>Three hours laboratory for each unit of credit (36 hours total for each unit of credit per quarter).</i> <i>(Any combination of French 77, 77X and 77Y may be taken up to six times, not to exceed 18 units, as long as the projects are different each time.)</i> Special reading, writing, or study projects in any discipline in French, determined in consultation with the instructor.		

Geography

GEO 1	Physical Geography	4 Units
<i>(See general education pages for the requirement this course meets.)</i> <i>Advisory: English Writing 1A or English as a Second Language 5; Mathematics 210 or equivalent.</i> <i>Four hours lecture (48 hours total per quarter).</i> An introduction to the basic physical elements of geography and the diverse physical environment in which we live. Topics include the global patterns of weather and climate, landforms, soils and vegetation along with human modification of natural environments.		
GEO 4	Cultural Geography	4 Units
<i>(Formerly Geography 50.)</i> <i>(See general education pages for the requirement this course meets.)</i> <i>Advisory: English Writing 1A or English as a Second Language 5; Mathematics 210 or equivalent.</i> <i>Four hours lecture (48 hours total per quarter).</i> Examining the location of people and activities throughout the world and understanding the reasons for their distribution. Topics covered include population and migration, human-environment relationships, geographies of language, religion, race and ethnicity, economic activities, political organization and settlement patterns including the urban environment.		

GEO 5 A Geography of California 4 Units

(Formerly Geography 55.)

(See general education pages for the requirement this course meets.)

Advisory: English Writing 1A or English as a Second Language 5.

Four hours lecture (48 hours total per quarter).

An exploration of California's diverse physical landscapes (land forms, climate, soil and resources) and analyzes its cultural landscapes created by human transformation of the environment through economic activities such as agriculture, mining, trade, industry and urbanization. Examines the remarkable physical and cultural regional differences within California. A study in the wealth of diversity of California's peoples while investigating the more disturbing aspects of discrimination and exploitation of various groups based on race, ethnicity, class and gender.

GEO 10 World Regional Geography 4 Units

(See general education pages for the requirement this course meets.)

Advisory: English Writing 1A or English as a Second Language 5; Mathematics 210 or equivalent.

Four hours lecture (48 hours total per quarter).

An introduction to the major distinctive regions of the world; their natural environment, people, resources, agriculture, manufacturing, trade, cities and the problems relating to contemporary society in each of the regions. Understanding the increasing interdependencies among and between regions.

Geology

GEOL 10 Introductory Geology 5 Units

(See general education pages for the requirement this course meets.)

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Four hours lecture, three hours laboratory (84 hours total per quarter).

Analysis and description of the composition, structure, and development of the earth's external and internal features and the geologic processes responsible for their origin and evolution. Examination of the concepts and principles upon which geologic knowledge is based.

(One Saturday field trip is required.)

GEOL 20 General Oceanography 4 Units

Requisite/Advisory: None.

Four hours lecture (48 hours total per quarter).

An introduction to the physical environment of the ocean. Origin and evolution of ocean basins; sea-floor morphology; origin, distribution, historical record, and economic significance of marine sediments; ocean currents, climate and the ocean system, waves, tides, and changing sea level; beaches, shorelines, and coastal processes; marine resources, pollution, and human impacts on the oceans.

(One Saturday field trip is required.)

GEOL 77 Special Projects in Geology 1 Unit

GEOL 77X 2 Units

GEOL 77Y 3 Units

Prerequisite: Consent of instructor and division dean.

Three hours laboratory for each unit of credit (36 hours total for each unit of credit per quarter).

(Any combination of Geology 77, 77X and 77Y may be taken up to six times, not to exceed 18 units, as long as the projects are different each time.)

Pass-No Pass (P-NP) course.

Individual special reading, writing, or study projects in Geology as determined in consultation with the instructor.

GEOL 78 Special Topics in Geology 1/2 Unit

GEOL 78W 1 Unit

GEOL 78X 2 Units

GEOL 78Y 3 Units

GEOL 78Z 4 Units

Prerequisite: Consent of instructor and division dean.

Two hours lecture-laboratory for each unit of credit (24 hours total for each unit of credit per quarter).

(Any combination of Geology 78, 78W, 78X, 78Y and 78Z may be taken up to six times, not to exceed 18 units, as long as the topics are different each time.)

Study of topics in the geological sciences that are of special relevance to current earth-science related events, geological hazards, environmental issues, new discoveries in the geological sciences, or resource issues.

German

GERM 1 Elementary German (First Quarter) 5 Units

(See general education pages for the requirement this course meets.)

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Five hours lecture (60 hours total per quarter).

Introduction to the language and cultures of the German speaking countries. Basic speaking, listening, reading and writing of German will be introduced and practiced within a cultural framework. The emphasis will be on language as an expression of culture. Language laboratory practice to reinforce pronunciation, grammar and syntax.

GERM 2 Elementary German (Second Quarter) 5 Units

(See general education pages for the requirement this course meets.)

Prerequisite: German 1 (equivalent to one year of high school German) or equivalent.

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Five hours lecture (60 hours total per quarter).

Further development of material presented in German 1. Continuation of introduction to the language and cultures of the German-speaking countries. Basic speaking, listening, reading and writing of German will be introduced and practiced within a cultural framework. The emphasis will be on language as an expression of culture. Language laboratory practice to reinforce pronunciation, grammar and syntax.

GERM 3 Elementary German (Third Quarter) 5 Units

(See general education pages for the requirement this course meets.)

Prerequisite: German 2 (equivalent to two years of high school German) or equivalent.

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Five hours lecture (60 hours total per quarter).

Further development of material presented in German 1 and 2. Completion of introduction to the language and cultures of the German-speaking countries. Basic speaking, listening, reading and writing of German will be introduced and practiced within a cultural framework. The emphasis will be on language as an expression of culture. Language laboratory practice to reinforce pronunciation, grammar and syntax.

GERM 4 Intermediate German (First Quarter) 5 Units

(See general education pages for the requirement this course meets.)

Prerequisite: German 3 (equivalent to three years of high school German) or equivalent.

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Five hours lecture (60 hours total per quarter).

Development of reading, writing, speaking and listening skills at the first intermediate level. Reading and discussion of texts dealing with the literature, arts, history, geography and culture of the German-speaking world. Review and expansion of the linguistic functions and grammar structures of first-year German.

GERM 5 Intermediate German (Second Quarter) 5 Units

(See general education pages for the requirement this course meets.)

Prerequisite: German 4 (equivalent to four years of high school German) or equivalent.

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Five hours lecture (60 hours total per quarter).

Development of reading, writing, speaking and listening skills at the second intermediate level. Reading and discussion of texts dealing with the literature, arts, history, geography and culture of the German-speaking world. Review and expansion of the linguistic functions and grammar structures of first-year German.

GERM 6 Intermediate German (Third Quarter) 5 Units

(See general education pages for the requirement this course meets.)

Prerequisite: German 5 or equivalent.

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Five hours lecture (60 hours total per quarter).

Development of reading, writing, speaking and listening skills at the third intermediate level. Reading and discussion of texts dealing with the literature, arts, history, geography and culture of the German-speaking world. Review and expansion of the linguistic functions and grammar structures of first-year German.

GUID 200 Educational Diagnostic Center (EDC) Learning Skills Assessment 1 Unit

(Formerly Guidance 100.)

Credit course - Does not apply to De Anza Associate degree.

Requisite/Advisory: None.

One hour lecture (12 hours total per quarter).

Pass-No Pass (P-NP) course.

Individualized psycho-educational assessment which provides an analysis of learning strengths and weaknesses, cognitive/perceptual abilities and academic achievement levels. Assessment results may be utilized to determine a student's eligibility for community college learning disability services. College and community resources to enhance access and success will be introduced.

GUID 201 Introduction to Learning Disabilities and Attention Deficit/Hyperactive Disorders 4 Units

(Formerly Guidance 101.)

Credit course - Does not apply to De Anza Associate degree.

Advisory: English Writing 1A or English as a Second Language 5; Guidance 200.

Four hours lecture (48 hours total per quarter).

Covers basic characteristics of learning disabilities and attention deficit/hyperactive disorders and their impact on various life functions including learning. Emphasis is on awareness, acceptance, and advocacy of learning disabilities for college students with specialized learning differences.

GUID 202 Student Success Strategies 4 Units

(Formerly Guidance 102.)

Credit course - Does not apply to De Anza Associate degree.

Advisory: Guidance 200.

Four hours lecture (48 hours total per quarter).

Pass-No Pass (P-NP) course.

Optimal learning strategies and accommodative techniques for students with special learning needs. Evaluate and apply successful learning tools in areas such as time management, goal setting, memory, processing information, test taking strategies and learning styles.

GUID 204 Introductory Spelling Strategies 4 Units

(Formerly Guidance 104.)

Credit course - Does not apply to De Anza Associate degree.

Advisory: Guidance 200 and/or placement by Educational Diagnostic Center Learning Specialist or Disability Support Services counselor. Basic word processing proficiency or concurrent enrollment in Special Education 240 or 245.

Four hours lecture (48 hours total per quarter).

Pass-No Pass (P-NP) course.

A multi-sensory approach to improving basic reading and spelling skills for the student with special needs utilizing a phonetic sound-symbol base to aid in decoding and encoding language. Development of word attack skills utilizing the six-syllable spelling patterns and knowledge of roots, prefixes, and suffixes. Specialized learning strategies are utilized including simultaneous use of visual, auditory and kinesthetic modalities.

GUID 207 Educational Diagnostic Center (EDC) Introductory Writing and Grammar Skills 4 Units

(Formerly Guidance 107.)

Credit course - Does not apply to De Anza Associate degree.

Advisory: Guidance 200.

Four hours lecture (48 hours total per quarter).

Pass-No Pass (P-NP) course.

Basic writing and editing skills for students with specialized learning needs preparing for college level writing activities. Engage in diverse writing formats including structured paragraphs on a variety of topics using compensatory written learning strategies. Practice parts of speech, capitalization, punctuation, sentence structure, and paragraph development.

GUID 209 Arithmetic Skills and Strategies 4 Units

(Formerly Guidance 109.)

Credit course - Does not apply to De Anza Associate degree.

Advisory: Guidance 200 or placement by a counselor/adviser.

Four hours lecture (48 hours total per quarter).

Pass-No Pass (P-NP) course.

A transition class for students with special learning needs. The class is designed to improve skills in mathematics by addressing areas of difficulty common to students with disabilities in mathematics. The class moves at a slower pace and includes small group instruction.

GUID 211 Algebra Skills I 4 Units

(Formerly Guidance 111.)

Credit course - Does not apply to De Anza Associate degree.

Advisory: Guidance 200 or placement by a counselor/adviser.

Four hours lecture (48 hours total per quarter).

Pass-No Pass (P-NP) course.

A transitional class for students with special learning needs. The class is designed to improve skills in mathematics by addressing areas of difficulty common to students with disabilities in mathematics. The class moves at a slower pace with small group instruction. This class also includes alternative learning strategies for mastering algebraic concepts.

GUID 212 Algebra Skills II 4 Units

(Formerly Guidance 112.)

Credit course - Does not apply to De Anza Associate degree.

Advisory: Guidance 200; Mathematics 210; or placement by a counselor/adviser.

Four hours lecture (48 hours total per quarter).

Pass-No Pass (P-NP) course.

A transition class for students with special learning needs. The class focuses on the acquisition of fundamental algebra skills, including the study of equations, polynomials, factoring, graphs of linear functions and inequalities by using a multi-sensory approach.

GUID 218 Educational Diagnostic Center (EDC) Group Instructional Assistance 1 Unit

(Formerly Guidance 118.)

Credit course - Does not apply to De Anza Associate degree.

Advisory: Guidance 204, 207, 209, 211 or 212.

Two hours lecture-laboratory (24 hours total per quarter).

Pass-No Pass (P-NP) course.

Small group collaborative and instructional support focused on reducing learning difficulties associated with learning and other types of disabilities and on developing study strategies designed to improve academic performance.

GUID 219 Educational Diagnostic Center (EDC) Instructional Assistance Laboratory 1/2 Unit

(Formerly Guidance 119.)

Credit course - Does not apply to De Anza Associate degree.

Requisite/Advisory: None.

One and one-half hours laboratory (18 hours total per quarter).

Pass-No Pass (P-NP) course.

Instructional support laboratory that provides students with disabilities strategies for effective studying and to improve academic performance.

Health

HLTH 21 Contemporary Health Concerns 4 Units

(See general education pages for the requirement this course meets.)

Advisory: English Writing 1A or English as a Second Language 5.

Four hours lecture (48 hours total per quarter).

Development of understanding and attitudes relative to personal, family, community, and global health needs. Attention given to mental health, drug abuse, infectious and degenerative diseases, family health, nutrition, exercise, the life cycle, and ecological conditions of health significance. Study of common lifestyle behaviors will emphasize self-help and preventable aspects of medical care.

HLTH 51 Health and Fitness 4 Units

(See general education pages for the requirement this course meets.)

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or

English as a Second Language 272 and 273.

(Also listed as Physical Education 51. Students may enroll in either department, but not both, for credit.)

Four hours lecture (48 hours total per quarter).

Introduction to the disciplines of Physical Education and Health through fitness, wellness and lifestyle management. Concepts of wellness from an interdisciplinary and multicultural perspective. Practices and beliefs that contribute to fitness and healthful living. Exploration of past and current theories of health and fitness with emphasis on the roles of genetics, gender, and age. Students will assess their own cardiovascular capacity, muscular strength and endurance, flexibility, body composition, in and out of class.

HLTH 57A First Aid for the Community, Home, Wilderness, and Disasters 1 Unit

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or

English as a Second Language 272 and 273.

One hour lecture (12 hours total per quarter).

(May be taken once every three years for credit.)

Designed for certification in American Red Cross First Aid. Students will gain the knowledge and skills necessary to recognize and provide basic care for injuries and sudden illnesses until advanced medical personnel take over. Adaptations for delayed help in situations such as a wilderness environment or after an earthquake. Upon successful completion of the course, each participant will receive an American Red Cross certification in Standard First Aid (valid for three years).

HLTH 57D	CPR/AED for the Professional Rescuer - Recertification	1/2 Unit	HTEC 64A	Basic Clinical Laboratory Procedures	1 1/2 Units
<i>Prerequisite: Must have current certificate from the American Red Cross or the American Heart Association for cardiopulmonary resuscitation and automated external defibrillation (CPR/AED) for the professional rescuer. One and one-half hours laboratory (18 hours total per quarter). (May be taken once per year for credit.)</i> <i>Pass-No Pass (P-NP) course.</i> Designed to recertify the trained candidate in CPR/AED for the professional rescuer. The course meets Cal-OSHA standards for basic requirements.			<i>(Formerly Health Technologies 64G.)</i> <i>Advisory: Health Technologies 60A.</i> Three hours lecture-laboratory (36 hours total per quarter). Introduction to the clinical laboratory: infection control, bloodborne pathogen standard, safety standards, laboratory requisition, specimen requirements, patient preparation, patient identification, specimen identification, venipuncture and skin puncture equipment.		
HLTH 57E	Cardiopulmonary Resuscitation and Automated External Defibrillation	1/2 Unit	HTEC 64B	Advanced Clinical Laboratory Procedures	1 1/2 Units
<i>Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.</i> One and one-half hours laboratory (18 hours total per quarter). (May be taken three times per year for credit.) <i>Pass-No Pass (P-NP) course.</i> Designed for certification in American Red Cross cardiopulmonary resuscitation and automated external defibrillation for the professional rescuer. Using American Red Cross standards, students will gain the knowledge and skills necessary to apply the blood-borne pathogens regulations issued by the Occupational Health and Safety Administration with the intent to prevent disease transmission, recognize and provide basic care for breathing emergencies, perform adult, child and infant cardiopulmonary resuscitation (CPR) and use an automated external defibrillator (AED) for victims of sudden cardiac arrest. (Upon successful completion of the course, each participant will receive an American Red Cross certification in CPR/AED for the Professional Rescuer.)			<i>(Formerly Health Technologies 64H.)</i> <i>Prerequisite: Health Technologies 64A.</i> <i>Co-requisite: Health Technologies 64B students must also enroll in Health Technologies 101A.</i> Three hours lecture-laboratory (36 hours total per quarter). Addresses blood collection procedures and includes: safety, infection collection, circulatory system, pre-analytical considerations, blood collection equipment and supplies, blood collection procedures for venipuncture and skin puncture, special collections, specimen processing and handling, quality assurance, and legal issues.		
Health Technologies			HTEC 68	Medical Reception Externship	2 Units
			<i>Prerequisite: Health Technologies 60A, 71 and 73; Computer Applications and Office Systems 70A.</i> Six hours laboratory (72 hours total per quarter). Practical medical reception experience in medical clinics.		
			HTEC 71	Medical Office Reception	1 Unit
			<i>Advisory: Health Technologies 60A.</i> Two hours lecture-laboratory (24 hours total per quarter). Duties of the medical receptionist with emphasis on oral communications and appointment scheduling.		
HTEC 50	Introduction to Health Technologies	1 Unit	HTEC 72	Medical Office Financial Procedures	1 1/2 Units
<i>Advisory: English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263.</i> Two hours lecture-laboratory (24 hours total per quarter). <i>Pass-No Pass (P-NP) course.</i> Survey of health technology programs with emphasis on the professions; designed to assist in identifying personal strengths and weaknesses related to health technology professions; assist students in health technology professions to learn basic principles of human behavior.			<i>Co-requisite: Health Technologies 72 students must also enroll in Health Technologies 101D.</i> <i>Advisory: Health Technologies 60A.</i> Three hours lecture-laboratory (36 hours total per quarter). Fee determination, credit and collections, billing, diagnostic and procedural coding, private and government health insurance programs.		
HTEC 51	Introduction to Medical Laboratory Technology	2 Units	HTEC 73	Medical Law and Ethics	1 1/2 Units
<i>Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273; Mathematics 114 or equivalent.</i> Four hours lecture-laboratory (48 hours total per quarter). Introduces clinical laboratory professions and provides the foundation of theory, skills and techniques required for understanding and performing routine laboratory tests.			<i>Advisory: Health Technologies 60A.</i> Three hours lecture-laboratory (36 hours total per quarter). Medical ethics, medical practice acts, legal relationship of patient and physician, legal responsibilities of the health technology team member, professional liability, physician's civic duties and arbitration.		
HTEC 60A	Basic Medical Terminology	3 Units	HTEC 74	Medical Transcription with Advanced Terminology	1 1/2 Units
<i>Advisory: Health Technologies 50 (may be taken concurrently).</i> Three hours lecture (36 hours total per quarter). Orientation to medical terminology; basic structure of medical terms and their components-prefixes, suffixes and roots with emphasis on analysis, definition, spelling and pronunciation.			<i>Co-requisite: Health Technologies 74 students must also enroll in Health Technologies 101C.</i> <i>Advisory: Health Technologies 60A and 61.</i> Three hours lecture-laboratory (36 hours total per quarter). (May be taken up to four times for credit.) Development of transcription skills necessary for a medical office using actual dictation from various medical specialties; advanced medical terminology.		
HTEC 60G	Advanced Medical Terminology	2 Units	HTEC 75	Medical Office Management	1 1/2 Units
<i>Advisory: Health Technologies 60A.</i> Two hours lecture (24 hours total per quarter). Application of medical terminology to the following body systems: digestive, urinary, reproductive, nervous, integumentary, sensory organs, and radiology.			<i>Advisory: Health Technologies 60A and 72.</i> Three hours lecture-laboratory (36 hours total per quarter). Advanced administrative skills including computerized accounts management duties of the medical office manager, personnel recruitment and training, financial management, office policy and procedure manuals, editorial and research duties and meeting arrangements.		
HTEC 60H	Advanced Medical Terminology	2 Units	HTEC 77	Special Projects in Health Technology	1 Unit
<i>Advisory: Health Technologies 60A.</i> Two hours lecture (24 hours total per quarter). Application of medical terminology to the following body systems: cardiovascular, respiratory, blood and lymphatics, musculoskeletal, endocrine, oncology, pharmacology, psychiatry.			HTEC 77X HTEC 77Y <i>(Formerly Health Technologies 56, 56X and 56Y respectively.)</i> <i>Prerequisite: Consent of instructor and division dean.</i> Three hours laboratory for each unit of credit (36 hours total for each unit of credit per quarter). (Any combination of Health Technologies 77, 77X and 77Y may be taken up to six times, not to exceed 18 units, as long as the projects are different each time.) <i>Pass-No Pass (P-NP) course.</i> Individual advanced projects in health technology.		
HTEC 61	Medical Communications	1 1/2 Units			
<i>Co-requisite: Health Technologies 61 students must also enroll in Health Technologies 101C.</i> <i>Advisory: Computer Applications and Office Systems 91AN; Health Technologies 60A.</i> Three hours lecture-laboratory (36 hours total per quarter). Application of medical terminology, abbreviations, symbols, numbers, keyboarding appropriate formats in medical communications; medical chart notes, history and physicals, consultations and operative reports.					

HTEC 80 Clinical Hematology Laboratory 1 1/2 Units

Co-requisite: Health Technologies 80 students must also enroll in Health Technologies 80A.

Four and one-half hours laboratory (54 hours total per quarter).

Introduces the various techniques and safety procedures used in the clinical hematology laboratory. The students will prepare and stain blood slides, perform microhematocrits, hemoglobin analysis, ESR, and Sickle Cell Screening. Students will perform manual WBC's and platelet counts using a hemacytometer. Students will evaluate printouts from the automated hematology analyzer. Students will determine the morphology and identification of common human blood cells. Special stains (Reticulocyte, giemsa and Kleihauer-Betke) will be done. Correlating test results with disease states will be accomplished. Successful completion of this course and Health Technologies 80A, Health Technologies 81A, Health Technologies 81, Health Technologies 82A and Health Technologies 82 is required to enroll in Clinical Hematology/Urinalysis/Coagulation Practicum, Health Technologies 180.

HTEC 80A Clinical Hematology Lecture 4 1/2 Units

Co-requisite: Health Technologies 80A students must also enroll in Health Technologies 80.

Four and one-half hours lecture (54 hours total per quarter).

Presents the origin of the various types of blood cells with emphasis on the red and white blood cells. Human hematological disorders and classifications based on clinical laboratory findings will also be covered. Case studies will be presented.

HTEC 81 Clinical Urinalysis Laboratory 3/4 Unit

Co-requisite: Health Technologies 81 students must also enroll in Health Technologies 81A.

Two and one-quarter hours laboratory (27 hours total per quarter).

Teaches the student the various properties and constituents of urine via "hands-on" learning. Emphasis is placed on the interpretation and handling of urine specimens and their accompanying requisitions. The students will be taught to examine urine physically, chemically, and microscopically and compare clinical values as related to the physiology of the urinary system in health and disease. Correlating test results to disease states will be accomplished. Successful completion of this course and Health Technologies 81A, Health Technologies 80A, Health Technologies 80, Health Technologies 82A, and Health Technologies 82 is required to enroll in Clinical Hematology/Urinalysis/Coagulation Practicum Health Technologies 180.

HTEC 81A Clinical Urinalysis Lecture 1 1/2 Units

Co-requisite: Health Technologies 81A students must also enroll in Health Technologies 81.

One and one-half hours lecture (18 hours total per quarter).

Introduces the student to urine formation including renal anatomy and physiology, renal diseases and metabolic disorders. Content also includes basic body fluids. Case studies correlate clinical laboratory testing results to possible disease states.

HTEC 82 Clinical Coagulation Laboratory 3/4 Unit

Co-requisite: Health Technologies 82 students must also enroll in Health Technologies 82A.

Two and one-quarter hours laboratory (27 hours total per quarter).

Introduces the various techniques and safety procedures used in the clinical coagulation laboratory. Emphasis on platelet function tests and intrinsic and extrinsic clotting pathway testing. Normal and abnormal cases will be studied. Correlating test results with disease states will be accomplished. Successful completion of this course and Health Technologies 80, 80A, 81, 81A and 82A are required to enroll in Clinical Hematology/Urinalysis/Coagulation Practicum, Health Technologies 180.

HTEC 82A Clinical Coagulation Lecture 1 1/2 Units

Co-requisite: Health Technologies 82A students must also enroll in Health Technologies 82.

One and one-half hours lecture (18 hours total per quarter).

Introduces the mechanisms involved in hemostasis. Includes the processes of primary, secondary and fibrinolysis in normal circumstances and in relation to disease states. Case studies will be included.

HTEC 83 Clinical Microbiology Laboratory 1 1/2 Units

Co-requisite: Health Technologies 83 students must also enroll in Health Technologies 83A.

Four and one-half hours laboratory (54 hours total per quarter).

An introduction to the various techniques and safety procedures in clinical microbiology. Emphasizes the morphology and identification of common pathogenic organisms. Correlation of test results with disease states will be accomplished. Successful completion of this course and Health Technologies 83A is required to enroll in Clinical Microbiology Practicum, Health Technologies 183.

HTEC 83A Clinical Microbiology Lecture 4 1/2 Units

Co-requisite: Health Technologies 83A students must also enroll in Health Technologies 83.

Four and one-half hours lecture (54 hours total per quarter).

Addresses microorganisms of medical microbiology with emphasis on the characteristics of clinically significant microorganisms and their biochemical profile, media for isolation, and identification methods for selected pathogens. The

student will be introduced to identification methods, theories, and techniques used in basic bacteriology, parasitology and mycology. Emphasizes routine organism identification. Correlating test results with disease states will be accomplished. Successful completion of this course and Health Technologies 83 is required to enroll in Clinical Microbiology Practicum, Health Technologies 183.

HTEC 84 Clinical Immunology/Immunohematology Laboratory 1 1/2 Units

Co-requisite: Health Technologies 84 students must also enroll in Health Technologies 84A.

Four and one-half hours laboratory (54 hours total per quarter).

Introduces the student to the basic principles of antigen and antibody reactions included in blood grouping and typing, compatibility testing and serological procedures by performances in a student lab environment. Introduces serological and immunohematology procedures and techniques to measure analytes qualitatively and quantitatively. Correlating test results with disease states will be accomplished. Successful completion of this course and Health Technologies 84A is required prior to enrollment in Clinical Immunology/Immunohematology Practicum, Health Technologies 184.

HTEC 84A Clinical Immunology/Immunohematology Lecture 4 1/2 Units

Co-requisite: Health Technologies 84A students must also enroll in Health Technologies 84.

Four and one-half hours lecture (54 hours total per quarter).

Introduces the student to the basic principles of antigen and antibody reactions included in blood grouping and typing, compatibility testing and serological procedures. Introduces serological and immunohematology procedures and techniques to measure analytes qualitatively and quantitatively.

HTEC 85A Clinical Chemistry I Laboratory 1 1/2 Units

Co-requisite: Health Technologies 85A students must also enroll in Health Technologies 85C.

Four and one-half hours laboratory (54 hours total per quarter).

Teaches the general laboratory principles and specific basic instrumentation methodologies used in basic clinical chemistry analysis. After review of laboratory math, and a reintroduction to quality control and quality assurance, the student will be introduced to variables of the pre-analytical phase, characteristics important to quality lab technique and safety. Correlating test results with disease states will be accomplished. Successful completion of this course, Health Technologies 85B, 85C and 85D are required to enroll in Clinical Chemistry Practicum, Health Technologies 185.

HTEC 85B Clinical Chemistry II Laboratory 1 1/2 Units

Prerequisite: Health Technologies 85A.

Co-requisite: Health Technologies 85B students must also enroll in Health Technologies 85D.

Four and one-half hours laboratory (54 hours total per quarter).

Teaches the general laboratory principles and specific basic instrumentation methodologies used in basic clinical chemistry analysis. After review of laboratory math, and a reintroduction to quality control and quality assurance, the student will be introduced to variables of the pre-analytical phase, characteristics important to quality lab technique and safety. Correlating test results with disease states will be accomplished. Successful completion of this course, Health Technologies 85B, 85C and 85D are required to enroll in Clinical Chemistry Practicum, Health Technologies 185.

HTEC 85C Clinical Chemistry I Lecture 4 1/2 Units

Co-requisite: Health Technologies 85C students must also enroll in Health Technologies 85A.

Four and one-half hours lecture (54 hours total per quarter).

Fundamental principles of clinical chemistry will be presented. Topics include: laboratory math, basic supplies and equipment, testing variables, and analytical techniques. Detailed theory of enzymes, electrolytes, acid-base, trace metals, carbohydrates, cardiac, amino acids, proteins, porphyrins will be included. Basic quality control will be introduced. Correlating test results with disease states will be accomplished.

HTEC 85D Clinical Chemistry II Lecture 4 1/2 Units

Prerequisite: Health Technologies 85C.

Co-requisite: Health Technologies 85D students must also enroll in Health Technologies 85B.

Four and one-half hours lecture (54 hours total per quarter).

Teaches relationships between the endocrine system and analytes assayed in the clinical laboratory, including tumor markers, therapeutic drugs, and compounds studied in toxicology. The student will be introduced to vitamins assayed and correlate their clinical significance. The student will correlate liver, kidney, and pancreatic function with test results and compare with states of health and disease. The function and laboratory analysis of various body fluids including effusions, spinal fluid, and synovial fluid will be included.

HTEC 90G	Basic Patient Care	1 1/2 Units	HTEC 96E	Business Office Clerk Externship	4 Units
Co-requisite: Health Technologies 90G students must also enroll in Health Technologies 101B. Advisory: Health Technologies 60A. Three hours lecture-laboratory (36 hours total per quarter). Medical asepsis, nutrition and diet therapy, vital signs, preparation of examining room and patient, various procedures in the medical office.			Prerequisite: Computer Applications and Office Systems 70A, 90GA, 91AN, 95N, 104O; and Health Technologies 50, 60A, 72, 73 and 101D. Twelve hours laboratory (144 hours total per quarter). Business office clerk practical experience in medical facilities.		
HTEC 90H	Medical Office Sterile Technique	1 1/2 Units	HTEC 96F	Insurance and Coding Externship	4 Units
Co-requisite: Health Technologies 90H students must also enroll in Health Technologies 101E. Advisory: Health Technologies 60A and 90G. Three hours lecture-laboratory (36 hours total per quarter). Local application of heat and cold, medical office instruments, sterilization and disinfection of equipment and instruments, application of sterile gloves, assisting with minor office surgery, and bandaging.			Prerequisite: Biology 54G, 54H, 54I, 54J; and Health Technologies 50, 60A, 60G, 60H, 61, 72, 73, 101C and 101D. Twelve hours laboratory (144 hours total per quarter). Insurance and coding practical experience in medical facilities.		
HTEC 91	Medical Office Diagnostic Tests	1 1/2 Units	HTEC 96G	Medical Transcription Externship	4 Units
Co-requisite: Health Technologies 91 students must also enroll in Health Technologies 101F. Advisory: Health Technologies 60A. Three hours lecture-laboratory (36 hours total per quarter). Electrocardiography, theory of assisting with physical therapy and x-ray examinations, theory of diagnostic procedures and instructions.			Prerequisite: Biology 54G, 54H, 54I, 54J; Health Technologies 50, 60A, 60G, 60H, 61, 73 and 74. Twelve hours laboratory (144 hours total per quarter). Medical transcription practical experience in medical facilities.		
HTEC 93	Pharmacology for Medical Assistants	1 1/2 Units	HTEC 96H	EKG Externship	4 Units
Advisory: Health Technologies 60A. Three hours lecture-laboratory (36 hours total per quarter). Dosage calculation, drug legislation and standards, drug preparations and information regarding antibiotics, sulfonamides, antihistamines, and drugs that affect various systems of the body.			Prerequisite: Health Technologies 50, 60A, 60G, 60H, 90G, 64A, 64B, 73, 91, 95B, 101A, 101B and 101F. Twelve hours laboratory (144 hours total per quarter). Lab assisting practical experience in medical facilities.		
HTEC 94	Administration of Medications	1 Unit	HTEC 101A	Skill Building in Clinical Laboratory Procedures	1 Unit
Prerequisite: Health Technologies 93 (may be taken concurrently). Two hours lecture-laboratory (24 hours total per quarter). (May be taken up to three times for credit.) Pertinent anatomy and physiology, choice of equipment, proper technique, hazards and complications, post-treatment and test patient care and satisfactory performance of a minimum of 10 intramuscular, subcutaneous, and intradermal injections; preparation and administration of oral medication.			Prerequisite: Health Technologies 64B (may be taken concurrently). Three hours laboratory (36 hours total per quarter). (May be taken up to six times for credit.) Pass-No Pass (P-NP) course. Proper collection and handling of blood specimens while developing speed and accuracy.		
HTEC 95A	Medical Assisting Externship	3 Units	HTEC 101B	Skill Building in Basic Patient Care	1 Unit
Prerequisite: Accounting 1A; and Biology 54G, 54H, 54I, 54J; and Computer Applications and Office Systems 84A, 95N, 104O; and Health Technologies 50, 60A, 60G, 60H, 61, 64A, 64B, 68, 71, 72, 73, 74, 75, 90G, 90H, 91, 93, 94, 96A and 110. Nine hours laboratory (108 hours total per quarter). Clinical medical assisting practical experience in medical facilities.			Prerequisite: Health Technologies 90G (may be taken concurrently). Three hours laboratory (36 hours total per quarter). (May be taken up to six times for credit.) Pass-No Pass (P-NP) course. Development of speed and accuracy in skills learned in the basic patient care course; skills include proper hand washing, vital signs, preparation of examination room and patient and various procedures in the medical office.		
HTEC 95B	Phlebotomy Technician I Externship	3 Units	HTEC 101C	Skill Building in Medical Communications and Medical Transcription	1 Unit
Prerequisite: Computer Applications and Office Systems 70A, 90GA, 91AN; and Health 57A, 57E; and Health Technologies 50, 60A, 64A, 64B, 73 and 101A. Nine hours laboratory (108 hours total per quarter). (May be taken up to two times for credit.) Phlebotomy Technician I practical experience in medical facilities.			Prerequisite: Health Technologies 61 or 74 (may be taken concurrently). Three hours laboratory (36 hours total per quarter). (May be taken up to six times for credit.) Pass-No Pass (P-NP) course. Development of speed and accuracy in skills learned in medical communications and medical transcription and advanced medical terminology.		
HTEC 96A	Medical Assisting Externship	4 Units	HTEC 101D	Skill Building in Medical Office Financial Procedures	1 Unit
Prerequisite: Accounting 1A; and Biology 54G, 54H, 54I, 54J; and Computer Applications and Office Systems 84A, 95N, 104O; and Health Technologies 50, 60A, 60G, 60H, 61, 64A, 64B, 68, 71, 72, 73, 74, 75, 90G, 90H, 91, 93, 94, 95A and 110. Twelve hours laboratory (144 hours total per quarter). Administrative and clinical medical assisting practical experience in medical facilities.			Prerequisite: Health Technologies 72 (may be taken concurrently). Three hours laboratory (36 hours total per quarter). (May be taken up to six times for credit.) Pass-No Pass (P-NP) course. Development of speed and accuracy in skills learned in medical office financial procedures course; skills include determining ICD-9CM and CPT codes, completing various types of insurance forms.		
HTEC 96B	Medical Secretarial Externship	4 Units	HTEC 101E	Skill Building in Medical Office Sterile Technique	1 Unit
Prerequisite: Accounting 1A; and Biology 54G, 54H, 54I, 54J; and Computer Application and Office Systems 81H, 84A, 95N, 104O; and Health Technologies 50, 60A, 60G, 60H, 61, 68, 71, 72, 73, 74, 75, 101C, 101D and 101G. Twelve hours laboratory (144 hours total per quarter). Medical secretarial practical experience in medical facilities.			Prerequisite: Health Technologies 90H (may be taken concurrently). Three hours laboratory (36 hours total per quarter). (May be taken up to six times for credit.) Pass-No Pass (P-NP) course. Development of speed and accuracy in skills learned in the medical office sterile technique course; skills include local application of heat and cold, application of sterile gloves, assisting with minor surgery, and bandaging.		
HTEC 96C	Medical File Clerk Externship	4 Units	HTEC 101F	Skill Building in Medical Office Diagnostic Tests	1 Unit
Prerequisite: Computer Applications and Office Systems 70A, 90GA, 91AN, 95N, 104O; and Health Technologies 50, 60A and 73. Twelve hours laboratory (144 hours total per quarter). Medical file clerk practical experience in medical facilities.			Prerequisite: Health Technologies 91 (may be taken concurrently). Three hours laboratory (36 hours total per quarter). (May be taken up to six times for credit.) Pass-No Pass (P-NP) course. Development of speed and accuracy in skills learned in the medical office diagnostic tests course; skills include performing assessing electrocardiograms.		
HTEC 96D	Medical Record Clerk Externship	4 Units			
Prerequisite: Computer Applications and Office Systems 70AA, 90GA, 91AN, 95N, 104O; and Health Technologies 50, 60A, 71 and 73. Twelve hours laboratory (144 hours total per quarter). Medical record clerk practical experience in medical facilities.					

HTEC 110 Health Technologies Employment Preparation 1 1/2 Units

*Advisory: To be taken the quarter before final externship.
Three hours lecture-laboratory (36 hours total per quarter).
(May be taken up to three times for credit.)*

Steps involved in seeking employment in medical facilities; preparation of resume and interviewing; preparation for certification examinations.

HTEC 180 Clinical Hematology/Urinalysis/Coagulation Practicum 6 Units

(Formerly Health Technology 280.)

Prerequisite: Health Technologies 80A, 81A and 82A.

Eighteen hours laboratory (216 hours total per quarter).

Provides entry-level clinical laboratory practice/experience in the department of hematology, urinalysis and coagulation. Emphasis is placed on technique, accuracy, and precision. Different instrumentation will be introduced as well as bench/manual methods. Competence will be evaluated based on final clinical evaluations. This practicum will be conducted at a clinical affiliate site that will be assigned by the MLT (Medical Laboratory Technician) Program Director.

HTEC 183 Clinical Microbiology Practicum 6 Units

(Formerly Health Technology 283.)

Prerequisite: Health Technologies 83A.

Eighteen hours laboratory (216 hours total per quarter).

Provides entry-level clinical laboratory practice/experience in the department of microbiology. Emphasis is placed on technique, accuracy, and precision. Different instrumentation will be introduced as well as bench/manual methods. Competence will be evaluated based on final clinical evaluations. This practicum will take place at a clinical affiliate site that will be assigned by the MLT (Medical Laboratory Technician) Program Director.

HTEC 184 Clinical Immunology/Immunohematology Practicum 4 1/2 Units

(Formerly Health Technology 284.)

Prerequisite: Health Technologies 84A.

Thirteen and one-half hours laboratory (162 hours total per quarter).

Provides entry-level clinical laboratory practice/experience in the department of serology and blood banking. Emphasis is placed on technique, accuracy, and precision. Different instrumentation will be introduced as well as bench/manual methods. Competence will be evaluated based on final clinical evaluations. This practicum will take place at a clinical affiliate site that will be assigned by the MLT (Medical Laboratory Technician) Program Director.

HTEC 185 Clinical Chemistry Practicum 6 Units

(Formerly Health Technology 285.)

Prerequisite: Health Technologies 85C and 85D.

Eighteen hours laboratory (216 hours total per quarter).

Provides entry-level clinical laboratory practice/experience in the department of general and special chemistry. Emphasis is placed on technique, accuracy, and precision. Different instrumentation will be introduced as well as bench/manual methods. Competence will be evaluated based on final clinical evaluations. This practicum will be conducted at a clinical affiliate site that will be assigned by the MLT (Medical Laboratory Technician) Program Director.

Hindi

HNDI 1 Elementary Hindi (First Quarter) 5 Units

(See general education pages for the requirement this course meets.)

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Five hours lecture (60 hours total per quarter).

Introduction to the language and cultures of the Hindi-speaking countries and communities. Basic speaking, listening, reading and writing of Hindi will be introduced and practiced within a cultural framework. The emphasis will be on language as an expression of culture.

HNDI 2 Elementary Hindi (Second Quarter) 5 Units

(See general education pages for the requirement this course meets.)

Prerequisite: Hindi 1 (equivalent to one year of high school Hindi) or equivalent.

Five hours lecture (60 hours total per quarter).

Further development of material presented in Hindi 1. Continuation of introduction to the language and culture of the Hindi-speaking states. Basic speaking, listening, reading and writing of Hindi will be introduced and practiced within a cultural framework. The emphasis will be on language as an expression of culture.

HNDI 3 Elementary Hindi (Third Quarter) 5 Units

(See general education pages for the requirement this course meets.)

Prerequisite: Hindi 2 (equivalent to two years of high school Hindi) or equivalent.

Five hours lecture (60 hours total per quarter).

Further development of material presented in Hindi 1 and Hindi 2. Completion

of introduction to the language and culture of the Hindi-speaking states and communities. Basic speaking, listening, reading and writing of Hindi will be introduced and practiced within a cultural framework. The emphasis will be on language as an expression of culture.

History

HIST 2 Introduction to California Studies 4 Units

(See general education pages for the requirement this course meets.)

Advisory: English Writing 1A or English as a Second Language 5.

Four hours lecture (48 hours total per quarter).

Interdisciplinary introduction to California as a region of the earth and of the mind: landscapes, environments and biosystems, peoples and culture, human communities and history, arts and literature, technological systems.

HIST 3A World History 4 Units

(See general education pages for the requirement this course meets.)

Advisory: English Writing 1A or English as a Second Language 5.

(Also listed as Intercultural Studies 3A. Students may enroll in either department, but not both, for credit.)

Four hours lecture (48 hours total per quarter).

Beginning with late prehistoric times and covering to 750 Common Era (C.E.), focusing on the world's ancient peoples, cultures and civilizations. Interdisciplinary, multi-perspective view of world history, using a thematic approach and offering a balanced, representative and inclusive sampling of the world's cultures from Africa, the Americas, Asia, Europe and Oceania.

HIST 3B World History 4 Units

(See general education pages for the requirement this course meets.)

Advisory: English Writing 1A or English as a Second Language 5.

(Also listed as Intercultural Studies 3B. Students may enroll in either department, but not both, for credit.)

Four hours lecture (48 hours total per quarter).

Beginning with 750 C.E. and covering to 1750 Common Era (C.E.), focusing on the convergence of the world's peoples, cultures and civilizations. Interdisciplinary, multi-perspective view of world history, using a thematic approach and offering a balanced, representative and inclusive sampling of the world's cultures from Africa, the Americas, Asia, Europe and Oceania.

HIST 3C World History 4 Units

(See general education pages for the requirement this course meets.)

Advisory: English Writing 1A or English as a Second Language 5.

(Also listed as Intercultural Studies 3C. Students may enroll in either department, but not both, for credit.)

Four hours lecture (48 hours total per quarter).

Beginning with 1750 Common Era (C.E.) and covering to the present, focusing on recent and current interactions between the world's peoples, cultures and civilizations. Interdisciplinary, multi-perspective view of world history, using a thematic approach and offering a balanced, representative and inclusive sampling of the world's cultures from Africa, the Americas, Asia, Europe and Oceania.

HIST 4A History of Western Civilization 4 Units

(See general education pages for the requirement this course meets.)

Advisory: English Writing 1A or English as a Second Language 5.

Four hours lecture (48 hours total per quarter).

The development of Western culture from its origins in the Near East through the Hellenistic era, with an emphasis on the growth of ancient Greek rationalism.

HIST 4B History of Western Civilization 4 Units

(See general education pages for the requirement this course meets.)

Advisory: English Writing 1A or English as a Second Language 5.

Four hours lecture (48 hours total per quarter).

The development of Western culture from the Roman Republic through the Middle Ages, with an emphasis on the growth of Judeo-Christian and Islamic traditions.

HIST 4C History of Western Civilization 4 Units

(See general education pages for the requirement this course meets.)

Advisory: English Writing 1A or English as a Second Language 5.

Four hours lecture (48 hours total per quarter).

The development of Western Civilization from the 13th to the late 18th centuries, which includes late Medieval, the Renaissance, Reformation, the Enlightenment. This study concludes with an overview of the French Revolution and the beginning of globalism and the modern world.

HIST 4D History of Western Civilization 4 Units

(See general education pages for the requirement this course meets.)

Advisory: English Writing 1A or English as a Second Language 5.

Four hours lecture (48 hours total per quarter).

The development of Western Civilization from the Revolutionary era to the present, with an emphasis on the emergence of modern ideologies and the development of modern social thought.

HIST 5A	A Historical Study of the Old Testament	4 Units	HIST 17A	History of the United States to Early National Era	4 Units
(Formerly History 95A.) (See general education pages for the requirement this course meets.) Advisory: English Writing 1A or English as a Second Language 5. Four hours lecture (48 hours total per quarter). Critical examination of the Old Testament (Hebrew Bible) and related writings, from a historical point of view, with particular attention given to recent biblical scholarship.			(See general education pages for the requirement this course meets.) Advisory: English Writing 1A or English as a Second Language 5. Four hours lecture (48 hours total per quarter). U.S. civilization to Early National Era. A survey of the social, cultural, political, economic and intellectual development of the Colonial Era with emphasis on the era of the American Revolution, the development of the Constitution, and the role of the major ethnic, social and gender groups in the American experience.		
HIST 5B	A Historical Study of the New Testament	4 Units	HIST 17B	History of the United States from 1800 to 1900	4 Units
(Formerly History 95B.) (See general education pages for the requirement this course meets.) Advisory: English Writing 1A or English as a Second Language 5. Four hours lecture (48 hours total per quarter). Critical examination of the New Testament and related writings, from a historical point of view, with particular attention given to recent biblical scholarship.			(See general education pages for the requirement this course meets.) Advisory: English Writing 1A or English as a Second Language 5. Four hours lecture (48 hours total per quarter). U.S. civilization from 1800 to 1900. A survey of United States history (political, economic, intellectual, and social development).		
HIST 7A	Colonial Latin American History	4 Units	HIST 17C	History of the United States from 1900 to the Present	4 Units
(See general education pages for the requirement this course meets.) Advisory: English Writing 1A or English as a Second Language 5. (Also listed as Intercultural Studies 38A. Students may enroll in either department, but not both, for credit.) Four hours lecture (48 hours total per quarter). Colonial Latin America and its role in the Atlantic world (to 1825) including the independence movements. Themes cover social, intellectual and cultural developments, impact of poverty, race and gender relations and popular culture.			(See general education pages for the requirement this course meets.) Advisory: English Writing 1A or English as a Second Language 5. Four hours lecture (48 hours total per quarter). American civilization from 1900 to the present. A survey of United States history (political, economic, intellectual, and social development).		
HIST 7B	Modern Latin American History	4 Units	HIST 18A	African American History Before 1865	4 Units
(See general education pages for the requirement this course meets.) Advisory: English Writing 1A or English as a Second Language 5. (Also listed as Intercultural Studies 38B. Students may enroll in either department, but not both, for credit.) Four hours lecture (48 hours total per quarter). Latin American history from post-colonialism to the present (1810 to the present). Focuses on understanding the region as a diverse geographic, political and social reality. Special attention will be given to contributions of various peoples and cultures, human communities in arts and literature.			(See general education pages for the requirement this course meets.) Advisory: English Writing 1A or English as a Second Language 5. (Also listed as Intercultural Studies 18A. Students may enroll in either department, but not both, for credit.) Four hours lecture (48 hours total per quarter). History of the African American from the pre-European West African city state kingdoms to the end of the Civil War; major events in America's development emphasizing the role of people of African descent in the political, social and economic life of the United States; the institution of slavery; free Blacks in the north and the abolitionist movement.		
HIST 9	Women in American History	4 Units	HIST 18B	African American History Since 1865	4 Units
(See general education pages for the requirement this course meets.) Advisory: English Writing 1A or English as a Second Language 5. (Also listed as Women's Studies 9. Students may enroll in either department, but not both, for credit.) Four hours lecture (48 hours total per quarter). Critical examination of the social, economic, cultural and political history of American women from the colonial times to the present. Emphasis on the movements which enhanced women's political and economic rights, the social roles which defined women primarily by their gender and the legal realities that women faced. Significant moral, political and economic issues will be assessed.			(See general education pages for the requirement this course meets.) Advisory: English Writing 1A or English as a Second Language 5. (Also listed as Intercultural Studies 18B. Students may enroll in either department, but not both, for credit.) Four hours lecture (48 hours total per quarter). History of the African American in the United States since the Civil War; major events in America's development emphasizing the role of people of African descent in the political, social and economic life of the United States; reconstruction; Jim Crow era; Booker T. Washington and his critics; Martin Luther King, Malcolm X and the Civil Rights Movement; the new reconstruction; and African Americans in the Reagan-Bush and Clinton eras.		
HIST 10	History of California	4 Units	HIST 19A	History of Asian Civilization: China and Japan (through the 18th Century)	4 Units
(See general education pages for the requirement this course meets.) Advisory: English Writing 1A or English as a Second Language 5. Four hours lecture (48 hours total per quarter). California history from Native American cultures to the present. Emphasis is placed on introducing students to the discipline of history through cultural, social, economic, political, and environmental resource issues. Practice in critical analysis of primary and secondary sources.			(See general education pages for the requirement this course meets.) Advisory: English Writing 1A or English as a Second Language 5. (Also listed as International Studies 19A. Students may enroll in either department, but not both, for credit.) Four hours lecture (48 hours total per quarter). An introductory study of the development of Chinese and Japanese civilizations from their origins through the eighteenth century.		
HIST 16A	History of Africa to 1800	4 Units	HIST 19B	History of Asian Civilization: China and Japan (19th - 21st Centuries)	4 Units
(See general education pages for the requirement this course meets.) Advisory: English Writing 1A or English as a Second Language 5. (Also listed as Intercultural Studies 16A. Students may enroll in either department, but not both, for credit.) Four hours lecture (48 hours total per quarter). History of Africa from the Paleolithic period to 1800; an interdisciplinary survey of the emergence and development of African civilizations that focuses on geographical, environmental economic, social, cultural and political issues.			(See general education pages for the requirement this course meets.) Advisory: English Writing 1A or English as a Second Language 5. (Also listed as International Studies 19B. Students may enroll in either department, but not both, for credit.) Four hours lecture (48 hours total per quarter). An introductory study of the development of modern China and Japan from the nineteenth to the twenty-first centuries.		
HIST 16B	History of Africa from 1800 to the Present	4 Units	HIST 28	Social Environmental History	4 Units
(See general education pages for the requirement this course meets.) Advisory: English Writing 1A or English as a Second Language 5. (Also listed as Intercultural Studies 16B. Students may enroll in either department, but not both, for credit.) Four hours lecture (48 hours total per quarter). A study of African history in the 19th and 20th centuries; an examination of the implications of European expansion into Africa; an analysis of the "Scramble for Africa"; the emergence of independent African nations and the growth of African nationalism.			(Formerly History 64.) (See general education pages for the requirement this course meets.) Advisory: English Writing 1A or English as a Second Language 5. (Also listed as Intercultural Studies 28. Students may enroll in either department, but not both, for credit.) Four hours lecture (48 hours total per quarter). An historical survey of human societies and their influence on the environments in which they developed. An examination of rapidly decreasing world resources, pollution, and the environment in general are examined in a historical context through a chronological approach, beginning with the ancient civilizations, the spreading of humanity across the globe, the cultural, social, and environmental implications, and ending with a discussion of contemporary environmental issues as they affect modern society.		

HIST 51W Topics in California Political and Diplomatic History 1 Unit

HIST 51X 2 Units

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

One hour lecture for each unit of credit (12 hours total for each unit of credit per quarter).

(Any combination of History 51W and 51X may be taken up to six times as long as the topics are different each time.)

Examination of topics relating to California's political and diplomatic history from the time of the early Spanish explorations through the present, looking at both Spanish, Mexican and United States rule.

HIST 52W Topics in History of Transportation in California 1 Unit

HIST 52X 2 Units

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

One hour lecture for each unit of credit (12 hours total for each unit of credit per quarter).

(Any combination of History 52W and 52X may be taken up to six times as long as the topics are different each time.)

Examination of topics relating to California's transportation history looking at the influences of various cultures and national rulerships from the earliest human occupation to the present.

HIST 53W Topics in California Historical Sites and Monuments 1 Unit

HIST 53X 2 Units

Advisory: English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263.

One hour lecture for each unit of credit (12 hours total for each unit of credit per quarter).

(Any combination of History 53W and 53X may be taken up to six times as long as the topics are different each time.)

Topics relating to California's sites and monuments through a historical perspective of various eras and major architects who created or influenced them. Consideration of the political, socioeconomic, geographical and environmental conditions providing the historical and cultural context in which these styles evolved.

HIST 54W Special Topics: Significant Californians 1 Unit

HIST 54X 2 Units

Advisory: English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263.

One hour lecture for each unit of credit (12 hours total for each unit of credit per quarter).

(Any combination of History 54W and 54X may be taken up to six times as long as the topics are different each time.)

Works and achievements of specific Californians will be studied in relation to how they affected the trends, social climate, history and development of California.

HIST 107W Community History 1 Unit

HIST 107X 2 Units

Advisory: English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263.

One hour lecture for each unit of credit (12 hours total for each unit of credit per quarter).

(Any combination of History 107W and 107X may be taken up to six times as long as the topics/projects are different each time.)

An overview and appreciation of one or more California communities tracing evolution of land use and development and looking at the influence of Native Americans and various cultures to the present.

Human Development

HUMA 10 Human Sexuality 4 Units

(See general education pages for the requirement this course meets.)

Advisory: English Writing 1A or English as a Second Language 5.

Four hours lecture (48 hours total per quarter).

The comprehensive study of the biological, psychological and socio-cultural aspects of human sexuality. An exploration into values and attitudes and their relationship to behaviors and behavioral changes. Includes an assessment of various cultural mores and current safe sex practices.

HUMA 20 Life Skills for Higher Education 4 Units

(Formerly Human Development 57.)

(See general education pages for the requirement this course meets.)

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Four hours lecture (48 hours total per quarter).

Addresses a multitude of life skills and strategies for success, with emphasis on attaining professional, personal and academic goals in a diverse society. Topics

covered include creative and realistic goal setting, academic and life management, cultural learning styles, college and community resources, library and Internet use, time management, and techniques to reduce math and science anxiety. Evaluation and application of academic study methods to achieve subject matter mastery. Development of critical thinking skills, and application of reading, writing, note taking and test taking methods to improve personal strategies. Exploration of personal lifestyle and health factors, including the causes and management of stress, as it relates to academic success. Assessment of academic and career goals, selection of majors, and development of education plans. Topics from developmental psychology, learning theory and personality theory will be presented as a foundation for the course.

HUMA 50 Understanding and Managing Stress 4 Units

(See general education pages for the requirement this course meets.)

Advisory: English Writing 1A or English as a Second Language 5.

Four hours lecture (48 hours total per quarter).

The study of stress as the interaction between the individual and the environment, viewed from psychological, sociological, and physiological perspectives, including gender, physical and psychological disabilities, sexual orientation, multicultural and global concerns.

Humanities

HUMI 1 Creative Minds 4 Units

(See general education pages for the requirement this course meets.)

Advisory: English Writing 1A or English as a Second Language 5.

Four hours lecture (48 hours total per quarter).

An introduction to the study of creativity in human life; its sources, development, social purpose, and role in culture change. Students analyze creativity as a central source of meaning and purpose in their lives as well as a development of their unique combination of human intelligences. Lives of creative people from all over the world are examined and contextualized.

HUMI 2 But is it Art? Questions and Criticism 4 Units

(See general education pages for the requirement this course meets.)

Advisory: English Writing 1A or English as a Second Language 5.

Four hours lecture (48 hours total per quarter).

A cross-cultural, interdisciplinary introduction to aesthetics - theories about what art is, its functions and value, and the ways we experience it. Examines historical and contemporary views on visual, literary, and performing arts. Explores distinctions between "fine" and popular art, and varieties of deviant or shocking art. Primary focus will be on the visual arts and how they enrich our lives.

HUMI 5 Storytelling in American Culture 4 Units

(See general education pages for the requirement this course meets.)

Advisory: English Writing 1A or English as a Second Language 5.

Four hours lecture (48 hours total per quarter).

Explores how stories are told among different ethnic groups within the United States. This course will critically examine how collective memories are selected, organized, transformed, contested, and retold as origin myths, multicultural histories, family lore, heroic epics, trickster tales, traumatic experiences, slave narratives, immigrant testimonies, spectacular events, war memorials, celebrity biographies, malicious rumors, urban legends, animated fairy-tales, knowledge and science fiction films.

HUMI 6 Popular Culture 4 Units

(Formerly Humanities 51.)

(See general education pages for the requirement this course meets.)

Advisory: English Writing 1A or English as a Second Language 5.

Four hours lecture (48 hours total per quarter).

Utilizes the methods of the humanities in a critical analysis of popular culture. This inquiry is framed in multicultural, historical and political contexts and will evaluate how popular culture is created and sustained by mass media and techniques of mass production, marketing and distribution. Students examine how social meaning is constructed by the "texts" of popular culture in a constantly changing era of globalization of information and economies.

HUMI 7 The Arts and the Human Spirit 4 Units

(See general education pages for the requirement this course meets.)

Advisory: English Writing 1A or English as a Second Language 5.

Four hours lecture (48 hours total per quarter).

Explores the expression of spiritual and religious thought and aspiration in the arts. Examines religious art in various media in particular, and analyzes the roles of creativity and spirituality in the arts in general. Critical, reflective and experiential in approach.

HUMI 9 Introduction to Comparative Religion 4 Units

(See general education pages for the requirement this course meets.)
Advisory: English Writing 1A or English as a Second Language 5.
Four hours lecture (48 hours total per quarter).

An interdisciplinary examination and comparison of the religious dimensions of human life: history, terminology, emotional experiences, concepts, attitudes, images, material expressions, conflicts, myths, metaphors, symbols, perceptions of nature and the natural environment and rituals relating to the particular social context of each tradition. Emphasis will be placed on the numerous practices and perspectives of women and men throughout time and from different cultures regarding their sense of the sacred.

HUMI 10 Global Religious Perspectives: Judaism, Christianity and Islam 4 Units

(See general education pages for the requirement this course meets.)
Advisory: English Writing 1A or English as a Second Language 5.
Four hours lecture (48 hours total per quarter).

A historically grounded and contemporarily focused examination of the religious elements and experiences essential to the formation of the Western world view. Early Tribal, European, Asian, Babylonian, Persian, and Egyptian content will be important, while Judaism, Christianity, and Islam will be the central focus.

HUMI 13 Introduction to Korean Popular Culture 4 Units

(Formerly Humanities 63.)
(See general education pages for the requirement this course meets.)
Advisory: English Writing 1A or English as a Second Language 5.
(Also listed as International Studies 13. Students may enroll in either department, but not both, for credit.)
Four hours lecture (48 hours total per quarter).

An interdisciplinary introduction to contemporary Korean popular culture which explores modern Korean society across a wide range of themes such as identity, gender/sexuality, love/marriage, family and social value systems. Examines multi-levels of the socio-construction of modern Korean society through TV drama (soap opera), film and pop music. Also, it explores the unique patterns of Korean culture and Korean cultural issues related to contemporary Asian societies and global issues. No Korean language or studies experience necessary.

HUMI 14A Indian Philosophy 4 Units

(See general education pages for the requirement this course meets.)
Advisory: English Writing 1A or English as a Second Language 5.
(Also listed as Philosophy 14A. Students may enroll in either department, but not both, for credit.)
Four hours lecture (48 hours total per quarter).

A study of the development of philosophical thought in India. Primary emphasis is given to the orthodox darshanas, especially Jaina.

HUMI 14B Chinese Philosophy 4 Units

(See general education pages for the requirement this course meets.)
Advisory: English Writing 1A or English as a Second Language 5.
(Also listed as Philosophy 14B. Students may enroll in either department, but not both, for credit.)
Four hours lecture (48 hours total per quarter).

An introduction to classical Chinese philosophies (roughly the philosophies that flourished in China prior to unification in 221 B.C.E.), emphasizing Confucianism, Moism, Yangism, The Logicians, Han Fei Tzu, and the schools and texts that get antecedently labeled "Daoism." In addition to the classical period of Chinese philosophy, some attention will be given to the evolution of philosophical thought in China, such as the introduction of Buddhism and other elements (as represented, for example, by Wang Yangming). Finally, philosophical examination of contemporary China will be considered.

HUMI 14C Japanese Philosophy 4 Units

(See general education pages for the requirement this course meets.)
Advisory: English Writing 1A or English as a Second Language 5.
(Also listed as Philosophy 14C. Students may enroll in either department, but not both, for credit.)
Four hours lecture (48 hours total per quarter).

A study of philosophical thought in Japan including Zen Buddhism, Shinto, and contemporary thinkers.

HUMI 15 Discussion on the Arts 4 Units

(See general education pages for the requirement this course meets.)
Advisory: English Writing 1A or English as a Second Language 5.
Four hours lecture (48 hours total per quarter).

Art forms such as painting, sculpture, architecture, music, dance, drama, literature, film and photography will be explored to provide a forum for discussion on how the arts affect humanity, reflect the human spirit, touch the soul, and stimulate mankind's creativity. A great first time, multicultural exposure to the arts. Focus will be on enhancing the student's ability to experience the uniqueness of each art form and to develop a depth of understanding of its expression and relevance.

HUMI 16 Arts, Ideas and Values 4 Units

(See general education pages for the requirement this course meets.)
Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.
Four hours lecture (48 hours total per quarter).

Interdisciplinary introduction to artistic cultural studies. A critical analysis of the dynamic process through which contemporary cultural values and social constructions of gender, ethnicity, sexual orientation, social class, religion and globalization shape and have been shaped by artistic expression. Special emphasis is placed on art as a tool for social change.

HUMI 18 History as Mystery: Western Perspectives in Global Contexts 4 Units

(See general education pages for the requirement this course meets.)
Advisory: English Writing 1A or English as a Second Language 5.
Four hours lecture (48 hours total per quarter).

As history reveals, it also conceals; so, what do historical narratives conceal? What kind of historical scripts might emerge from our descendants based on our current-cultural artifacts? This is an interdisciplinary discussion that identifies, examines, analyzes and critiques fundamental western concepts from aesthetics, history, philosophy, religion and science as representative of a perspective from an historical or cross-cultural context. Emphasis will be placed on how the past, present, and future have the potential to inform one another and are framed by perspective.

HUMI 20 The Greek Achievement 4 Units

(See general education pages for the requirement this course meets.)
Advisory: English Writing 1A or English as a Second Language 5.
Four hours lecture (48 hours total per quarter).

Critical examination and exploration of the intellectual and artistic achievements of the Ancient Greeks who created new cultural alternatives (experiences) and values in self-awareness, rationalism, community, education, ethics, and justice. Particular attention will be paid to these experiences and values which will be explored and analyzed through Greek art, architecture, science, philosophy, drama, poetry, and religion.

Intercultural Studies

ICS 3A World History 4 Units

(See general education pages for the requirement this course meets.)
Advisory: English Writing 1A or English as a Second Language 5.
(Also listed as History 3A. Students may enroll in either department, but not both, for credit.)
Four hours lecture (48 hours total per quarter).

Beginning with late prehistoric times and covering to 750 Common Era (C.E.), focusing on the world's ancient peoples, cultures and civilizations. Interdisciplinary, multi-perspective view of world history, using a thematic approach and offering a balanced, representative and inclusive sampling of the world's cultures from Africa, the Americas, Asia, Europe and Oceania.

ICS 3B World History 4 Units

(See general education pages for the requirement this course meets.)
Advisory: English Writing 1A or English as a Second Language 5.
(Also listed as History 3B. Students may enroll in either department, but not both, for credit.)
Four hours lecture (48 hours total per quarter).

Beginning with 750 C.E. and covering to 1750 Common Era (C.E.), focusing on the convergence of the world's peoples, cultures and civilizations. Interdisciplinary, multi-perspective view of world history, using a thematic approach and offering a balanced, representative and inclusive sampling of the world's cultures from Africa, the Americas, Asia, Europe and Oceania.

ICS 3C World History 4 Units

(See general education pages for the requirement this course meets.)
Advisory: English Writing 1A or English as a Second Language 5.
(Also listed as History 3C. Students may enroll in either department, but not both, for credit.)
Four hours lecture (48 hours total per quarter).

Beginning with 1750 Common Era (C.E.) and covering to the present, focusing on recent and current interactions between the world's peoples, cultures and civilizations. Interdisciplinary, multi-perspective view of world history, using a thematic approach and offering a balanced, representative and inclusive sampling of the world's cultures from Africa, the Americas, Asia, Europe and Oceania.

ICS 4 Race, Ethnicity and Inequality 4 Units

(See general education pages for the requirement this course meets.)
Advisory: English Writing 1A or English as a Second Language 5.
(Also listed as Sociology 4. Students may enroll in either department, but not both, for credit.)
Four hours lecture (48 hours total per quarter).

An interdisciplinary examination of major concepts and controversies in study of racial and ethnic difference in the United States. Exploration of race and ethnicity as historical and contemporary categories of identification in the context of social inequality. Social movements and policy debates on racial equity will be analyzed.

ICS 5	History of Art (Multicultural Arts in the United States)	4 Units	ICS 14	Cinema and the African American (An Historical Analysis of African Americans in American Cinema)	4 Units
(See general education pages for the requirement this course meets.) Advisory: English Writing 1A or English as a Second Language 5. (Also listed as Arts 2F. Students may enroll in either department, but not both, for credit.) Four hours lecture (48 hours total per quarter). A cross-cultural introduction to American art history which includes interdisciplinary analysis of diverse art forms generated by artists of color, including African Americans, Asian Americans, Native Americans, Latina(o)s/Chicana(o)s, and Americans of non-European heritage. Significant attention will be given to issues considered important by each ethnicity or group as well as issues related to racism, gender, and social class. Traditions, values, and cultural expressions of diverse societies and their contributions to American visual culture are explored.			(See general education pages for the requirement this course meets.) Advisory: English Writing 1A or English as a Second Language 5. (Also listed as Film/Television 48 and English Literature 6. Students may enroll in only one department for credit.) Four hours lecture (48 hours total per quarter). A survey of the image and role of the American film industry. Particular attention will be given to the development of images of racial stereotypes, those works attempting a historical portrayal of the African American experience and the roles played by key African Americans in the evolution of film as an art and feature films as an industry in the United States.		
ICS 7	Intercultural Communication	4 Units	ICS 16A	History of Africa to 1800	4 Units
(See general education pages for the requirement this course meets.) Advisory: English Writing 1A or English as a Second Language 5. (Also listed as Speech Communication 7. Students may enroll in either department, but not both, for credit.) Four hours lecture (48 hours total per quarter). Study of intercultural communication in domestic and global contexts. Examines how differing cultures, languages, and social patterns influence the way members of groups relate among themselves and with members of other ethnic and cultural groups. Emphasizes development of interpersonal skills for communicating effectively across cultures and encourages appreciation of diverse cultural voices.			(See general education pages for the requirement this course meets.) Advisory: English Writing 1A or English as a Second Language 5. (Also listed as History 16A. Students may enroll in either department, but not both, for credit.) Four hours lecture (48 hours total per quarter). History of Africa from the Paleolithic period to 1800; an interdisciplinary survey of the emergence and development of African civilizations that focuses on geographical, environmental economic, social, cultural and political issues.		
ICS 8	Women of Color in the USA	4 Units	ICS 16B	History of Africa from 1800 to the Present	4 Units
(See general education pages for the requirement this course meets.) Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273. (Also listed as Women's Studies 8. Students may enroll in either department, but not both, for credit.) Four hours lecture (48 hours total per quarter). An interdisciplinary, multi perspective and comparative study of the experiences of women of color in the United States. The constructs of race, ethnicity, class, gender and sexuality as they relate to social institutions and national ideologies will be explored. Examination and analysis of the historical, political, and economic influences that have informed the relationships between women of color and white women in the U.S.A, is foundational to this course.			(See general education pages for the requirement this course meets.) Advisory: English Writing 1A or English as a Second Language 5. (Also listed as History 16B. Students may enroll in either department, but not both, for credit.) Four hours lecture (48 hours total per quarter). A study of African history in the 19th and 20th centuries; an examination of the implications of European expansion into Africa; an analysis of the "Scramble for Africa"; the emergence of independent African nations and the growth of African nationalism.		
ICS 9	Studying Race and Ethnicity (Theories and Methods)	4 Units	ICS 17	Critical Consciousness and Social Change	4 Units
(See general education pages for the requirement this course meets.) Advisory: English Writing 1A or English as a Second Language 5. Four hours lecture (48 hours total per quarter). Interdisciplinary examination of historical and contemporary race and ethnic relations in the United States. Topics include racial and ethnic identity, racial privilege and inequality, theories of race and racial ideology, and pluralism and the work of anti-racism. Application of theories, concepts, and research frameworks towards studying race and ethnicity in local contexts.			(See general education pages for the requirement this course meets.) Advisory: English Writing 1A or English as a Second Language 5. (Also listed as Philosophy 17. Students may enroll in either department, but not both, for credit.) Four hours lecture (48 hours total per quarter). An exploration of issues related to social change including the development of ways of thinking that promote social change. Students will read classical and contemporary authors on movements for social change, strategies for organizing, and the development of consciousness.		
ICS 10	An Introduction to African American Studies	4 Units	ICS 18A	African American History Before 1865	4 Units
(See general education pages for the requirement this course meets.) Advisory: English Writing 1A or English as a Second Language 5. Four hours lecture (48 hours total per quarter). A broad-based survey of African American life and culture. Through a variety of cross-disciplinary perspectives, including history, literature, philosophy, politics, socio-economics, and the arts, students gain insights into African American experiences in the United States.			(See general education pages for the requirement this course meets.) Advisory: English Writing 1A or English as a Second Language 5. (Also listed as History 18A. Students may enroll in either department, but not both, for credit.) Four hours lecture (48 hours total per quarter). History of the African American from the pre-European West African city state kingdoms to the end of the Civil War; major events in America's development emphasizing the role of people of African descent in the political, social and economic life of the United States; the institution of slavery; free Blacks in the north and the abolitionist movement.		
ICS 11	The Roots of the African American Experience	4 Units	ICS 18B	African American History Since 1865	4 Units
(See general education pages for the requirement this course meets.) Advisory: English Writing 1A or English as a Second Language 5. Four hours lecture (48 hours total per quarter). An interdisciplinary course utilizing the award-winning docudrama "Roots: The Saga of an American Family". An historical and aesthetic analysis of people of African descent in the United States. Emphasis on the colonial period, antebellum era, the Civil War and reconstruction period.			(See general education pages for the requirement this course meets.) Advisory: English Writing 1A or English as a Second Language 5. (Also listed as History 18B. Students may enroll in either department, but not both, for credit.) Four hours lecture (48 hours total per quarter). History of the African American in the United States since the Civil War; major events in America's development emphasizing the role of people of African descent in the political, social and economic life of the United States; reconstruction; Jim Crow era; Booker T. Washington and his critics; Martin Luther King, Malcolm X and the Civil Rights Movement; the new reconstruction; and African Americans in the Reagan-Bush and Clinton eras.		
ICS 12	An Introduction to African American Literature	4 Units	ICS 20	Asian American Experiences in History	4 Units
(See general education pages for the requirement this course meets.) Advisory: English Writing 1A or English as a Second Language 5. Four hours lecture (48 hours total per quarter). Surveys African American literature in all genres from the mid-eighteenth century to the present. Emphasizes the cultural, historical and social contexts of African American oral and literary expression. Studies writers such as Phillis Wheatley, Zora Neale Hurston, Langston Hughes, Richard Wright, Alice Walker and Toni Morrison.			(See general education pages for the requirement this course meets.) Advisory: English Writing 1A or English as a Second Language 5. Four hours lecture (48 hours total per quarter). Experiences of Asian immigrant communities in the United States from the 19th Century to the Asian American Movement of the late 1960s.		

ICS 21	Introduction to Pacific Islander History and Culture	4 Units	ICS 28	Social Environmental History	4 Units
(Formerly Intercultural Studies 90.) (See general education pages for the requirement this course meets.) Advisory: English Writing 1A or English as a Second Language 5. Four hours lecture (48 hours total per quarter). An interdisciplinary introduction to and survey of the Pacific Islander/American in the United States. Emphasis will be placed on history and contemporary issues in Pacific Islander/American communities. An examination of intergroup (e.g. Native Hawaiian, Samoan American, Tongan, Filipina/o American, Native American, Chamorro, Fijian, Maori, Tahitian, Melanesia, Micronesia, Polynesian, etc.) and intra-group challenges within today's ethnic communities.			(Formerly Intercultural Studies 64.) (See general education pages for the requirement this course meets.) Advisory: English Writing 1A or English as a Second Language 5. (Also listed as History 28. Students may enroll in either department, but not both, for credit.) Four hours lecture (48 hours total per quarter). An historical survey of human societies and their influence on the environments in which they developed. An examination of rapidly decreasing world resources, pollution, and the environment in general are examined in a historical context through a chronological approach, beginning with the ancient civilizations, the spreading of humanity across the globe, the cultural, social, and environmental implications, and ending with a discussion of contemporary environmental issues as they affect modern society.		
ICS 22	Contemporary Issues in the Asian American Communities	4 Units	ICS 29	Cultural Pluralism and American Law and Justice	4 Units
(See general education pages for the requirement this course meets.) Advisory: English Writing 1A or English as a Second Language 5. Four hours lecture (48 hours total per quarter). Experiences of contemporary Asian Americans are examined in terms of issues such as identity, community, youth, and empowerment, with an interdisciplinary approach based on Asian American Studies and the social sciences.			(Formerly Intercultural Studies 58.) (See general education pages for the requirement this course meets.) Advisory: English Writing 1A or English as a Second Language 5. (Also listed as Administration of Justice 29. Students may enroll in either department, but not both, for credit.) Four hours lecture (48 hours total per quarter). An interdisciplinary study of marginalized peoples and their relationship to the law. Examines the legal perspective on cultural diversity in the United States, including race, ethnicity, gender, class, religious background, disability, and sexual orientation. Analyzes how these groups interact with mainstream society through American law, concentrating on both historical and contemporary state and federal legislation and court rulings. Analyzes how the courts play a role in determining the status of minority groups.		
ICS 24	Asian American Literature	4 Units	ICS 30	Introduction to Chicano Studies	4 Units
(Formerly Intercultural Studies 52.) (See general education pages for the requirement this course meets.) Prerequisite: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273. (Also listed as English Literature 24. Students may enroll in either department, but not both, for credit.) Four hours lecture (48 hours total per quarter). Introduction to Asian American literature. Readings in Twentieth and Twenty-First Century works, with an emphasis on three relevant themes: problems of identity as it relates to class, gender, mixed heritages, and sexuality; politics and the history of Asian American activism and resistance; and diversity of cultures within the Asian American community.			(See general education pages for the requirement this course meets.) Advisory: English Writing 1A or English as a Second Language 5. Four hours lecture (48 hours total per quarter). An exploration of the Chicano experience with emphasis on the cultural and historical development, the socioeconomic and political status of the contemporary Chicano/a.		
ICS 25	Grassroots Democracy: Race, Politics and the American Promise	4 Units	ICS 31	Chicano Culture	4 Units
(See general education pages for the requirement this course meets.) Advisory: English Writing 1A or English as a Second Language 5. (Also listed as Political Science 15. Students may enroll in either department, but not both, for credit.) Four hours lecture (48 hours total per quarter). Applied and theoretical learning for students of social justice, this course will examine race, culture and contradictions in the ideal of the American Dream through a comparative analysis of American experiences of migration. Particular emphasis will be on the historical experiences of European immigrants, African Americans, Mexican Americans, and Asian Americans. The course will also discuss the contemporary social and cultural implications of the migration process. Using a multidisciplinary social science approach, attention will be given to issues of race, ethnicity, gender, class, and ecology as well as the role of the state (policy) to the process of migration and immigration.			(See general education pages for the requirement this course meets.) Advisory: English Writing 1A or English as a Second Language 5. Four hours lecture (48 hours total per quarter). Survey of the origins and development of Chicano culture with emphasis on the religions, philosophies, and lifestyles of the Chicano.		
ICS 26	Introduction to Lesbian, Gay, Bisexual and Transgender Studies	4 Units	ICS 32	Chicano History	4 Units
(Formerly Intercultural Studies 96.) (See general education pages for the requirement this course meets.) Advisory: English Writing 1A or English as a Second Language 5. Four hours lecture (48 hours total per quarter). An interdisciplinary, multi-perspective, critical analysis and comparative study of the broad range of contemporary lesbian, gay, bisexual and transgender issues in various contexts including biomedical, sociological, political, cultural, economic, racial and sexual. This course will explore the relationship between LGBT individuals and the social and political constructs of gender, sexuality, citizenship, and identity as they relate to social and political institutions and national ideologies. The values, experience, and cultural contributions of LGBT individuals in the United States will be identified, examined, and authenticated.			(See general education pages for the requirement this course meets.) Advisory: English Writing 1A or English as a Second Language 5. Four hours lecture (48 hours total per quarter). A history of the Chicano people, surveying pre-Columbian origins, with emphasis on the period since 1848 in the United States Southwest.		
ICS 27	Grassroots Democracy: Leadership and Power	4 Units	ICS 33	The Chicano and the Arts	4 Units
(See general education pages for the requirement this course meets.) Advisory: English Writing 1A or English as a Second Language 5. (Also listed as Political Science 17. Students may enroll in either department, but not both, for credit.) Four hours lecture (48 hours total per quarter). Applied and theoretical training for students of social justice, this course is a multidisciplinary exploration of social change and popular democratic action with a focus on the meaning and development of political power in modern democracies. Topics to be explored include: gender and race sensitive approaches to leadership style, institutional and mass forums for civic engagement, mass recruitment and mobilization, consciousness development, democratic ethics, and strategic and tactical action.			(See general education pages for the requirement this course meets.) Advisory: English Writing 1A or English as a Second Language 5. Four hours lecture (48 hours total per quarter). Survey and analysis of contemporary Chicano art, film, theater and dance, and literature, and their influence on the Chicano experience.		
			ICS 35	Chicano Literature	4 Units
			(See general education pages for the requirement this course meets.) Advisory: English Writing 1A or English as a Second Language 5. Four hours lecture (48 hours total per quarter). A survey of Chicano/a literature in its various forms, with emphasis on contemporary authors, from the 1940s to the present.		
			ICS 36	Grassroots Democracy: Social Movements Since the 1960s	4 Units
			(See general education pages for the requirement this course meets.) Advisory: English Writing 1A or English as a Second Language 5. (Also listed as Political Science 16. Students may enroll in either department, but not both, for credit.) Four hours lecture (48 hours total per quarter). Applied and theoretical learning for students of social justice, this course is a comparative survey of protest movements since the 1960s. An introductory, comparative, and interdisciplinary study of Mexican American, African American, Asian American, and white working class social and political struggles from 1960 to the present. The course traces the development of protest movements in response to racial, class, gender, and political inequality in the context of U.S. politics and history. The course critically examines the internal and external factors contributing to the rise and fall of social and political movements with special attention to the conjuncture of ecology, gender, race, ethnicity, culture, class, and sexual orientation in contemporary U.S. politics.		

ICS 37 Ancient People of Mesoamerica 4 Units*(See general education pages for the requirement this course meets.)**Advisory: English Writing 1A or English as a Second Language 5.**Four hours lecture (48 hours total per quarter).*

Introductory survey of the development of pre-contact Mesoamerican indigenous cultures, concluding with the Spanish invasion, conquest and colonization of the Aztecs, Maya and Zapotec peoples. A course of study commencing with the earliest known evidence of human occupation in Mesoamerica, progressing through the development of agriculturally-based societies.

ICS 38A Colonial Latin American History 4 Units*(See general education pages for the requirement this course meets.)**Advisory: English Writing 1A or English as a Second Language 5.**(Also listed as History 7A. Students may enroll in either department, but not both, for credit.)**Four hours lecture (48 hours total per quarter).*

Colonial Latin America and its role in the Atlantic world (to 1825) including the independence movements. Themes cover social, intellectual and cultural developments, impact of poverty, race and gender relations and popular culture.

ICS 38B Modern Latin American History 4 Units*(See general education pages for the requirement this course meets.)**Advisory: English Writing 1A or English as a Second Language 5.**(Also listed as History 7B. Students may enroll in either department, but not both, for credit.)**Four hours lecture (48 hours total per quarter).*

Latin American history from post-colonialism to the present (1810 to the present). Focuses on understanding the region as a diverse geographic, political and social reality. Special attention will be given to contributions of various peoples and cultures, human communities in arts and literature.

ICS 41 American Indians in Contemporary Society 4 Units*(See general education pages for the requirement this course meets.)**Advisory: English Writing 1A or English as a Second Language 5.**Four hours lecture (48 hours total per quarter).*

Sociological understanding of the American Indian groups in contemporary society with emphasis on the relationship to dominant society. American Indian economic, political, legal and cultural changes in the 21st century. Emphasis on issues of identity, the role of the federal government, gaming and self-determination.

ICS 42 American Indian Peoples of California 4 Units*(See general education pages for the requirement this course meets.)**Advisory: English Writing 1A or English as a Second Language 5.**Four hours lecture (48 hours total per quarter).*

A survey of the American Indian peoples of California, including their histories and cultures from oral traditions to contemporary issues, with a focus on selected Indian tribes and communities.

ICS 43 U.S. History from an American Indian Perspective 4 Units*(See general education pages for the requirement this course meets.)**Advisory: English Writing 1A or English as a Second Language 5.**Four hours lecture (48 hours total per quarter).*

Study of U.S. history from an indigenous perspective pre-Columbian contact to present. Examines Native American societies with attention to white intrusion, U.S. constitution and legislation to remove American Indians, control their land and the impact upon indigenous cultures and society.

ICS 44 American Indian Religions 4 Units*(See general education pages for the requirement this course meets.)**Advisory: English Writing 1A or English as a Second Language 5.**Four hours lecture (48 hours total per quarter).*

Survey of spirit beings, prophecies, and renewals of the Indian way through their land-based religions, symbols and ceremonies. Tribal religions reviewed as they have been influenced by foreign influences and philosophies. Change and continuity of American indigenous values and tribalism as reflected through present-day spiritual issues in Indian America.

ICS 45 Survey of American Indian Arts 4 Units*(See general education pages for the requirement this course meets.)**Advisory: English Writing 1A or English as a Second Language 5.**Four hours lecture (48 hours total per quarter).*

Survey of styles and forms of pre-contact and contemporary American Indian arts, within the context of their tribal cultures and traditions with consideration of the influence of non-native cultures' artistic techniques and resources on American Indian art. A look at the development of contemporary American Indian arts.

ICS 46 Literatures of America's Native Peoples 4 Units*(See general education pages for the requirement this course meets.)**Advisory: English Writing 1A or English as a Second Language 5.**Four hours lecture (48 hours total per quarter).*

Study of traditional and contemporary literature produced by native peoples of North America. Literary methods of analysis of contemporary American Indian poetry and fiction will be used to explore and formulate perspectives concerning Indian America in the 21st century.

ICS 55 Civic Leadership for Community Empowerment 4 Units*(See general education pages for the requirement this course meets.)**Advisory: English Writing 1A or English as a Second Language 5.**Four hours lecture (48 hours total per quarter).*

Introduction to intercultural studies through principles of civic leadership. Explores community empowerment as idea and practice in areas of public service, non-profit work, and electoral politics. Examines political economy of community development through historical study of disenfranchised ethnic, racial, and immigrant groups in the U.S. such as Asian Americans and Latinos, the two largest ethnic and racial minority populations in Silicon Valley. Analyzes contemporary social issues through local examples in Silicon Valley. Engages students in community-focused problem solving, personal reflection, and interpersonal and organizational leadership development.

ICS 77 Special Projects in Intercultural Studies 1 Unit**ICS 77X 2 Units****ICS 77Y 3 Units****ICS 77Z 4 Units***Prerequisite: Consent of instructor and division dean.**Three hours laboratory for each unit of credit (36 hours total for each unit of credit per quarter).*

(Any combination of Intercultural Studies 77, 77X, 77Y and 77Z may be taken up to six times, not to exceed 18 units, as long as the projects are different each time.)

Specific reading, writing or study projects within the discipline of Intercultural Studies.

ICS 78 Issues in Intercultural Studies 1/2 Unit**ICS 78W 1 Unit****ICS 78X 2 Units****ICS 78Y 3 Units****ICS 78Z 4 Units***Advisory: English Writing 1A or English as a Second Language 5.**Three hours laboratory for each unit of credit (36 hours total for each unit of credit per quarter).*

(Any combination of Intercultural Studies 78, 78W, 78X, 78Y and 78Z may be taken up to six times, not to exceed 18 units, as long as the topics/projects are different each time.)

Special group projects that incorporate the theory and practice of issues within the field of Intercultural Studies.

ICS 80 Community Based Learning in Intercultural Studies 1/2 Unit**ICS 80W 1 Unit****ICS 80X 2 Units****ICS 80Y 3 Units****ICS 80Z 4 Units***Requisite/Advisory: None.**Three hours laboratory for each unit of credit (36 hours total for each unit of credit per quarter).*

(Any combination of Intercultural Studies 80, 80W, 80X, 80Y and 80Z may be taken up to six times, not to exceed 18 units, as long as the topics/projects are different each time.)

Practical work with a community, business or civic institution and reflection on that activity.

International Studies

INTL 5 Global Issues and Perspectives 4 Units*(See general education pages for the requirement this course meets.)**Advisory: English Writing 1A or English as a Second Language 5.**Four hours lecture (48 hours total per quarter).*

Introduces current global issues, with emphasis on the development and growth of the global economy and world order, as seen from a number of different perspectives. Analyzes the role of culture in world affairs, the processes of economic development and globalization, the environmental impacts of global production, and issues of war and peace. Encourages consideration of global processes from local, regional, governmental and nongovernmental perspectives.

INTL 8	Sociology of Globalization and Social Change	4 Units	INTL 19B	History of Asian Civilization: China and Japan (19th - 21st Centuries)	4 Units
(Formerly International Studies 58.) (See general education pages for the requirement this course meets.) Advisory: English Writing 1A or English as a Second Language 5. (Also listed as Sociology 5. Students may enroll in either department, but not both, for credit.) Four hours lecture (48 hours total per quarter). Introduction to the sociological study of globalization and other forms of social change. Macrosociological analysis of economic, political, military, cultural, technological, and environmental aspects of globalization; history of globalization, European colonialism and decolonization processes; impact of multinational corporations and global political and financial institutions, and social movements from cross-cultural and global perspectives.			(See general education pages for the requirement this course meets.) Advisory: English Writing 1A or English as a Second Language 5. (Also listed as History 19B. Students may enroll in either department, but not both, for credit.) Four hours lecture (48 hours total per quarter). An introductory study of the development of modern China and Japan from the nineteenth to the twenty-first centuries.		
INTL 10	History of Art (Arts of Asia)	4 Units	INTL 21	History of Art: Native Arts of Mesoamerica and South America	4 Units
(See general education pages for the requirement this course meets.) Advisory: English Writing 1A or English as a Second Language 5. (Also listed as Arts 2G. Students may enroll in either department, but not both, for credit.) Four hours lecture (48 hours total per quarter). A general introduction to art through major Asian artistic traditions. Focuses upon paintings, sculptures, ceramics, and architecture and their religious, cultural, historical, and social contexts. Examines arts from China, Japan, India, Central Asia, Himalayas, and Southeast Asia and assesses the contributions of Asian art in a global context.			(Formerly International Studies 67.) (See general education pages for the requirement this course meets.) Advisory: English Writing 1A or English as a Second Language 5. (Also listed as Arts 2H. Students may enroll in either department, but not both, for credit.) Four hours lecture (48 hours total per quarter). A general introduction to the visual arts of the indigenous cultures of Mesoamerica, an area extending from northern Mexico through Central America, and the Andean region of South America. Covers diverse art forms, including architecture, ceramics, weaving, painting and sculpture from antiquity to the present. Topics addressing the religious, cultural, social, economic and political contexts of the art will be explored. Compares indigenous arts of the Americas to other world art traditions and assesses the contributions of indigenous cultures in a global context.		
INTL 11	Vietnamese Literature (from Tradition to Asian American Identity)	4 Units	INTL 22	History of Art: Indigenous Arts of the World	4 Units
(See general education pages for the requirement this course meets.) Advisory: English Writing 1A or English as a Second Language 5. Four hours lecture (48 hours total per quarter). An introduction to the humanities through a global perspective on Vietnamese and Vietnamese American literature. Exploration of oral tradition, folk literature, traditional elite literature, modern prose, exile writings by the first immigrant generation to the Vietnamese American expressions focusing on several major themes in literature: war and representations of Southeast Asians, migration experience, impacts of migration. Students develop a historical and aesthetic understanding of Vietnamese and Vietnamese American creative expressions, with emphasis on native development and international influences.			(See general education pages for the requirement this course meets.) Advisory: English Writing 1A or English as a Second Language 5. (Also listed as Arts 2J. Students may enroll in either department, but not both, for credit.) Four hours lecture (48 hours total per quarter). A general introduction to some of the many indigenous art traditions around the world, with emphasis placed upon traditional arts created for use in small-scale communities from the Americas, South Pacific region and Africa. Diverse art forms covered will include sculpture, painting, performance, ceramics, textiles and architecture from antiquity through the colonial period to the present. Topics addressing the religious, cultural, social, economic and political contexts of the art will be explored. Compares arts from indigenous peoples to other world art traditions and assesses the contributions of indigenous arts in a global context.		
INTL 13	Introduction to Korean Popular Culture	4 Units	INTL 23	History of Art: Visual Arts of Islam	4 Units
(Formerly International Studies 63.) (See general education pages for the requirement this course meets.) Advisory: English Writing 1A or English as a Second Language 5. (Also listed as Humanities 13. Students may enroll in either department, but not both, for credit.) Four hours lecture (48 hours total per quarter). An interdisciplinary introduction to contemporary Korean popular culture which explores modern Korean society across a wide range of themes such as identity, gender/sexuality, love/marriage, family and social value systems. Examines multi-levels of the socio-construction of modern Korean society through TV drama (soap opera), film and pop music. Also, it explores the unique patterns of Korean culture and Korean cultural issues related to contemporary Asian societies and global issues. No Korean language or studies experience necessary.			(See general education pages for the requirement this course meets.) Advisory: English Writing 1A or English as a Second Language 5. (Also listed as Arts 2K. Students may enroll in either department, but not both, for credit.) Four hours lecture (48 hours total per quarter). An exploration of the visual arts of Islam in a global context, including comparative analysis of the arts from diverse regions of the Islamic world. Examines artistic traditions of calligraphy, miniature painting, textiles, decorative arts and architecture from the beginnings of the Islamic faith to the present, and Islamic contributions to world art history. Includes interdisciplinary analysis of Islamic visual arts, emphasizing the cultural and religious contexts, as well as issues related to gender and social class.		
INTL 15	Introduction to the Arab World	4 Units	INTL 24	History of Art: Visual Arts of Africa	4 Units
(See general education pages for the requirement this course meets.) Advisory: English Writing 1A or English as a Second Language 5. Four hours lecture (48 hours total per quarter). An introductory survey of contemporary Arab society and people. Topics include geography, family and gender, religions and pre- and post-colonial histories; ethnicity, migration, refugees and Arab groups in Europe and the Americas; and new media and globalization in Arab countries today. Provides an overview of key events, milestones and ideas that have shaped Arab society and includes a sociological analysis of the societies and people, emphasizing the nature and character of social transformation, as well as issues related to ethnic groups, migrations, refugees, and globalization.			(See general education pages for the requirement this course meets.) Advisory: English Writing 1A or English as a Second Language 5. (Also listed as Arts 2L. Students may enroll in either department, but not both, for credit.) Four hours lecture (48 hours total per quarter). A general introduction to the visual arts of Africa, covering diverse art forms, including sculpture, painting, performance, ceramics, textiles and architecture from antiquity through the colonial period to the present. Topics addressing the religious, cultural, social, economic and political contexts of the art will be explored. Compares arts from Africa to other world art traditions and assesses the contributions of African arts in a global context.		
INTL 19A	History of Asian Civilization: China and Japan (through the 18th Century)	4 Units	INTL 30	Introduction to Islamic Studies	4 Units
(See general education pages for the requirement this course meets.) Advisory: English Writing 1A or English as a Second Language 5. (Also listed as History 19A. Students may enroll in either department, but not both, for credit.) Four hours lecture (48 hours total per quarter). An introductory study of the development of Chinese and Japanese civilizations from their origins through the eighteenth century.			(Formerly International Studies 55.) (See general education pages for the requirement this course meets.) Advisory: English Writing 1A or English as a Second Language 5. Four hours lecture (48 hours total per quarter). Introduction to Islam as a religious system focusing on its origins, basic sources, brief history, culture, values and its impact on Muslims, non-Muslims and the world.		

INTL 33 Introduction to Peace and Conflict Studies 4 Units
 (See general education pages for the requirement this course meets.)
 Advisory: English Writing 1A or English as a Second Language 5.
 (Also listed as Political Science 33. Students may enroll in either department, but not both, for credit.)
 Four hours lecture (48 hours total per quarter).
 Introduction to a broad range of issues, concepts, and approaches fundamental to the study of peace and conflict predominantly from the discipline of political science but incorporating ethnology, psychology, anthropology, religion, economics, and history. Students assess: the role of international norms, institutions, and states; the impact of religious, philosophical, and cultural influences; and the processes and sources of social change as they relate to upholding peace, culminating in the examination and identification of factors that attend conflict and violence with the intention of applying this understanding toward the prevention, de-escalation, and resolution of conflicts.

INTL 34 Russian Culture: An Introduction to a Nation and People 4 Units
 (Formerly International Studies 54.)
 (See general education pages for the requirement this course meets.)
 Advisory: English Writing 1A or English as a Second Language 5.
 Four hours lecture (48 hours total per quarter).
 An interdisciplinary introduction to the political and cultural development of Russia from the Kievan period through the present.

Internet

(See **Computer Applications and Office Systems, Computer Information Systems, and Library/Learning Center.**)

Italian

ITAL 1 Elementary Italian (First Quarter) 5 Units
 (See general education pages for the requirement this course meets.)
 Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.
 Five hours lecture (60 hours total per quarter).
 Introduction to the language and cultures of the Italian-speaking countries and communities. Basic speaking, listening, reading, and writing of Italian will be introduced and practiced within a cultural framework. Italian will be the primary language of instruction. Emphasis will be on language as an expression of culture.

ITAL 2 Elementary Italian (Second Quarter) 5 Units
 (See general education pages for the requirement this course meets.)
 Prerequisite: Italian 1 (equivalent to one year of high school Italian) or equivalent.
 Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.
 Five hours lecture (60 hours total per quarter).
 Further development of material presented in Italian 1. Continuation of introduction to the language and cultures of the Italian-speaking countries. Basic speaking, listening, reading, and writing of Italian will be continued and practiced within a cultural framework. Emphasis will be on language as an expression of culture.

ITAL 3 Elementary Italian (Third Quarter) 5 Units
 (See general education pages for the requirement this course meets.)
 Prerequisite: Italian 2 (equivalent to two years of high school Italian) or equivalent.
 Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.
 Five hours lecture (60 hours total per quarter).
 Further development of material presented in Italian 1 and 2. Continuation of introduction to the language and cultures of the Italian-speaking countries. Basic speaking, listening, reading, and writing of Italian will be continued and practiced within a cultural framework. Emphasis will be on language as an expression of culture.

ITAL 4 Intermediate Italian (First Quarter) 5 Units
 (See general education pages for the requirement this course meets.)
 Prerequisite: Italian 3 (equivalent to three years of high school Italian) or equivalent.
 Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.
 Five hours lecture (60 hours total per quarter).
 Further development of material presented in Italian 1, 2 and 3. Continuation of introduction to the language and cultures of the Italian-speaking countries. Low intermediate level of speaking, listening, reading, and writing of Italian will be continued and practiced within a cultural framework. Emphasis will be on language as an expression of culture.

Japanese

JAPN 1 Elementary Japanese (First Quarter) 5 Units
 (See general education pages for the requirement this course meets.)
 Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.
 Five hours lecture (60 hours total per quarter).

Introduction to the language and the culture of Japan. Emphasis will be on language as the primary expression of culture and a medium of communication. Develop four language skills (listening, speaking, reading and writing) as well as sociocultural knowledge which plays an important role in communicating in the target language. Japanese will be the major language of instruction. Oral practice based on understanding of the language structure will be also emphasized. Master two of the Japanese syllabic writing systems, hiragana and katakana is required.

JAPN 2 Elementary Japanese (Second Quarter) 5 Units
 (See general education pages for the requirement this course meets.)
 Prerequisite: Japanese 1 (equivalent to one year of high school Japanese) or equivalent.

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.
 Five hours lecture (60 hours total per quarter).
 Continuation of introduction to the Japanese language and culture with the further development of materials presented in Japanese 1. Emphasis will be on acquisition of second-quarter beginner level of four language skills (listening, speaking, reading and writing) as well as sociocultural knowledge which plays an important role in communicating in the target language. Japanese is the major language of instruction. Oral practice based on understanding of the language structure will be also emphasized. In addition to practicing two of the Japanese syllabic writing systems, hiragana and katakana, the third writing system, kanji, Sino-Japanese characters will be introduced.

JAPN 3 Elementary Japanese (Third Quarter) 5 Units
 (See general education pages for the requirement this course meets.)
 Prerequisite: Japanese 2 (equivalent to two years of high school Japanese) or equivalent.

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.
 Five hours lecture (60 hours total per quarter).
 Continuation of introduction to the Japanese language and culture with further development of materials presented in Japanese 1 and 2. Emphasis will be on acquisition of the third-quarter high beginner level of four language skills (listening, speaking, reading and writing) as well as sociocultural knowledge which plays an important role in communicating in the target language. Oral practice based on understanding of the language structure will be further emphasized. More kanji, Sino-Japanese characters will be introduced. Students are expected to integrate three writing systems in order to demonstrate authentic writing skills.

JAPN 4 Intermediate Japanese (First Quarter) 5 Units
 (See general education pages for the requirement this course meets.)
 Prerequisite: Japanese 3 (equivalent to three years of high school Japanese) or equivalent.

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.
 Five hours lecture (60 hours total per quarter).
 The first-quarter of intermediate Japanese. Introduces the Japanese language and culture with the further development of materials presented in Japanese 3. The emphasis will be on the acquisition of the first-quarter low intermediate level of four language skills (listening, speaking, reading and writing) as well as the sociocultural knowledge which plays an important role in communicating in the target language. Oral practice is based on an understanding of the language structures which will also be further emphasized. More kanji, Sino-Japanese characters will be introduced. Students will develop low intermediate level of reading strategies and writing skills integrating hiragana, katakana and kanji.

JAPN 5 Intermediate Japanese (Second Quarter) 5 Units
 (See general education pages for the requirement this course meets.)
 Prerequisite: Japanese 4 (equivalent to four years of high school Japanese) or equivalent.

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.
 Five hours lecture (60 hours total per quarter).
 The second-quarter of intermediate Japanese. Introduces the Japanese language and culture with further development of materials presented in Japanese 4. The emphasis will be on acquisition of the second-quarter intermediate level of four language skills (listening, speaking, reading, and writing) as well as the sociocultural knowledge which plays an important role in communicating in the target language. Oral practice is based on understanding of the language structures which will also be emphasized. More kanji, Sino-Japanese characters will be introduced. Students will develop intermediate level of reading strategies and writing skills integrating hiragana, katakana, and kanji.

JAPN 6 Intermediate Japanese (Third Quarter) 5 Units

(See general education pages for the requirement this course meets.)

Prerequisite: Japanese 5 or equivalent.

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Five hours lecture (60 hours total per quarter).

The third-quarter of intermediate Japanese. Introduces the Japanese language and culture with further development of materials presented in Japanese 5. The emphasis will be on acquisition of the high intermediate level of four language skills (listening, speaking, reading and writing) as well as the sociocultural knowledge which plays an important role in communicating in the target language. Oral practice based on understanding of the language structures should also be emphasized. More kanji, Sino-Japanese characters will be introduced. Students will develop high intermediate level of reading strategies and writing skills integrating hiragana, katakana, and kanji.

JAPN 60A Japanese - Introductory Conversation (First Quarter) 3 Units

(Formerly Japanese 90A.)

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Three hours lecture (36 hours total per quarter).

A practical course designed for students with no previous background of Japanese language. The primary focus of this course is on the development of conversational skills at the low beginner level. One of the three writing systems, Hiragana, is introduced.

JAPN 60B Japanese - Introductory Conversation (Second Quarter) 3 Units

(Formerly Japanese 90B.)

Prerequisite: Japanese 60A or equivalent.

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Three hours lecture (36 hours total per quarter).

The next course in the introductory Japanese sequence following Japanese 60A. The primary focus of this course is on the development of conversational skills at the beginner level. Aspects of business life and practical daily occurrences are dealt with in this course. The second writing system, Katakana, is introduced.

JAPN 60C Japanese - Introductory Conversation (Third Quarter) 3 Units

(Formerly Japanese 90C.)

Prerequisite: Japanese 60B or equivalent.

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Three hours lecture (36 hours total per quarter).

The next course in the introductory Japanese sequence following Japanese 60B. The primary focus of this course is on the development of conversational skills at the high beginner level. Further aspects of business life and practical daily occurrences are dealt with in this course. More Katakana writing system is introduced.

JAPN 61A Japanese - Intermediate Conversation (First Quarter) 3 Units

(Formerly Japanese 50A.)

Prerequisite: Japanese 60C.

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Three hours lecture (36 hours total per quarter).

The next course in the sequence following Japanese 60C. It is designed for students who desire to learn natural spoken Japanese in a limited amount of time. Students use the language through speaking, listening, reading, and writing at the low intermediate level. Aspects of business life and practical daily occurrences are dealt with in this course. Third writing system, Kanji, is introduced.

JAPN 61B Japanese - Intermediate Conversation (Second Quarter) 3 Units

(Formerly Japanese 50B.)

Prerequisite: Japanese 61A.

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Three hours lecture (36 hours total per quarter).

The next course in the intermediate conversation sequence following Japanese 61A. It is designed for students who desire to learn natural spoken Japanese in a limited amount of time. Students use the language through speaking, listening, reading, and writing at the intermediate level. Aspects of business life and practical daily occurrences are dealt with in this course. More Kanji characters are introduced.

JAPN 61C Japanese - Intermediate Conversation (Third Quarter) 3 Units

(Formerly Japanese 50C.)

Prerequisite: Japanese 61B.

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Three hours lecture (36 hours total per quarter).

The next course in the intermediate conversation sequence following Japanese

61B. It is designed for students who desire to learn natural spoken Japanese in a limited amount of time. Students use the language through speaking, listening, reading, and writing at the high intermediate level. Aspects of business life and practical daily occurrences are dealt with in this course. More Kanji characters are introduced.

Journalism

JOUR 2 Mass Communication and Its Impact On Society 4 Units

(See general education pages for the requirement this course meets.)

Advisory: English Writing 1A or English as a Second Language 5.

Four hours lecture (48 hours total per quarter).

A survey of the mass media and measurement of its impact on culture and society. Mass media effects on global and American institutions. Theories of mass communications in the context of each medium: books, newspapers, magazines, movies, radio, recordings, television and the Internet. Ethical and legal implications of media and their effects on the individual and society. Influences of the media on gender, ethnic and minority issues.

JOUR 21A News Writing and Reporting 3 Units

Prerequisite: English Writing 1A or English as a Second Language 5.

Three hours lecture (36 hours total per quarter).

Instruction and practice in reporting and the fundamentals of news writing, with analysis of typical news stories. Concentration on the language and style of news writing; organization and structure of news stories; the lead and the basic story types. Practical writing experience.

JOUR 21B Feature Writing and Reporting 3 Units

Prerequisite: English Writing 1A or English as a Second Language 5.

Three hours lecture (36 hours total per quarter).

Fundamentals in feature writing for newspapers and magazines with instruction and practice in profile, human interest, consumer and interpretive news features. Practical experience in interviewing, writing special story types and revising. Freelancing a story for publication.

Journalism Production

Students are encouraged to enroll in only one of the 60 series courses per quarter; any deviation must be approved in advance by the instructor. San Jose State University will accept for journalism credit no more than 12 per quarter units in the Journalism 60 series. Any course in the series is open to non-journalism majors. While previous publications experience is desirable, it is not mandatory. See descriptions of individual courses for prerequisites.

JOUR 61 Newspaper and Student Media Staff 3 Units

Advisory: Journalism 21A or 21B.

Nine hours laboratory (108 hours total per quarter).

(May be taken up to six times for credit.)

Practical experience in covering and reporting news and features as members of the college newspaper, magazine or media staff. Staff includes reporters, editors, photojournalists, graphic artists and media producers.

JOUR 62 Newspaper and Media Freelancing 1 Unit

Requisite/Advisory: None.

Three hours laboratory (36 hours total per quarter).

(May be taken up to six times for credit.)

Practical experience contributing as a freelancer to the college newspaper as a reporter, copy editor, columnist, graphic artist, photographer, or other freelance position.

JOUR 63 Newspaper Advertising Staff 1 Unit

Requisite/Advisory: None.

Three hours laboratory (36 hours total per quarter).

(May be taken up to six times for credit.)

Experience in advertising as it relates to the college newspaper. Combines functions of advertising and business management. Introduction to advertising sales, design, production and billing.

**JOUR 65W Literary Magazine 1 Unit
JOUR 65X 2 Units**

Advisory: English Writing 1A or English as a Second Language 5.

(Also listed as English Writing 65 and 65X. Students may enroll in either department, but not both, for credit.)

Two hours lecture-laboratory for the one-unit course (24 hours total per quarter); two hours lecture-laboratory and three hours laboratory for the two unit course (60 hours total per quarter).

(Any combination of English Writing 65, 65X and Journalism 65W, 65X may be taken up to six times for credit. Submissions vary each quarter, so content is different. Students build upon previous experience and develop higher-level skills.)

Collaborative evaluation and selection of fiction, poetry, photography, drawings, and other literary and artistic work for literary magazine. Magazine design and production. (Additional editorial, production, management, or marketing work for English Writing 65X and Journalism 65X.)

JOUR 77W	Special Projects in Journalism	1 Unit
JOUR 77X		2 Units
JOUR 77Y		3 Units
JOUR 77Z		4 Units

(Formerly Journalism 70W, 70X, 70Y and 70Z respectively.)

Prerequisite: Consent of instructor and division dean.

Three hours laboratory for each unit of credit (36 hours total for each unit of credit per quarter).

(Any combination of Journalism 77W, 77X, 77Y and 77Z may be taken up to six times, not to exceed 18 units, as long as the projects are different each time.)

Special research, writing or study projects in Journalism as determined in consultation with the department chair.

(Complexity of project determines number of units assigned.)

JOUR 78W	Special Topics in Journalism	1 Unit
JOUR 78X		2 Units
JOUR 78Y		3 Units
JOUR 78Z		4 Units

(Formerly Journalism 66W, 66X, 66Y and 66Z respectively.)

Requisite/Advisory: None.

One hour lecture for each unit of credit (12 hours total for each unit of credit per quarter).

(Any combination of Journalism 78W, 78X, 78Y and 78Z may be taken up to six times, not to exceed 18 units, as long as the topics are different each time.)

Intensive study and analysis of a special topic in Journalism. Subjects vary. (Complexity of topic determines number of units assigned.)

Korean

KORE 1	Elementary Korean (First Quarter)	5 Units
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(See general education pages for the requirement this course meets.)

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Five hours lecture (60 hours total per quarter).

Introduction to the historical and cultural background of the Korean language. Intensive reading and writing practice of the Korean alphabet, Hangul. Development of language skills orally and in writing for basic and simple information relating to high-frequency situations in familiar contexts, to further understand grammatical and syntactical structures.

KORE 2	Elementary Korean (Second Quarter)	5 Units
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(See general education pages for the requirement this course meets.)

Prerequisite: Korean 1 (equivalent to one year of high school Korean) or equivalent.

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Five hours lecture (60 hours total per quarter).

Further development of materials presented in Korean 1. Intensive oral practice broadening the language functions covered in Korean 1 and adding new ones. Greater emphasis on student generated discussion. More emphasis on cultural and historical background in the use of language. Written practice to further understanding of the underlying grammatical and syntactical structures for an extended range of basic/simple information relating to high-frequency situations.

KORE 3	Elementary Korean (Third Quarter)	5 Units
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(See general education pages for the requirement this course meets.)

Prerequisite: Korean 2 (equivalent to two years of high school Korean) or equivalent.

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Five hours lecture (60 hours total per quarter).

Further development of materials presented in Korean 1 and 2. High beginning level language skills for oral and written communication in targeted language functions, with focus on greater structural accuracy and communicative competence for a more complex/abstract range of information relating to high frequency situations. Better understanding of the Korean culture through text and out-of-text authentic materials.

KORE 4	Intermediate Korean (First Quarter)	5 Units
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(See general education pages for the requirement this course meets.)

Prerequisite: Korean 3 (equivalent to three years of high school Korean) or equivalent.

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Five hours lecture (60 hours total per quarter).

Review of grammar and discussion of grammatical features beyond the elementary level. Development of reading, writing, speaking and listening skills at the first intermediate level for an expanding range of somewhat sophisticated information. Reading and discussion of materials dealing with Korean literature, arts, history and culture.

KORE 5	Intermediate Korean (Second Quarter)	5 Units
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(See general education pages for the requirement this course meets.)

Prerequisite: Korean 4 (equivalent to four years of high school Korean) or equivalent.

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Five hours lecture (60 hours total per quarter).

Review of grammar and further discussion of grammatical features beyond the first intermediate level. Development of reading, writing, speaking and listening skills at the second intermediate level needed to spontaneously request and provide a greater range of more sophisticated information. Reading and discussion of texts dealing with Korean literature, arts, history and culture.

KORE 6	Intermediate Korean (Third Quarter)	5 Units
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(See general education pages for the requirement this course meets.)

Prerequisite: Korean 5 or equivalent.

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Five hours lecture (60 hours total per quarter).

Continuation of Korean 5. Review of grammar and discussion of grammatical features needed to spontaneously and accurately request and provide information, orally and in writing, about a wide variety of topics. Development of reading, writing, speaking and listening skills at the third intermediate level. Reading and discussion of texts and out-of texts dealing with Korean literature, arts, history and culture.

Language Arts

LART 78	Topics in Language Arts - FYE and Sankofa	1 Unit
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LART 78X		2 Units
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Co-requisite: Language Arts 78 and 78X students must also enroll in English Writing 1A; English Writing 211, Reading 211 or Language Arts 211; English Writing 200, Reading 200 or Language Arts 200.

One hour lecture for each unit of credit (12 hours total for each unit of credit per quarter).

(Any combination of Language Arts 78 and 78X may be taken up to six times for credit as long as the topics are different each time.)

Uses reading and writing to link students' lived experiences with the social, cultural, historical, political, scientific and/or artistic subject matter that complements the interdisciplinary curriculum in the FYE and Sankofa Scholars programs. Topics will change with each cohort group.

LART 80	Community Based Learning in Language Arts	1/2 Unit
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LART 80W		1 Unit
LART 80X		2 Units
LART 80Y		3 Units
LART 80Z		4 Units

Requisite/Advisory: None.

Three hours laboratory for each unit of credit (36 hours total for each unit of credit per quarter).

(Any combination of Language Arts 80, 80W, 80X, 80Y and 80Z may be taken up to six times, not to exceed 18 units, as long as the topics/projects are different each time.)

Practical work with a community, business or civic institution and reflection on that activity.

LART 200	Developing Reading and Writing Connections	10 Units
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Credit course - Does not apply to De Anza Associate degree.

(Not open to students who have completed Reading 200 and/or English Writing 200.)

Prerequisite: A qualifying score on the Reading and Writing Placement Test.

Ten hours lecture (120 hours total per quarter).

Pass-No Pass (P-NP) course.

Development of reading and writing abilities to the level necessary to be successful in Reading 211 and English Writing 211. Comprehension of assigned readings. Writing focused on a central idea, developed with specific examples, organized according to a reasonably clear progression of ideas and largely free of major grammatical, syntactic, usage and diction errors.

LART 211 Integrated Reading and Writing 10 Units
(Formerly Language Arts 100.)
 Credit course - Does not apply to De Anza Associate degree.
 Prerequisite: English Writing 200 and Reading 200 (or Language Arts 200), or a qualifying score on the Reading and Writing Placement Test.
 Ten hours lecture (120 hours total per quarter).
 Pass-No Pass (P-NP) course.
 Integration of reading and writing skills necessary for success in college level courses. Emphasis on analysis and criticism of assigned readings and written responses to critical questions about those readings.

Learning Assistance

LRNA 77 Special Projects in Learning Assistance 1 Unit

LRNA 77X 2 Units
(Formerly Learning Assistance 99 and 99W respectively.)
 Prerequisite: Consent of instructor and division dean.
 Three hours laboratory for each unit of credit (36 hours total for each unit of credit per quarter).
 (Any combination of Learning Assistance 77 and 77X may be taken up to six times as long as the projects are different each time.)
 Pass-No Pass (P-NP) course.

Special reading, writing, or study projects in Learning Assistance as determined in consultation with the instructor. Student must concurrently work as a tutor (for pay or volunteer) at the De Anza College Tutorial Center, or similar organization, as determined by instructor.

LRNA 95 Introduction to Peer Tutoring in Math and Science 2 Units

Prerequisite: Must be selected to work as a De Anza tutor.
 (Also listed as Physical Sciences, Math, and Engineering 95. Students may enroll in either department, but not both, for credit.)
 Two hours lecture (24 hours total per quarter).
 Pass-No Pass (P-NP) course.

Content-specific strategies and communication skills to help peer tutors of math and science conduct productive, effective, and fun tutoring sessions. Experience applying instructional and learning theory and tutoring techniques to math and science content. Strategies for working with students from diverse backgrounds and with various learning styles. Self-reflection and peer feedback on actual tutoring sessions. Required of all De Anza group and individual math and science tutors during their first quarter of tutoring.

LRNA 96 Introduction to Peer Tutoring in Groups 2 Units

Prerequisite: Must be hired as a De Anza tutor.
 Advisory: English Writing 1A or English as a Second Language 5.
 (Also listed as Speech Communication 96. Students may enroll in either department, but not both, for credit.)
 Two hours lecture (24 hours total per quarter).
 Pass-No Pass (P-NP) course.

Introduction to the principles and practices of group tutoring. Development of effective communication and leadership skills to facilitate collaborative, dynamic and productive learning groups in a multicultural environment.

LRNA 97 Introduction to Peer Tutoring in Writing 3 Units

Prerequisite: English Writing 1A or English as a Second Language 5; must be hired to work as a De Anza tutor.
 (Also listed as English Writing 97. Students may enroll in either department, but not both, for credit.)
 Three hours lecture (36 hours total per quarter).

Required training for De Anza writing tutors. Introduction to the theory and practice of tutoring writing, including strategies and approaches to help students from diverse linguistic backgrounds at various stages of the writing process. Students read about, observe, discuss, write about and practice the craft of tutoring writing. After an initial orientation, students in the class begin tutoring, and reflect on their tutoring experiences as part of the class.

LRNA 98 Tutor Training 1 Unit

Prerequisite: Must be selected to work as a De Anza tutor.
 One hour lecture (12 hours total per quarter).
 Pass-No Pass (P-NP) course.
 Required training course for De Anza individual general subject and math/science tutors during their first quarter of tutoring. Strategies and communication skills to help peer tutors conduct productive, effective, and fun tutoring sessions. Experience reflecting on instructional and learning theory and practicing theory-based tutoring techniques. Strategies for working with students from diverse backgrounds and with various learning styles. Self-reflection and peer feedback on actual tutoring sessions.

LRNA 200 Supervised Tutoring 0 Units

Prerequisite: Student must be referred by counselor or instructor on the basis of an identified learning need.

Two to 50 hours lecture-laboratory per quarter.

(No limit on repeatability for 0 unit courses.)

Optional learning assistance to strengthen students' study and learning skills for the appropriate basic skills courses. Learning assistance is provided in a designated De Anza center by trained and approved De Anza tutors.

LRNA 201 Supervised Tutoring in Language Arts 0 Units

Prerequisite: Student must be referred by counselor or instructor on the basis of an identified learning need.

Two to 50 hours lecture-laboratory per quarter.

(No limit on repeatability for 0 unit courses.)

Optional learning assistance to strengthen students' learning skills and reinforce mastery of concepts in the appropriate basic skills parent courses in Language Arts. Learning assistance is provided in a designated De Anza center by approved tutors who are trained in tutoring for specific content areas.

LRNA 202 Supervised Tutoring in Math 0 Units

Prerequisite: Student must be referred by counselor or instructor on the basis of an identified learning need.

Two to 50 hours lecture-laboratory per quarter.

(No limit on repeatability for 0 unit courses.)

Optional learning assistance to strengthen students' learning skills and reinforce mastery of concepts taught in the appropriate parent course or courses in basic skills math. Learning assistance is provided in a designated De Anza center by approved De Anza tutors who are trained in tutoring for specific content areas.

Library / Learning Center

LIB 1 Library Research Skills 1 Unit
(Formerly Learning Center 50.)

Advisory: English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263.

Two hours lecture-laboratory (24 hours total per quarter).

Introduces skills needed to locate, evaluate, and cite information. Focuses on the resources of academic libraries including online catalogs, periodical indexes, and instructional web sites. Prepares students to do the basic research necessary to effectively complete written and oral assignments.

LIB 51 Business Resources on the World Wide Web 1 Unit

(Formerly Learning Center 51.)

Advisory: English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263.

Two hours lecture-laboratory (24 hours total per quarter).

Locate, examine, and evaluate business-related sites available on the World Wide Web.

LIB 53 Advanced Internet Search Techniques 1 Unit

(Formerly Learning Center 53.)

Advisory: English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263.

Two hours lecture-laboratory (24 hours total per quarter).

Provides Internet users with tools and information to effectively search and evaluate Internet websites. Also introduces the concept of the "hidden web" -- information that is not indexed by search engines such as Google and Yahoo.

LIB 55 Emerging Internet Technologies -- A Crash Course 1 Unit

(Formerly Learning Center 55.)

Advisory: English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263.

Two hours lecture-laboratory (24 hours total per quarter).

Introduces students to emerging Internet technologies and links these ongoing transitions to information research. Currently referred to as "Web 2.0", today's Internet includes photography and image postings, blogs, wikis, and RSS feeds. Skills for locating and using these new applications will be studied.

Linguistics

LING 1 Introduction to Linguistics 4 Units

(See general education pages for the requirement this course meets.)

Advisory: English Writing 1A or English as a Second Language 5.

(Also listed as English Literature 25. Students may enroll in either department, but not both, for credit.)

Four hours lecture (48 hours total per quarter).

Introduction to the nature of language. Origin and development of spoken and written languages, how people learn languages, and how languages change, with emphasis on the history of English. Basics of linguistic description including systems of phonetics and phonology, semantics, morphology and syntax. Study of general linguistic principles as they apply across languages.

Mandarin

MAND 1 Elementary Mandarin (First Quarter) 5 Units

(See general education pages for the requirement this course meets.)

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Five hours lecture (60 hours total per quarter).

Introduction to the language and cultures of Mandarin-speaking countries and communities. Basic speaking, listening, reading, and writing of Mandarin will be introduced and practiced within a cultural framework. Mandarin will be the primary language of instruction. Emphasis will be on language as an expression of culture and a medium of communication.

MAND 2 Elementary Mandarin (Second Quarter) 5 Units

(See general education pages for the requirement this course meets.)

Prerequisite: Mandarin 1 (equivalent to one year of high school Mandarin) or equivalent.

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Five hours lecture (60 hours total per quarter).

Further development of material presented in Mandarin 1. Continuation of introduction to the language and cultures of Mandarin-speaking countries and communities. Speaking, listening, reading, and writing of Mandarin will be continued and practiced within a cultural framework. Mandarin will be the primary language of instruction. Emphasis will be on language as an expression of culture and a medium of communication.

MAND 3 Elementary Mandarin (Third Quarter) 5 Units

(See general education pages for the requirement this course meets.)

Prerequisite: Mandarin 2 (equivalent to two years of high school Mandarin) or equivalent.

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Five hours lecture (60 hours total per quarter).

Further development of material presented in Mandarin 1 and 2. Completion of introduction to the language and cultures of Mandarin-speaking countries and communities. Basic speaking, listening, reading, and writing of Mandarin will be further introduced and practiced within a cultural framework. Mandarin will be the primary language of instruction. Emphasis will be on language as an expression of culture and a medium of communication.

MAND 4 Intermediate Mandarin (First Quarter) 5 Units

(See general education pages for the requirement this course meets.)

Prerequisite: Mandarin 3 (equivalent to three years of high school Mandarin) or equivalent.

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Five hours lecture (60 hours total per quarter).

Read and discuss texts dealing with geography, history, social and cultural practices of the Chinese-speaking world. Review the linguistic functions and grammatical structures of first-year Chinese. Speaking, listening, reading, and writing of the first-quarter low intermediate level of Mandarin will be introduced and practiced within a cultural framework.

MAND 5 Intermediate Mandarin (Second Quarter) 5 Units

(See general education pages for the requirement this course meets.)

Prerequisite: Mandarin 4 (equivalent to four years of high school Mandarin) or equivalent.

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Five hours lecture (60 hours total per quarter).

Continuation of Mandarin 4. Read and discuss texts dealing with geography, history, literature, social, and cultural practices of the Chinese-speaking world. Review the linguistic functions and grammatical structures of intermediary Chinese. Speaking, listening, reading, and writing of second-quarter intermediate level of Mandarin will be introduced and practiced within a cultural framework.

MAND 6 Intermediate Mandarin (Third Quarter) 5 Units

(See general education pages for the requirement this course meets.)

Prerequisite: Mandarin 5 or equivalent.

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Five hours lecture (60 hours total per quarter).

Continuation of Mandarin 5. Read, discuss and analyze texts dealing with arts, geography, history, literature, social and cultural practices of the Chinese-speaking world. Review the linguistic functions and grammatical structures of intermediary Chinese. Speaking, listening, reading, and writing of third-quarter high intermediate level of Mandarin will be introduced and practiced within a cultural framework.

MAND 60A Mandarin - Introductory Conversation (First Quarter) 3 Units

(Formerly Mandarin 90A.)

Requisite/Advisory: None.

Three hours lecture (36 hours total per quarter).

Introduction to the language and cultures of Mandarin-speaking countries and communities. Spoken Chinese will be introduced with focus on pronunciation and vocabulary, in connection with elements of Chinese culture necessary to understand the language. Intensive drills in the patterns and idioms of daily speech will be supported by sufficient grammar to give flexibility in the spoken language.

MAND 60B Mandarin - Introductory Conversation (Second Quarter) 3 Units

(Formerly Mandarin 90B.)

Prerequisite: Mandarin 60A.

Three hours lecture (36 hours total per quarter).

The next course in the introductory conversation Mandarin course sequence, following Mandarin 60A. Continues the introduction to the language and cultures of Mandarin-speaking countries and communities. The vocabulary and grammatical structures mastered in Mandarin 60A will be consolidated and further developed, in conjunction with elements of Chinese culture. The course emphasizes practical communication for everyday use and business, particularly conversational fluency.

MAND 60C Mandarin - Introductory Conversation (Third Quarter) 3 Units

(Formerly Mandarin 90C.)

Prerequisite: Mandarin 60B.

Three hours lecture (36 hours total per quarter).

The next course in the introductory conversation Mandarin sequence, following Mandarin 60B. Continues the introduction to the language and cultures of Mandarin-speaking countries and communities. The vocabulary and grammatical structures mastered in Mandarin 60B will be consolidated and further developed, in conjunction with elements of Chinese culture. Elements of Chinese for business are introduced. Mandarin 60C is focused on speaking and comprehension proficiency.

MAND 61A Mandarin - Intermediate Conversation (First Quarter) 3 Units

(Formerly Mandarin 50A.)

Prerequisite: Mandarin 60C or equivalent.

Three hours lecture (36 hours total per quarter).

The first course in the intermediate conversation Mandarin course sequence, following Mandarin 60C. Continues the introduction to the language and cultures of Mandarin-speaking countries and communities. The vocabulary and grammatical structures mastered in Mandarin 60C will be consolidated and further developed, in conjunction with elements of Chinese culture. Elements of Chinese for business are further introduced. Mandarin 61A is focused on speaking and comprehension proficiency near native speaker level.

MAND 61B Mandarin - Intermediate Conversation (Second Quarter) 3 Units

(Formerly Mandarin 50B.)

Prerequisite: Mandarin 61A or equivalent.

Three hours lecture (36 hours total per quarter).

The next course in the intermediate conversation Mandarin course sequence, following Mandarin 61A. Continues the introduction to the language and cultures of Mandarin-speaking countries and communities. The vocabulary and grammatical structures mastered in Mandarin 61A will be consolidated and further developed, in conjunction with elements of Chinese culture. Elements of Chinese for business are further introduced including a meeting conversation. Mandarin 61B is focused on speaking and comprehension proficiency near native speaker level.

MAND 61C Mandarin - Intermediate Conversation (Third Quarter) 3 Units

(Formerly Mandarin 50C.)

Prerequisite: Mandarin 61B or equivalent.

Three hours lecture (36 hours total per quarter).

The advanced level of conversation, following Mandarin 61B. Continues the introduction to the language and cultures of Mandarin-speaking countries and communities. The vocabulary and grammatical structures mastered in Mandarin 61B will be consolidated and further developed, in conjunction with elements of Chinese culture. Elements of Chinese for business are further introduced including make business presentations, conducting simple business negotiations, and travel Chinese. Mandarin 61C is focused on speaking and comprehension proficiency at native speaker level.

Manufacturing and CNC Technologies

MCNC 56	Special Projects in Manufacturing and CNC	1 Unit
MCNC 56X MCNC 56Y		2 Units 3 Units
<p><i>Prerequisite: Consent of instructor and division dean.</i> <i>Three hours laboratory for each unit of credit (36 hours total for each unit of credit per quarter).</i> <i>(Any combination of Manufacturing and CNC 56, 56X and 56Y may be taken up to six times, not to exceed 18 units, as long as the projects are different each time.)</i> Projects advancing student's knowledge and experience in a selected area of Manufacturing and CNC Technology. Project type and design will be determined through consultation with the instructor.</p>		
MCNC 61A	Survey of Writing and Data Communications	2 Units
<p><i>Advisory: English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263; Mathematics 210 or equivalent.</i> <i>Four hours lecture-laboratory (48 hours total per quarter).</i> The application of word processing and spreadsheet programs, such as Word and Excel, to communicate technical information used in various fields of technology including manufacturing, product design, and similar disciplines.</p>		
MCNC 62A	Technical Calculations	2 Units
<p><i>Advisory: English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263.</i> <i>Four hours lecture-laboratory (48 hours total per quarter).</i> The application of fundamental mathematics to various fields of technology including machining, automotive, sheet metal, and similar disciplines. Review and development of arithmetic skills, introduction of basic algebraic concepts and metric conversion. The use of a scientific calculator in problem solving will be emphasized.</p>		
MCNC 64	Manufacturing Materials and Processes	4 Units
<p><i>Advisory: English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263.</i> <i>Two hours lecture, four hours lecture-laboratory (72 hours total per quarter).</i> Applied materials and process analysis. Materials and process selection techniques. The role of metals, polymers, ceramics and composites in the casting, molding, forging, forming, machining, joining, heat and surface treatment processes.</p>		
MCNC 71	Introduction to Machining and CNC Processes	4 1/2 Units
<p><i>Advisory: English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263; Mathematics 210 or equivalent.</i> <i>Nine hours lecture-laboratory (108 hours total per quarter).</i> Manufacturing lab safety. Precision measuring tools and practices. Basic manual machine operations: pedestal grinders, drill presses, saws, lathes and milling machines. Threads: types, applications and use of taps and dies. Computer Numerical Control (CNC) mills: axis moves, cutters, tooling, basic setup and controller function. Cutter speed and feed calculations.</p>		
MCNC 72	Applied Geometric Inspection Dimensioning and Tolerancing (ANSI Y14.5m); Coordinate Measuring Machines (CMM)	3 Units
<p><i>Advisory: English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263; Mathematics 210 or equivalent; experience in blueprint reading.</i> <i>Six hours lecture-laboratory (72 hours total per quarter).</i> Interpretation of specifications and inspection procedures related to current ASME Y14.5 Geometric Dimensioning and Tolerancing (GD&T) standards. Applications and capabilities of precision measuring tools, including the computer-aided Coordinate Measuring Machine (CMM), used in manufacturing environments to inspect discrete complex parts. Machine and inspected part set-up for measuring form, orientation, and position call outs.</p>		
MCNC 74A	Survey of Computer Drawings	2 Units
<p><i>Advisory: English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263.</i> <i>Four hours lecture-laboratory (48 hours total per quarter).</i> Principles and applications of computer drawings using industry standard software. Emphasis is on 3-D and articulated drawings.</p>		
MCNC 74B	Survey of Computer Aided Design	2 Units
<p><i>Advisory: English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263; Mathematics 210 or equivalent.</i> <i>Four hours lecture-laboratory (48 hours total per quarter).</i> Principles and applications of computer aided design (CAD) using industry standard software. Emphasis is on 2-D drawings.</p>		

MCNC 75A	Introduction to Computer-Aided Numerical Control (CNC) Programming and Operation; Mills	4 1/2 Units
<p><i>Advisory: English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263; Mathematics 210 or equivalent; Manufacturing and CNC 71 or experience in machining processes.</i> <i>Nine hours lecture-laboratory (108 hours total per quarter).</i> Introduction to mill tool path programming using G & M code format. CNC systems and components including machine controller functions and operations. Program entry, editing, and back plotting. Calculation for mill cutter compensation. Precision inspection techniques. Basic mill setups, including cutting tool selection, and work holding.</p>		
MCNC 75B	Computer-Aided Numerical Control (CNC) Programming and Operation; Lathes, Advanced Mills	4 1/2 Units
<p><i>Prerequisite: Manufacturing and CNC Technology 75A or equivalent with a grade of C or better.</i> <i>Nine hours lecture-laboratory (108 hours total per quarter).</i> Introduction to lathe tool path programming using word address format, including coordinate system, cutter compensation and canned cycles. Advanced mill programming; sub programs, work coordinate system and use of macros. Program entry, editing, and back plotting. Machine controller functions and operations. Single point threading and Unified thread form classes and measurement. Cutting tool insert selection.</p>		
MCNC 75C	CNC Lathes & Horizontal Machining Centers; Programming & Operation, 4th Axis Rotary, Fixture Design	4 1/2 Units
<p><i>Prerequisite: Manufacturing and CNC 75A or equivalent work experience.</i> <i>Nine hours lecture-laboratory (108 hours total per quarter).</i> CNC lathe tool path programming using G & M code format, including tool orientation and compensation and canned cycles. Programming for CNC horizontal machining centers and 4th axis rotary tables. Horizontal machining center and lathe controller functions, setup and operations. Fixture design for mills and lathes; base plate layout, supporting, locating, and clamping practices.</p>		
MCNC 76C	CAD/CAM Based Computer Numerical Control Programming Using Mastercam	4 1/2 Units
<p><i>Advisory: English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263; Mathematics 210 or equivalent; basic understanding of mill and lathe operations.</i> <i>Nine hours lecture-laboratory (108 hours total per quarter).</i> Introduction to Mastercam three axis mill programming. Create part geometry, define tools and tool paths, using post-processors to produce word-address format programs.</p>		
MCNC 76H	CAD/CAM Based Computer Numerical Control Programming Using Mastercam	4 1/2 Units
<p><i>Prerequisite: Manufacturing and CNC 76C.</i> <i>Nine hours lecture-laboratory (108 hours total per quarter).</i> Programming procedures using wireframe, splines, and surface modeling. Rough, finish, and high speed machining. Editing, post-processing, verifying programs.</p>		
MCNC 76M	CAD/CAM Based Computer Numerical Control Programming Using Mastercam	4 1/2 Units
<p><i>Prerequisite: Manufacturing and CNC 76C.</i> <i>Nine hours lecture-laboratory (108 hours total per quarter).</i> Advanced Mastercam; complex surfacing for milling machines and contouring surfaces for lathes. Tooling, workflow and programming for horizontal machining centers.</p>		
MCNC 77	Machining Practices Using Conventional Machine Tools, Tool Design, Abrasive Machining	4 1/2 Units
<p><i>Prerequisite: Manufacturing and CNC 71 with a grade of C or better or equivalent.</i> <i>Nine hours lecture-laboratory (108 hours total per quarter).</i> Advanced machining practices using conventional machine tools. Introduction to fixture design including location and clamping methods and computation of fits and allowances. Abrasive machining.</p>		
MCNC 200	Manufacturing and CNC Technology Laboratory	1/2 Unit
MCNC 200X MCNC 200Y MCNC 200Z		1 Unit 1 1/2 Units 2 Units
<p><i>Credit course - Does not apply to De Anza Associate degree.</i> <i>Co-requisite: Manufacturing and CNC 200, 200X, 200Y and 200Z students must also enroll in any Manufacturing and CNC Technology course.</i> <i>Three hours laboratory for each unit of credit (36 hours total for each unit of credit per quarter).</i></p>		

All courses are for unit credit and apply to a De Anza associate degree unless otherwise noted. 177

(Any combination of Manufacturing and CNC 200, 200X, 200Y and 200Z may be taken up to six times, not to exceed 18 units, as long as the topics/projects are different each time.)

Pass-No Pass (P-NP) course.

Use of Manufacturing and CNC Technology labs for additional/advanced projects in MCNC. Projects will vary each quarter based on the students other MCNC classes and the direction of the instructor.

Mathematics

MATH 1A Calculus 5 Units

(See general education pages for the requirement this course meets.)

Prerequisite: Mathematics 43 (with a grade of C or better), or appropriate score on Calculus Placement Test within the past calendar year.

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Five hours lecture (60 hours total per quarter).

Fundamentals of differential calculus.

MATH 1B Calculus 5 Units

(See general education pages for the requirement this course meets.)

Prerequisite: Mathematics 1A.

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Five hours lecture (60 hours total per quarter).

Fundamentals of integral calculus.

MATH 1C Calculus 5 Units

(See general education pages for the requirement this course meets.)

Prerequisite: Mathematics 1B (with a grade of C or better) or equivalent.

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Five hours lecture (60 hours total per quarter).

Infinite series, lines and surfaces in three dimensions, vectors in two and three dimensions, parametric equations of curves. Derivatives and integrals of vector functions.

MATH 1D Calculus 5 Units

(See general education pages for the requirement this course meets.)

Prerequisite: Mathematics 1C (with a grade of C or better) or equivalent.

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Five hours lecture (60 hours total per quarter).

Partial derivatives, multiple integrals, vector calculus.

MATH 2A Differential Equations 5 Units

(See general education pages for the requirement this course meets.)

Prerequisite: Mathematics 1D with a grade of C or better.

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Five hours lecture (60 hours total per quarter).

Ordinary differential equations and selected applications.

MATH 2B Linear Algebra 5 Units

(See general education pages for the requirement this course meets.)

Prerequisite: Mathematics 1D with a grade of C or better.

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Five hours lecture (60 hours total per quarter).

Linear algebra and selected topics of mathematical analysis.

MATH 10 Elementary Statistics and Probability 5 Units

(See general education pages for the requirement this course meets.)

Prerequisite: Mathematics 114 or equivalent with a grade of C or better; or a qualifying score on the Intermediate Algebra Placement Test within the past calendar year.

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Five hours lecture (60 hours total per quarter).

Introduction to data analysis making use of graphical and numerical techniques to study patterns and departures from patterns. The student studies randomness with an emphasis on understanding variation, collects information in the face of uncertainty, checks distributional assumptions, tests hypotheses, uses probability as a tool for anticipating what the distribution of data may look like under a set of assumptions, and uses appropriate statistical models to draw conclusions from data. The course introduces the student to applications in engineering, business, economics, medicine, education, the sciences, and those pertaining to issues of contemporary interest. The use of technology (computers or graphing calculators) will be required in certain applications. Where appropriate, the contributions to the development of statistics by men and women from diverse cultures will be introduced.

MATH 11 Finite Mathematics 5 Units

(See general education pages for the requirement this course meets.)

Prerequisite: Qualifying score on the Math Placement Test within the past calendar year; or Mathematics 114 or equivalent with a grade of C or better.

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Five hours lecture (60 hours total per quarter).

Application of linear equations, sets, matrices, linear programming, mathematics of finance and probability to real-life problems. Emphasis on the understanding of the modeling process, and how mathematics is used in real-world applications.

MATH 12 Introductory Calculus for Business and Social Science 5 Units

(See general education pages for the requirement this course meets.)

Prerequisite: Mathematics 11 or 41.

Five hours lecture (60 hours total per quarter).

Introduction to limits, differentiation, and integration of single variable functions. Differentiation of multivariate functions. Applications in business, economics, and social science.

MATH 22 Discrete Mathematics 5 Units

(See general education pages for the requirement this course meets.)

Prerequisite: Mathematics 43 with a grade of C or better, or equivalent.

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Five hours lecture (60 hours total per quarter).

Elements of discrete mathematics with applications to computer science. Topics include methods of proof, mathematical induction, logic, sets, relations, graphs, combinatorics, and Boolean algebra.

MATH 23 Engineering Statistics 5 Units

(See general education pages for the requirement this course meets.)

Prerequisite: Mathematics 1C with a grade of C or better.

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Five hours lecture (60 hours total per quarter).

Engineering statistics provides a comprehensive introduction to probabilistic and statistical modeling for students in engineering, economics, finance and related disciplines in the mathematical sciences. The course exposes students to a variety of applications requiring decision making in the face of uncertainty. Topics covered include the collection and analysis of information, making use of graphical and numerical techniques, discrete, continuous, cumulative, and joint probability distribution functions and use of statistical inference, experimental design, and equation fitting, when appropriate. Many of the applications require the use of technology (computers and graphic calculators). Computer simulations are used to illustrate difficult topics and provide visualization of advanced theoretical results (e.g. the Central Limit Theorem).

MATH 41 Precalculus I: Theory of Functions 5 Units

(See general education pages for the requirement this course meets.)

Prerequisite: Mathematics 114 or equivalent (with a grade of C or better); or a satisfactory score on the College Level Math Placement Test within the last calendar year.

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Five hours lecture (60 hours total per quarter).

Polynomial, rational, exponential and logarithmic functions, graphs, solving equations.

MATH 42 Precalculus II: Trigonometric Functions 5 Units

(Formerly Mathematics 52.)

(See general education pages for the requirement this course meets.)

Prerequisite: Mathematics 41 (with a grade of C or better); or a satisfactory score on the College Level Math Placement Test within the last calendar year.

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Five hours lecture (60 hours total per quarter).

The theory of trigonometric functions and their applications.

MATH 43 Precalculus III: Advanced Topics 5 Units

(See general education pages for the requirement this course meets.)

Prerequisite: Mathematics 41 and 42 (both with a grade of C or better); or a satisfactory score on Calculus Readiness Test within the last calendar year.

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Five hours lecture (60 hours total per quarter).

Conic sections, parametric equations, systems of equations and inequalities, vectors, lines and planes, sequences and series, polar coordinates, mathematical induction, and the binomial theorem.

MATH 44	Introduction to Contemporary Mathematics	5 Units	<p>(See general education pages for the requirement this course meets.) <i>Prerequisite:</i> Qualifying score on the Math Placement Test within the past calendar year; or Mathematics 114 or equivalent with a grade of C or better. <i>Advisory:</i> English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273. Five hours lecture (60 hours total per quarter). A survey of selected topics from contemporary mathematics, including problem solving techniques and connections between mathematics and culture. Includes a selection of introductory topics from symmetry; graph theory; chaos and fractals; topology; number theory; geometry; combinatorics and counting; the mathematics of social choice; data analysis, probability and statistics; consumer mathematics and personal financial management.</p>	MATH 203	Intermediate Algebra Refresher	1/2 Unit	<p><i>Credit course - Does not apply to De Anza Associate degree.</i> <i>Advisory:</i> English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273. One and one-half hours laboratory (18 hours total per quarter). Pass-No Pass (P-NP) course. Review of content of Mathematics 114, including exponential functions, logarithmic functions, rational functions, sequences and series and their applications. This is a self-paced, computer-based course. A diagnostic will determine areas needing review and students will be required to master the identified topics.</p>
MATH 46	Mathematics for Elementary Education	5 Units	<p>(See general education pages for the requirement this course meets.) <i>Prerequisite:</i> Mathematics 114 with a grade of C or better, or a qualifying score on Intermediate Algebra Placement Test within the past calendar year. <i>Advisory:</i> English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273. (Also listed as Education 46. Students may enroll in either department, but not both, for credit.) Five hours lecture (60 hours total per quarter). Designed for prospective elementary and middle school teachers. An introduction to the discipline of mathematics as the use of logical, quantitative, and spatial reasoning in the abstraction, modeling, and problem solving of real-world situations. The main topics in the course include the origins of mathematics, mathematical reasoning and problem solving strategies, theory of sets, integers and integral number theory, rational numbers and proportion, real numbers and decimal notation, and measurement. Throughout the course students will experience the learning of mathematics in a way that models how they can create an active learning environment for their future students.</p>	MATH 210	College Math Preparation Level 1: Pre-Algebra	5 Units	<p>(Formerly Mathematics 110.) <i>Credit course - Does not apply to De Anza Associate degree.</i> <i>Advisory:</i> English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273. Five hours lecture (60 hours total per quarter); or four hours lecture and two hours lecture-laboratory (72 hours total per quarter). Use of basic arithmetic in application problems, estimation, the real number system, variables and linear equations, graphs of linear equations and the Cartesian coordinate system, the concept of function.</p>
MATH 77	Special Projects in Mathematics	1 Unit		MATH 212	College Math Preparation Level 2: Beginning Algebra	5 Units	<p>(Formerly Mathematics 112.) <i>Credit course - Does not apply to De Anza Associate degree.</i> <i>Prerequisite:</i> Qualifying score on the Math Placement Test within last calendar year; or Mathematics 210 or equivalent with a grade of C or better. <i>Advisory:</i> English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273. Five hours lecture (60 hours total per quarter); or four hours lecture and two hours lecture-laboratory (72 hours total per quarter). Application of linear functions, quadratic functions and linear systems to problems. Emphasis on the development of models of real world applications and interpretation of their characteristics.</p>
MATH 77X		2 Units		MATH 241	Academic Excellence in Precalculus	1 Unit	
MATH 77Y		3 Units					
			<p><i>Prerequisite:</i> Consent of instructor and division dean. Three hours laboratory for each unit of credit (36 hours total for each unit of credit per quarter). (Any combination of Mathematics 77, 77X and 77Y may be taken up to six times, not to exceed 18 units, as long as the projects are different each time.) Pass-No Pass (P-NP) course. Individual special reading, writing, or study projects in mathematics as determined in consultation with the instructor.</p>				<p>(Formerly Mathematics 249A.) <i>Credit course - Does not apply to De Anza Associate degree.</i> <i>Co-requisite:</i> Mathematics 241 students must also enroll in Mathematics 41. <i>Advisory:</i> English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273. Three hours laboratory (36 hours total per quarter). Critical thinking and skills reinforcement in a precalculus setting: cooperative learning/study techniques, concept development related to polynomial, rational, exponential and logarithmic functions and their graphs, and use of technology.</p>
MATH 114	College Math Preparation Level 3: Intermediate Algebra	5 Units	<p><i>Prerequisite:</i> Qualifying score on the Math Placement Test within last calendar year; or Mathematics 212 or equivalent with a grade of C or better. <i>Advisory:</i> English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273. Five hours lecture (60 hours total per quarter); or four hours lecture and two hours lecture-laboratory (72 hours total per quarter). Application of exponential and logarithmic functions, rational functions, and sequences and series to problems. Emphasis on the development of models of real world applications and interpretation of their characteristics.</p>	MATH 242	Academic Excellence in Trigonometry	1 Unit	<p>(Formerly Mathematics 252.) <i>Credit course - Does not apply to De Anza Associate degree.</i> <i>Co-requisite:</i> Mathematics 242 students must also enroll in Mathematics 42. <i>Advisory:</i> English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273. Three hours laboratory (36 hours total per quarter). Critical thinking and skills reinforcement in a trigonometry setting: cooperative learning/study techniques, concept development, and use of technology.</p>
MATH 201	Pre-Algebra Refresher	1/2 Unit	<p><i>Credit course - Does not apply to De Anza Associate degree.</i> <i>Advisory:</i> English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273. One and one-half hours laboratory (18 hours total per quarter). Pass-No Pass (P-NP) course. Review of content of Mathematics 210 including basic arithmetic, estimation, variables, linear equations and their graphs. This is a self-paced, computer-based course. A diagnostic will determine areas needing review and students will be required to master the identified topics.</p>	MATH 243	Academic Excellence in Precalculus	1 Unit	<p>(Formerly Mathematics 249B.) <i>Credit course - Does not apply to De Anza Associate degree.</i> <i>Co-requisite:</i> Mathematics 243 students must also enroll in Mathematics 43. <i>Advisory:</i> English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273. Three hours laboratory (36 hours total per quarter). Critical thinking and skills reinforcement in a precalculus setting: cooperative learning/study techniques; concept development related to conic sections, vectors and polar and three dimensional coordinates and equations, systems of equations and inequalities, parametric equations and sequences and series, and mathematical induction and the binomial theorem; and use of technology.</p>
MATH 202	Beginning Algebra Refresher	1/2 Unit	<p><i>Credit course - Does not apply to De Anza Associate degree.</i> <i>Advisory:</i> English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273. One and one-half hours laboratory (18 hours total per quarter). Pass-No Pass (P-NP) course. Review of content of Mathematics 212 including linear functions, quadratic functions, linear systems and their applications. This is a self-paced, computer-based course. A diagnostic will determine areas needing review and students will be required to master the identified topics.</p>				

Meteorology

MET 10	Weather and Climate Processes	5 Units
<p>(See general education pages for the requirement this course meets.) <i>Advisory:</i> Mathematics 210 or equivalent; English Writing 211 and Reading 211</p>		

(or Language Arts 211), or English as a Second Language 272 and 273.

Five hours lecture (60 hours total per quarter).

Introduction to the principles of the sciences of meteorology and climatology including: history of the sciences; origin, evolution and structure of the atmosphere; major atmospheric variables that determine weather; global and local wind circulations; air masses and frontal systems; birth and development of extra tropical and tropical cyclones and associated severe weather phenomena; weather map analysis and interpretation; objective techniques used by meteorologists to forecast weather; air pollution; atmospheric optics, global climate and the processes that produce climate change including "global warming."

MET 10L Meteorology Laboratory 1 Unit

(Formerly Meteorology 50L.)

(See general education pages for the requirement this course meets.)

Prerequisite: Mathematics 210 or equivalent; Meteorology 10 (may be taken concurrently).

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or

English as a Second Language 272 and 273.

Three hours laboratory (36 hours total per quarter).

Introductory weather lab in which students work with observational data, graphics products, charts and instruments used by synoptic meteorologists to forecast weather. Lab sessions will include current weather products downloaded from the American Meteorological Society's "Online Weather Studies" homepage which has been specifically designed for this course and from De Anza College's automated rooftop weather station. Students will practice the analysis and decision-making skills employed by meteorologists to diagnose air patterns, understand air motions and predict future atmospheric conditions.

MET 20L Climate Studies Laboratory 1 Unit

(See general education pages for the requirement this course meets.)

Prerequisite: Meteorology 10 (may be taken concurrently).

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or

English as a Second Language 272 and 273; Mathematics 210 or equivalent.

Three hours laboratory (36 hours total per quarter).

Introductory climatology lab developed in collaboration with the American Meteorological Society which places students in a dynamic learning environment where they investigate Earth's climate system using real-world data used by professional climatologists to study and forecast future changes in Earth's climate system. Lab sessions will include current computer graphics products downloaded from the American Meteorological Society's "Online Climate Studies" homepage which has been specifically designed for this course. Students will practice the analytical skills used by climatologists in assessing the world's climate and will examine the factors that produce critical changes in climate such as "global warming." While focusing on science, students will address many of the social and societal impacts of impending climate change.

MET 77 Special Projects in Meteorology 1 Unit

MET 77X 2 Units **MET 77Y 3 Units**

Prerequisite: Consent of instructor and division dean.

Three hours laboratory for each unit of credit (36 hours total for each unit of credit per quarter).

(Any combination of Meteorology 77, 77X and 77Y may be taken up to six times, not to exceed 18 units, as long as the projects are different each time.)

Pass-No Pass (P-NP) course.

Individual research projects in Meteorology as determined in consultation with the instructor. Outside reading and written reports(s) required. These projects are on topics not covered in the regular Meteorology curriculum and require the approval of the PSM&E Division Dean.

Military Studies

Military Studies includes the following: Military Science (Army Reserve Officer's Training Corps [ROTC]), Aerospace Studies (Air Force ROTC), and Naval Science (Naval ROTC). Army ROTC courses are offered at Santa Clara University. Aerospace Studies are offered at San Jose State University. The Naval/Marine ROTC program is offered at the University of California at Berkeley; however, it does not have a community college component at this time.

NOTE: Lower-division ROTC programs are open to all students and there is no military obligation incurred. However, ROTC scholarships and military commissions do have specific qualifications and commitments. While all students are eligible to take ROTC courses, not all students who take ROTC courses will be eligible for either a scholarship or a military commission.

REGISTRATION NOTE: To register from a community college for ROTC courses, please contact Mission College or West Valley College. De Anza College does not currently provide for ROTC registration for De Anza College students. For further information, please contact the Biological and Health Sciences Division 408.864.8773.

Aerospace Studies

(Air Force Reserve Officers Training Corps) The Air Force Reserve Officer Training Program (Air Force ROTC) at San Jose State University offers a high quality educational experience structured for all college students. It gives students the opportunity to learn excellent leadership and management skills while training to become a commissioned officer in the Air Force. Academic instruction includes Air Force organization, history, officer skills, leadership and management, and national security policy and issues. Students find out first hand what the Air Force has to offer for scholarships while they are in school and what career opportunities await them after graduation with a Bachelors Degree.

For direct information on the Air Force ROTC program at San Jose State University, contact the Aerospace Studies Department at San Jose State University at 408.924.2960.

Military Science

(Army Reserve Officers Training Corps) The Army Reserve Officer Training Program (Army ROTC) program at Santa Clara University offers a high quality educational experience open to all students. The program is designed to develop men's and women's management skills and leadership abilities for successful careers in both the corporate world and the military. Instruction is conducted on and off the Santa Clara University campus. All courses offered by the Military Science Department are fully accredited and applicable toward fulfilling academic requirements for graduation at Santa Clara University. Through this voluntary program, Santa Clara University offers all eligible students the opportunity to obtain an officer's commission in the U.S. Army Reserve, National Guard, or active Army, while earning their college degree.

For direct information on the Army ROTC program at Santa Clara University, contact the Department of Military Science at Santa Clara University at 408.554.4033.

Naval Science

(Navy Reserve Officers Training Corps) The Department of Naval Science at the University of California, Berkeley, offers several programs of instruction for men and women leading to reserve commissions in the U.S. Navy or U.S. Marine Corps. There are no Navy ROTC programs available for community college students. For information on the four year institution Navy ROTC program, please contact the Department of Naval Science at 510.642.3551.

Music

MUSI 1A Introduction to Music: Music in Western Cultures 4 Units

(Formerly Music 1.)

(See general education pages for the requirement this course meets.)

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Four hours lecture (48 hours total per quarter).

Introduction to the discipline of music; methods of understanding music available in modern culture; listening techniques; use of fundamental concepts including form, style, musical media, and textures; acquaintance with and comparison of musical examples from various eras and cultures; roles of music in society.

MUSI 1B Introduction to Music: Jazz Styles 4 Units

(Formerly Music 7A.)

(See general education pages for the requirement this course meets.)

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Four hours lecture (48 hours total per quarter).

Introduction to the discipline of music through American Jazz; from its multicultural origins to the present; listening skills and use of fundamental musical elements for distinguished jazz styles; social issues, noted performers, and technological advancements found in jazz.

MUSI 1C Introduction to Music: World Music in America 4 Units

(Formerly Music 7B.)

(See general education pages for the requirement this course meets.)

Advisory: English Writing 1A or English as a Second Language 5.

Four hours lecture (48 hours total per quarter).

An introduction to music through world music and its influence on current musical trends in the United States. Music of diverse cultures which may include Native Americans, Asia/Pacific Rim, India, Africa, South and Central America, Mexico, and the Caribbean are presented in conjunction with American and European traditions; listening skills for distinguishing musical cultures, instrumentations, and artists.

MUSI 1D	Introduction to Music: Rock– From Roots to Rap	4 Units	MUSI 9	Jazz Piano	1 1/2 Units
<i>(Formerly Music 59.) (See general education pages for the requirement this course meets.) Advisory: English Writing 1A or English as a Second Language 5. Four hours lecture (48 hours total per quarter).</i> An introduction to music through rock music, tracing its beginnings in the early 1950s to the present. Various rock styles will be related to the historical trends and events of the time period being studied; listening techniques; use of fundamental concepts including form, style, musical media, and textures; acquaintance with and comparison of musical examples from various styles.			<i>Prerequisite: Ability to play a keyboard instrument and read music. Advisory: English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263. Three hours lecture-laboratory (36 hours total per quarter). (May be taken up to six times for credit.)</i> Development of the ability to play jazz piano arrangements from lead sheets in a variety of jazz styles using knowledge of jazz harmony, jazz piano techniques, and improvisational skills. Improvisational skill on the piano is developed through the understanding and practice of scale choices, and the application of techniques for melodic development.		
MUSI 3A	Comprehensive Musicianship (First Quarter)	4 Units	MUSI 10A	Music Fundamentals	3 Units
<i>Requisite/Advisory: None. Three hours lecture, two hours lecture-laboratory (60 hours total per quarter).</i> Basic knowledge such as notation, key signatures, scales, intervals, and rudimentary harmony as well as skill development including sight singing, rhythmic training, ear training, and keyboard work.			<i>Advisory: English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263. Three hours lecture (36 hours total per quarter).</i> Offers a basic introduction to concepts and skills of music notation, rhythm, major and minor scales and keys, simple sight-reading, key signatures, melody, and triads. Open to all students. May be appropriate for students with low scores on the Music 3A diagnostic test. Music Fundamentals students with no previous musical experience may benefit from concurrent enrollment in a beginning instrumental or vocal performance class.		
MUSI 3B	Comprehensive Musicianship	4 Units	MUSI 10B	Harmony I	3 Units
<i>Advisory: Music 3A or equivalent. Three hours lecture, two hours lecture-laboratory (60 hours total per quarter).</i> Principles, literacy, and parameters of music including writing elementary four part harmony, sight singing, rhythmic training, ear training, and keyboard work for the student with some basic skills and education in standard notation.			<i>Advisory: Music 10A or 12A. Three hours lecture (36 hours total per quarter).</i> Study of traditional harmonies and structures (18th century choral style) will be supplemented with the use of chord symbols and popular notational practices. Also analysis of 19th century music would be included.		
MUSI 3C	Comprehensive Musicianship (Third Quarter)	4 Units	MUSI 12A	Class Piano I	1 1/2 Units
<i>Advisory: Music 3B or equivalent. Three hours lecture, two hours lecture-laboratory (60 hours total per quarter).</i> Principles, literacy, and parameters of music including writing, sight singing, rhythmic training, ear training, keyboard work, beginning analysis, and simple melody composition.			<i>Advisory: Music 10A. Three hours lecture-laboratory (36 hours total per quarter). (Any combination of Music 12A, 12B, 12C and 18 may be taken up to six times for credit for the family of courses as long as the topics/projects are different each time.)</i> Beginning piano for students with no previous instruction, those who need knowledge of piano for a teaching credential, music majors, and the general student.		
MUSI 4A	Comprehensive Musicianship II	4 Units	MUSI 12B	Class Piano II	1 1/2 Units
<i>Advisory: Music 3C or equivalent. Three hours lecture, two hours lecture-laboratory (60 hours total per quarter).</i> Principles, literacy, and parameters of music including writing, comprehensive and aural analysis, sight singing, rhythmic training, ear training, and keyboard work for the more advanced undergraduate student.			<i>Prerequisite: Music 12A or consent of instructor. Three hours lecture-laboratory (36 hours total per quarter). (Any combination of Music 12A, 12B, 12C and 18 may be taken up to six times for credit for the family of courses as long as the topics/projects are different each time.)</i> Basic piano for beginning students who read treble and bass clef, and understand music notation.		
MUSI 4B	Comprehensive Musicianship II (Second Quarter)	4 Units	MUSI 12C	Class Piano III	1 1/2 Units
<i>Advisory: Music 4A or equivalent. Three hours lecture, two hours lecture-laboratory (60 hours total per quarter).</i> Principles, literacy, and parameters of music including writing, comprehensive and aural analysis, sight singing, rhythmic training, ear training, and keyboard work for the more advanced undergraduate student exploring chromatic practice and the limits of the tonal system including a review of diatonic practice.			<i>Prerequisite: Music 12B or consent of instructor. Three hours lecture-laboratory (36 hours total per quarter). (Any combination of Music 12A, 12B, 12C and 18 may be taken up to six times for credit for the family of courses as long as the topics/projects are different each time.)</i> Piano performance with emphasis on interpretation, musical form and harmony.		
MUSI 4C	Comprehensive Musicianship II (Third Quarter)	4 Units	MUSI 13A	Beginning Singing I	1 1/2 Units
<i>Advisory: Music 4B or equivalent. Three hours lecture, two hours lecture-laboratory (60 hours total per quarter).</i> Principles, literacy, and parameters of music including writing, comprehensive and aural analysis, sight singing, rhythmic training, ear training, and keyboard work for the more advanced undergraduate student exploring post tonal practice and the influence of non-notated, experimentally notated, and non Western music on an emerging world wide art music culture.			<i>Advisory: English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263; an understanding of basic music notation and some possession of basic piano skills, or concurrent enrollment in Music 10A or 12A. Three hours lecture-laboratory (36 hours total per quarter). (Any combination of Music 13A and 13B may be taken up to six times for credit for the family of courses.)</i> Class instruction for beginners in techniques of solo and group singing. Training in controlling tonal production, breathing, diction, and musical accuracy.		
MUSI 5A	Modal Counterpoint	3 Units	MUSI 13B	Beginning Singing II	1 1/2 Units
<i>Advisory: Music 3A or equivalent. Two hours lecture, two hours lecture-laboratory (48 hours total per quarter).</i> Modal counterpoint in two and three parts using both the species approach and the Phenomenological approach to produce species, imitative, and free counterpoint examples.			<i>Prerequisite: Music 13A or equivalent. Advisory: English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263; an understanding of basic music notation and some possession of basic piano skills, or concurrent enrollment in Music 10A or 12A. Three hours lecture-laboratory (36 hours total per quarter). (Any combination of Music 13A and 13B may be taken up to six times for credit for the family of courses.)</i> Continuation of Music 13A with emphasis on musicianship, memorization, legato singing, correction of individual problems, and the rudiments of performance. Training in controlling tonal production, breathing, diction, and musical accuracy.		
MUSI 8	Intermediate Electronic Music	3 Units			
<i>Advisory: English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263; Music 51. Two hours lecture, two hours lecture-laboratory (48 hours total per quarter).</i> Intermediate level electronic music techniques including digital and analog synthesizer sound design and editing; professional studio and computer music software including integrated audio/MIDI sequencing software, instrument editors, software synthesizers; basic audio/MIDI studio configuration; modular synthesis; basic digital audio recording and editing; basic audio signal processing; introduction to concepts of music notation software; historical and technological development of electronic music; roles of electronic music technology in twentieth-century music. Some prior music experience and/or concurrent enrollment in Music 10A or Music 12A is recommended, but not required.					

MUSI 14A Classical Guitar I 1 1/2 Units

Advisory: English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263.

Three hours lecture-laboratory (36 hours total per quarter).

(Any combination of Music 14A, 14B and 14C may be taken up to six times for credit for the family of courses.)

Beginning instruction for playing the classical, nylon-stringed guitar, assuming no prior musical experience. Introduces basic note reading on the first four frets of the instrument, left and right hand techniques, including free strokes, rest strokes, arpeggio technique, left-hand development of strength and independence. Chords, chord progression and basic strumming techniques will also be introduced.

MUSI 14B Classical Guitar II 1 1/2 Units

Prerequisite: Music 14A or equivalent level; admission by instructor approval.

Three hours lecture-laboratory (36 hours total per quarter).

(Any combination of Music 14A, 14B and 14C may be taken up to six times for credit for the family of courses.)

Refinement and expansion of classical guitar techniques learned in Classical Guitar I. Topics include expanded arpeggio techniques, free stroke and rest stroke development, slur technique, complex rhythms, multiple-voice music reading, and repertoire development. Music fundamentals such as major and minor scales and chord construction will also be covered.

MUSI 14C Classical Guitar III 1 1/2 Units

Prerequisite: Music 14B or equivalent level; admission by instructor approval.

Three hours lecture-laboratory (36 hours total per quarter).

(Any combination of Music 14A, 14B and 14C may be taken up to six times for credit for the family of courses.)

Continuation and expansion of skills learned in Classical Guitar II. Development of sight-reading skills, complex rhythms and multiple-voice music in positions two through five through exercises and standard guitar repertoire. Emphasis on proper technique, interpretation, dynamics and tone color.

MUSI 15A Guitar Ensemble I 2 Units

(Formerly Music 60A.)

Prerequisite: Enrollment subject to audition; ability to execute proper classical guitar technique and read music.

Four hours lecture-laboratory (48 hours total per quarter).

(Any combination of Music 15A, 15B and 15C may be taken up to six times, not to exceed 18 units, as long as the subject matter is different each time.)

Introduction to the performance of music for guitar ensemble, emphasizing sight reading, rhythmic accuracy and ensemble skills. Music from the 15th century to the present will be rehearsed and performed.

MUSI 15B Guitar Ensemble II 2 Units

(Formerly Music 60B.)

Prerequisite: Music 15A or equivalent. Enrollment subject to audition; ability to execute proper classical guitar technique and read music at sight in the first position.

Four hours lecture-laboratory (48 hours total per quarter).

(Any combination of Music 15A, 15B and 15C may be taken up to six times, not to exceed 18 units, as long as the subject matter is different each time.)

Continuation of Guitar Ensemble I, emphasizing sight-reading at higher positions, greater accuracy at increased tempos and/or rhythms, and ensemble skills. Music from the 15th century to the present will be rehearsed and performed.

MUSI 15C Guitar Ensemble III 2 Units

(Formerly Music 60C.)

Prerequisite: Music 15B or equivalent. Enrollment subject to audition; ability to execute proper classical guitar technique and read music at sight in the first through fifth positions.

Four hours lecture-laboratory (48 hours total per quarter).

(Any combination of Music 15A, 15B and 15C may be taken up to six times, not to exceed 18 units, as long as the subject matter is different each time.)

Continuation of Guitar Ensemble II, emphasizing sight-reading at seventh and higher positions, greater accuracy at increased tempos and/or rhythms, ensemble leadership skills. Music from the 15th century to the present will be rehearsed and performed.

MUSI 16 Jazz, Blues and Popular Guitar 1 1/2 Units

(Formerly Music 56.)

Prerequisite: Ability to play first-position and movable major, minor and dominant 7th chords.

Advisory: English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263.

Three hours lecture-laboratory (36 hours total per quarter).

An intermediate-level study of the common practices used in jazz, blues and selected styles of popular music. Guitar styles from the 1940s to the present will be examined through the use of recording and written examples. Chord voicing, scales, right hand picking techniques, and development of solo skills in these styles will be emphasized.

MUSI 18 Intermediate Piano 1 1/2 Units

Prerequisite: Music 12C or approval of instructor.

Three hours lecture-laboratory (36 hours total per quarter).

(Any combination of Music 12A, 12B, 12C and 18 may be taken up to six times

for credit for the family of courses as long as the topics/projects are different each time.)

Piano music from the Baroque era to the present, with emphasis on the style of each period and differences in interpretation.

MUSI 20 De Anza Chorale 2 Units

Advisory: English Writing 200 and Reading 200 (or Language Arts 200), or

English as a Second Language 261, 262 and 263; concurrent enrollment in Music 10A, 12A or 13A is recommended.

Four hours lecture-laboratory (48 hours total per quarter).

(May be taken up to six times for credit as long as the topics change each quarter.)

Study and performance of traditional, classical choral literature. Cultivation of performance skills in accompanied music. Attendance at all scheduled performances is required. Enrollment is open to all students. An introductory audition will assess pitch-matching ability and determine vocal range and appropriate choral part.

MUSI 21 Vintage Singers 2 Units

Advisory: English Writing 200 and Reading 200 (or Language Arts 200), or

English as a Second Language 261, 262 and 263; concurrent enrollment in Music 10A, 10B, 3A, 3B, 3C or 12A is recommended.

Four hours lecture-laboratory (48 hours total per quarter).

(May be taken up to six times for credit.)

Study and performance of specialized choral styles from early to modern in an ensemble of limited size. Enrollment subject to audition. Choral experience, previous vocal training, and some music reading ability is necessary. Attendance at all scheduled performances is required.

MUSI 22 Early Music Study and Performance 2 Units

Advisory: English Writing 200 and Reading 200 (or Language Arts 200), or

English as a Second Language 261, 262 and 263; concurrent enrollment in Music 10A, 10B, 3A, 3B, 3C or 12A is recommended.

Four hours lecture-laboratory (48 hours total per quarter).

(May be taken up to six times for credit.)

Study and performance of instrumental and vocal music from the Medieval and Renaissance periods. Cultivation of performance skills aimed at emulating the spirit and vitality of those periods. Attendance at all scheduled performances is required. Enrollment is open to all students. An introductory audition will determine placement in the appropriate section of singers.

MUSI 24 Women's Chorus 2 Units

Advisory: English Writing 200 and Reading 200 (or Language Arts 200), or

English as a Second Language 261, 262 and 263; concurrent enrollment in Music 10A, 10B, 3A, 3B, 3C or 12A is recommended.

Four hours lecture-laboratory (48 hours total per quarter).

(May be taken up to six times for credit.)

A choir for students interested in singing with a group for enjoyment. Study and performance of music of different styles and periods. Provides basic technique and experience in choral singing. Attendance at all scheduled performances is required. Enrollment is open to all students. An introductory audition will determine placement in the appropriate section of singers.

MUSI 25G Performance Workshop (Brass) 1 1/2 Units**MUSI 25H Performance Workshop (Guitar) 1 1/2 Units****MUSI 25J Performance Workshop (Piano) 1 1/2 Units****MUSI 25K Performance Workshop (Reeds) 1 1/2 Units****MUSI 25M Performance Workshop (Voice) 1 1/2 Units****MUSI 25VJ Performance Workshop (Jazz Solo Voice) 1 1/2 Units**

Prerequisite: Placement by audition.

Three hours lecture-laboratory (36 hours total per quarter).

(Any combination of Music 25G-VJ may be taken up to six times, not to exceed 18 units, for the family of courses.)

Master class instruction in solo and ensemble performance technique, requiring technical command of the instrument and basic knowledge of musicianship.

MUSI 27 Vocal Jazz Ensemble 2 Units

(Formerly Music 27B.)

Prerequisite: Enrollment subject to a standardized audition demonstrating musical ability and technical proficiency at a level suitable to the course level.

Co-requisite: Concurrent enrollment in Music 3A, 3B, 3C, 10A, 10B or 12A is recommended.

Advisory: English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263.

Four hours lecture-laboratory (48 hours total per quarter).

(May be taken up to six times for credit as long as the topics are different each time.)

Study, rehearsal, and performance of standard and contemporary vocal jazz ensemble literature. Exposure to microphone technique, vocal improvisation, and ensemble interpretation of jazz styles and phrasing. Developing a working vocabulary of traditional vocal jazz performance techniques and an understanding of the cultural and historical contexts that produced the specific vocal jazz styles.

MUSI 31 (Formerly Music 31A.)	Chamber Orchestra	2 Units
<i>Prerequisite:</i> Enrollment subject to audition; ability to play an orchestral instrument and read music at sight.		
<i>Advisory:</i> English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263.		
Four hours lecture-laboratory (48 hours total per quarter).		
(May be taken up to six times for credit.)		
Performance of music for chamber orchestra emphasizing the development of good ensemble and proper musical interpretations.		
MUSI 32A (Formerly Music 52A.)	Jazz Solo Voice I	1 1/2 Units
<i>Prerequisite:</i> Music 13B or equivalent private vocal instruction or experience. All students should have solo voice experience.		
<i>Advisory:</i> English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263.		
Three hours lecture-laboratory (36 hours total per quarter).		
(Any combination of Music 32A and 32B may be taken up to six times for credit as long as the topics/projects are different each time.)		
Study and performance of songs in the jazz idiom. Emphasis on jazz phrasing, melodic and harmonic improvisation, stylistic concepts, vocal consistency, variation of texture, jazz rhythms, rhythm section communication, microphone technique.		
MUSI 32B (Formerly Music 52B.)	Jazz Solo Voice II	1 1/2 Units
<i>Prerequisite:</i> Music 32A or equivalent private vocal instruction or experience. Approval of instructor. All students must have vocal jazz solo experience.		
<i>Advisory:</i> English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263; concurrent enrollment in Music 10A or 12A is recommended.		
Three hours lecture-laboratory (36 hours total per quarter).		
(Any combination of Music 32A and 32B may be taken up to six times for credit as long as the topics/projects are different each time.)		
Advanced study and performance of songs in the jazz idiom. In-depth emphasis on jazz phrasing, melodic and harmonic improvisation, stylistic concepts, vocal consistency, variation of texture, jazz rhythms, rhythm section communication, microphone technique, repertoire building, and public performance. This course prepares students for professional activity in the area of vocal jazz solo performance.		
MUSI 34	Jazz Ensemble	2 Units
<i>Prerequisite:</i> Ability to play an instrument and read music. Enrollment may be subject to audition.		
<i>Advisory:</i> English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263; concurrent enrollment in Music 42 and/or 48 is recommended.		
Four hours lecture-laboratory (48 hours total per quarter).		
(May be taken up to six times for credit.)		
Sight-reading, rehearsal, performance and recording of diverse styles of music composed and arranged for standard jazz ensemble. Emphasis on improvising within the ensemble structure is a goal for each individual.		
MUSI 41	Rehearsal and Performance	1/2 Unit
MUSI 41U		1 Unit
MUSI 41V		1 1/2 Units
MUSI 41W		2 Units
MUSI 41X		2 1/2 Units
<i>Requisite/Advisory:</i> None.		
Two hours lecture-laboratory for each unit of credit (24 hours total for each unit of credit per quarter).		
(Any combination of Music 41, 41U, 41V, 41W and 41X may be taken up to six times, not to exceed 18 units, as long as the topics/projects are different each time.)		
Supervised participation in the various aspects of music rehearsal and/or performance.		
MUSI 42	Symphonic Wind Ensemble	2 Units
<i>Prerequisite:</i> Ability to play a band instrument and read music at sight.		
<i>Advisory:</i> English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263; concurrent enrollment in Music 32, 34, or 48 is recommended.		
Four hours lecture-laboratory (48 hours total per quarter).		
(May be taken up to six times for credit.)		
Rehearsal, sight-reading, performance, and recording of wind ensemble literature in a variety of styles and time-periods. Attendance at all scheduled performances is required.		
MUSI 45 (Formerly Music 45C.)	Jazz Combos	2 Units
<i>Prerequisite:</i> Ability to play an instrument and read music.		
<i>Advisory:</i> English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263.		
Four hours lecture-laboratory (48 hours total per quarter).		
(May be taken up to six times for credit.)		
Preparation and performance of music for jazz combo. Ensemble and improvisational		

performance are emphasized in addition to playing in all jazz rhythmic styles. Student compositions and arrangements are encouraged. Participation at all scheduled performances is required.

MUSI 46 Beginning Winds and Percussion 1 1/2 Units

Advisory: English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263.

Three hours lecture-laboratory (36 hours total per quarter).

(May be taken six times for credit as long as the instrument is different each time.)

Beginning performance methods and techniques on brass, woodwind, and percussion instruments. Fundamentals of embouchure, fingerings, articulation, rhythm, intonation, and reading musical notation.

MUSI 48 Jazz Improvisation 1 1/2 Units

Prerequisite: Ability to play an instrument and read music.

Advisory: English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263.

Three hours lecture-laboratory (36 hours total per quarter).

(May be taken six times for credit as long as the music performed is different each time.)

Development of improvisational skill in the jazz idiom. Analysis of scales, chords, and forms as applicable to improvisational performance of standard jazz vehicles. Ear training and transcribing solos included. Attendance and participation in final recital is required. Music will vary each quarter.

MUSI 51 Introduction to Electronic Music 3 Units

Advisory: English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263.

Two hours lecture, two hours lecture-laboratory (48 hours total per quarter).

Introduction to the use of keyboard controllers, hardware and software synthesizers and instruments, and sequencing and audio software to create music in a variety of styles; basic studio techniques; introduction to Musical Instrument Digital Interface (MIDI); introduction to basic historical developments in electronic music; creation of music/audio projects using basic electronic music hardware and software. Some prior music experience is recommended but not required.

MUSI 53 Music Business 3 Units

Advisory: English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263.

Three hours lecture (36 hours total per quarter).

Introduction to the business aspects of music. Examines the areas of copyright laws, publishing, concert promotion, club and record contracts, agents, managers, unions, and the various careers to be found in music. Emphasis on the commercial music field including film, television, sound recording, the record industry, and Internet applications.

MUSI 58A Beginning African and African-Influenced Percussion and Rhythms 1 1/2 Units

(Formerly Music 58.)

Advisory: English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263.

Three hours lecture-laboratory (36 hours total per quarter).

(Any combination of Music 58A and 58B may be taken up to six times for credit.)

An introduction to selected African, Afro-Caribbean and Latin American rhythms applied to hand drums, stick drums and percussion instruments. Each quarter focuses on one particular culture area and its traditional and popular music styles. No musical experience required. Instruments for in-class use provided.

MUSI 58B Intermediate African and African-Influenced Percussion and Rhythms 1 1/2 Units

Prerequisite: Music 58A or equivalent level.

Advisory: English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263.

Three hours lecture-laboratory (36 hours total per quarter).

(Any combination of Music 58A and 58B may be taken up to six times for credit.)

Intermediate-level skill development of selected African, Afro-Caribbean and Latin American rhythms applied to hand drums, stick drums and other percussion instruments. Each quarter focuses on one particular culture area and its traditional and popular music styles. Instruments for in-class use provided.

MUSI 77 Special Projects in Music 1 Unit

MUSI 77X 2 Units

MUSI 77Y 3 Units

Prerequisite: Consent of instructor and division dean.

Three hours laboratory for each unit of credit (36 hours total for each unit of credit per quarter).

(Any combination of Music 77, 77X and 77Y may be taken up to six times, not to exceed 18 units, as long as the projects are different each time.)

Individual advanced projects in music.

Naval Science

(Navy Reserve Officers Training Corps) For information on Naval ROTC courses, please see Military Studies.

All courses are for unit credit and apply to a De Anza associate degree unless otherwise noted. 183

The following are the nursing education options and career paths for students at De Anza College. For specific program requirements, see Career and Curriculum Certificates and Degrees located elsewhere in this catalog.

Registered Nursing Program

L.V.N. Transition to R.N. Nursing Program

Continuing Education for Nurses

Refresher Program for Registered Nurses

Applications for the licensure programs (R.N., or L.V.N. Transition) are available after successfully completing the following: Nursing 50, the required prerequisites for the programs with a Grade point Average (GPA) of 3.0 or higher, and admission through the selection process for entrance. The curriculum of these programs is designed to prepare individuals for beginning professional nursing practice and to define and understand the legal scope of practice within each of the licensed nursing disciplines. The programs promote success in the ability to practice nursing effectively together as a professional team.

See www.deanza.edu/nursing for specific policies regarding application and admission. The majority of courses are scheduled in the daytime. Generally, the nursing programs are not scheduled during the summer session. Costs of uniforms, books, malpractice insurance and miscellaneous supplies are estimated at \$4000 for the program. In addition, each student is responsible for his/her own transportation to the clinical agencies.

Registered Nursing Program

Associated Degree Nursing Program is accredited by the California Board of Registered Nursing. The R.N. graduate is eligible to take the California State Board Examination for licensing (NCLEX - R.N.) Students are admitted to this program during the fall, winter, and spring quarters. The majority of courses are scheduled in the daytime. Generally, the R.N. Program is not scheduled in the summer session. The program, once admitted, (**not including** prerequisites) is six quarters in length.

L.V.N. Transition to the Registered Nursing Program

(Current California L.V.N. license is required.) The L.V.N. Transition to the R.N. graduate is eligible to take the California State Board Examination for licensing (NCLEX - R.N.) Students are admitted throughout the year as advanced placements. The majority of courses are scheduled in the daytime. Generally, the program is not scheduled in the summer session. The program, once admitted, (**not including** prerequisites) is at least three quarters in length.

Advanced Placement for Students with

Prior Nursing Education

Students are admitted in advanced placement during the fall, winter, or spring quarter on a space available basis only. Placement depends on prior nursing education.

NURS 50 Career Opportunities in Nursing 2 Units

Advisory: English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263.

Two hours lecture (24 hours total per quarter).

Pass-No Pass (P-NP) course.

Careers in the health field with emphasis on education and practice. Required course for entry to De Anza's Registered Nursing Programs. Not required for LVN Transition to RN or Refresher Program for Registered Nurses.

NURS 77 Special Projects in Nursing 1/2 Unit NURS 77X 1 Unit NURS 77Y 2 Units NURS 77Z 3 Units

(Formerly Nursing 56, 56X, 56Y and 56Z respectively.)

Prerequisite: Consent of instructor and division dean.

Three hours laboratory for each unit of credit (36 hours total for each unit of credit per quarter).

(Any combination of Nursing 77, 77X, 77Y and 77Z may be taken up to six times, not to exceed 18 units, as long as the projects are different each time.)

Pass-No Pass (P-NP) course.

Individual special theory and/or clinical projects in nursing as determined in consultation with the instructor.

NURS 81 Fundamental Nursing (Non-Acute/Sub-Acute Care) 4 Units

Prerequisite: Admission into the De Anza College Nursing Program.

Co-requisite: Nursing 81 students must also enroll in Nursing 81L and 81P.

Four hours lecture (48 hours total per quarter).

Introduction to the foundation for entry into the field of nursing. Orem's model of self-care is used as the basis to study the health-illness continuum, the legal and ethical issues, safety principles, and the process of coping related to nursing practice. Goal-directed therapeutic communication techniques, principles of medical and surgical asepsis, and safe administration of medications by non-

parenteral routes will be introduced. The nursing process is also a basis for all client interactions. Beginning teaching/learning principles will be explored to assist the client toward self-care.

NURS 81L Fundamental Nursing (Non-Acute/Sub-Acute Care Clinical) 5 Units

Prerequisite: Admission into the De Anza College Nursing Program.

Co-requisite: Nursing 81L students must also enroll in Nursing 81 and 81P.

Fifteen hours laboratory (180 hours total per quarter).

Pass-No Pass (P-NP) course.

Clinical objectives will be met in the campus skills laboratory and in skilled and sub-acute nursing facilities to apply theory concepts. Fundamental nursing care concepts will be introduced. Students will have "hands on" experiences with all basic concepts presented.

NURS 81N CNA Transition (Non-Acute/Sub-Acute Care) 3 Units

Prerequisite: Admission into the De Anza College Nursing Program; current California Nursing Assistant Certification.

Co-requisite: Nursing 81N students must also enroll in Nursing 81NL and 81P.

Three hours lecture (36 hours total per quarter).

A transition course which provides a higher level entry into the nursing program for the Certified Nursing Assistant who has basic bedside nursing skills but lacks additional nursing requirements. The nursing process incorporating Orem's model of self-care, and teaching/learning principles are presented along with concepts of non-parenteral medication administration.

NURS 81NL CNA Transition (Non-Acute/Sub-Acute Care Clinical) 2 Units

Prerequisite: Admission into the De Anza College Nursing Program; current California Nursing Assistant Certification.

Co-requisite: Nursing 81N students must also enroll in Nursing 81N and 81P.

Six hours laboratory (72 hours total per quarter).

Pass-No Pass (P-NP) course.

A transition course which provides a higher level entry into the nursing program for the Certified Nursing Assistant who has basic bedside nursing skills but lacks additional nursing requirements. The nursing process and teaching/learning principles are applied along with administration of non-parenteral medications.

NURS 81P Pharmacology I 1 1/2 Units

(Open to non-nursing students with instructor approval.)

Prerequisite: Admission into the De Anza College Nursing Program.

Co-requisite: Nursing 81P students must also enroll in Nursing 81 and 81L (or Nursing 81N and 81NL).

One and one-half hours lecture (18 hours total per quarter).

Pharmacology I provides the basic foundation required for entry in the field of nursing. Legal/ethical issues and safety principles will be stressed throughout this course as an integral part of nursing practice. Beginning teaching/learning principles will be explored to assist the student to use effective techniques in self-care. The nursing process is used as a basis for all client interactions and Orem's model is integrated into this process.

NURS 82 Acute Fundamentals/Medical Surgical I 4 Units

Prerequisite: Nursing 81 and 81L (or 81N and 81NL); and Nursing 81P (all courses with a grade of C or better).

Co-requisite: Nursing 82 students must also enroll in Nursing 82L and 82P.

Four hours lecture (48 hours total per quarter).

Physical and psychosocial, universal, developmental, and health deviation self-care requisites are addressed by utilization of the nursing process and Orem's model of self-care. The student will be introduced to principles of fluid and electrolyte theory, and safe administration of medication by parenteral and intravenous routes. The preoperative, intraoperative, and postoperative stages of the surgical patient will be discussed. A variety of medical-surgical health deviations will also be presented which has a more surgical emphasis. The student will learn gender, physiological, ethnic, and age differences and similarities when discussing the health deviations and interventions.

NURS 82L Acute Fundamentals/Medical Surgical I (Clinical) 5 Units

Prerequisite: Nursing 81 and 81L (or Nursing 81N and 81NL); and Nursing 81P (all courses with a grade of C or better).

Co-requisite: Nursing 82L students must also enroll in Nursing 82 and 82P.

Fifteen hours laboratory (180 hours total per quarter).

Pass-No Pass (P-NP) course.

Physical and psychosocial, universal, developmental, and health deviation self-care requisites are addressed by utilization of the nursing process and Orem's model of self-care. Therapeutic communication techniques and teaching/learning principles are applied in assisting the medical/surgical client to move toward self-care. The student will be introduced to principles of safe administration of medications by parenteral routes, fluid and electrolyte theory application, and preparation and administration of intravenous infusions. Clinical assignments will focus on the perioperative client as well as medical health deviations discussed in theory class.

NURS 82P Pharmacology II 1 1/2 Units
(Open to non-nursing students with instructor approval.)
Prerequisite: Nursing 81 and 81L (or Nursing 81N and 81NL); and Nursing 81P (all courses with a grade of C or better).
Co-requisite: Nursing 82P students must also enroll in Nursing 82 and 82L.
One and one-half hours lecture (18 hours total per quarter).
 Pharmacology II provides the student a sound basis of pharmacology for entry into acute care nursing. Legal/ethical issues and safety principles will be stressed throughout this course as an integral part of nursing practice. Teaching/learning principles will be expanded to assist the student in effective techniques in self-care. Orem's model is used as a basis for all client interactions and is integrated into the nursing process. The student will also incorporate principles of medical and surgical asepsis in the safe administration of medications by non-parenteral and parenteral routes with emphasis on parenteral routes.

NURS 83 Perinatal Nursing 2 Units
Prerequisite: Nursing 82, 82L and 82P (all courses with a grade of C or better).
Co-requisite: Nursing 83 students must also enroll in Nursing 83L, 83P and 83PL.
Two hours lecture (24 hours total per quarter).
 Utilization of the nursing process and incorporation of Orem's model of self-care in meeting universal, developmental, and health deviation self-care requisites of perinatal client and family. Focus is on the physical and psychosocial needs of the perinatal client, including the needs of the family unit. Critical thinking and problem solving skills will be employed through group exercises and independent study with consideration for the Registered Nurse's specific scope of practice. Theory and clinical components are to be taken concurrently. Failure of either component requires both courses to be retaken.

NURS 83A Pediatric Nursing 2 Units
Prerequisite: Nursing 82, 82L and 82P (all courses with a grade of C or better).
Co-requisite: Nursing 83A students must also enroll in Nursing 83AL, 83P and 83PL.
Two hours lecture (24 hours total per quarter).
 Introduction to the nursing care of children. Orem's model of self-care will be used as a basis to study the health/illness continuum as it applies to children and their families. The nursing process will be integrated throughout the course as a primary tool for delivering nursing care to children. Theory and clinical must be taken concurrently. Failure of either requires both to be retaken. Critical thinking and problem solving skills will be employed through group exercises and independent study with consideration for the Registered Nurse's specific scope of practice.

NURS 83AL Pediatric Nursing (Clinical) 2 1/2 Units
Prerequisite: Nursing 82, 82L and 82P (all courses with a grade of C or better).
Co-requisite: Nursing 83AL students must also enroll in Nursing 83A, 83P and 83PL.
Seven and one-half hours laboratory (90 hours total per quarter).
Pass-No Pass (P-NP) course.
 Clinical objectives will be met in the campus skills laboratory, acute care facilities and numerous community agencies to apply theory concepts. Theory and clinical must be taken concurrently. Failure of either requires both to be retaken. Critical thinking and problem solving skills will be utilized in the application of theoretical concepts with consideration for the Registered Nurse's scope of practice.

NURS 83L Perinatal Nursing (Clinical) 2 1/2 Units
Prerequisite: Nursing 82, 82L and 82P (all courses with a grade of C or better).
Co-requisite: Nursing 83L students must also enroll in Nursing 83, 83P and 83PL.
Seven and one-half hours laboratory (90 hours total per quarter).
Pass-No Pass (P-NP) course.
 Clinical objectives will be achieved through student participation in nursing laboratory exercises, in acute hospital settings and in selected community-based women's health clinics. Assessment skills will be demonstrated by the instructor and practiced by the student before "hands-on" implementation in the various clinical settings. Theory and clinical components are to be taken concurrently. Failure of either component requires both courses to be retaken.

NURS 83P Pharmacology III 1 1/2 Units
(Open to non-nursing students with instructor approval.)
Prerequisite: Nursing 82, 82L and 82P (all courses with a grade of C or better).
Co-requisite: Nursing 83P students must also enroll in Nursing 83, 83A, 83AL, 83L and 83PL.
One and one-half hours lecture (18 hours total per quarter).
 Pharmacology III focuses on pharmacology related to the maternal and child population. Legal/ethical issues and safety principles will be stressed as an integral part of nursing practice. Teaching/learning principles with regard to medication administration will be included. Concepts on venipuncture will be presented.

NURS 83PL Pharmacology III Laboratory 1/2 Unit
Prerequisite: Nursing 82, 82L and 82P (all courses with a grade of C or better).
Co-requisite: Nursing 83PL students must also enroll in Nursing 83, 83A, 83AL, 83L and 83P.
One and one-half hours laboratory (18 hours total per quarter).
Pass-No Pass (P-NP) course.
 Pharmacology III Laboratory objectives will be met in the campus skills laboratory. The focus of the course is to provide the student pharmacology skill application with emphasis on maternal and child population. Practice in venipuncture and blood withdrawal will also be provided. Concepts of advanced vascular access, chemotherapy and parenteral nutrition will be addressed.

NURS 84 Medical/Surgical II (Care of the Older Adult) 4 Units
Prerequisite: Nursing 83, 83A, 83AL, 83L, 83P and 83PL (all courses with a grade of C or better).
Co-requisite: Nursing 84 students must also enroll in Nursing 84C and 84L.
Four hours lecture (48 hours total per quarter).
 Utilization of the nursing process within the framework of Orem's model of self-care in relation to the gerontological client and the client with chronic self-care deficits. Emphasis is on the study of the older adult who is experiencing the normal process of aging as well as the older adult experiencing a health deviation. Critical thinking and problem solving will be employed through group exercises and independent study with consideration for the Registered Nurse's scope of practice. This course and its clinical component (Nursing 84L) must be taken concurrently. Failure of either requires both to be retaken.

NURS 84C Critical Thinking in Nursing 2 Units
(Formerly Nursing 55C.)
Prerequisite: Nursing 83, 83A, 83AL, 83L, 83P and 83PL (all courses with a grade of C or better).
Co-requisite: Nursing 84C students must also enroll in Nursing 84 and 84L.
Two hours lecture (24 hours total per quarter).
 Designed to assist the nurse in developing critical thinking skills to facilitate decision making and effective clinical judgment. The nursing process will be utilized as a mechanism in developing coherent and logical thinking through the use of scenarios, debates, group and written assignments. Critical thinking and problem solving skills will be employed through group exercises and independent study with consideration for the Registered Nurse's specific scope of practice.

NURS 84L Medical/Surgical II (Care of the Older Adult) - Clinical 5 Units
Prerequisite: Nursing 83, 83A, 83AL, 83L, 83P and 83PL (all courses with a grade of C or better).
Co-requisite: Nursing 84L students must also enroll in Nursing 84 and 84C.
Fifteen hours laboratory (180 hours total per quarter).
Pass-No Pass (P-NP) course.
 Utilization of the nursing process within the framework of Orem's model of self-care in relation to the gerontologic client and the client with chronic self-care deficits. Emphasis is on the clinical nursing care of the older adult who is experiencing the normal process of aging as well as the older adult experiencing a health deviation. Clinical objectives are met through experiences in a variety of settings such as long-term care nursing facilities, medical-surgical units in acute care settings, adult community centers, and simulated laboratory settings. This course and its theory component (Nursing 84) must be taken concurrently. Failure of either requires both to be retaken. Critical thinking and problem solving skills will be utilized in the application of theoretical concepts with consideration for the Registered Nurse's specific scope of practice.

NURS 85 Advanced Medical-Surgical Concepts 2 Units
Prerequisite: Nursing 84, 84C and 84L.
Co-requisite: Nursing 85 students must also enroll in Nursing 85L.
Two hours lecture (24 hours total per quarter).
 Health deviations presented are encountered in the adult population. Topics include self-care deficits related to air, water, food, activity and rest, solitude/social interaction, elimination, prevention of hazards, and normalcy. Critical thinking and problem solving skills will be employed through group exercises and independent study with consideration for the Registered Nurse's specific scope of practice.

NURS 85A Psychiatric/Mental Health Nursing (Theory) 2 Units
Prerequisite: Nursing 84, 84C and 84L (all courses with a grade of C or better).
Co-requisite: Nursing 85A students must also enroll in Nursing 85AL.
Two hours lecture (24 hours total per quarter).
 Utilization of the nursing process in learning to meet clients' self-care deficits, with an emphasis on the biopsychosocial needs of individuals across the life span who experience acute or severe psychopathology. Theories of psychiatric/mental health nursing will be taught in concert with nursing care of individuals undergoing treatment in a variety of behavioral healthcare settings. Theory and clinical components must be taken concurrently. Failure of either component requires both courses to be retaken.

NURS 85AL Psychiatric/Mental Health Nursing (Clinical) 2 1/2 Units

Prerequisite: Nursing 84, 84C and 84L (all courses with a grade of C or better).
Co-requisite: Nursing 85AL students must also enroll in Nursing 85A.
 Seven and one-half hours laboratory (90 hours total per quarter).
 Pass-No Pass (P-NP) course.

Application of theories of psychiatric/mental health nursing. The nursing process is used in providing care for individuals undergoing treatment in a variety of behavioral health care settings including hospitals, clinics and community agencies. Clinical and theory (Nursing 85A) components must be taken concurrently. Failure of either component requires both courses to be retaken.

NURS 85L Advanced Medical-Surgical Clinical 2 1/2 Units

Prerequisite: Nursing 84, 84C and 84L (all courses with a grade of C or better).
Co-requisite: Nursing 85L students must also enroll in Nursing 85.
 Seven and one-half hours laboratory (90 hours total per quarter).
 Pass-No Pass (P-NP) course.

Application of concepts learned in the theory class will occur in acute care settings. Students will be working with clients demonstrating acute health deviations. The nursing process and Orem's conceptual model will be utilized in caring for unstable clients on a medical-surgical unit.

NURS 86 Leadership/Management in Nursing 2 Units

Prerequisite: Nursing 85, 85A, 85AL and 85L (all courses with a grade of C or better).

Co-requisite: Nursing 86 students must also enroll in Nursing 86L.
 Two hours lecture (24 hours total per quarter).

Leadership/Management in Nursing is a quarter long course designed to prepare the Registered Nursing student to function as a graduate nurse. Focus includes the managerial/leadership role, interdisciplinary practice, legal challenges of clinical practice, and trends within the nursing profession.

NURS 86L Leadership/Management Clinical Component 5 Units

Prerequisite: Nursing 85, 85A, 85AL, and 85L (all courses with a grade of C or better).

Co-requisite: Nursing 86L students must also enroll in Nursing 86.
 Fifteen hours laboratory (180 hours total per quarter).

Pass-No Pass (P-NP) course.

The clinical component to the Leadership/Management in Nursing course (to be taken concurrently). This course, the Prelicensure Preceptorship, is designed to prepare the student to function as a graduate nurse. Students will provide nursing care for patients under the guidance of a registered nurse working in the community, supervised by the faculty liaison. The student will work on the day, evening, or night shift, depending on the schedule of the assigned preceptor.

NURS 150 Nursing Laboratory Skills 1/2 Unit NURS 150W 1 Unit NURS 150X 1 1/2 Units NURS 150Y 2 Units

Co-requisite: Nursing 150, 150W, 150X and 150Y students must also be accepted into the De Anza College Associate Degree Nursing Program.
 Three hours laboratory for each unit of credit (36 hours total for each unit of credit per quarter).

(Any combination of Nursing 150, 150W, 150X and 150Y may be taken up to six times for credit.)

Pass-No Pass (P-NP) course.

Nursing skills practice in campus laboratory setting.

NURS 202 Review of Nursing Concepts 1/2 Unit NURS 202X 1 Unit NURS 202Y 2 Units NURS 202Z 3 Units

Credit course - Does not apply to De Anza Associate degree.

Prerequisite: Nursing 202, 202X, 202Y and 202Z students must also be a licensed or graduate nurse.

Three hours laboratory for each unit of credit (36 hours total for each unit of credit per quarter).

(Any combination of Nursing 202, 202X, 202Y and 202Z may be taken up to six times for credit.)

Pass-No Pass (P-NP) course.

Independent study course which is designed for the nurse who is seeking a review or update of information related to theoretical nursing concepts in the areas of gerontology, medical surgical, pediatric, perinatal, and psychiatric nursing. Critical thinking skills are employed in making decisions, and effective clinical judgments.

Nutrition

NUTR 10 Contemporary Nutrition 4 Units

(See general education pages for the requirement this course meets.)

Advisory: English Writing 1A or English as a Second Language 5.

Four hours lecture (48 hours total per quarter).

Introductory level nutrition. Relationship of nutrients to health and physical fitness. Physiological, cultural, psychological and economic influences on food choices. Evaluation of current nutritional issues and controversies.

NUTR 62 Nutrition and Athletic Performance 2 Units

Advisory: English Writing 1A or English as a Second Language 5.

Two hours lecture (24 hours total per quarter).

Principles of sports nutrition. Diet and nutrition concepts applicable to strength training, endurance activities and weight control. Use of dietary supplements as popular ergogenic aids.

NUTR 62G Dieting (Sifting Fact from Fiction) 1 Unit

Advisory: Nutrition 10 or 62.

One hour lecture (12 hours total per quarter).

Causes of obesity, evaluation of popular weight control diets and programs and effective methods of weight loss.

Paralegal Program

PARA 3 Concepts of Criminal Law (CP 2) 4 Units

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

(Also listed as Administration of Justice 3 and Political Science 13. Students may enroll in only one department for credit.)

Four hours lecture (48 hours total per quarter).

Historical development, philosophy of law and constitutional provisions; definitions, classification of crime, and their application to the system of administration of justice; legal research, study of case law, methodology, and concepts of law as a social force in a multicultural, multiethnic society.

PARA 11 Federal Courts and Constitutional Law 4 Units

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

(Also listed as Administration of Justice 11 and Political Science 11. Students may enroll in only one department for credit.)

Four hours lecture (48 hours total per quarter).

Federal court procedure and the impact of U.S. Constitutional law on federal and state law. Read and analyze the Constitution. Effect of U.S. Supreme Court cases on current constitutional interpretation.

PARA 18 Business Law I 5 Units

Advisory: English Writing 1A or English as a Second Language 5; Business 10.

(Also listed as Business 18. Students may enroll in either department, but not both, for credit.)

Five hours lecture (60 hours total per quarter).

The American legal system and laws applicable to business emphasizing contract, sales and agency laws, the impact of the legal system on business, and ethical considerations in the business environment.

PARA 25 Law and Social Change 4 Units

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

(Also listed as Administration of Justice 25 and Sociology 25. Students may enroll in only one department for credit.)

Four hours lecture (48 hours total per quarter).

Exploration of the use of law as an instrument for social change. Examination of the relationship between law and social change in cross-cultural settings. Analysis of legislation, case law, the process of conflict resolution and legal institutions as they relate to social change.

PARA 52A Legal Aspects of Real Estate 4 Units

Prerequisite: Real Estate 50.

(Also listed as Real Estate 52A. Students may enroll in either department, but not both, for credit.)

Four hours lecture (48 hours total per quarter).

California real property laws with emphasis on their practical application. Sources of real estate law; classes of property; fixtures; easements; estates or interest in real property; contracts of sale; covenants; conditions; and restrictions.

PARA 54	Youth and the Law	4 Units	PARA 86	Legal Analysis	4 Units
Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273. (Also listed as Administration of Justice 54 and Sociology 54. Students may enroll in only one department for credit.) Four hours lecture (48 hours total per quarter). A legal and sociological approach to understanding the causes of juvenile delinquency; an examination of race, culture and gender in juvenile delinquency; community responses to delinquency; organization, functions and jurisdiction of both social and legal agencies; processing and detention; case disposition; statutes and court procedures.			Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273. Four hours lecture (48 hours total per quarter). Principles of legal analysis with an emphasis on analysis of case law; detailed examination of written case opinions; methods of interpreting statutory law; development of legal arguments based on case law and statutory law.		
PARA 64	Paralegal Internship	1 Unit	PARA 87	Personal Injury and Tort Litigation	4 Units
PARA 64X		2 Units	Prerequisite: Paralegal 94 or 95, or professional experience appropriate to the topic.		
PARA 64Y		3 Units	Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.		
PARA 64Z		4 Units	Four hours lecture (48 hours total per quarter). Substantive tort law emphasizing concepts applicable to automobile accident cases, product liability cases, premises liability cases and malpractice cases; insurance law affecting personal injury litigation; basic medical terminology in personal injury litigation; procedural rules and practices related to personal injury litigation in California with an emphasis on the role of the paralegal.		
Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273. Four hours laboratory per unit of supervised internship in an authorized office or agency (48 hours total for each unit of credit per quarter). (Any combination of Paralegal 64, 64X, 64Y and 64Z may be taken up to six times, not to exceed 18 units, as long as the topics/projects are different each time.) Program of work experience and study in law, paralegal, or legal research under the supervision of the instructor and agency personnel.			PARA 88	The Paralegal and Professional Responsibility	2 Units
PARA 65W	Current Paralegal Topics	1 Unit	Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273. Two hours lecture (24 hours total per quarter). Examination of the role of paralegal in legal system. Ethical rules and guidelines governing legal professionals.		
PARA 65X		2 Units	PARA 89	Landlord Tenant Law	4 Units
PARA 65Y		3 Units	Prerequisite: Paralegal 94 or 95, or professional experience appropriate to the topic.		
PARA 65Z		4 Units	Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273. Four hours lecture (48 hours total per quarter). California law relating to creation of landlord/tenant relationship; legal rights of landlords; legal rights of tenants; eviction proceedings.		
Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273; background or experience appropriate to topic or consent of instructor. One hour lecture for each unit of credit (12 hours total for each unit of credit per quarter). (Any combination of Paralegal 65W, 65X, 65Y and 65Z may be taken up to six times, not to exceed 18 units, as long as the topics are different each time.) Current developments in the substantive law in an area of legal practice; current developments in procedural law in that area of legal practice; current developments in legal forms used in that area of legal practice; role of paralegal in substantive and procedural law in that area of legal practice.			PARA 90A	Legal Aspects of Evidence (CP 4)	4 Units
PARA 69	Paralegal Field Trips	1 1/2 Units	Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273. (Also listed as Administration of Justice 90A. Students may enroll in either department, but not both, for credit.) Four hours lecture (48 hours total per quarter). The origin, development, and content of the rules of evidence; kinds of degrees of evidence and rules governing admissibility of evidence.		
Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273. Three hours lecture-laboratory (36 hours total per quarter). A survey of current conditions in the paralegal field.			PARA 91A	California Family Law	4 Units
PARA 74A	Interviewing, Interrogation and Crisis Intervention	4 Units	Prerequisite: Paralegal 94 or 95, or professional experience appropriate to the topic.		
Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273. (Also listed as Administration of Justice 74A and Psychology 74A. Students may enroll in only one department for credit.) Four hours lecture (48 hours total per quarter). Theories, principles and strategies of tactical and interpersonal communication necessary to interview victims, witnesses, and suspects; crisis intervention strategies for victims and witnesses of crime; communication with individuals from diverse backgrounds with consideration to race, ethnicity, gender, age and special needs.			Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273. Four hours lecture (48 hours total per quarter). Substantive and procedural aspects of family law practice in California, with emphasis on dissolution procedures.		
PARA 75	Principles and Procedures of the Justice System	4 Units	PARA 92A	Partnerships and Corporations	4 Units
Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273. (Also listed as Administration of Justice 75 and Political Science 75. Students may enroll in only one department for credit.) Four hours lecture (48 hours total per quarter). Procedures followed by law enforcement and courts in criminal cases; constitutional principles governing those procedures.			Prerequisite: Paralegal 94 or 95, or professional experience appropriate to the topic.		
PARA 84	Trial Preparation	4 Units	Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273. Four hours lecture (48 hours total per quarter). Substantive and procedural law of basic business organizations, including sole proprietorships, partnerships, corporations and limited liability companies and partnerships.		
Prerequisite: Paralegal 94 or 95. Advisory: English Writing 1A or English as a Second Language 5; Paralegal 97A. Four hours lecture (48 hours total per quarter). Role of paralegal in preparing a case for trial including pretrial planning, evidence gathering and case analysis.			PARA 92B	Corporate Securities Regulations	4 Units
PARA 85	Intellectual Property Law	4 Units	Prerequisite: Paralegal 94 or 95, or professional experience appropriate to the topic.		
Prerequisite: Paralegal 94 or 95. Advisory: English Writing 1A or English as a Second Language 5. Four hours lecture (48 hours total per quarter). Overview of the law of intellectual property, including trade secrets, trademarks, patents and copyrights and examination of the role of the paralegal in this area.			Advisory: English Writing 1A or English as a Second Language 5. Four hours lecture (48 hours total per quarter). Substantive laws and procedural rules and forms related to California and federal corporate securities regulations.		
			PARA 93	Bankruptcy Law	4 Units
			Prerequisite: Paralegal 94 or 95, or professional experience appropriate to the topic.		
			Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273. Four hours lecture (48 hours total per quarter). Substantive law of bankruptcy; legal rights of debtors and creditors, procedural rules and forms for bankruptcy; practical applications.		

PARA 94 Introduction to California Law 4 Units

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Four hours lecture (48 hours total per quarter).

The legal structures and legal procedures existing within the state of California; examination of the roles and duties of legal personnel in California with an emphasis on the role and duty of paralegals.

PARA 95 Overview of American Law 4 Units

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

(Also listed as Administration of Justice 95 and Political Science 95. Students may enroll in only one department for credit.)

Four hours lecture (48 hours total per quarter).

Overview of the major substantive areas of American law: Agency, contracts, constitutional law, corporations, criminal law, family law, property, torts, wills and estates.

PARA 96A Introduction to Legal Research and Writing 4 Units

Prerequisite: Paralegal 94 or 95, or professional experience appropriate to the topic.

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Four hours lecture (48 hours total per quarter).

Organization and publication of American and California law; using print and on-line legal resources to find the law; using the law to analyze legal issues arising from factual disputes; writing a memorandum of law utilizing acceptable legal citation format.

PARA 96B Advanced Legal Research and Writing 4 Units

Prerequisite: Paralegal 96A.

Advisory: English Writing 1A or English as a Second Language 5.

Four hours lecture (48 hours total per quarter).

Researching complex legal disputes utilizing both print and on-line resources; drafting a memorandum of points and authorities.

PARA 96C Computer Assisted Legal Research and Investigation 4 Units

Prerequisite: Paralegal 94 or 95, or professional experience appropriate to the topic.

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Four hours lecture (48 hours total per quarter).

Use the Internet to find legal resources and conduct legal investigation; introduction to the fee-based legal resources such as LEXIS and Westlaw.

PARA 97A Civil Litigation Procedures 4 Units

Prerequisite: Paralegal 94 or 95, or professional experience appropriate to the topic.

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Four hours lecture (48 hours total per quarter).

Substantive and procedural rules and forms for handling federal and California state civil cases through the pleading and motion phases of litigation.

PARA 97B Advanced Civil Litigation Procedures 4 Units

Prerequisite: Paralegal 94 or 95; Paralegal 97A; or professional experience appropriate to the topic.

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Four hours lecture (48 hours total per quarter).

Selected pretrial, discovery and post-trial procedures for paralegals; document preparation; judicial council form use; case analysis.

PARA 98 Drafting Wills and Trusts 4 Units

Prerequisite: Paralegal 94 or 95, or professional experience appropriate to the topic.

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Four hours lecture (48 hours total per quarter).

Substantive, procedural and drafting principles of wills and trusts and estate planning; role of paralegal in drafting wills and trusts, inventorying estates, and collecting data.

PARA 99 California Probate Law and Procedures 4 Units

Prerequisite: Paralegal 94 or 95, or professional experience appropriate to the topic.

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Four hours lecture (48 hours total per quarter).

California probate substantive law and procedures including state and federal estate tax requirements, conservatorships and community property death transfers.

Peace Officer Standards and Training

POST 53A Basic Police Academy 33 Units

Prerequisite or Co-requisite: (1) Peace Officer Standards and Training approved pre-entry English and mathematical skills assessment exam provided by the academy; (2) medical clearance by licensed physician; (3) criminal history clearance pursuant to penal code.

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273; Mathematics 210 or equivalent.

536 hours lecture per quarter, 344 hours laboratory per quarter (880 hours total per quarter).

This 880-hour course of training is certified by the Commission on Peace Officer Standards and Training to meet the statutory basic training requirements. Course requires a significant commitment in time and dedication. Requires both academic and physical skills in addition to extra motivation to endure the intensive agenda.

POST 54A Basic Academy (Modular, Level III-Part 2) 5 Units

Prerequisite: Current valid PC-832 Arrest Methods & PC-832 Firearms

Certificates; POST approved pre-entry English skills assessment exam provided by academy; criminal history clearance as provided by the Penal Code.

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Nine and one-half hours lecture, one and one-third hours laboratory (132 hours total per quarter).

This course combined with the required PC 832 certificate meets POST requirements for a Level III Reserve Police Officer. The Level III certificate is a prerequisite for Level II and I.

POST 54B Basic Academy (Modular, Level II) 10 1/2 Units

Prerequisite: Current valid PC-832 Arrest Methods & PC-832 Firearms

Certificates; completion of Level III, Parts I & II.

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273; Mathematics 210 or equivalent.

Seventeen hours lecture, six hours laboratory (280 hours total per quarter).

This course combined with the required PC 832 certificates meet POST requirements for a Level II Reserve Police Officer. The Level II certificate is a prerequisite for Level I.

POST 54C Basic Academy (Modular, Level I) 19 1/2 Units

Prerequisite: Current valid PC-832 Arrest Methods & PC-832 Firearms

Certificates; completion of Level III and Level II; POST approved comprehensive exam provided by academy; medical examination/clearance by a licensed physician.

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Three and one-sixth hours lecture, forty-one hours laboratory (536 hours total per quarter).

This course combined with the required PC 832 certificates meet POST requirements for a Level I Reserve Police Officer.

POST 69 Field Training Program 3 Units

POST 69P 6 Units

POST 69Q 9 Units

POST 69R 12 Units

POST 69S 15 Units

POST 69T 18 Units

POST 69U 21 Units

POST 69V 24 Units

POST 69W 27 Units

POST 69X 30 Units

POST 69Y 33 Units

POST 69Z 36 Units

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273; Mathematics 210 or equivalent.

80 - 960 hours laboratory per quarter.

(May be repeated for credit.)

Pass-No Pass (P-NP) course.

A program certified to Law Enforcement Agencies in the State of California. The program is designed to certify the completion of specifications described in the "Field Training Officer Guide" from the Commission on Peace Officer Standards and Training. Students will be assigned in a patrol car, one-on-one with a certified Field Training Officer. The program introduces a newly assigned officer to the personnel procedures, policies and purposes of the individual law enforcement agency and provides the initial formal and informal training specific to the agency and the day-to-day duties of its officers.

POST 100 Correctional Officer Basic 6 Units

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273; Mathematics 210 or equivalent. Ten hours lecture, three and one-third hours laboratory (160 hours total per quarter).

This core training course is designed to meet the State Board of Corrections regulations for entry level training of correctional officers for adult institutions. Presents the lecture and practical application skills and knowledge to work in local adult jail facilities.

POST 101 Juvenile Counselor Core Course 6 Units

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273; Mathematics 210 or equivalent. Ten hours lecture, three and one-third hours laboratory (160 hours total per quarter).

This course is designed to meet the California Board of Corrections requirements for entry level training of juvenile institutions staff.

POST 102 Probation Officer Core Course 7 1/2 Units

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273; Mathematics 210 or equivalent. Fourteen hours lecture, three and one-fourth hours laboratory (208 hours total per quarter).

Provides the trainee with the basic concepts, tools, skills, etc. necessary to perform the job of probation officer within the State of California and prepare the graduate for the job. Certified by the State Board of Corrections, Training and Standards for Corrections (STC). Testing on the various topics covered will be both written and practical in nature. This course includes 208 hours of training.

POST 103 Supervisor's Update 3 Units

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273; Mathematics 210 or equivalent. Two and one-half hours lecture, four hours laboratory (80 hours total per quarter).

This 80 hour course includes values and ethics, role identification, leadership styles, assertive leadership, legal/liability issues, employee performance appraisal, counseling, discipline, employee relations, administrative support, press relations, planning and organizing, communications, report review, investigations, stress and the transition. This course will be updated regularly for currency according to Standards and Training for Corrections.

POST 104 Laws of Arrest and Firearms 1 1/2 Units (832 P.C.)

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273; Mathematics 210 or equivalent. One hour lecture, two and one-half hours laboratory (40 hours total per quarter). Principles, methods and laws of arrest as required by State of California Peace Officer Standards and Training.

POST 104B PC 932 (Firearms) 1 Unit

Prerequisite: Criminal history clearance as provided by Penal Code.

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273; Mathematics 210 or equivalent. Two-thirds hour lecture, one and one-third hour laboratory (24 hours total per quarter).

(May be taken up to three times for credit.)

Pass-No Pass (P-NP) course.

This course is the basic POST certified 24-hour firearms training with qualification certificate upon completion.

POST 105 Probation Annual Training 7 1/2 Units

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273; Mathematics 210 or equivalent. Fourteen hours lecture, three and one-fourth hours laboratory (208 hours total per quarter).

This course fulfills the California State Board of Corrections annual training requirement for eligible staff to remain current and to upgrade knowledge and skills. Content reflects advisory board, state standards, and agency education and training objectives for probation officers, adult institutions, and juvenile institutions staff.

POST 110 Basic Public Safety Dispatch 4 1/2 Units

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273; Mathematics 210 or equivalent. Two and one-half hours lecture, seven and one-half hours laboratory (120 hours total per quarter).

This course is designed to provide dispatchers with the necessary skills and knowledge to perform their job. Curriculum includes computer systems, familiarization, legal updates, communication techniques, etc. It may contain Peace Officer Standards and Training curriculum, as well as local training mandates.

**POST 111 Public Safety Dispatch (Update) 1 1/2 Units
POST 111W 4 1/2 Units**

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273; Mathematics 210 or equivalent. POST 111 is ten hours lecture, thirty hours laboratory (40 hours total for the quarter). POST 111W is thirty hours lecture, ninety hours laboratory (120 hours total for the quarter).

This course is designed to provide experienced dispatchers with the necessary skills and knowledge to remain current in job skills and knowledge. Curriculum includes computer systems familiarization, legal updates, communication techniques, etc. It may contain Peace Officer Standards and Training curriculum as well as local training mandates.

POST 112 Emergency Medical Dispatch 1 1/2 Units

Prerequisite or Co-requisite: Current CPR certification.

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273; Mathematics 210 or equivalent. Two and one-half hours lecture, one hour laboratory (40 hours total per quarter).

This 40 hour course will supplement other dispatch courses and is designed to familiarize dispatchers with the overall emergency medical system, provide them with the skills to effectively conduct a medical interrogation and communicate pre-arrival instructions to a caller reporting a medical emergency.

POST 113 Communication Training Officer 1 1/2 Units

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273; Mathematics 210 or equivalent. Two and one-half hours lecture, one hour laboratory (40 hours total per quarter).

This course is designed to educate communications trainers about their responsibilities and roles in training new dispatchers. The course includes topics such as role of the trainer, elements of instruction, legal aspects and liability, evaluations and documentation, critical incident stress, and practical exercises.

POST 114 Basic Fire Dispatch 3 Units

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273; Mathematics 210 or equivalent. One and two-thirds hours lecture, five hours laboratory (80 hours total per quarter).

This 80 hour course is designed to provide basic fire dispatcher training for entry level and/or experienced dispatchers.

**POST 115 Fire Dispatch Update 1 1/2 Units
POST 115W 3 Units**

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273; Mathematics 210 or equivalent. POST 115 is ten hours lecture, thirty hours laboratory (40 hours total for the quarter). POST 115W is twenty hours lecture, sixty hours laboratory (80 hours total for the quarter).

Designed to provide experienced fire dispatchers with the skills and knowledge necessary to maintain job skills. It completes and updates requirements for basic fire dispatch course.

POST 116 Non-Lethal Chemical Agents Training 1/3 Unit

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273; Mathematics 210 or equivalent. Six hours lecture, two hours laboratory (eight hours total per quarter).

Includes types of non-lethal chemical agents, methods of dispersal and delivery, safety, first aid, tactics, use of the gas mask and applicable penal code sections. This course is a Peace Officers Standards and Training certified course which is designed to provide sufficient training for use of tear gas and other chemical agents.

**POST 117 Advanced Officer Training 3/4 Unit
POST 117W 1 1/2 Units**

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273; Mathematics 210 or equivalent. POST 117 is twenty hours lecture for the quarter. POST 117W is forty hours lecture for the quarter.

(May be taken for credit once every two years.)

Designed to provide a mechanism whereby agencies may insure that the necessary new skills required of police officers have been provided and that previously learned skills are maintained and reinforced. It will enable the agency to provide a means of correcting deficiencies while satisfying state teaching requirements. New information and changes in the criminal justice system affecting police officers and, when necessary, a review of previously acquired materials will be provided. This course satisfies advanced officer training requirements.

POST 121 Community Service Officer 3 Units

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273; Mathematics 210 or equivalent. Six hours lecture, one hour laboratory (80 hours total per quarter).

This 80 hour course provides basic information for newly hired community service officers. These employees provide a variety of law enforcement related services, freeing sworn officers for tasks requiring higher level skills and training. The course covers criminal law and procedures, patrol procedures, community relations, traffic enforcement and investigation, investigating procedures, first aid/CPR, report writing, and hazardous materials response.

POST 122 Field Training Officer 1 1/2 Units

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273; Mathematics 210 or equivalent. Two and one-third hours lecture, one hour laboratory (40 hours total per quarter). This course is primarily designed for police officers that have been or will be accepted into field training officer programs in their respective law enforcement agencies. This course has certification from the California Commission on Peace Officer Standards and Training and follows the guidelines and standards under 832.3 of the Penal Code.

POST 123 Field Evidence Technician 3 Units

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273; Mathematics 210 or equivalent. Four hours lecture, two and one-half hours laboratory (80 hours total per quarter).

This is an 80 hour in-service course which provides training for law enforcement investigators at a crime scene where evidence needs to be identified, processed, collected and/or safeguarded. The student will be trained in evidence photography, crime scene sketching and appropriate reporting.

POST 124A Background Investigations 3/4 Unit

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273; Mathematics 210 or equivalent. One-half hour lecture, two and one-half hours laboratory (36 hours total per quarter).

A Peace Officer Standards and Training certified course designed to develop in law enforcement officers the skills to be an accomplished background investigator. This course includes the fundamentals of background investigation, interviewing, the use of psychological screening, polygraphs, legal aspects of background investigation, and verbal/nonverbal communication.

POST 124B Drug Investigation (11550) 1 Unit

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273; Mathematics 210 or equivalent. Two hours lecture (24 hours total per quarter).

This is an 11550 Health and Safety Code course covering restricted dangerous drugs: opiates, cocaine, PCP, etc. This course is designed for law enforcement officers desiring to upgrade, refine, or develop an expertise in the field recognition, identification and apprehension of individuals under the influence of narcotics and dangerous drugs. Included is informant development and District Attorney legal update.

POST 125 Police Officer Supervisor 3 Units

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273; Mathematics 210 or equivalent. Six and one-third hours lecture, one-third hour laboratory (80 hours total per quarter).

This course emphasizes the basic elements of supervision and how they may be applied to police work. Essentials of good leadership and understanding of the basic needs of human beings as well as ways to stimulate subordinates to better performance are the contents of the course. Designed for new sergeants emphasizing the basic elements of supervision, teacher training, conference leadership, and related law enforcement subjects as outlined by Peace Officer Standards and Training.

POST 206N Special Topics in POST 1/4 Unit**POST 206P 1/2 Unit****POST 206Q 3/4 Unit****POST 206R 1 Unit****POST 206S 1 1/2 Units****POST 206T 2 Units****POST 206U 2 1/2 Units****POST 206V 3 Units****POST 206W 3 1/2 Units****POST 206X 4 Units****POST 206Y 4 1/2 Units****POST 206Z 5 Units**

(Formerly Peace Officer Standards and Training 106N.)

Credit course - Does not apply to De Anza Associate degree.

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273. Two hours lecture-laboratory for each unit of credit (24 hours total for each unit of credit per quarter).

(Any combination of Peace Officer Standards and Training 206N-Z may be taken up to six times, not to exceed 18 units, as long as the topics are different each time.)

Pass-No Pass (P-NP) course.

In-service training curriculum for personnel attending annual updates, recertifications, remediation, and assorted legal skills related seminars mandated by the Commission on Peace Officer Standards and Training on an ongoing basis.

POST 207 Skills and Knowledge Module Training 1/4 Unit**POST 207M 1/2 Unit****POST 207N 3/4 Unit****POST 207P 1 Unit****POST 207Q 1 1/4 Units****POST 207R 1 1/2 Units****POST 207S 1 3/4 Units****POST 207T 2 Units****POST 207U 2 1/4 Units****POST 207V 2 1/2 Units****POST 207W 2 3/4 Units****POST 207X 3 Units****POST 207Y 3 1/4 Units****POST 207Z 3 1/2 Units**

(Formerly Peace Officer Standards and Training 107.)

Credit course - Does not apply to De Anza Associate degree.

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273; Mathematics 210 or equivalent. Two hours lecture-laboratory for each unit of credit (24 hours total for each unit of credit per quarter).

(Each module may be taken up to three times for credit, every two years.)

Pass-No Pass (P-NP) course.

In-service training curriculum for personnel attending annual updates, recertifications, remediation, and assorted legal skills related seminars.

Persian**PERS 1 Elementary Persian (First Quarter) 5 Units**

(Formerly Persian 91.)

(See general education pages for the requirement this course meets.)

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Five hours lecture (60 hours total per quarter).

Introduction to the language and cultures of the Persian-speaking world. Basic speaking, listening, reading, and writing of Persian will be introduced and practiced within a cultural framework and will be the primary language of instruction. Language laboratory practice to reinforce pronunciation, grammar, syntax, and conversation.

PERS 2 Elementary Persian (Second Quarter) 5 Units

(Formerly Persian 92.)

(See general education pages for the requirement this course meets.)

Prerequisite: Persian 1 (equivalent to one year of high school Persian) or equivalent.

Five hours lecture (60 hours total per quarter).

Further development of material presented in Persian 1. Continuation of introduction to the language and cultures of the Persian-speaking states. Basic speaking, listening, reading and writing of Persian will be introduced and practiced within a cultural framework. Emphasis will be on language as an expression of culture with special interest in communication skill-building. Language laboratory practice to reinforce pronunciation, grammar, and syntax.

PERS 3 Elementary Persian (Third Quarter) 5 Units

(Formerly Persian 93.)

(See general education pages for the requirement this course meets.)

Prerequisite: Persian 2 (equivalent to two years of high school Persian) or equivalent.

Five hours lecture (60 hours total per quarter).

Further development of material presented in Persian 1 and 2 with further introduction to the language and cultures of the Persian-speaking countries. Basic speaking, listening, reading and writing of Persian introduced and practiced within a cultural framework. Language laboratory practice to reinforce pronunciation, grammar, and syntax.

PERS 4 Intermediate Persian (First Quarter) 5 Units

(Formerly Persian 94.)

(See general education pages for the requirement this course meets.)

Prerequisite: Persian 3 (equivalent to three years of high school Persian) or equivalent.

Five hours lecture (60 hours total per quarter).

Reading and discussion of texts dealing with the literature, arts, geography, history and culture of the Persian-speaking world. Review of the linguistic functions and grammar structures of introductory (elementary-level) Persian. Development of reading, writing, speaking and listening skills at the first intermediate level.

PERS 5 Intermediate Persian (Second Quarter) 5 Units

(Formerly Persian 95.)

(See general education pages for the requirement this course meets.)

Prerequisite: Persian 4 (equivalent to four years of high school Persian) or equivalent.

Five hours lecture (60 hours total per quarter).

Reading and discussion of texts dealing with the literature, arts, geography, history and culture of the Persian-speaking world. Review of the linguistic functions and grammar structures of introductory (elementary-level) Persian. Continued development of reading, writing, speaking and listening skills at the intermediate level.

PERS 6 Intermediate Persian (Third Quarter) 5 Units

(Formerly Persian 96.)

(See general education pages for the requirement this course meets.)

Prerequisite: Persian 5 or equivalent.

Five hours lecture (60 hours total per quarter).

Reading and discussion of texts dealing with the literature, arts, geography, history and culture of the Persian-speaking world. Review of the linguistic functions and grammar structures of first-year Persian. Development of reading, writing, speaking and listening skills at the third-intermediate level.

Philosophy

PHIL 1 Knowledge and Reality 4 Units

(See general education pages for the requirement this course meets.)

Advisory: English Writing 1A or English as a Second Language 5.

Four hours lecture (48 hours total per quarter).

A multicultural examination of philosophy as love of speculative and practical wisdom. What philosophers throughout the world have thought about reality and what constitutes our knowing of reality will be the major focus of the course.

PHIL 2 Social and Political Philosophy 4 Units

(See general education pages for the requirement this course meets.)

Advisory: English Writing 1A or English as a Second Language 5.

Four hours lecture (48 hours total per quarter).

Examines fundamental issues and methods in social and political philosophy in their historical and cultural contexts. Issues include rights, equality, justifications for hierarchy, political systems (such as democracy, dictatorship, and collectivism), analysis of sources of inequality and domination as well as practices that challenge inequality domination.

PHIL 3 Critical Thinking and Writing 5 Units

(See general education pages for the requirement this course meets.)

Prerequisite: English Writing 1A.

Five hours lecture (60 hours total per quarter).

An introduction to the study of argumentation, critical evaluation, the structure of language in written composition, and research techniques. Practical applications of critical thinking skills in everyday situations such as problem solving and evaluation of arguments will also be explored. A major research paper is also required for the course.

PHIL 4 Critical Thinking 4 Units

(See general education pages for the requirement this course meets.)

Advisory: English Writing 1A or English as a Second Language 5.

Four hours lecture (48 hours total per quarter).

An introduction to the study of argumentation, critical evaluation, and the use of language in interpretation of diverse forms of discourse. Explores practical applications of critical thinking skills in everyday situations such as problem solving and evaluation of arguments.

PHIL 7 Deductive Logic 4 Units

(See general education pages for the requirement this course meets.)

Advisory: English Writing 1A or English as a Second Language 5.

Four hours lecture (48 hours total per quarter).

Study of the concepts and methods of deductive logic, developing and using logical symbols, formal proof techniques, and focusing on sentential and predicate logic.

PHIL 8 Ethics 4 Units

(See general education pages for the requirement this course meets.)

Advisory: English Writing 1A or English as a Second Language 5.

Four hours lecture (48 hours total per quarter).

An integrated and multicultural study of Ethical philosophy. Emphasis will be given to topics such as moral reflection, moral reasoning, moral decision making, and action. The course examines many approaches to Ethics (both Eastern and Western). Readings will be selected from moral philosophy, history, psychology, socio-cultural criticism, ethnic studies, and other sources (such as film and literature).

PHIL 9 Philosophy of Science 4 Units

(See general education pages for the requirement this course meets.)

Advisory: English Writing 1A or English as a Second Language 5.

Four hours lecture (48 hours total per quarter).

Examines central issues in the philosophy of science. Issues will include the aims of science, scientific explanation, the nature of scientific theories, rationality and the development of science, the relationship between natural and social sciences, the influences of social phenomena such as race, gender, and culture on science, and the influences of science on society.

PHIL 10 Philosophy of Democracy 4 Units

(See general education pages for the requirement this course meets.)

Advisory: English Writing 1A or English as a Second Language 5.

Four hours lecture (48 hours total per quarter).

An introduction to the philosophy of democracy. A cross-cultural and historical examination of ideas about democracy and how democracy works.

PHIL 14A Indian Philosophy 4 Units

(See general education pages for the requirement this course meets.)

Advisory: English Writing 1A or English as a Second Language 5.

(Also listed as Humanities 14A. Students may enroll in either department, but not both, for credit.)

Four hours lecture (48 hours total per quarter).

A study of the development of philosophical thought in India. Primary emphasis is given to the orthodox darshanas, especially Jaina.

PHIL 14B Chinese Philosophy 4 Units

(See general education pages for the requirement this course meets.)

Advisory: English Writing 1A or English as a Second Language 5.

(Also listed as Humanities 14B. Students may enroll in either department, but not both, for credit.)

Four hours lecture (48 hours total per quarter).

An introduction to classical Chinese philosophies (roughly the philosophies that flourished in China prior to unification in 221 B.C.E.), emphasizing Confucianism, Moism, Yangism, The Logicians, Han Fei Tzu, and the schools and texts that get antecedently labeled "Daoism." In addition to the classical period of Chinese philosophy, some attention will be given to the evolution of philosophical thought in China, such as the introduction of Buddhism and other elements (as represented, for example, by Wang Yangming). Finally, philosophical examination of contemporary China will be considered.

PHIL 14C Japanese Philosophy 4 Units

(See general education pages for the requirement this course meets.)

Advisory: English Writing 1A or English as a Second Language 5.

(Also listed as Humanities 14C. Students may enroll in either department, but not both, for credit.)

Four hours lecture (48 hours total per quarter).

A study of philosophical thought in Japan including Zen Buddhism, Shinto, and contemporary thinkers.

PHIL 17 Critical Consciousness and Social Change 4 Units

(See general education pages for the requirement this course meets.)

Advisory: English Writing 1A or English as a Second Language 5.

(Also listed as Intercultural Studies 17. Students may enroll in either department, but not both, for credit.)

Four hours lecture (48 hours total per quarter).

An exploration of issues related to social change including the development of ways of thinking that promote social change. Students will read classical and contemporary authors on movements for social change, strategies for organizing, and the development of consciousness.

PHIL 20A History of Western Philosophy: Ancient Greece 4 Units

(See general education pages for the requirement this course meets.)

Advisory: English Writing 1A or English as a Second Language 5.

Four hours lecture (48 hours total per quarter).

Examination of the problems of knowledge, reality, truth, value, agency, morality, and wisdom in Greek philosophy from Thales to Aristotle. Emphasis will be given to applications of Greek thinking to social, aesthetic, cultural, gender, historical, and religious issues.

PHIL 20B History of Western Philosophy: 1400 - 1800 4 Units

(See general education pages for the requirement this course meets.)

Advisory: English Writing 1A or English as a Second Language 5.

Four hours lecture (48 hours total per quarter).

An introduction to the major philosophers of the Western tradition from the Renaissance through the early modern period. Examination of the problems of knowledge, reality, truth, freedom, agency, morality and value theory in figures from Descartes to Kant, including marginalized figures and groups, such as Elizabeth of Bohemia.

PHIL 20C**History of Western Philosophy:
1800 - the Present****4 Units**

(See general education pages for the requirement this course meets.)
 Advisory: English Writing 1A or English as a Second Language 5.
 Four hours lecture (48 hours total per quarter).

An introduction to the major philosophers of the Western tradition from 1900 to the present with an emphasis on major philosophers and movements that examine problems of knowledge, reality, truth, value, and human existence, as well as their applications to the sciences and other fields, such as cultural studies.

PHIL 24**Philosophy of Religion****4 Units**

(See general education pages for the requirement this course meets.)
 Advisory: English Writing 1A or English as a Second Language 5.
 Four hours lecture (48 hours total per quarter).

An introduction to Philosophy of Religion investigating the dimensions of religious experience and life under the scope of philosophy. Examines types of religions and the religious dimensions of life expressed in many cultures from many different historical periods throughout the world. Analyzes the emergence of modern philosophy of religion and its major issues, as well as current issues in contemporary philosophy of religion, including such issues as: the cognitive component in religious experience, religion and feminism, religious fundamentalism, pre-axial and axial religions, the religious attitude in religious secularity, and attitudes toward both philosophy and religion in a variety of cultural contexts.

PHIL 30**Introduction to Existentialism****4 Units**

(See general education pages for the requirement this course meets.)
 Advisory: English Writing 1A or English as a Second Language 5.
 Four hours lecture (48 hours total per quarter).

Examination of the problems of knowledge, reality, truth, and value, freedom, and agency in existential thinkers. Emphasis will be given to existential applications to social, aesthetic, cultural, gender, historical, and religious issues.

PHIL 49**Women and Philosophy****4 Units**

(Formerly Philosophy 55.)

(See general education pages for the requirement this course meets.)
 Advisory: English Writing 1A or English as a Second Language 5.

(Also listed as Women's Studies 49. Students may enroll in either department, but not both, for credit.)

Four hours lecture (48 hours total per quarter).

Examination of feminist theory and philosophy produced by a diverse range of women and investigation of the ways that understandings of the relations between the sexes have influenced the work of philosophers from different cultures.

Photography

PHTG 1**Basic Photography****3 Units**

Advisory: English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263; Mathematics 210 or equivalent.

Two hours lecture, three hours laboratory (60 hours total per quarter).

Introduction to black and white photography. Overview of the 35mm, single lens reflex, camera operating system. Basic understanding of film processing, printing and finishing. Development of critical thinking skills to analyze historical, cultural, conceptual, and practical aspects of a medium used worldwide. Preparatory for further work in photography including digital imaging.

PHTG 2**Intermediate Photography****3 Units**

Prerequisite: Photography 1.

Two hours lecture, three hours laboratory (60 hours total per quarter).

Intermediate black and white photography. Overview of the medium format camera and continued use of the 35mm camera. Demonstration of basic 4x5 camera principles. Introduction to studio portraiture and basic studio practices. Continued development of critical thinking skills to analyze historical, cultural, conceptual, and practical aspects of a medium used worldwide. Preparatory for further work in photography including digital imaging.

PHTG 3**Advanced Photography****3 Units**

Prerequisite: Photography 2.

Two hours lecture, three hours laboratory (60 hours total per quarter).

Advanced black and white photography. Introduction to large format photography. Pre-visualization of the image and the application of the Zone System including archival print processing. Process and print technically and well-conceived images as part of a final portfolio. Refined development of critical thinking skills to analyze historical, cultural, conceptual and practical aspects of a medium used worldwide. Preparatory for further work in photography including digital imaging.

PHTG 4**Introduction to Digital
Photography****3 Units**

(Formerly Photography 64.)

Advisory: English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263.

Two hours lecture, three hours laboratory (60 hours total per quarter).

An introduction to digital photography and digital imaging processes. Gain proficiency in the use of a digital camera and explore the digital darkroom using Adobe Lightroom. Develop skills in digital print output for both fine art and commercial applications.

Gain knowledge of issues in contemporary photography and develop an ability to analyze and discuss photographic imagery. Basic, beginning photography and wet darkroom experience recommended.

PHTG 5**Intermediate Digital
Photography****3 Units**

(Formerly Photography 65.)

Advisory: English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263.

Two hours lecture, three hours laboratory (60 hours total per quarter).

Further study of digital photography and digital imaging processes. Gain greater control over the quality of your digital images through shooting RAW (unprocessed, digital negatives), organization and development through Lightroom, and/or image editing with Photoshop. Create a work flow for producing quality prints. Discuss and analyze current trends in photography. Prior experience with a digital camera, Lightroom and/or Photoshop skills required or the equivalent.

PHTG 7**Exploring Visual Expression****4 Units**

(See general education pages for the requirement this course meets.)

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Four hours lecture (48 hours total per quarter).

Exploring visual expression through the photographic medium. Understanding of basic principles of perception, light, color, composition and visual awareness. Development of "critical thinking" skills to express aesthetic, intellectual and emotional concerns. Instruction on the use of film and/or digital cameras, lenses, and other creative controls of photography.

PHTG 20**History of Early Photography
from Its Beginnings to 1925****4 Units**

(See general education pages for the requirement this course meets.)

Advisory: English Writing 1A or English as a Second Language 5.

Four hours lecture (48 hours total per quarter).

The development of amateur photography, major artistic styles, a comparison of photography and painting, drawing, and other visual arts will be explored. The course also will assess photography's impact on world communication, social change, and the interpretation and analysis of visual reality.

PHTG 21**Contemporary Trends in
Photography****4 Units**

(See general education pages for the requirement this course meets.)

Advisory: English Writing 1A or English as a Second Language 5.

Four hours lecture (48 hours total per quarter).

A comprehensive introduction to contemporary trends, styles and applications of photography starting in 1925. An examination of photography's broad impact as a cultural, visual and social force including the diversity of 20th and 21st Century photographic movements.

PHTG 52**Photography Production Lab****1 Unit****PHTG 52X****2 Units**

Prerequisite: Photography 1 or 4 (may be taken concurrently).

Three hours laboratory for each unit of credit (36 hours total for each unit of credit per quarter).

(Any combination of Photography 52 and 52X may be taken up to six times for credit.)

Supervised use of photographic studio, darkrooms and/or photographic computer lab space.

PHTG 54**Experimental Photography****3 Units**

Prerequisite: Photography 1.

Two hours lecture, three hours laboratory (60 hours total per quarter).

(May be taken up to three times for credit.)

Introduction to experimental and nontraditional photographic processes through the use of analog and digital photography. View both historical and contemporary approaches to camera and darkroom use in the creation of photographic imagery. Make enlarged negatives, create cyanotype and VanDyke brown prints, tone and handcolor images, and use digital imaging to emulate these and other traditional processes. Produce an engaging and expressive collection of images.

PHTG 57A**Commercial Lighting I****3 Units**

Prerequisite: Photography 2 or 5.

Two hours lecture, three hours laboratory (60 hours total per quarter).

(May be taken up to three times for credit.)

Basic lighting skills. Provide an understanding of the use of artificial light sources and associated equipment in a studio environment. Learn controls of lighting ratios, contrast, texture and form, reflection, and exposure. Produce photographic images relevant to the techniques and production methods covered.

PHTG 57B**Commercial Lighting II****3 Units**

Prerequisite: Photography 57A.

Two hours lecture, three hours laboratory (60 hours total per quarter).

(May be taken up to three times for credit.)

Intermediate/advanced lighting skills. Learn complex lighting for reflective surfaces, commercial portraits, and exterior and interior architectural shooting. Produce photographic images relevant to the techniques and production methods covered. Gain an understanding of commercial studio organization and operation.

PHTG 58A Photographic Photoshop I 3 Units

Advisory: English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263; Mathematics 210 or equivalent.

Two hours lecture, three hours laboratory (60 hours total per quarter).

(May be repeated three times for a total of 9 units for credit.)

Introduction to digital imaging using the application Photoshop. Overview of Macintosh operating system. Basic understanding of image capture, input, storage, and output. Use of specifically photographic methods and controls to create and manage imagery in an all digital environment. The development of critical thinking skills to analyze diverse cultural, intellectual, philosophical, ethical and aesthetic concerns of the photographic medium as a part of new technologies.

PHTG 58B Photographic Photoshop II 3 Units

Advisory: Photography 58A; English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263; Mathematics 210 or equivalent.

Two hours lecture, three hours laboratory (60 hours total per quarter).

(May be repeated three times for a total of 9 units for credit.)

Refinement of digital imaging skills using the application Photoshop. Learn channel mixing, advanced layering, and masking techniques. Understanding of color management, optimization of the toolbox and an introduction to large format printing. Use of specifically photographic methods and controls to create and manage imagery in an all-digital environment. Development of critical thinking skills to analyze diverse cultural, intellectual, philosophical, ethical and aesthetic concerns of the digital photograph.

PHTG 60 Using a Digital Camera 2 Units

(Formerly Photography 58.)

Requisite/Advisory: None.

Four hours lecture-laboratory (48 hours total per quarter).

An online introduction to the fundamentals of digital cameras; basic camera types, controls, storage, image size, and display will be covered. Technical and compositional exercises will enhance the understanding of digital cameras and techniques covered.

PHTG 77 Special Projects in Photography 2 Units

(Formerly Photography 59.)

Prerequisite: Consent of instructor and division dean.

Six hours laboratory (72 hours total per quarter).

(May be taken two times for credit as long as the projects are different each time.)

Individual projects in creative, technical, or applied photography by written arrangement with the instructor. A specific area is explored in depth and quality.

PHTG 78X Special Topics in Photographic Studies 1 Unit**PHTG 78Y 2 Units****PHTG 78Z 3 Units**

Advisory: English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263.

One hour lecture for each unit of credit (12 hours total for each unit of credit per quarter).

(Any combination of Photography 78X, 78Y and 78Z may be taken up to six times, not to exceed 18 units, as long as the topics are different each time.)

In depth study of influential photographer, genre, movement, photographic method, technique, or historical period. The topic studied is specific, specialized and different for each section of the course for example: visiting artist/photographer, study of women in photography, cultural diversity within the medium, documentary work, portraiture, landscape genres, modern, postmodern movements, new directions, new equipment and/or software, business practices, or special techniques (see course note in the quarterly schedule of classes).

Physical Education

P E 1A Softball 1/2 Unit**P E 1AX 1 Unit**

(See general education pages for the requirement this course meets.)

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Two hours laboratory for the one-half unit course (24 hours total per quarter);

three hours laboratory for the one unit course (36 hours total per quarter).

(Any combination of Physical Education 1A and 1AX may be taken up to six times for credit.)

An introduction to the discipline of Physical Education through the sport of softball. Includes a global and historical examination of the sport, rules, equipment, facilities, etiquette, and beginning skills and strategy as related to playing the game. Fundamental skills and rules pertaining to softball. Analysis of basic strategy in a game situation and the different outcomes resulting from specific player actions will be covered. Basic exercise physiology, nutrition, flexibility and strength concepts to improve physical condition will be included.

P E 1H Team Sport - Basketball**P E 1HX****1/2 Unit
1 Unit**

(See general education pages for the requirement this course meets.)

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Two hours laboratory for the one-half unit course (24 hours total per quarter); three hours laboratory for the one unit course (36 hours total per quarter).

(Any combination of Physical Education 1H and 1HX may be taken up to six times for credit.)

An introduction to the discipline of Physical Education through team sport basketball. Activities include individual and team strategies and techniques required for competitive games. A brief historical examination of significant national and international contributions to the development of styles of play will be presented. The impact of culture and gender on amateur and professional levels of competition will also be analyzed. Skills emphasized will enable students to participate in formal and informal basketball activities. Students will recognize basketball needs associated with physiology, nutrition, flexibility, and strength concepts in order to improve level of skill. Instructors will motivate and encourage students to practice and adapt skills to physical ability, age, strength, and gender. Major emphasis on tournament format participation.

P E 1L Lacrosse**P E 1LX****1/2 Unit
1 Unit**

(Formerly Physical Education 99L and 99LX respectively.)

(See general education pages for the requirement this course meets.)

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Two hours laboratory for the one-half unit course (24 hours total per quarter); three hours laboratory for the one unit course (36 hours total per quarter).

(Any combination of Physical Education 1L and 1LX may be taken up to six times for credit.)

An introduction to the discipline of Physical Education through the sport of lacrosse. Emphasis is placed upon the rules of the game, the skills and strategies of the sport. Includes a global and historical examination of lacrosse, its equipment, facilities, etiquette and contributions of both male and female experts and players. Basic exercise physiology, nutrition, flexibility, muscular strength and endurance techniques relative to lacrosse will be discussed.

P E 2A Beginning Karate**P E 2AX****1/2 Unit
1 Unit**

(See general education pages for the requirement this course meets.)

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Two hours laboratory for the one-half unit course (24 hours total per quarter); three hours laboratory for the one unit course (36 hours total per quarter).

(Any combination of Physical Education 2A, 2AX, 2B and 2BX may be taken up to six times for credit for the family of courses.)

An introduction to the discipline of physical education through the discipline of karate. Includes, a global and historical examination of the sport, rules, equipment, and etiquette. Students will analyze and demonstrate the application of traditional Japanese Shotokan karate techniques including blocking, punching, kicking striking and stances. Students will strive to understand and apply basic exercise physiology, nutrition, flexibility and strength concepts in an effort to improve their physical condition. Considerations for the variables that occur due to age, gender and physical conditions will be covered.

P E 2B Intermediate Karate**P E 2BX****1/2 Unit
1 Unit**

(See general education pages for the requirement this course meets.)

Prerequisite: Physical Education 2A or 2AX, or approval of instructor.

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Two hours laboratory for the one-half unit course (24 hours total per quarter); three hours laboratory for the one unit course (36 hours total per quarter).

(Any combination of Physical Education 2A, 2AX, 2B and 2BX may be taken up to six times for credit for the family of courses.)

An introduction to the discipline of physical education through the discipline of karate. Includes a global and historical examination of the sport, rules, equipment, and etiquette of the sport. Intermediate karate skills and techniques of Japanese karate will be covered including blocking, punching, kicking, stances and individual evasive movement, and group interaction. Students will strive to understand and apply basic exercise physiology, nutrition, flexibility, and strength concepts in an effort to improve their physical condition in order to train at a more advanced level, with consideration for the variables that occur due to age, gender and physical conditions.

P E 2K Aikido**P E 2KX****1/2 Unit
1 Unit**

(See general education pages for the requirement this course meets.)

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Two hours laboratory for the one-half unit course (24 hours total per quarter); three hours laboratory for the one unit course (36 hours total per quarter).

(Any combination of Physical Education 2K, 2KX, 2L and 2LX may be taken up to six times for credit for the family of courses.)

An introduction to the discipline of Physical Education through the study of Martial Arts in the form of Aikido. Includes a global and historical examination, key philosophical concepts of the Aikido tradition and the evolution of Aikido to its present form. Students will practice simple Aikido techniques for the mind, body and spirit that can easily be incorporated into daily life. Rotation movements, mindfulness, breath awareness, and relaxation techniques will be covered. The course will incorporate basic exercise physiology, nutrition, strength development, flexibility and meditation techniques as related to Aikido and health.

P E 2L Intermediate Aikido 1/2 Unit
P E 2LX 1 Unit

(See general education pages for the requirement this course meets.)

Prerequisite: Physical Education 2K, 2KX, or technical proficiency suitable to the course level.

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Two hours laboratory for the one-half unit course (24 hours total per quarter);

three hours laboratory for the one unit course (36 hours total per quarter).

(Any combination of Physical Education 2K, 2KX, 2L and 2LX may be taken up to six times for credit for the family of courses.)

Further examination of the discipline of Physical Education through the study of Martial Arts in the form of Aikido. Students will practice Intermediate Aikido techniques for the mind, body and spirit that can easily be incorporated into daily life. Rotation movements, mindfulness, breath awareness, and relaxation techniques will be covered. The course will incorporate exercise physiology, nutrition, strength development, flexibility and meditation techniques as related to Aikido and health.

P E 2P Pilates Mat Exercise 1/2 Unit
P E 2PX 1 Unit

(See general education pages for the requirement this course meets.)

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Two hours laboratory for the one-half unit course (24 hours total per quarter);

three hours laboratory for the one unit course (36 hours total per quarter).

(Any combination of Physical Education 2P and 2PX may be taken up to six times for credit.)

An introduction to physical education through the study of Pilates. Includes a global and historical perspective, and key philosophical concepts of the Pilates method. Students will practice mat techniques and the use of equipment to improve the mind, and body. Includes basic exercise physiology concepts, nutrition, strength development, flexibility, and the six principles of Pilates.

P E 2Q Tai Chi 1/2 Unit
P E 2QX 1 Unit

(See general education pages for the requirement this course meets.)

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Two hours laboratory for the one-half unit course (24 hours total per quarter);

three hours laboratory for the one unit course (36 hours total per quarter).

(Any combination of Physical Education 2Q, 2QX, 2R and 2RX may be taken up to six times for credit for the family of courses.)

An introduction to the discipline of Physical Education through Tai Chi exercises including well-known short forms consisting of 24 postures. Principles of unity, centering, balance, alignment, breath and mind intent, "yin and yang" relationships and the development of Chi. Benefits of Tai Chi exercise relative to age, gender and environmental conditions. Basic exercise physiology, nutrition, fundamentals of strength development, flexibility and meditation concepts as related to Tai Chi and "health and wellness". A global and historical examination of the Taoist philosophy and the development of various forms of Tai Chi.

P E 2R Intermediate Tai Chi 1/2 Unit
P E 2RX 1 Unit

(See general education pages for the requirement this course meets.)

Prerequisite: Physical Education 2Q or 2QX, or comparable level, or permission of instructor.

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Two hours laboratory for the one-half unit course (24 hours total per quarter);

three hours laboratory for the one unit course (36 hours total per quarter).

(Any combination of Physical Education 2Q, 2QX, 2R and 2RX may be taken up to six times for credit for the family of courses.)

Further examination of Physical Education through the ancient exercise of Tai Chi. Includes the well-known short forms consisting of 24 or 36 postures. Complete and polish movements of the 24 Tai Chi set, self-defense applications, "push-hands," and sparring will be performed. Review and embody principles of unity, centering, balance, alignment, breath and mind intent, "yin and yang" relationships and the development of Tai Chi at an intermediate level. Benefits of Tai Chi exercise relative to age, gender and environmental conditions will be studied. The course will incorporate basic exercise physiology, nutrition, strength development, flexibility and meditation techniques as related to Tai Chi and health.

P E 2S Cardio Tai-Chi 1/2 Unit
P E 2SX 1 Unit

(Formerly Physical Education 92S and 92SX respectively.)

(See general education pages for the requirement this course meets.)

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Two hours laboratory for the one-half unit course (24 hours total per quarter);

three hours laboratory for the one unit course (36 hours total per quarter).

(Any combination of Physical Education 2S and 2SX may be taken up to six times for credit.)

An introduction to physical education through the principles of cardio tai-chi. The student will gain cardiovascular fitness and health through this course. Includes an historical and global examination of the sport, orientation to aerobic exercise, tai-chi principles, cardio tai-chi basic movements, cardio tai-chi routines, partner drills and principles of self-defense. Principles of fitness and nutrition as they relate to cardio tai-chi will be discussed.

P E 2Y Yoga 1/2 Unit
P E 2YX 1 Unit

(See general education pages for the requirement this course meets.)

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Two hours laboratory for the one-half unit course (24 hours total per quarter);

three hours laboratory for the one unit course (36 hours total per quarter).

(Any combination of Physical Education 2Y and 2YX may be taken up to six times for credit.)

An introduction to the discipline of Physical Education through the study of yoga including a historical examination and key philosophical concepts of the yoga tradition and the evolution of yoga throughout the ages. Students will practice simple yoga poses for the mind, body, mindfulness, breath awareness, and relaxation techniques will be covered.

P E 3 Indoor Cycling 1/2 Unit
P E 3X 1 Unit

(Formerly Physical Education 50 and 50X respectively.)

(See general education pages for the requirement this course meets.)

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Two hours laboratory for the one-half unit course (24 hours total per quarter);

three hours laboratory for the one unit course (36 hours total per quarter).

(Any combination of Physical Education 3 and 3X may be taken up to six times for credit.)

An introduction to the discipline of Physical Education through indoor cycling. Includes an historical examination of indoor cycling/spinning. The cycling program is an individually paced, noncompetitive, group training program designed for all riders and all fitness levels. Cycling is an exercise performed on a stationary racing bicycle and is performed to music. Training is fast paced and is open to anyone who is interested in losing body fat, improving cycling techniques, and wants to improve cardio-respiration.

P E 3AX Outdoor Cycling 1 Unit
P E 3AY 1 1/2 Units

(Formerly Physical Education 93A and 93AX respectively.)

(See general education pages for the requirement this course meets.)

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Three hours laboratory for the one unit course (36 hours total per quarter); four

and one-half hours laboratory for the one and one-half unit course (54 hours total per quarter).

(Any combination of Physical Education 3AX and 3AY may be taken up to six times for credit.)

An introduction to physical education through outdoor cycling for fitness. Students will be engaged in Bay Area bike rides utilizing the modern day bicycle as a means of fitness and recreation. Several weekend rides will feature safety, efficiency and local bicycle trails unique to the San Francisco Bay Area. Nutrition, cardiorespiratory endurance, strength development, gender differences, and age related conditioning workouts will be covered.

P E 3G Self-Defense 1/2 Unit
P E 3GX 1 Unit

(See general education pages for the requirement this course meets.)

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Two hours laboratory for the one-half unit course (24 hours total per quarter);

three hours laboratory for the one unit course (36 hours total per quarter).

(Any combination of Physical Education 3G and 3GX may be taken up to six times for credit.)

An introduction to the discipline of Physical Education through personal self-defense. The course includes a historical and global examination of self-defense. It will provide the student with a sense of awareness and practical applications that will maximize the student's strength, endurance, and skill relative to gender, body build and strength. Recognition of potential problems, attack prevention/avoidance, escape strategies, counterattack, kidnapping, and abduction will be discussed. Basic exercise physiology, nutrition, fundamentals of strength development, and flexibility.

P E 4 P E 4X	Strength Development	1/2 Unit 1 Unit	P E 6F P E 6FX	Deep Water Running	1/2 Unit 1 Unit
(See general education pages for the requirement this course meets.) Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273. Two hours laboratory for the one-half unit course (24 hours total per quarter); three hours laboratory for the one unit course (36 hours total per quarter). (Any combination of Physical Education 4 and 4X may be taken up to six times for credit.) An introduction to the discipline of Physical Education through strength training. Includes etiquette, safety and techniques of strength development, with a brief historical examination of how strength training has changed due to the influence of individuals, and their style of lifting. The development of skill and adaptations based on the physical ability, age and gender of the individual student will be encouraged. Students will review and apply basic exercise physiology, nutrition, flexibility and strength concepts to improve their physical condition.			(See general education pages for the requirement this course meets.) Prerequisite: Physical Education 26C or 26CX. Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273. Two hours laboratory for the one-half unit course (24 hours total per quarter); three hours laboratory for the one unit course (36 hours total per quarter). (Any combination of Physical Education 6F and 6FX may be taken up to six times for credit.) An introduction to the discipline of Physical Education through deep water running including an historical and global examination of deep water running for fitness and rehabilitation. Students will improve fitness through a program of cardiovascular endurance, strength development and flexibility using water based exercise routines.		
P E 4XX	High Intensity Strength Development for Athletes	1 Unit	P E 6G P E 6GX	Aerobic Swimming	1/2 Unit 1 Unit
Prerequisite: Enrollment in Intercollegiate athletics. Three hours laboratory (36 hours total per quarter). (May be taken up to six times for credit.) Specific rigorous total body single set high intensity three day per week program. Based on the principles of high intensity lifting. Emphasizing concentric and eccentric failure. Utilizing nautilus and free weight apparatus.			(See general education pages for the requirement this course meets.) Prerequisite: Physical Education 26C, 26CX, or permission of instructor. Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273. Two hours laboratory for the one-half unit course (24 hours total per quarter); three hours laboratory for the one unit course (36 hours total per quarter). (Any combination of Physical Education 6G and 6GX may be taken up to six times for credit.) An introduction to the discipline of Physical Education through aerobic swimming. Cardiovascular conditioning for the swimmer who is proficient at the intermediate level. Includes global and historical development of swimming as a fitness activity. Students will review training methods, measurements, safety, individual program design, exercise physiology, nutrition appropriate to swimming, intermediate strokes and turns.		
P E 5AX P E 5AY	Spin/Swim Fitness	1 Unit 1 1/2 Units	P E 6H P E 6HX	Aerobic Power Walking	1/2 Unit 1 Unit
(Formerly Physical Education 95A and 95AX respectively.) (See general education pages for the requirement this course meets.) Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273. Three hours laboratory for the one unit course (36 hours total per quarter); four and one-half hours laboratory for the one and one-half unit course (54 hours total per quarter). (Any combination of Physical Education 5AX and 5AY may be taken up to six times for credit.) An introduction to physical education through a combination of indoor cycling and swimming. A brief historical look at indoor cycling and swimming will be included. The course is a fast paced course for competitive or non-competitive students interested in health and fitness. Emphasis will be placed on cycling techniques, freestyle stroke refinements, nutrition, cardiorespiratory endurance, strength development, gender differences, and age related conditioning workouts.			(See general education pages for the requirement this course meets.) Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273. Two hours laboratory for the one-half unit course (24 hours total per quarter); three hours laboratory for the one unit course (36 hours total per quarter). (Any combination of Physical Education 6H and 6HX may be taken up to six times for credit.) An introduction to the discipline of Physical Education through aerobic power walking. Includes an historical and global examination of walking for health and fitness. Students will improve fitness through a progressive program of walking various distances, routes and at variable speeds. The importance of strength development, and flexibility exercises, adaptations of the exercises to individual physical abilities and principles of fitness and nutrition will be discussed.		
P E 6B P E 6BX	Cross Training	1/2 Unit 1 Unit	P E 6K P E 6KX	Cardio Kick	1/2 Unit 1 Unit
(See general education pages for the requirement this course meets.) Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273. Two hours laboratory for the one-half unit course (24 hours total per quarter); three hours laboratory for the one unit course (36 hours total per quarter). (Any combination of Physical Education 6B and 6BX may be taken up to six times for credit.) An introduction to the discipline of Physical Education including an historical examination of cross training. Cardiovascular fitness will be increased through circuit and interval training. Agility, speed, strength, and flexibility will be enhanced through the utilization of a variety of fitness equipment. Strength, cardiovascular, flexibility and body composition assessments will be included in course activities. Students will participate indoors as well as outdoors.			(See general education pages for the requirement this course meets.) Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273. Two hours laboratory for the one-half unit course (24 hours total per quarter); three hours laboratory for the one unit course (36 hours total per quarter). (Any combination of Physical Education 6K and 6KX may be taken up to six times for credit.) An introduction to the discipline of Physical Education through the activity of cardio kick. Dynamic kickboxing techniques are used to provide a level of conditioning for both the aerobic and anaerobic systems. The freestyle interval format combines boxing and kicking drills specific to martial arts and kickboxing integrating the element of mind/body, readiness, visualization, and reaction. Students will participate in a safe, modifiable, program to improve overall fitness, agility, balance, strength, and endurance. An historical examination of cardio kick for fitness and its roots in the sports of kickboxing, boxing, and martial arts will be included.		
P E 6D P E 6DX	Body Sculpting	1/2 Unit 1 Unit	P E 6Q P E 6QX	Lo Impact Aerobic Rhythms	1/2 Unit 1 Unit
(Formerly Physical Education 52 and 52X respectively.) (See general education pages for the requirement this course meets.) Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273. Two hours laboratory for the one-half unit course (24 hours total per quarter); three hours laboratory for the one unit course (36 hours total per quarter). (Any combination of Physical Education 6D and 6DX may be taken up to six times for credit.) An introduction to the discipline of Physical Education. It includes an historical examination of core strengthening. Body sculpt conditioning is an integrated approach that focuses on developing the muscles of the entire body. Through body sculpting the student will achieve ultimate fitness by focusing on a program of strength, balance, agility and flexibility. Concentration will be on muscles of the entire body. Resistance training, medicine balls, stability balls, and the body bar will be used in conjunction with proper breathing, posture, and muscle awareness.			(See general education pages for the requirement this course meets.) Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273. Two hours laboratory for the one-half unit course (24 hours total per quarter); three hours laboratory for the one unit course (36 hours total per quarter). (Any combination of Physical Education 6Q, 6QX, 6R, 6RX, 6S and 6SX may be taken up to six times for credit for the family of courses.) An introduction to the discipline of Physical Education through aerobic exercise utilizing lo impact techniques. Students will learn fundamental patterns and routines to popular music accompaniment. A global and historical review of the evolution of aerobic exercise, exercise trends for men, and women will be covered. Students will review and apply basic exercise physiology, nutrition and wellness concepts related to cardiovascular exercise relative to age, gender, or physical limitations.		

P E 6R **Hi-Lo Impact Aerobic Rhythms** **1/2 Unit**
P E 6RX **1 Unit**

(See general education pages for the requirement this course meets.)

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Two hours laboratory for the one-half unit course (24 hours total per quarter);

three hours laboratory for the one unit course (36 hours total per quarter).

(Any combination of Physical Education 6Q, 6QX, 6R, 6RX, 6S and 6SX may be taken up to six times for credit for the family of courses.)

An introduction to the discipline of Physical Education using hi-lo aerobic exercise to promote cardiorespiratory endurance through a variety of movements. Students will learn fundamental patterns and routines with popular music accompaniment. Global and historical review of aerobic exercise trends for men, women and athletes will be discussed. Students will review and apply basic exercise physiology, nutrition and wellness concepts related to cardiovascular exercise, strength development and flexibility depending on age, gender, and physical limitations.

P E 6S **Step Aerobics** **1/2 Unit**
P E 6SX **1 Unit**

(See general education pages for the requirement this course meets.)

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Two hours laboratory for the one-half unit course (24 hours total per quarter);

three hours laboratory for the one unit course (36 hours total per quarter).

(Any combination of Physical Education 6Q, 6QX, 6R, 6RX, 6S and 6SX may be taken up to six times for credit for the family of courses.)

An introduction to the discipline of Physical Education through cardiovascular/aerobic exercise utilizing a step system to promote cardiorespiratory endurance through a variety of movements. Students will learn fundamental patterns and routines with popular music accompaniment. Global and historical review of the evolution of aerobic exercise, exercise trends for men, women and athletes will be discussed. Students will review and apply basic exercise physiology, nutrition and wellness concepts related to cardiovascular exercise, strength development and flexibility relative to age, gender, or physical limitations.

P E 6U **Fit Camp** **1/2 Unit**
P E 6UX **1 Unit**
P E 6UY **1 1/2 Units**

(See general education pages for the requirement this course meets.)

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Two hours laboratory for the one-half unit course (24 hours total per quarter);

three hours laboratory for the one unit course (36 hours total per quarter); four and one-half hours for the one and one-half unit course (54 hours total per quarter).

(Any combination Physical Education 6U, 6UX and 6UY may be taken up to six times for credit.)

An introduction to the discipline of Physical Education through fit camp. An historical examination of fit camp for fitness which includes a look at the U.S. Military boot camp regimen. The student will strive for ultimate fitness through a program of cardiovascular exercise including circuit and intervals, balance, agility, speed, strength, and flexibility training both indoors and outdoors. Strength, cardiovascular fitness, flexibility and body composition assessments will occur throughout the term.

P E 6V **Core Conditioning** **1/2 Unit**
P E 6VX **1 Unit**

(See general education pages for the requirement this course meets.)

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Two hours laboratory for the one-half unit course (24 hours total per quarter);

three hours laboratory for the one unit course (36 hours total per quarter).

(Any combination of Physical Education 6V and 6VX may be taken up to six times for credit.)

An introduction to the discipline of Physical Education through core conditioning which is an integrated fitness approach that focuses on developing the stabilization muscles of the center of the body. Included is an historical examination of core strengthening. Concentration will be on muscles of the torso, back, hips, inner and outer thighs, chest and abdominals. Resistance training, medicine balls, stability balls, and the body bar will be used in conjunction with breathing, posture, and muscle awareness.

P E 8 **Total Fitness** **1/2 Unit**
P E 8X **1 Unit**

(See general education pages for the requirement this course meets.)

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Two hours laboratory for the one-half unit course (24 hours total per quarter);

three hours laboratory for the one unit course (36 hours total per quarter).

(Any combination of Physical Education 8 and 8X may be taken up to six times for credit.)

Introduction to the discipline of Physical Education through total fitness, including an historical and global examination of total fitness and conditioning. Students will improve fitness through a program of cardiovascular exercise, agility, speed, flexibility, and resistance training using both indoor and outdoor facilities. Fitness assessments will occur throughout the term.

P E 9 **Cardiovascular and Strength** **1/2 Unit**
Training

P E 9X **1 Unit**
P E 9Y **1 1/2 Units**

(See general education pages for the requirement this course meets.)

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Two hours laboratory for the one-half unit course (24 hours total per quarter); three hours laboratory for the one unit course (36 hours total per quarter); four and one-half hours for the one and one-half unit course (54 hours total per quarter).

(Any combination of Physical Education 9, 9X and 9Y may be taken up to six times for credit.)

An introduction to the discipline of Physical Education through cardiovascular and strength training. Includes rules, equipment, facilities, etiquette, safety and technique of cardiovascular and strength training. Includes a brief historical examination of how cardiovascular and strength training has changed due to the influence of individuals and their countries. Students will review and apply basic exercise physiology, nutrition, and flexibility concepts to improve their physical condition.

P E 10 **Multi-Sport Fitness** **1/2 Unit**
P E 10X **1 Unit**
P E 10Y **1 1/2 Units**

(See general education pages for the requirement this course meets.)

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Two hours laboratory for the one-half unit course (24 hours total per quarter);

three hours laboratory for the one unit course (36 hours total per quarter); four and one-half hours for the one and one-half unit course (54 hours total per quarter).

(Any combination of Physical Education 10, 10X and 10Y may be taken up to six times for credit.)

An introduction to the discipline of Physical Education through multi-sport fitness. An historical examination of multi-sport training methodology to include triathlon training. The student will strive for ultimate fitness through a program of cardiovascular exercise including interval training, strengthening exercises, and flexibility training both indoors and outdoors with an emphasis on aquatic fitness. Strength, cardiovascular fitness, and flexibility will be monitored and assessed throughout the term.

P E 11 **Stretching** **1/2 Unit**
P E 11X **1 Unit**

(See general education pages for the requirement this course meets.)

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Two hours laboratory for the one-half unit course (24 hours total per quarter);

three hours laboratory for the one unit course (36 hours total per quarter).

(Any combination of Physical Education 11 and 11X may be taken up to six times for credit.)

An introduction to the discipline of Physical Education through stretching. Techniques for improving flexibility including passive and active stretches, Pilates exercises, partner stretches, yoga poses and the use of equipment will be included. Emphasis will be placed upon flexibility, balance, spatial awareness and safety during stretching. Technique modifications to account for physical limitations will be emphasized. A brief examination of the evolution of the various forms of stretching reflecting cultural differences and diversity, exercise physiology, nutrition and wellness concepts related to total fitness, age, gender, disabilities and/or genetics will be covered.

P E 12 **Aqua Aerobics** **1/2 Unit**
P E 12X **1 Unit**

(See general education pages for the requirement this course meets.)

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Two hours laboratory for the one-half unit course (24 hours total per quarter);

three hours laboratory for the one unit course (36 hours total per quarter).

(Any combination of Physical Education 12 and 12X may be taken up to six times for credit.)

An introduction to the discipline of Physical Education through aqua aerobics. This course uses dynamic aerobic exercise techniques to provide a level of conditioning for both the aerobic and anaerobic energy systems. A variety of aerobic type movements performed in land based programs such as running, jumping and skipping will be performed. Students will strive for ultimate fitness through a complete program of cardiovascular exercise, strength development, and flexibility. An historical examination of aqua aerobics for fitness, rehabilitation, and play will be included.

P E 13A Beginning Badminton 1/2 Unit
P E 13AX 1 Unit

(See general education pages for the requirement this course meets.)

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Two hours laboratory for the one-half unit course (24 hours total per quarter); three hours laboratory for the one unit course (36 hours total per quarter).

(Any combination of Physical Education 13A, 13AX, 13B, 13BX, 13C, 13CX, 13T and 13TX may be taken up to six times for credit for the family of courses.)

An introduction to the discipline of Physical Education through badminton. Includes a global and historical examination of the sport, rules, equipment, facilities, etiquette, and basic strokes in beginning level badminton. Basic exercise physiology, nutrition, flexibility and strength concepts to improve physical condition will be discussed. The skills portion of the course will encourage an understanding of how to adapt the game and conventional techniques to age, gender and physical conditions.

P E 13B Intermediate Badminton 1/2 Unit
P E 13BX 1 Unit

(See general education pages for the requirement this course meets.)

Prerequisite: Physical Education 13A or 13AX; or permission of instructor.

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Two hours laboratory for the one-half unit course (24 hours total per quarter); three hours laboratory for the one unit course (36 hours total per quarter).

(Any combination of Physical Education 13A, 13AX, 13B, 13BX, 13C, 13CX, 13T and 13TX may be taken up to six times for credit for the family of courses.)

An introduction to the discipline of Physical Education through the sport of badminton. Includes a global and historical examination of the sport, rules, equipment, facilities and etiquette. Basic exercise physiology, nutrition, fundamentals of strength development and flexibility relative to playing at an intermediate level will be included. The course will encourage an understanding of how to adapt game strategies and conventional techniques to one's needs and abilities based on age, gender and environmental conditions, personal strengths and weaknesses.

P E 13C Advanced Badminton 1/2 Unit
P E 13CX 1 Unit

(See general education pages for the requirement this course meets.)

Prerequisite: Physical Education 13B or 13BX; or consent of the instructor.

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Two hours laboratory for the one-half unit course (24 hours total per quarter); three hours laboratory for the one unit course (36 hours total per quarter).

(Any combination of Physical Education 13A, 13AX, 13B, 13BX, 13C, 13CX, 13T and 13TX may be taken up to six times for credit for the family of courses.)

Further examination of Physical Education through the sport of badminton. Includes an in depth study of the sport at an advanced level, rules, equipment, facilities, etiquette, and advanced skills and strategy as related to competitive play. Basic exercise physiology, nutrition, flexibility and strength concepts to improve physical condition in order to play at a more advanced level will be covered. The skills portion of the course will encourage an understanding of how to adapt the game and conventional techniques to age, gender and physical conditions.

P E 13T Tournament Badminton 1/2 Unit
P E 13TX 1 Unit

(See general education pages for the requirement this course meets.)

Prerequisite: Physical Education 13C or 13CX.

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Two hours laboratory for the one-half unit course (24 hours total per quarter); three hours laboratory for the one unit course (36 hours total per quarter).

(Any combination of Physical Education 13A, 13AX, 13B, 13BX, 13C, 13CX, 13T and 13TX may be taken up to six times for credit for the family of courses.)

Further examination of Physical Education through the sport of badminton. Includes an in depth study of advanced skills, the rules, equipment, facilities, etiquette, and strategy as related to tournament play. Basic exercise physiology, nutrition, flexibility and strength concepts to improve physical condition in order to play at a more advanced level will be covered. The skills portion of the course will encourage an understanding of how to adapt the game and competitive techniques to age, gender and physical conditions.

P E 14A Beginning Fencing 1/2 Unit
P E 14AX 1 Unit

(See general education pages for the requirement this course meets.)

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Two hours laboratory for the one-half unit course (24 hours total per quarter); three hours laboratory for the one unit course (36 hours total per quarter).

(Any combination of Physical Education 14A, 14AX, 14B and 14BX may be taken up to six times for credit for the family of courses.)

Fundamental techniques/skills utilizing the French foil. Students will learn the rules and regulations governing fencing competition. Fundamental exercise physiology, physiological benefits, nutrition and wellness concepts related to total fitness and individual variations due to age, gender, and/or genetics will be explored. A brief

historical examination of the various styles of this international sport, its roots, famous male, female and junior champions of the Olympic, PANAM, and World Championships.

P E 14B Intermediate Fencing 1/2 Unit
P E 14BX 1 Unit

(See general education pages for the requirement this course meets.)

Prerequisite: Physical Education 14A or 14AX, or comparable course.

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Two hours laboratory for the one-half unit course (24 hours total per quarter); three hours laboratory for the one unit course (36 hours total per quarter).

(Any combination of Physical Education 14A, 14AX, 14B and 14BX may be taken up to six times for credit for the family of courses.)

Further examination of Physical Education through the sport of fencing with a French foil. Application of more complex combinations of blade and footwork that build upon the skills taught are transferable for use of the epee and sabre. The physiological benefits of fencing, fundamental exercise physiology, nutrition and wellness concepts related to total fitness and individual variations due to age, gender, and genetics will be explored.

P E 15 Beginning Bowling 1/2 Unit
P E 15X 1 Unit

(See general education pages for the requirement this course meets.)

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Two hours laboratory for the one-half unit course (24 hours total per quarter); three hours laboratory for the one unit course (36 hours total per quarter).

(Any combination of Physical Education 15 and 15X may be taken up to six times for credit.)

An introduction to the discipline of Physical Education through the sport of bowling. Includes an historical examination, styles of play and strategies of the sport. Students will strive to develop basic skills including approach, types of deliveries, strategy, etiquette, and league play associated with the sport of bowling. Adaptations related to gender, age and physical conditioning will be addressed. Principles associated with exercise physiology, nutrition, flexibility, muscular strength and endurance will be covered.

P E 16A Beginning Golf 1/2 Unit
P E 16AX 1 Unit

(See general education pages for the requirement this course meets.)

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Two hours laboratory for the one-half unit course (24 hours total per quarter); three hours laboratory for the one unit course (36 hours total per quarter).

(Any combination of Physical Education 16A, 16AX, 16B and 16BX may be taken up to six times for credit for the family of courses.)

An introduction to the discipline of Physical Education through the sport of golf. Includes a global and historical examination of the sport, rules, equipment, facilities, etiquette, safety, and basic fundamentals of beginning golf. Students will develop skills in putting, chipping, pitching, and full swing fundamentals utilizing basic theories of physics. The skills portion of the course will encourage an understanding of how to adapt to the game and conventional techniques to an individual's physical abilities. Students will apply basic exercise physiology, nutrition, flexibility and strength concepts to improve their overall playing level.

P E 16B Intermediate Golf 1/2 Unit
P E 16BX 1 Unit

(See general education pages for the requirement this course meets.)

Prerequisite: Physical Education 16A or 16AX; or instructor permission.

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Two hours laboratory for the one-half unit course (24 hours total per quarter); three hours laboratory for the one unit course (36 hours total per quarter).

(Any combination of Physical Education 16A, 16AX, 16B and 16BX may be taken up to six times for credit for the family of courses.)

An introduction to the discipline of Physical Education through the sport of golf. Includes an historical examination, styles of play and strategies of the sport of men's and women's golf. Students will strive to develop intermediate skills in putting, chipping, pitching, unusual lies and full swing fundamentals utilizing theories of physics. Variations in concepts due to age, gender, and physical conditions will be noted. Exercise physiology, nutrition, flexibility and strength concepts for conditioning will be covered.

P E 19A Beginning Volleyball 1/2 Unit
P E 19AX 1 Unit

(See general education pages for the requirement this course meets.)

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Two hours laboratory for the one-half unit course (24 hours total per quarter); three hours laboratory for the one unit course (36 hours total per quarter).

(Any combination of Physical Education 19A, 19AX, 19B, 19BX, 19C, 19CX and 19T may be taken up to six times for credit for the family of courses.)

An introduction to the discipline of Physical Education through the sport of volleyball.

Includes: rules, equipment, facilities, safety, etiquette, basic fundamentals in beginning level volleyball with strategies for team offense and defense, and a brief historical examination of global contributions by the men and women who changed the game of volleyball. Students will develop passing, hitting, blocking, and serving techniques utilizing fundamental theories of physics. The skills portion of the course will encourage an understanding of how to adapt the game and conventional techniques to an individual's physical abilities. Students will understand and apply basic exercise physiology, nutrition, flexibility, and strength concepts to improve their physical condition in order to play at a more advanced level.

P E 19B Intermediate Volleyball 1/2 Unit
P E 19BX 1 Unit

(See general education pages for the requirement this course meets.)

Prerequisite: Physical Education 19A or 19AX; or consent of instructor.

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Two hours laboratory for the one-half unit course (24 hours total per quarter);

three hours laboratory for the one unit course (36 hours total per quarter).

(Any combination of Physical Education 19A, 19AX, 19B, 19BX, 19C, 19CX and 19T may be taken up to six times for credit for the family of courses.)

An introduction to the discipline of Physical Education through the sport of volleyball. Includes a global and historical examination of the sport, rules, equipment, facilities, etiquette, safety, and fundamentals of volleyball. Students will develop their volleyball skills and improve upon basic team play strategies. Students will apply basic exercise physiology, nutrition, flexibility and strength concepts to improve their overall playing level.

P E 19C Advanced Volleyball 1/2 Unit
P E 19CX 1 Unit

(See general education pages for the requirement this course meets.)

Prerequisite: Physical Education 19B or 19BX; or consent of instructor.

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Two hours laboratory for the one-half unit course (24 hours total per quarter);

three hours laboratory for the one unit course (36 hours total per quarter).

(Any combination of Physical Education 19A, 19AX, 19B, 19BX, 19C, 19CX and 19T may be taken up to six times for credit for the family of courses.)

An introduction to the discipline of Physical Education through the sport of volleyball. Includes a global and historical examination of the sport, rules, equipment, facilities, etiquette, safety, and fundamentals of advanced volleyball. Students will develop their volleyball skills and improve upon team play strategies. Students will apply basic exercise physiology, nutrition, flexibility and strength concepts to improve their overall playing level.

P E 19T Tournament Volleyball 1 Unit

(See general education pages for the requirement this course meets.)

Prerequisite: Physical Education 19C or 19CX; or consent of instructor.

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Three hours laboratory (36 hours total per quarter).

(Any combination of Physical Education 19A, 19AX, 19B, 19BX, 19C, 19CX and 19T may be taken up to six times for credit for the family of courses.)

An introduction to the discipline of Physical Education through the sport of volleyball. Includes a global and historical examination of the sport, rules, equipment, facilities, etiquette, safety, and fundamentals of advanced volleyball through tournament play. Students will improve upon team play strategies. The primary purpose of this course is to promote educational and organized competitive playing opportunities for males and females. Students will apply exercise physiology, nutrition, flexibility and strength concepts for an advanced level of play.

P E 20A Beginning Archery 1/2 Unit
P E 20AX 1 Unit

(See general education pages for the requirement this course meets.)

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Two hours laboratory for the one-half unit course (24 hours total per quarter);

three hours laboratory for the one unit course (36 hours total per quarter).

(Any combination of Physical Education 20A, 20AX, 20B and 20BX may be taken up to six times for credit for the family of courses.)

An introduction to the discipline of Physical Education through archery. Includes an historical and global examination of the sport, rules, etiquette, equipment, facilities, and beginning archery skills along with theories of physics relating to arrow flight and adaptations of the sport to individual physical abilities. Principles of fitness and nutrition as they relate to archery will be covered.

P E 20B Intermediate Archery 1/2 Unit
P E 20BX 1 Unit

(See general education pages for the requirement this course meets.)

Prerequisite: Physical Education 20A or 20AX.

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Two hours laboratory for the one-half unit course (24 hours total per quarter);

three hours laboratory for the one unit course (36 hours total per quarter).

(Any combination of Physical Education 20A, 20AX, 20B and 20BX may be taken

up to six times for credit for the family of courses.)

An introduction to the discipline of Physical Education through archery. Includes an historical and global examination of the sport, rules, etiquette, equipment, facilities, and intermediate archery skills along with theories of physics relating to arrow flight and adaptations of the sport to individual physical abilities. Principles of fitness and nutrition as they relate to archery will be covered from Olympic level to the demands of intercollegiate archery.

P E 21A Beginning Tennis 1/2 Unit
P E 21AX 1 Unit

(See general education pages for the requirement this course meets.)

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Two hours laboratory for the one-half unit course (24 hours total per quarter);

three hours laboratory for the one unit course (36 hours total per quarter).

(Any combination of Physical Education 21A, 21AX, 21B, 21BX, 21C, 21CX, 21D and 21DX may be taken up to six times for credit for the family of courses.)

An introduction to the discipline of Physical Education through the sport of tennis. Basic ground-strokes, serve and footwork as well as basic singles' and doubles' strategies will be covered. Includes a brief historical examination of the sport, rules, equipment, facilities and etiquette. Students will strive to understand and apply basic exercise physiology, nutrition, flexibility and strength concepts to improve their physical condition in order to play at a more advanced level and to adapt the game to their individual physical ability, age, and gender.

P E 21B Advanced Beginning Tennis 1/2 Unit
P E 21BX 1 Unit

(See general education pages for the requirement this course meets.)

Prerequisite: Physical Education 21A or 21AX; or equivalent skills.

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Two hours laboratory for the one-half unit course (24 hours total per quarter);

three hours laboratory for the one unit course (36 hours total per quarter).

(Any combination of Physical Education 21A, 21AX, 21B, 21BX, 21C, 21CX, 21D and 21DX may be taken up to six times for credit for the family of courses.)

A continuing introduction to the rules, equipment, facilities, etiquette, and basic strokes - volley, lob and overhead and with further development of the forehand, backhand, serve. Instructors will emphasize conventional skill development, but also encourage adaptations based on physical ability, age, strength, gender and/or genetics. A brief historical examination of how the game of tennis has changed due to the influence of individual men, women, and children, of various countries, and their styles of play or strategies. Students will review and apply basic exercise physiology, nutrition, flexibility and strength concepts to improve their physical condition in order to play tennis at a more advanced level.

P E 21C Intermediate Tennis 1/2 Unit
P E 21CX 1 Unit

(See general education pages for the requirement this course meets.)

Prerequisite: Physical Education 21B or 21BX; or equivalent skills.

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Two hours laboratory for the one-half unit course (24 hours total per quarter);

three hours laboratory for the one unit course (36 hours total per quarter).

(Any combination of Physical Education 21A, 21AX, 21B, 21BX, 21C, 21CX, 21D and 21DX may be taken up to six times for credit for the family of courses.)

Development of consistency, accuracy and control for forehand, backhand ground-strokes, serve, volley, lob and overhead skills utilizing fundamental theories of physics. Introducing elements of changing the dynamics of the game with spins and drop shots or by approaching the net; basic singles and doubles strategies. A brief historical examination of how the game of tennis has changed due to the influence of individual men, women, and children, of various countries, and their styles of play or strategies. Students will review and apply basic exercise physiology, nutrition, flexibility and strength concepts to improve their physical condition in order to play tennis at a more advanced level.

P E 21D Advanced Tennis 1/2 Unit
P E 21DX 1 Unit

(See general education pages for the requirement this course meets.)

Prerequisite: Physical Education 21C or 21CX, or equivalent skills based on instructors evaluation.

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Two hours laboratory for the one-half unit course (24 hours total per quarter);

three hours laboratory for the one unit course (36 hours total per quarter).

(Any combination of Physical Education 21A, 21AX, 21B, 21BX, 21C, 21CX, 21D and 21DX may be taken up to six times for credit for the family of courses.)

Further examination of Physical Education through tennis. Basic exercise physiology, nutrition, fundamentals of strength development and flexibility relative to playing at an advanced level will be included. The course will encourage an understanding of how to adapt game strategies and conventional techniques to one's needs and abilities based on age, gender and environmental conditions, personal strengths and weaknesses.

P E 21E Competitive Tennis 2 1/2 Units

(See general education pages for the requirement this course meets.)

Prerequisite: Experience in tournament or interscholastic competition or appropriate skill level with consent of instructor.

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Eight hours laboratory (96 hours total per quarter).

(May be taken up to six times for credit.)

An introduction to the discipline of Physical Education through the study of tennis. Includes a brief historical examination of how the game of tennis has changed due to the influence of individual men, women, and children, of various countries, and their styles of play or strategies. Development of consistency, accuracy and ground strokes, serve, volley, footwork, lob and overhead skills within a competitive situation will be emphasized. Introducing elements of changing the dynamics of the game with spins and drop shots or by approaching the net; advanced singles and doubles strategies. Students will review and apply basic exercise physiology, nutrition, flexibility, and strength concepts to improve their physical condition in order to play tennis at a competitive level.

P E 26A Novice Swimming 1/2 Unit
P E 26AX 1 Unit

(See general education pages for the requirement this course meets.)

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Two hours laboratory for the one-half unit course (24 hours total per quarter); three hours laboratory for the one unit course (36 hours total per quarter).

(Any combination of Physical Education 26A, 26AX, 26B, 26BX, 26C, 26CX, 26D and 26DX may be taken up to six times for credit for the family of courses.)

An introduction to Physical Education through novice swimming. Skills and techniques for the non-swimmer will be covered. Global and historical development of swimming as a fitness activity, novice stroke skills, survival methods, overcoming fear of water, and safety will be included. American Red Cross stroke standards will be followed but adaptations will be allowed based on physical ability, age, strength and gender. Students will review basic exercise physiology and nutrition appropriate to swimming.

P E 26B Beginning Swimming 1/2 Unit
P E 26BX 1 Unit

(See general education pages for the requirement this course meets.)

Prerequisite: Physical Education 26A or 26AX, or pass swimming placement test which consists of swimming 25 yards in deep water.

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Two hours laboratory for the one-half unit course (24 hours total per quarter); three hours laboratory for the one unit course (36 hours total per quarter).

(Any combination of Physical Education 26A, 26AX, 26B, 26BX, 26C, 26CX, 26D and 26DX may be taken up to six times for credit for the family of courses.)

An introduction to Physical Education through the development of skills and techniques for the beginning swimmer. Global and historical development of swimming as a fitness and competitive activity will be discussed. Beginning stroke skills, survival methods, diving from the side of the pool, and deep water swimming will be covered. American Red Cross stroke standards will be followed but adaptations will be allowed based on physical ability, age, strength and gender. Students will review basic exercise physiology and nutrition appropriate to swimming.

P E 26C Intermediate Swimming 1/2 Unit
P E 26CX 1 Unit

(See general education pages for the requirement this course meets.)

Prerequisite: Physical Education 26B or 26BX, or equivalent swimming skills.

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Two hours laboratory for the one-half unit course (24 hours total per quarter); three hours laboratory for the one unit course (36 hours total per quarter).

(Any combination of Physical Education 26A, 26AX, 26B, 26BX, 26C, 26CX, 26D and 26DX may be taken up to six times for credit for the family of courses.)

An introduction into Physical Education through skills and techniques for the intermediate swimmer. Global and historical development of swimming as a fitness and competitive activity will be discussed. Intermediate stroke skills, spring board diving, turns, and water safety will be covered. The student will be expected to swim greater lengths with increased motor skills. American Red Cross stroke standards will be followed but adaptations will be allowed based on physical ability, age, strength and gender. Students will review basic exercise physiology and nutrition appropriate to swimming.

P E 26D Advanced Swimming 1/2 Unit
P E 26DX 1 Unit

(See general education pages for the requirement this course meets.)

Prerequisite: Physical Education 26C or 26CX, or equivalent swimming skills.

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Two hours laboratory for the one-half unit course (24 hours total per quarter); three hours laboratory for the one unit course (36 hours total per quarter).

(Any combination of Physical Education 26A, 26AX, 26B, 26BX, 26C, 26CX, 26D and 26DX may be taken up to six times for credit for the family of courses.)

An introduction to Physical Education through skills and techniques for the advanced swimmer. Global and historical development of swimming as a fitness and competitive activity will be discussed. Advanced stroke skills, endurance swimming, racing turns and starts, and spring board diving will be covered. The student will perform skills at a greater speed and distance at an advanced motor skill level. American Red Cross stroke standards will be followed but adaptations will be allowed based on physical ability, age, strength and gender. Students will review basic exercise physiology and nutrition appropriate to swimming.

P E 28A Lifeguard Training 4 Units

(See general education pages for the requirement this course meets.)

Prerequisite: Physical Education 26B or 26BX; and pass the Red Cross screening test.

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Two and one-half hours lecture, four and one-half hours laboratory (84 hours total per quarter).

(May be taken up to six times for credit.)

An introduction to Physical Education through a course designed for lifeguard training and certification. It includes techniques and skills for rescue and personal safety. The instructor will encourage skills adaptations based on physical ability, age, strength, gender and/or genetics. The following certificates are available upon completion: American Red Cross Lifeguard Training; First Aid; Cardiopulmonary Resuscitation and Automated External Defibrillation for the Professional Rescuer; Waterfront Lifeguard; Basic Water Rescue; Shallow Water Attendant; Blood-borne Pathogens: Preventing Disease Transmission; Administering Emergency Oxygen; and Epinephrine Auto-Injector.

P E 28G Water Safety Instructor 4 Units

(See general education pages for the requirement this course meets.)

Prerequisite: Physical Education 26C, 26CX or ability to swim basic strokes at Red Cross Level 4.

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Three hours lecture, three hours laboratory (72 hours total per quarter).

(May be taken up to six times for credit.)

A course for Red Cross certification of swimming and diving instructors. Emphasis on the biomechanics of strokes, teaching progressions, and feedback techniques. Includes the American Red Cross Fundamentals of Instructor Training Certification.

P E 30 Introduction to Physical Education/Kinesiology 4 Units

(See general education pages for the requirement this course meets.)

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Four hours lecture (48 hours total per quarter).

A introduction to the discipline of physical education/kinesiology. The student will study career options, career choice, required preparation and training for occupations in teaching, coaching, physical therapy, sports medicine and other professions stemming from a degree in physical education/kinesiology. Course will include an in-depth overview of past, present, and future foundations, principles, and philosophies for students seeking major areas of study. Course will also focus on career options with an understanding of intercultural and gender (Title IX) relating to the profession.

P E 32B Women's Badminton Techniques 2 Units
(Formerly Physical Education 92B.)

(See general education pages for the requirement this course meets.)

Prerequisite: Competitive badminton experience at the high school, club or collegiate levels and consent of instructor.

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273; Physical Education 13T.

Six hours laboratory (72 hours total per quarter).

(May be taken up to six times for credit.)

An introduction to the discipline of physical education through the sport of badminton. Emphasis is on developing the mental, physical, and tactical aspects of badminton play necessary to compete at the tournament level. Includes a global examination of the sport, rules, equipment, facilities and etiquette. Basic physiology, nutrition, flexibility, strength and endurance techniques relative to badminton will be discussed.

P E 32F Defensive Baseball Techniques 2 Units

(See general education pages for the requirement this course meets.)

Prerequisite: Competitive baseball experience at the high school, club or collegiate levels and consent of instructor.

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Six hours laboratory (72 hours total per quarter).

(May be taken up to six times for credit.)

An introduction to the discipline of physical education through defensive baseball techniques. Includes a global and historical examination of the skills and techniques of advanced defensive baseball, team interaction, and baseball theory. Through the study of film and use of playbooks the student will learn the various segments of defensive play. Exercise physiology, nutrition, flexibility and strength concepts for conditioning will be covered.

P E 32G Offensive Baseball Techniques 2 Units

(See general education pages for the requirement this course meets.)

Prerequisite: Competitive baseball experience at the high school, club or collegiate levels and consent of instructor.

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Six hours laboratory (72 hours total per quarter).

(May be taken up to six times for credit.)

An introduction to the discipline of physical education through offensive baseball techniques. Includes a global and historical examination of the skills and techniques of advanced offensive baseball and the changes that have influenced the modern game. Includes analysis of movement, team interaction, and baseball theory. Through the study of film the student will learn the various segments of offensive play. Exercise physiology, nutrition, flexibility and strength concepts for conditioning will be covered.

P E 32H Offensive Football Techniques 2 Units

(See general education pages for the requirement this course meets.)

Prerequisite: Competitive football experience at the high school, club or collegiate levels and consent of instructor.

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Six hours laboratory (72 hours total per quarter).

(May be taken up to six times for credit.)

An introduction to the discipline of Physical Education through offensive football techniques. Includes a global and historical examination of the skills and techniques of advanced offensive football and the changes that have influenced the modern game. Through the study of film and use of playbooks the student will learn the various segments of offensive play. Exercise physiology, nutrition, flexibility and strength concepts for conditioning will be covered.

P E 32I Defensive Football Techniques 2 Units

(See general education pages for the requirement this course meets.)

Prerequisite: Competitive football experience at the high school, club or collegiate levels and consent of instructor.

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Six hours laboratory (72 hours total per quarter).

(May be taken up to six times for credit.)

An introduction to the discipline of Physical Education through defensive football techniques. Includes a global and historical examination of the skills and techniques of advanced defensive football and the changes that have influenced the modern game. Through the study of film, use of playbooks and team work the student will learn the various segments of defensive play. Exercise physiology, nutrition, flexibility and strength concepts for conditioning will be covered.

P E 32J Water Polo Techniques 2 Units

(See general education pages for the requirement this course meets.)

Prerequisite: Competitive water polo experience at the high school, club or collegiate levels and consent of instructor.

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Six hours laboratory (72 hours total per quarter).

(May be taken up to six times for credit.)

An introduction to the discipline of Physical Education through the sport of water polo. Includes a global and historical examination of the sport, rules, equipment, facilities, and etiquette. Through the intercollegiate competitive experience students will improve their individual water polo skills, increase their ability to employ advanced training and increase their knowledge of exercise physiology, exercise nutrition, and kinesiological concepts. Competitive water polo experience preferred at the high school, club or collegiate levels.

P E 32K Basketball Techniques 2 Units

(See general education pages for the requirement this course meets.)

Prerequisite: Competitive basketball experience at the high school, club or collegiate levels and consent of instructor.

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Six hours laboratory (72 hours total per quarter).

(May be taken up to six times for credit.)

An introduction to the discipline of Physical Education through the sport of basketball. Includes a global and historical examination of the sport, rules, equipment, facilities and etiquette. Skills and techniques of advanced basketball play. Includes analysis of basketball movement, team interaction and basketball theory. Students will gain an understanding of exercise physiology, nutrition, development of muscular strength and endurance and flexibility will be enhanced.

P E 32L Volleyball Techniques 2 Units

(See general education pages for the requirement this course meets.)

Prerequisite: Competitive volleyball experience at the high school, club or collegiate levels and consent of instructor.

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273; Mathematics 210 or equivalent.

Six hours laboratory (72 hours total per quarter).

(May be taken up to six times for credit.)

Further examination of the discipline of Physical Education through the sport of volleyball. A deeper look into the sport at an advanced level, rules, equipment, facilities, etiquette, safety, and fundamentals of advanced volleyball through intercollegiate play. Students will improve upon team play strategies. Students will apply basic exercise physiology, nutrition, flexibility and strength concepts to improve their overall playing level. Skills and techniques of advanced volleyball play. Analysis of movement, team interaction, and volleyball theory.

P E 32M Soccer Techniques 2 Units

(See general education pages for the requirement this course meets.)

Prerequisite: Competitive soccer experience at the high school, club or collegiate levels and consent of instructor.

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Six hours laboratory (72 hours total per quarter).

(May be taken up to six times for credit.)

Further examination of the discipline of Physical Education through the sport of soccer. Includes rules, equipment, facilities, etiquette and preparation for a competitive level of play. This course is designed to enhance skills and strategies of intermediate or advanced soccer players. Strategies and tactics of the game will be discussed and performed. Basic exercise physiology, nutrition, flexibility, muscular strength and endurance techniques relative to soccer will be discussed.

P E 32N Track and Field Techniques 2 Units

(See general education pages for the requirement this course meets.)

Prerequisite: Competitive track and field experience at the high school, club or collegiate levels and consent of instructor.

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Six hours laboratory (72 hours total per quarter).

(May be taken up to six times for credit.)

An introduction to the discipline of physical education through the sport of track and field. Includes a global and historical examination of the sport, rules, equipment, facilities, and etiquette. Students will improve their individual track and field skills, increase their ability to employ advanced strategies and increase their knowledge of exercise physiology, exercise nutrition, kinesiological concepts underlying the development of force, power and body awareness.

P E 32P Techniques of Competitive Swimming 2 Units

(See general education pages for the requirement this course meets.)

Prerequisite: Competitive swimming experience at the high school, club or collegiate levels and consent of instructor.

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Six hours laboratory (72 hours total per quarter).

(May be taken up to six times for credit.)

An introduction to the discipline of physical education through swimming and diving. Includes a global and historical examination of the sport, rules, equipment, facilities, and etiquette. Through the competitive class experience students will improve their individual swimming skills, increase their ability to employ advanced training and increase their knowledge of exercise physiology, exercise nutrition, kinesiological concepts underlying the development of force, power and biomechanics.

P E 32S Women's Soccer Techniques 2 Units

(See general education pages for the requirement this course meets.)

Prerequisite: Competitive soccer experience at the high school, club or collegiate levels and consent of instructor.

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Six hours laboratory (72 hours total per quarter).

(May be taken up to six times for credit.)

Further examination of the discipline of Physical Education through the sport of soccer. This course is designed to enhance skills and strategies of intermediate to advanced soccer players. Includes rules, equipment, facilities, etiquette and preparation for performance on a competitive level. Strategies and tactics of the game will be discussed and performed. Basic exercise physiology, nutrition, flexibility, muscular strength and endurance techniques relative to soccer will be discussed.

<p>P E 32T Tennis Techniques 2 Units <i>(Formerly Physical Education 92T)</i> <i>(See general education pages for the requirement this course meets.)</i> <i>Prerequisite: Competitive tennis experience at the high school, club or collegiate levels and consent of instructor.</i> <i>Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.</i> <i>Six hours laboratory (72 hours total per quarter).</i> <i>(May be taken up to six times for credit.)</i> An introduction to the discipline of physical education through the study of tennis. Includes a brief historical examination of how the game of tennis has changed due to the influence of individual men, women, and children, of various countries, and their styles of play or strategies. Development of consistency, accuracy and ground strokes, serve, volley, footwork, lob and overhead skills within a competitive situation will be emphasized. Introducing elements of changing the dynamics of the game with spins and drop shots or by approaching the net; advanced singles and doubles strategies. Students will review and apply basic exercise physiology, nutrition, flexibility, and strength concepts to improve their physical condition in order to play tennis at a competitive level.</p>	<p>P E 38WX Intercollegiate Women's Badminton 1 1/2 Units P E 38W 3 Units <i>(Physical Education 38WX was formerly Physical Education 98A. Physical Education 38W was formerly Physical Education 90.)</i> <i>(See general education pages for the requirement this course meets.)</i> <i>Prerequisite: Competitive experience in badminton, physician's clearance and completion of eligibility forms; all second year athletes must fulfill academic requirements per the CCCAA (California Community College Athletics Association).</i> <i>Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.</i> <i>Four and one-half hours laboratory for the one and one-half unit course (54 hours total per quarter); nine hours laboratory for the three unit course (108 hours total per quarter).</i> <i>(Any combination of Physical Education 38W and 38WX may be taken up to six times for credit.)</i> An introduction to the discipline of Physical Education through the sport of badminton. Includes a global examination of the sport, rules, equipment, facilities and etiquette. Emphasis placed on the four major pillars of the game: mental, physical, tactical and technical aspects necessary to successfully compete in matches. Discussion of the rules of the game, equipment technology and fair play will be incorporated into the course. Basic exercise physiology, nutrition, flexibility, muscular strength and endurance techniques relative to badminton will be discussed.</p>
<p>P E 32W Softball Techniques 2 Units <i>(See general education pages for the requirement this course meets.)</i> <i>Prerequisite: Competitive softball experience at the high school, club or collegiate levels and consent of instructor.</i> <i>Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.</i> <i>Six hours laboratory (72 hours total per quarter).</i> <i>(May be taken up to six times for credit.)</i> An introduction to the discipline of Physical Education through softball techniques. Includes a global and historical examination of the skills and techniques of advanced softball and the changes that have influenced the modern game. Includes analysis of movement, team interaction, and softball theory. Through team practice and scrimmages the student will learn the various segments of offensive and defensive play. Exercise physiology, nutrition, flexibility and strength concepts for conditioning will be covered.</p>	<p>P E 39MX Intercollegiate Men's Soccer 1 1/2 Units P E 39M 3 Units <i>(Physical Education 39MX was formerly Physical Education 98B and Physical Education 39M was formerly Physical Education 39.)</i> <i>(See general education pages for the requirement this course meets.)</i> <i>Prerequisite: Competitive experience in soccer, physician's clearance and completion of eligibility forms; all second year athletes must fulfill academic requirements per the CCCAA (California Community College Athletics Association).</i> <i>Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.</i> <i>Four and one-half hours laboratory for the one and one-half unit course (54 hours total per quarter); nine hours laboratory for the three unit course (108 hours total per quarter).</i> <i>(Any combination of Physical Education 39M and 39MX may be taken up to six times for credit.)</i> An introduction to the discipline of Physical Education through the sport of soccer. Includes a global and historical examination of the sport, rules, equipment, facilities, and etiquette. Emphasis placed upon the four major pillars of the game: mental, physical, tactical and technical aspects necessary to successfully compete in match play. Discussion of strategic information from scouting reports with application to game preparation and management. Basic exercise physiology, nutrition, flexibility, muscular strength and endurance techniques relative to soccer will be discussed.</p>
<p>P E 33A Soccer 1/2 Unit P E 33AX 1 Unit <i>(See general education pages for the requirement this course meets.)</i> <i>Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.</i> <i>Two hours laboratory for the one-half unit course (24 hours total per quarter); three hours laboratory for the one unit course (36 hours total per quarter).</i> <i>(Any combination of Physical Education 33A, 33AX, 33I and 33IX may be taken up to six times for credit for the family of courses.)</i> An introductory course to enhance skills used in the game of soccer, including a global perspective and the contributions of both male and female soccer experts and players. Emphasis will be placed upon the four major pillars of the game: technical ability, tactical understanding, physical fitness, and the mental approach necessary to compete successfully in match play. Strategies and tactics of the game will also be discussed and performed. There will be an introduction to the laws of the game, equipment, fair play, flexibility, nutrition, and the nuances of the game. Use of the Internet and other media sources will be encouraged to further understand the world's most popular game.</p>	<p>P E 39WX Intercollegiate Women's Soccer 1 1/2 Units P E 39W 3 Units <i>(Physical Education 39WX was formerly Physical Education 98C.)</i> <i>(See general education pages for the requirement this course meets.)</i> <i>Prerequisite: Competitive experience in women's soccer, physician's clearance and completion of eligibility forms; all second year athletes must fulfill academic requirements per the CCCAA (California Community College Athletics Association).</i> <i>Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.</i> <i>Four and one-half hours laboratory for the one and one-half unit course (54 hours total per quarter); nine hours laboratory for the three unit course (108 hours total per quarter).</i> <i>(Any combination of Physical Education 39W and 39WX may be taken up to six times for credit.)</i> An introduction to the discipline of Physical Education through the sport of soccer. Includes a global and historical examination of the sport, rules, equipment, facilities, and etiquette. Emphasis placed upon the four major pillars of the game: mental, physical, tactical and technical aspects necessary to successfully compete in match play. Discussion of the laws of the game, equipment technology, and fair play will be incorporated into the course. Basic exercise physiology, nutrition, flexibility, muscular strength and endurance techniques relative to soccer will be discussed.</p>
<p>P E 33I Indoor Soccer 1/2 Unit P E 33IX 1 Unit <i>(See general education pages for the requirement this course meets.)</i> <i>Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.</i> <i>Two hours laboratory for the one-half unit course (24 hours total per quarter); three hours laboratory for the one unit course (36 hours total per quarter).</i> <i>(Any combination of Physical Education 33A, 33AX, 33I and 33IX may be taken up to six times for credit for the family of courses.)</i> An introduction to Physical Education through the sport of indoor soccer. Includes a global perspective and the contributions of both male and female soccer experts and players. Emphasis will be placed upon the four major pillars of the game, strategies and tactics of the game will also be discussed and performed. There will be an introduction to the laws of the game, equipment, fair play, flexibility, nutrition, and the nuances of the game. Use of the Internet and other media sources will be encouraged to further understand indoor soccer.</p>	<p>P E 40X Intercollegiate Football 1 1/2 Units P E 40 3 Units <i>(Physical Education 40X was formerly Physical Education 98D.)</i> <i>(See general education pages for the requirement this course meets.)</i> <i>Prerequisite: Competitive experience in football, physician's clearance and completion of eligibility forms; all second year athletes must fulfill academic requirements per the CCCAA (California Community College Athletics Association).</i> <i>Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.</i> <i>Four and one-half hours laboratory for the one and one-half unit course (54 hours total per quarter).</i></p>
<p>P E 35 Care and Prevention of Athletic Injuries 4 Units <i>Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273; Physical Education 54 or 85M (or Biology 40A and 40B).</i> <i>Three hours lecture, three hours laboratory (72 hours total per quarter).</i> Treatment and preventative procedures in sports medicine. Emphasis on anatomical basis for recognition and evaluation of sports related injuries. Treatment focuses on immediate first aid, preventative techniques, and injury stress test and rehabilitation.</p>	<p><i>Four and one-half hours laboratory for the one and one-half unit course (54 hours total per quarter).</i></p>

hours total per quarter); nine hours laboratory for the three unit course (108 hours total per quarter).

(Any combination of Physical Education 40 and 40X may be taken up to six times for credit.)

An introduction to the discipline of Physical Education through intercollegiate football. Includes a global and historical examination of the sport, rules, equipment, facilities, and etiquette. Emphasis placed on the four major pillars of the game: mental, physical, tactical and technical aspects necessary to successfully compete in games. Discussion of the rules of the game, equipment technology and fair play will be incorporated into the course. Basic exercise physiology, nutrition, flexibility, muscular strength and endurance techniques relative to football will be discussed.

P E 41X Intercollegiate Water Polo 1 1/2 Units
P E 41 3 Units

(Physical Education 41X was formerly Physical Education 98E.)

(See general education pages for the requirement this course meets.)

Prerequisite: Competitive experience in water polo, physician's clearance and completion of eligibility forms; all second year athletes must fulfill academic requirements per the CCCAA (California Community College Athletics Association).

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Four and one-half hours laboratory for the one and one-half unit course (54 hours total per quarter); nine hours laboratory for the three unit course (108 hours total per quarter).

(Any combination of Physical Education 41 and 41X may be taken up to six times for credit.)

An introduction to the discipline of Physical Education through water polo. Includes a global and historical examination of the sport, rules, equipment, facilities, and etiquette. Emphasis placed on the four major pillars of the game: mental, physical, tactical and technical aspects necessary to successfully compete in games. Discussion of the rules of the game, equipment technology and fair play will be incorporated into the course. Basic exercise physiology, nutrition, flexibility, muscular strength and endurance techniques relative to water polo will be discussed.

P E 42WX Intercollegiate Women's 1 1/2 Units
P E 42W Volleyball 3 Units

(Physical Education 42WX was formerly Physical Education 98F.)

(See general education pages for the requirement this course meets.)

Prerequisite: Competitive experience in volleyball, physician's clearance and completion of eligibility forms; all second year athletes must fulfill academic requirements per the CCCAA (California Community College Athletics Association).

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Four and one-half hours laboratory for the one and one-half unit course (54 hours total per quarter); nine hours laboratory for the three unit course (108 hours total per quarter).

(Any combination of Physical Education 42W and 42WX may be taken up to six times for credit.)

An introduction to the discipline of Physical Education through the sport of volleyball. Includes a global and historical examination of the sport, rules, equipment, facilities, etiquette, and safety. Emphasis placed on the four major pillars of the game: mental, physical, tactical and technical aspects necessary to successfully compete in games. Discussion of the rules of the game, equipment technology and fair play will be incorporated into the course. Basic exercise physiology, nutrition, flexibility, muscular strength and endurance techniques relative to volleyball will be discussed.

P E 43X Intercollegiate Cross Country 1 1/2 Units
(Men and Women)

P E 43 3 Units

(Physical Education 43X was formerly Physical Education 98G.)

(See general education pages for the requirement this course meets.)

Prerequisite: Competitive experience in cross country, physician's clearance and completion of eligibility forms; all second year athletes must fulfill academic requirements per the CCCAA (California Community College Athletics Association).

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Four and one-half hours laboratory for the one and one-half unit course (54 hours total per quarter); nine hours laboratory for the three unit course (108 hours total per quarter).

(Any combination of Physical Education 43 and 43X may be taken up to six times for credit.)

An introduction to the discipline of physical education through the sport of cross country. Includes a global and historical examination of the sport, rules, equipment, facilities, and etiquette. Through the intercollegiate competitive experience students will improve their individual running skills, increase their ability to employ advanced strategies and increase their knowledge of exercise physiology, exercise nutrition, kinesiological concepts underlying the development of endurance, strength development and body awareness.

P E 44MX Intercollegiate Men's 1 1/2 Units
Basketball

P E 44M Intercollegiate Men's 3 Units
Basketball

(Physical Education 44MX was formerly Physical Education 98H.)

(See general education pages for the requirement this course meets.)

Prerequisite: Competitive experience in men's basketball, physician's clearance and completion of eligibility forms; all second year athletes must fulfill academic requirements per the CCCAA (California Community College Athletics Association).

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Four and one-half hours laboratory for the one and one-half unit course (54 hours total per quarter); nine hours laboratory for the three unit course (108 hours total per quarter).

(Any combination of Physical Education 44M and 44MX may be taken up to six times for credit.)

An introduction to the discipline of Physical Education through the sport of basketball. Includes a global and historical examination of the sport, rules, equipment, facilities and etiquette. Emphasis is placed on the four major pillars of the game: mental, physical, tactical and technical aspects necessary to successfully compete in games. Discussion of the rules of the game, equipment technology and fair play will be incorporated in the course. Basic exercise physiology, nutrition, flexibility, muscular strength and endurance techniques relative to basketball will be discussed.

P E 44WX Intercollegiate Women's 1 1/2 Units
Basketball 3 Units

(Physical Education 44WX was formerly Physical Education 98J.)

(See general education pages for the requirement this course meets.)

Prerequisite: Competitive experience in women's basketball, physician's clearance and completion of eligibility forms; all second year athletes must fulfill academic requirements per the CCCAA (California Community College Athletics Association).

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Four and one-half hours laboratory for the one and one-half unit course (54 hours total per quarter); nine hours laboratory for the three unit course (108 hours total per quarter).

(Any combination of Physical Education 44W and 44WX may be taken up to six times for credit.)

An introduction to the discipline of Physical Education through the sport of basketball. Includes a global and historical examination of the sport, rules, equipment, facilities and etiquette. Emphasis placed on the four major pillars of the game: mental, physical, tactical and technical aspects necessary to successfully compete in games. Discussion of the rules of the game, equipment technology and fair play will be incorporated into the course. Basic exercise physiology, nutrition, flexibility, muscular strength and endurance techniques relative to basketball will be discussed.

P E 45X Intercollegiate Swimming and 1 1/2 Units
Diving (Men and Women)

P E 45 3 Units

(Physical Education 45X was formerly Physical Education 98K.)

(See general education pages for the requirement this course meets.)

Prerequisite: Competitive experience in swimming and diving, physician's clearance and completion of eligibility forms; all second year athletes must fulfill academic requirements per the CCCAA (California Community College Athletics Association).

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Four and one-half hours laboratory for the one and one-half unit course (54 hours total per quarter); nine hours laboratory for the three unit course (108 hours total per quarter).

(Any combination of Physical Education 45 and 45X may be taken up to six times for credit.)

An introduction to the discipline of Physical Education through swimming and diving. Includes a global and historical examination of the sport, rules, equipment, facilities, and etiquette. Through the intercollegiate competitive experience students will improve their individual swimming and diving skills, increase their ability to employ advanced training and increase their knowledge of exercise physiology, exercise nutrition, kinesiological concepts underlying the development of force, power and biomechanics.

P E 46X Intercollegiate Track and Field (Men and Women) 1 1/2 Units

P E 46 3 Units

(Physical Education 46X was formerly Physical Education 98L.)

(See general education pages for the requirement this course meets.)

Prerequisite: Competitive experience in track and field, physician's clearance and completion of eligibility forms; all second year athletes must fulfill academic requirements per the CCCAA (California Community College Athletics Association).

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Four and one-half hours laboratory for the one and one-half unit course (54 hours total per quarter); nine hours laboratory for the three unit course (108 hours total per quarter).

(Any combination of Physical Education 46 and 46X may be taken up to six times for credit.)

An introduction to the discipline of Physical Education through the sport of track and field. Includes a global and historical examination of the sport, rules, equipment, facilities, and etiquette. Through the intercollegiate competitive experience students will improve their individual track and field skills, increase their ability to employ advanced strategies and increase their knowledge of exercise physiology, exercise nutrition, kinesiological concepts underlying the development of force, power and body awareness.

P E 47MX Intercollegiate Baseball 1 1/2 Units
P E 47M 3 Units

(Physical Education 47MX was formerly Physical Education 98M.)

(See general education pages for the requirement this course meets.)

Prerequisite: Competitive experience in baseball, physician's clearance and completion of eligibility forms; all second year athletes must fulfill academic requirements per the CCCAA (California Community College Athletics Association).

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Four and one-half hours laboratory for the one and one-half unit course (54 hours total per quarter); nine hours laboratory for the three unit course (108 hours total per quarter).

(Any combination of Physical Education 47M and 47MX may be taken up to six times for credit.)

An introduction to the discipline of Physical Education through intercollegiate baseball. Includes a global and historical examination of the skills of competitive baseball and the changes that have influenced the modern game. Includes analysis of offensive and defensive play, team interaction, and baseball theory. Through the intercollegiate competitive experience, student/athletes will improve their individual skills, increase their ability to employ advanced strategies and increase their knowledge of team play. Exercise physiology, nutrition, flexibility and strength concepts for conditioning will be covered.

P E 47WX Intercollegiate Softball 1 1/2 Units
P E 47W 3 Units

(Physical Education 47WX was formerly Physical Education 98N.)

(See general education pages for the requirement this course meets.)

Prerequisite: Competitive experience in softball, physician's clearance and completion of eligibility forms; all second year athletes must fulfill academic requirements per the CCCAA (California Community College Athletics Association).

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Four and one-half hours laboratory for the one and one-half unit course (54 hours total per quarter); nine hours laboratory for the three unit course (108 hours total per quarter).

(Any combination of Physical Education 47W and 47WX may be taken up to six times for credit.)

An introduction to the discipline of Physical Education through intercollegiate softball. Includes a global and historical examination of the skills and techniques of advanced offensive softball and the changes that have influenced the modern game. Analysis of movement, team interaction, and softball theory will be discussed. Through game preparation and repetition throughout the season the student will learn the various segments of intercollegiate play. Exercise physiology, nutrition, flexibility and strength concepts for conditioning will be covered.

P E 48MX Intercollegiate Men's Tennis 1 1/2 Units
P E 48M 3 Units

(Physical Education 48MX was formerly Physical Education 98P.)

(See general education pages for the requirement this course meets.)

Prerequisite: Competitive experience in men's tennis, physician's clearance and completion of eligibility forms; all second year athletes must fulfill academic requirements per the CCCAA (California Community College Athletics Association).

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Four and one-half hours laboratory for the one and one-half unit course (54 hours total per quarter); nine hours laboratory for the three unit course (108

hours total per quarter).

(Any combination of Physical Education 48M and 48MX may be taken up to six times for credit.)

An introduction to the discipline of Physical Education through tennis. Includes a global and historical examination of the sport, rules, equipment, facilities, and etiquette. Emphasis placed on the four major pillars of the game: mental, physical, tactical and technical aspects necessary to successfully compete in matches. Through the intercollegiate competitive experience students will improve their individual tennis skills, increase their ability to employ advanced strategies and increase their knowledge of exercise physiology, exercise nutrition, kinesiological concepts underlying the development of force, power and accuracy.

P E 48WX Intercollegiate Women's Tennis 1 1/2 Units
P E 48W 3 Units

(Physical Education 48WX was formerly Physical Education 98Q.)

(See general education pages for the requirement this course meets.)

Prerequisite: Competitive experience in women's tennis, physician's clearance and completion of eligibility forms; all second year athletes must fulfill academic requirements per the CCCAA (California Community College Athletics Association).

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Four and one-half hours laboratory for the one and one-half unit course (54 hours total per quarter); nine hours laboratory for the three unit course (108 hours total per quarter).

(Any combination of Physical Education 48W and 48WX may be taken up to six times for credit.)

An introduction to the discipline of physical education through tennis. Includes a global and historical examination of the sport, rules, equipment, facilities, and etiquette. Emphasis placed on the four major pillars of the game: mental, physical, tactical and technical aspects necessary to successfully compete in games. Through the intercollegiate competitive experience students will improve their individual tennis skills, increase their ability to employ advanced strategies and increase their knowledge of exercise physiology, exercise nutrition, concepts underlying the development of force, power and accuracy.

P E 51 Health and Fitness 4 Units

(See general education pages for the requirement this course meets.)

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

(Also listed as Health 51. Students may enroll in either department, but not both, for credit.)

Four hours lecture (48 hours total per quarter).

Introduction to the disciplines of Physical Education and Health through fitness, wellness and lifestyle management. Concepts of wellness from an interdisciplinary and multicultural perspective. Practices and beliefs that contribute to fitness and healthful living. Exploration of past and current theories of health and fitness with emphasis on the roles of genetics, gender, and age. Students will assess their own cardiovascular capacity, muscular strength and endurance, flexibility, body composition, in and out of class.

P E 53 Physical Stress Management 2 Units

(See general education pages for the requirement this course meets.)

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Two hours lecture (24 hours total per quarter).

An introduction to Physical Education through the natural techniques that effectively relieve stress related physical problems. Each student will develop and implement a personal stress reduction program. Students will be exposed to information on how lifestyle, gender, age, personality and occupation effects stress and the ability to successfully cope with it.

P E 54 Introduction to Massage 4 Units

(See general education pages for the requirement this course meets.)

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Three hours lecture, three hours laboratory (72 hours total per quarter).

Introduction to the discipline of Physical Education through the field of massage therapy. Includes theory, practical experience, methods, procedures, and contraindications. Students will be exposed to the rich international history of massage and to a variety of techniques from around the world including the contributions of men and women to the field.

P E 54A Intermediate Massage 3 Units

Prerequisite: Physical Education 54 or technical proficiency suitable to the course level or admission by instructor approval.

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Two hours lecture, three hours laboratory (60 hours total per quarter).

Further study and practice utilizing the principles of massage therapy.

P E 54B Sports Massage 3 Units

Prerequisite: Physical Education 54 or technical proficiency suitable to the course level.

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Two hours lecture, three hours laboratory (60 hours total per quarter).

Massage techniques and evaluation procedures for creating a massage specific to the athlete's condition and sport. Study of the muscles and movements involved in sports activities, with an understanding of common types and areas of injuries related to specific sports.

P E 54C Advanced Massage Skills 4 Units

Prerequisite: Physical Education 54B (may be taken concurrently); or technical proficiency suitable to the course level.

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Three hours lecture, three hours laboratory (72 hours total per quarter).

Methods and procedures of advanced soft tissue therapy and related topics including: clinical syndromes and pathologies, lymphatic system massage, various pain patterns, Travell trigger point release, deep tissue massage, bio-mechanical relationships, appropriate primary care referral, and the physiological aspects of tissue damage and repair.

P E 54D Clinical Practicum in Massage Therapy 3 Units

Prerequisite: Physical Education 54C or technical proficiency suitable to course level.

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

One hour lecture, six hours laboratory (84 hours total per quarter).

Clinical practice in massage therapy including: methods and procedures for office management, appointment scheduling, business development and financial record keeping; professional ethics training, client interviews, treatment design, massage clinical treatments and SOAP note charting experience.

P E 54E Table Shiatsu 4 Units

Prerequisite: Physical Education 54, 54A, 54B and 54C; or technical proficiency suitable to the course level.

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Three hours lecture, three hours laboratory (72 hours total per quarter).

Theory, methods, procedures and practice of Shiatsu, a Japanese method of hands on healing traditionally practiced on the floor, but adapted in this class to be performed on massage tables.

P E 54F Introduction to Chair Massage 3 Units

Prerequisite: Physical Education 54D and 54E; or technical proficiency suitable to the course level.

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Two hours lecture, three hours laboratory (60 hours total per quarter).

An introduction to the practice of chair massage. Includes a global and historical examination of chair massage, with an exploration of a variety of techniques and modalities used throughout the world. The theory behind chair massage will be covered. Students will be given practical experiences, and critiques will be used to correct posture, body mechanics, stroke application and stroke sequence.

P E 54T Internship in Massage Therapy 1 Unit**P E 54U 2 Units****P E 54V 3 Units**

Prerequisite: Physical Education 54 or technical proficiency suitable to the course level.

Three hours laboratory for each unit of credit (36 hours total for each unit of credit per quarter).

(Any combination of Physical Education 54T, 54U and 54V may be taken up to six times for credit.)

Internships provide opportunities for massage therapy students to reinforce the massage training gained in the classroom setting. With instructor approval students shall either assume the role of Teacher's Assistant or gain additional hands-on experience in the field under the supervision of an instructor, athletic trainer, or coach.

P E 70A Orientation to Lifetime Fitness 2 Units

(See general education pages for the requirement this course meets.)

Co-requisite: Physical Education 70A students must also enroll in Physical Education 71.

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Two hours lecture (24 hours total per quarter).

Introduction to fitness, wellness and lifestyle management. Students will examine current theories of health and fitness with emphasis on how wellness and personal fitness are affected by genetics, gender, and age. Each student will perform pre-assessment and post-assessment tests of their own cardiovascular capacity, muscular strength and endurance, flexibility, and body composition. Lifestyle changes will be emphasized and behavior change tools that promote healthy choices will be discussed. Instruction on proper exercise techniques will be demonstrated.

P E 71 Lifetime Wellness and Fitness Center Laboratory 1 Unit

(See general education pages for the requirement this course meets.)

Prerequisite: Physical Education 51 or 70A, or Health 51 (courses may be taken concurrently).

Three hours laboratory (36 hours total per quarter).

(May be taken up to six times for credit.)

A laboratory designed to improve student's cardio-respiratory fitness, muscular strength and endurance, flexibility and body composition. Strength and muscular endurance will be developed using Magnum weight equipment. Cardio-respiratory programs will be run on treadmills, cycles, stair steppers, and elliptical trainers.

P E 77 Special Projects in Physical Education 1/2 Unit**P E 77X 1 Unit****P E 77Y 1 1/2 Units**

(Formerly Physical Education 29, 29X and 29Y respectively.)

Prerequisite: Consent of instructor and division dean.

Three hours laboratory for each unit of credit (36 hours total for each unit of credit per quarter).

(Any combination of Physical Education 77, 77X and 77Y may be taken up to six times for credit as long as the projects are different each time.)

Individual research in Physical Education. Specific projects determined in consultation with the instructor. Outside reading and written report required. These projects are undertakings that are not in the regular physical education curriculum and require the approval of the division dean.

P E 85 Exercise Science 2 Units

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273; Biology 10 or 11 or equivalent.

Two hours lecture (24 hours total per quarter).

Basic concepts of physiology, nutrition, and exercise physiology for students planning on majoring in Physical Education and/or completing a certificate program in personal trainer, massage therapy, or coaching.

P E 85A Personal Fitness Trainer 2 Units

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273; completion of/or concurrent enrollment in Physical Education 85.

One and one-half hours lecture, two hours laboratory (42 hours total per quarter).

Concepts needed for instruction of individualized strength, flexibility, cardiovascular and functional fitness programs.

P E 85S Fitness Assessment for Personal Trainers 3 Units

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273; Mathematics 210 or equivalent; and Physical Education 85.

Two and one-half hours lecture, one and one-half hours laboratory (48 hours total per quarter).

Basic concepts of fitness assessment for personal trainers. Includes measurement of cardiovascular fitness and use of the American College of Sports Medicine metabolic equations. The student will understand body composition using calipers and skinfold equations. Measurements of muscular strength, muscular endurance, and flexibility will be covered. Test results will be analyzed and used for exercise prescription.

P E 88A Coaching I: The Foundations of Coaching 2 Units

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Two hours lecture (24 hours total per quarter).

Introduction and continuing education into the theories, techniques, strategies, and qualifications related to sport and athletic coaching. An in-depth analysis of coaching responsibilities and practical applications associated with youth (Little League, Pop Warner, American Youth Soccer Organization, and YMCA), middle school, high school, community college, and four-year university levels of competition and play. The students will study the issues and requirements associated with possible duties and job responsibilities in relationship to administrative, medical, legal, and practical experiences.

P E 88B Coaching II: The Fundamentals of Fund Raising and Budgeting 2 Units

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Two hours lecture (24 hours total per quarter).

Introduction and study of the fundamental strategies and techniques relating to alternative funding, i.e. fund raising, for school athletic programs or extra curricular activities. An in-depth analysis of successful fund raising endeavors with an emphasis on Education Code, District Policy, Legal and Ethical Standards of Operation, conduct, and accounting. Students will take a comprehensive look at the roles and responsibilities of coaches fund raising at all levels of sport competition and organization; youth, elementary and secondary schools, community colleges, college, university, and professional. Emphasis on role of money on programs. An overview of legal and business issues associated with possible coaching income derived from outside sources and fund raising activities. A mandatory review on non-profit organizational structure and accountability.

P E 99 Orientation to Athletics 1 Unit

Prerequisite: Competitive athletics experience at a high school or club level; medical examination; enrollment in 12 or more units (second year athletes must fulfill academic requirements as per the CCCAA).
Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.
 One hour lecture (12 hours total per quarter).
 Pass-No Pass (P-NP) course.

An introduction to De Anza College Intercollegiate Athletics. An orientation to the De Anza College Physical Education and Athletics Division programs, policies, services, requirements, transfer, etc. Topics discussed will be eligibility, decorum, team rules, college rules, NCAA rules, CCCAA rules, medical information, insurance, nutrition, alcohol awareness, drug education, sexual responsibility, team work, leadership, time management and study skills. Academic and Athletic success will be the focus.

Physical Education/Adapted

Physical Education classes for individuals with special needs.

PEA 1	Adapted Total Fitness	1/2 Unit
PEA 1X		1 Unit
PEA 1Y		1 1/2 Units
PEA 1Z		2 Units

(See general education pages for the requirement this course meets.)

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Three hours laboratory for each unit of credit (36 hours total for each unit of credit per quarter).

(Any combination of Adapted Physical Education 1, 1X, 1Y and 1Z may be taken up to six times for credit.)

Adapted to provide reasonable accommodations for students with verified physical disabilities, this course is an introduction to the discipline of Physical Education through cardiovascular, strength, and flexibility training in the context of an individual's physical, intellectual, and/or affective abilities and limitations. Includes rules, equipment, etiquette, safety, nutrition, and techniques related to fitness training. Includes a brief historical examination of how fitness training has changed due to the influences of individuals, cultures, and medical research. Students will review and apply basic exercise physiology and fitness concepts in the context of their own abilities and limitations to develop and/or maintain their cardiovascular, strength, and flexibility fitness levels.

PEA 2	Adapted Strength Development	1/2 Unit
PEA 2X		1 Unit
PEA 2Y		1 1/2 Units
PEA 2Z		2 Units

(See general education pages for the requirement this course meets.)

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Three hours laboratory for each unit of credit (36 hours total for each unit of credit per quarter).

(Any combination of Adapted Physical Education 2, 2X, 2Y and 2Z may be taken up to six times for credit.)

Adapted to provide reasonable accommodations for students with verified physical disabilities, this course is an introduction to the discipline of Physical Education through strength development in the context of an individual's physical, intellectual, and/or affective abilities and limitations. Includes rules, equipment, etiquette, safety, nutrition, and techniques related to strength training. Includes a brief historical examination of how strength training has changed due to the influences of individuals, cultures, and medical research. Students will review and apply basic exercise physiology and strength development concepts in the context of their own abilities and limitations to develop and/or maintain their muscular strength.

PEA 4	Adapted Cardiovascular Training	1/2 Unit
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PEA 4X	1 Unit
PEA 4Y	1 1/2 Units
PEA 4Z	2 Units

(See general education pages for the requirement this course meets.)

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Three hours laboratory for each unit of credit (36 hours total for each unit of credit per quarter).

(Any combination of Adapted Physical Education 4, 4X, 4Y and 4Z may be taken up to six times for credit.)

Adapted to provide reasonable accommodations for students with verified physical disabilities, this course is an introduction to the discipline of Physical Education through cardiovascular training in the context of an individual's physical, intellectual,

and/or affective abilities and limitations. Includes rules, equipment, etiquette, safety, nutrition, and techniques related to cardiovascular fitness training. Global and historical review of the evolution of aerobic exercise, exercise trends for men, women, and athletes as they correspond to the evolution of the discipline of Physical Education. Students will review and apply basic exercise physiology and fitness concepts in the context of their own abilities and limitations to develop and/or maintain their cardiovascular fitness levels.

PEA 5	Adapted Aquatic Exercise	1/2 Unit
PEA 5X		1 Unit
PEA 5Y		1 1/2 Units
PEA 5Z		2 Units

(See general education pages for the requirement this course meets.)

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Three hours laboratory for each unit of credit (36 hours total for each unit of credit per quarter).

(Any combination of Adapted Physical Education 5, 5X, 5Y and 5Z may be taken up to six times for credit.)

Adapted to provide reasonable accommodations for students with verified physical disabilities, this course is an introduction to the discipline of Physical Education through water exercise in the context of an individual's physical, intellectual, and/or affective abilities and limitations. Aquatic exercise uses dynamic aerobic exercise techniques to provide a level of conditioning for both the aerobic and anaerobic energy systems. The freestyle interval format combines jogging, jumping, walking, punching, kicking, and a variety of aerobic type movements performed in land-based programs. Students will strive for ultimate fitness through a complete program of cardiovascular exercise, strength development, and flexibility. An historical examination of aqua exercise for fitness, rehabilitation, and play will be included.

PEA 6X	Adapted Outdoor Education	1 Unit
PEA 6Y		1 1/2 Units

(Formerly Adapted Physical Education 60 and 60X respectively.)

(See general education pages for the requirement this course meets.)

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Three hours laboratory for each unit of credit (36 hours total for each unit of credit per quarter).

(Any combination of Adapted Physical Education 6X and 6Y may be taken up to six times for credit.)

A multifaceted course for students with disabilities seeking outdoor experiential education. Includes diverse experiences involving accessible activities including hiking, kayaking, white water rafting, camping, sailing, etc. Using adapted methodologies and wilderness safety, disabled students will experience survival techniques, investigate flora and fauna, experience greater joy and personal fulfillment being in an outdoor environment. Mental and physical strength will be tested. Students with disabilities will learn new personal skills.

PEA 56	Care and Prevention of Back Disorders	1/2 Unit
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PEA 56X	1 Unit
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(Formerly Adapted Physical Education 26 and 26X respectively.)

Advisory: English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263.

Three hours laboratory for each unit of credit (36 hours total for each unit of credit per quarter).

(Any combination of Adapted Physical Education 56 and 56X may be taken up to six times for credit.)

Proper fitness training in the prevention and care of chronic back disorders for students with verified physical limitations.

Physical Sciences, Math, and Engineering

PSME 95	Introduction to Peer Tutoring in Math and Science	2 Units
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Prerequisite: Must be selected to work as a De Anza tutor.

(Also listed as Learning Assistance 95. Students may enroll in either department, but not both, for credit.)

Two hours lecture (24 hours total per quarter).

Pass-No Pass (P-NP) course.

Content-specific strategies and communication skills to help peer tutors of math and science conduct productive, effective, and fun tutoring sessions. Experience applying instructional and learning theory and tutoring techniques to math and science content. Strategies for working with students from diverse backgrounds and with various learning styles. Self-reflection and peer feedback on actual tutoring sessions. Required of all De Anza group and individual math and science tutors during their first quarter of tutoring.

P Physics

PHYS 2A General Introductory Physics 5 Units

(See general education pages for the requirement this course meets.)

Prerequisite: Mathematics 1A (may be taken concurrently).

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273; Physics 50.

Four hours lecture, three hours laboratory (84 hours total per quarter).

An elementary study of the basic physical laws describing the motion of bodies. Includes the study of oscillations, waves, and sound. Applications to everyday physical phenomena in problem solving using verbal logic, critical thinking, and mathematics up to elementary calculus. In the laboratory, explore experimental scientific procedures by comparing theoretical models to classic experiments using standard measurement techniques, basic uncertainty analysis, and graphical interpretations of data.

PHYS 2B General Introductory Physics 5 Units

Prerequisite: Physics 2A.

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Four hours lecture, three hours laboratory (84 hours total per quarter).

The laws of mechanics applied to those of electricity and magnetism. An introduction to the physical properties of that fundamental quantity called charge. Includes the study of DC and AC circuits and their elementary applications. Concludes with electromagnetic waves. In the laboratory, learn to construct elementary circuits, measure and analyze their properties with electronic equipment including the oscilloscope, and study the behavior of moving charge in magnetic fields.

PHYS 2C General Introductory Physics 5 Units

Prerequisite: Physics 2B.

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Four hours lecture, three hours laboratory (84 hours total per quarter).

Study fluids, optics, thermodynamics, and modern physics. In the laboratory, continue to deepen an understanding of scientific procedure by applying theoretical models to classic experiments.

PHYS 4A Physics for Scientists and Engineers: Mechanics 6 Units

(See general education pages for the requirement this course meets.)

Prerequisite: Physics 50 with a grade of C or better, or the equivalent (including high school physics); Mathematics 1B (may be taken concurrently).

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Five hours lecture, three hours laboratory (96 hours total per quarter).

A rigorous introduction to the physical laws that describe and explain the motion of bodies. Analyze the structure of classical mechanics and its applications to problem solving using verbal logic, critical analysis, and mathematical models. Investigate general scientific procedures as a quantitative interplay between experimentation and theory employing statistical methods, graphical techniques, and measurement theory.

PHYS 4B Physics for Scientists and Engineers (Electricity and Magnetism) 6 Units

Prerequisite: Physics 4A; Mathematics 1C (may be taken concurrently).

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Five hours lecture, three hours laboratory (96 hours total per quarter).

An introduction to classical electromagnetism. Includes DC and AC circuits and elementary field theory.

PHYS 4C Physics for Scientists and Engineers: Fluids, Waves, Optics and Thermodynamics 6 Units

Prerequisite: Physics 4B; Mathematics 1D (may be taken concurrently).

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Five hours lecture, three hours laboratory (96 hours total per quarter).

Introductory studies in static and dynamic fluids, mechanical and non-mechanical waves, geometrical and physical optics, heat and the laws of thermodynamics.

PHYS 4D Physics for Scientists and Engineers (Modern Physics) 6 Units

Prerequisite: Physics 4C.

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Five hours lecture, three hours laboratory (96 hours total per quarter).

Physics meets the Twentieth Century with a study of special relativity and quantum mechanics. Nuclear physics, elementary particles, and other selected topics are treated as time allows.

PHYS 10 Concepts of Physics 5 Units

(See general education pages for the requirement this course meets.)

Prerequisite: Mathematics 114 or equivalent; or a qualifying score on the Intermediate Algebra Placement Test.

Advisory: English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263.

Five hours lecture (60 hours total per quarter).

Explore the fundamental concepts of physics as applied to everyday phenomena from a limited mathematical perspective emphasizing verbal logic, critical analysis, and rational thought. Analyze the history of scientific procedure as an interplay between theory and experimentation. Critically evaluate the role of scientific discovery in the success and development of technology.

PHYS 50 Preparatory Physics 4 Units

Advisory: Mathematics 43; Physics 10.

Four hours lecture (48 hours total per quarter).

A study in basic problem solving techniques in mechanics as a preparation for Physics 4A.

PHYS 77 Special Projects in Physics 1 Unit

PHYS 77X 2 Units

PHYS 77Y 3 Units

Prerequisite: Consent of instructor and division dean.

Three hours laboratory for each unit of credit (36 hours total for each unit of credit per quarter).

(Any combination of Physics 77, 77X and 77Y may be taken up to six times, not to exceed 18 units, as long as the projects are different each time.)

Pass-No Pass (P-NP) course.

Individual special reading, writing, or study projects in Physics as determined in consultation with the instructor.

Political Science

POLI 1 American Government and Politics 4 Units

(See general education pages for the requirement this course meets.)

Advisory: English Writing 1A or English as a Second Language 5.

Four hours lecture (48 hours total per quarter).

Critical examination of the contemporary and historical struggle for the development of democratic political institutions in the United States at the state, local, and national levels. Particular emphasis given to the conflict between disparate socioeconomic groups in the conduct of U.S. political life (e.g. traditional elites versus the historically (and currently) disenfranchised-- women, people of color, workers, immigrants, etc.).

POLI 2 Comparative Politics 4 Units

(See general education pages for the requirement this course meets.)

Advisory: English Writing 1A or English as a Second Language 5.

Four hours lecture (48 hours total per quarter).

Critical examination of the historical and contemporary development of various current major world political systems and the comparison of political phenomena at the intra-state, nation-state, inter-state, and global level of analysis.

POLI 3 International Relations 4 Units

(See general education pages for the requirement this course meets.)

Advisory: English Writing 1A or English as a Second Language 5.

Four hours lecture (48 hours total per quarter).

Critical examination of the basic elements of contemporary international relations: scope, terminology, methodology, sovereignty, nationalism, national policies, globalization, power, international and regional political systems. The course will also discuss non-governmental organizations and issues such as human rights and the environment.

POLI 5 Introduction to Political Thought and Theory 4 Units

(See general education pages for the requirement this course meets.)

Advisory: English Writing 1A or English as a Second Language 5.

Four hours lecture (48 hours total per quarter).

A survey in the field of political theory including how to interpret, discuss, critique, debate and write about classical and contemporary political thought and theory. Both classic or traditional approaches as well as more current and contemporary paradigms specific to constituent groups traditionally excluded will be examined. Through this course of study, students will learn to think and discuss critically, both classic and modern issues in politics (e.g., individual versus community rights, freedom, equality and distributive justice, power, sovereignty and the state, etc.).

POLI 10 Introduction to Administration of Justice 4 Units

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

(Also listed as Administration of Justice 1. Students may enroll in either department, but not both, for credit.)

Four hours lecture (48 hours total per quarter).

The history and philosophy of the administration of justice in America. A study of the overall system from its European antecedents and development within the United States; identification of various subsystems and components; their role expectations and interrelationships; basic premise of crime, punishment and rehabilitation; the role of education in the administration of justice within a democracy.

POLI 11	Federal Courts and Constitutional Law	4 Units	POLI 33	Introduction to Peace and Conflict Studies	4 Units
<i>Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.</i> <i>(Also listed as Paralegal 11 and Administration of Justice 11. Students may enroll in only one department for credit.)</i> <i>Four hours lecture (48 hours total per quarter).</i> Federal court procedure and the impact of U.S. Constitutional law on federal and state law. Read and analyze the Constitution. Effect of U.S. Supreme Court cases on current constitutional interpretation.			<i>(See general education pages for the requirement this course meets.)</i> <i>Advisory: English Writing 1A or English as a Second Language 5.</i> <i>(Also listed as International Studies 33. Students may enroll in either department, but not both, for credit.)</i> <i>Four hours lecture (48 hours total per quarter).</i> Introduction to a broad range of issues, concepts, and approaches fundamental to the study of peace and conflict predominantly from the discipline of political science but incorporating ethnology, psychology, anthropology, religion, economics, and history. Students assess: the role of international norms, institutions, and states; the impact of religious, philosophical, and cultural influences; and the processes and sources of social change as they relate to upholding peace, culminating in the examination and identification of factors that attend conflict and violence with the intention of applying this understanding toward the prevention, de-escalation, and resolution of conflicts.		
POLI 13	Concepts of Criminal Law (CP 2)	4 Units	POLI 75	Principles and Procedures of the Justice System	4 Units
<i>Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.</i> <i>(Also listed as Paralegal 3 and Administration of Justice 3. Students may enroll in only one department for credit.)</i> <i>Four hours lecture (48 hours total per quarter).</i> Historical development, philosophy of law and constitutional provisions; definitions, classification of crime, and their application to the system of administration of justice; legal research, study of case law, methodology, and concepts of law as a social force in a multicultural, multiethnic society.			<i>Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.</i> <i>(Also listed as Administration of Justice 75 and Paralegal 75. Students may enroll in only one department for credit.)</i> <i>Four hours lecture (48 hours total per quarter).</i> Procedures followed by law enforcement and courts in criminal cases; constitutional principles governing those procedures.		
POLI 15	Grassroots Democracy: Race, Politics and the American Promise	4 Units	POLI 95	Overview of American Law	4 Units
<i>(Formerly Political Science 53.)</i> <i>(See general education pages for the requirement this course meets.)</i> <i>Advisory: English Writing 1A or English as a Second Language 5.</i> <i>(Also listed as Intercultural Studies 25. Students may enroll in either department, but not both, for credit.)</i> <i>Four hours lecture (48 hours total per quarter).</i> Applied and theoretical learning for students of social justice, this course will examine race, culture and contradictions in the ideal of the American Dream through a comparative analysis of American experiences of migration. Particular emphasis will be on the historical experiences of European immigrants, African Americans, Mexican Americans, and Asian Americans. The course will also discuss the contemporary social and cultural implications of the migration process. Using a multidisciplinary social science approach, attention will be given to issues of race, ethnicity, gender, class, and ecology as well as the role of the state (policy) to the process of migration and immigration.			<i>Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.</i> <i>(Also listed as Administration of Justice 95 and Paralegal 95. Students may enroll in only one department for credit.)</i> <i>Four hours lecture (48 hours total per quarter).</i> Overview of the major substantive areas of American law: Agency, contracts, constitutional law, corporations, criminal law, family law, property, torts, wills and estates.		
POLI 16	Grassroots Democracy: Social Movements Since the 1960s	4 Units	Psychology		
<i>(Formerly Political Science 54.)</i> <i>(See general education pages for the requirement this course meets.)</i> <i>Advisory: English Writing 1A or English as a Second Language 5.</i> <i>(Also listed as Intercultural Studies 36. Students may enroll in either department, but not both, for credit.)</i> <i>Four hours lecture (48 hours total per quarter).</i> Applied and theoretical learning for students of social justice, this course is a comparative survey of protest movements since the 1960s. An introductory, comparative, and interdisciplinary study of Mexican American, African American, Asian American, and white working class social and political struggles from 1960 to the present. The course traces the development of protest movements in response to racial, class, gender, and political inequality in the context of U.S. politics and history. The course critically examines the internal and external factors contributing to the rise and fall of social and political movements with special attention to the conjuncture of ecology, gender, race, ethnicity, culture, class, and sexual orientation in contemporary U.S. politics.			PSYC 1		
POLI 17	Grassroots Democracy: Leadership and Power	4 Units	General Psychology		
<i>(See general education pages for the requirement this course meets.)</i> <i>Advisory: English Writing 1A or English as a Second Language 5.</i> <i>(Also listed as Intercultural Studies 27. Students may enroll in either department, but not both, for credit.)</i> <i>Four hours lecture (48 hours total per quarter).</i> Applied and theoretical training for students of social justice, this course is a multidisciplinary exploration of social change and popular democratic action with a focus on the meaning and development of political power in modern democracies. Topics to be explored include: gender and race sensitive approaches to leadership style, institutional and mass forums for civic engagement, mass recruitment and mobilization, consciousness development, democratic ethics, and strategic and tactical action.			<i>(See general education pages for the requirement this course meets.)</i> <i>Advisory: English Writing 1A or English as a Second Language 5.</i> <i>Four hours lecture (48 hours total per quarter).</i> Factors influencing human behavior including: biological and neurological processes and structures, evolution, genetics, gender, life span development, consciousness, attention, sensation, perception, learning, memory cognition, intelligence, motivation, emotion, stress, personality, psychopathology, psychotherapy, social and cultural determinants.		
POLI 30	Women, Gender and Politics	4 Units	PSYC 2	Psychology as a Behavioral Science and Profession	6 Units
<i>(Formerly Political Science 60.)</i> <i>(See general education pages for the requirement this course meets.)</i> <i>Advisory: English Writing 1A or English as a Second Language 5.</i> <i>(Also listed as Women's Studies 30. Students may enroll in either department, but not both, for credit.)</i> <i>Four hours lecture (48 hours total per quarter).</i> Survey of the multiple ways in which women are active in politics at the community, local, state, national and global levels, primarily in the U.S., with some consideration of women's diverse political engagements elsewhere.			<i>Prerequisite: Psychology 1.</i> <i>Advisory: English Writing 1A or English as a Second Language 5.</i> <i>Five hours lecture, three hours laboratory (96 hours total per quarter).</i> Psychology as a behavioral science and profession. Basic principles of learning, and behavior modification.		
			PSYC 3	Human Experimental Psychology (An Introduction to Cognitive Science)	6 Units
			<i>(See general education pages for the requirement this course meets.)</i> <i>Advisory: English Writing 1A or English as a Second Language 5; Psychology 1.</i> <i>Five hours lecture, three hours laboratory (96 hours total per quarter).</i> A survey of human experimental psychology and cognitive science with emphasis on research design, methodology and scientific report writing. Research design and methodology will be illustrated and integrated through a selected review of concepts and research in neurophysiology, sensation, perception and memory.		
			PSYC 4	Abnormal Psychology	4 Units
			<i>(See general education pages for the requirement this course meets.)</i> <i>Advisory: English Writing 1A or English as a Second Language 5.</i> <i>Four hours lecture (48 hours total per quarter).</i> A historical overview of abnormal psychology with emphasis on current paradigms and models in psychopathology and therapy including a survey of research methodology; clinical assessment, classification, and diagnosis with special focus on cultural, gender, and age issues in psychopathology and therapy.		
			PSYC 5	Introduction to Theories of Personality	4 Units
			<i>(See general education pages for the requirement this course meets.)</i> <i>Advisory: English Writing 1A or English as a Second Language 5; Psychology 1.</i> <i>Four hours lecture (48 hours total per quarter).</i> Survey of major theories and concepts of personality. Topics to include: Freudian, neo-Freudian, interpersonal, dispositional, behavioral and phenomenological theories.		

PSYC 6 Introduction to Humanistic Psychology 4 Units

(See general education pages for the requirement this course meets.)

Advisory: English Writing 1A or English as a Second Language 5.

Four hours lecture (48 hours total per quarter).

A survey of humanistic, existential-phenomenological psychology and Eastern thought. A cross-cultural survey of humanistic personality principles including Western European existential phenomenological psychology and the current and historical impact of Eastern thought.

PSYC 8 Introduction to Social Psychology 4 Units

(See general education pages for the requirement this course meets.)

Advisory: English Writing 1A or English as a Second Language 5.

Four hours lecture (48 hours total per quarter).

The scientific study of the way individuals think, feel and behave in social situations. The systematic approach will include cross-cultural and comparative perspectives.

PSYC 9 Psychology of Human Relationships and Normal Adjustment 4 Units

(See general education pages for the requirement this course meets.)

Advisory: English Writing 1A or English as a Second Language 5.

Four hours lecture (48 hours total per quarter).

A survey of current theoretical and applied psychological knowledge relevant to personal/social interactions and normal psychological adjustment.

PSYC 10G Child Development (The Early Years) 4 Units

(See general education pages for the requirement this course meets.)

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

(Also listed as Child Development 10G. Students may enroll in either department, but not both, for credit.)

Four hours lecture (48 hours total per quarter).

An examination of human growth and development from conception to middle childhood with particular attention given to current theoretical and research perspectives within a diverse society. Observational study of children with analysis of factors influencing development including conditions that put children at risk. (This course meets NAEYC Standards 1 and 3; NBPTS Standards 1 and 4; and CEC Standards 1, 2 and 3.)

PSYC 10H Child Development (Middle Childhood and Adolescence) 4 Units

(See general education pages for the requirement this course meets.)

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

(Also listed as Child Development 10H. Students may enroll in either department, but not both, for credit.)

Four hours lecture (48 hours total per quarter).

An examination of human growth and development both typical and atypical from school age through adolescence with particular attention given to current theoretical and research perspectives within a diverse society.

(This course meets NAEYC Standards 1 and 3; NBPTS Standards 1 and 4; and CEC Standards 1, 2 and 3.)

PSYC 12 Psychology of Gender 4 Units

(See general education pages for the requirement this course meets.)

Advisory: English Writing 1A or English as a Second Language 5.

(Also listed as Women's Studies 12. Students may enroll in either department, but not both, for credit.)

Four hours lecture (48 hours total per quarter).

A survey of the psychobiological, cultural, social and intellectual factors influencing the psychology of gender.

PSYC 14 Developmental Aspects of Psychology 4 Units

(See general education pages for the requirement this course meets.)

Advisory: English Writing 1A or English as a Second Language 5.

Four hours lecture (48 hours total per quarter).

Interaction of the biological, social, cognitive and psychological development across the life span.

PSYC 15 Basic Statistics and Research Methods in Social and Behavioral Sciences 4 Units

(See general education pages for the requirement this course meets.)

Prerequisite: Psychology 1 or Sociology 1; Mathematics 114 or equivalent.

Advisory: English Writing 1A or English as a Second Language 5.

(Also listed as Sociology 15. Students may enroll in either department, but not both, for credit.)

Four hours lecture (48 hours total per quarter).

Elementary statistics including measures of central tendency, variability, probability, correlation, tests of significance, experimental and quasi-experimental designs.

PSYC 24 Introduction to Psychobiology 4 Units

(See general education pages for the requirement this course meets.)

Prerequisite: Psychology 1.

Advisory: English Writing 1A or English as a Second Language 5.

Four hours lecture (48 hours total per quarter).

A survey of the central and peripheral nervous system processes underlying the behavior of humans and animals, with emphasis on evolutionary, genetic and gender

differences underlying social behavior, the basic anatomical and physiological substrates of behavior and consciousness and on the neural mechanisms and sensory processes associated with learning, language, perception, motivation, emotion, sleep, speech, and sexual behavior.

PSYC 60 Industrial Organizational Psychology 4 Units

Advisory: English Writing 1A or English as a Second Language 5; Psychology 1.

Four hours lecture (48 hours total per quarter).

Application of psychological principles to issues faced by business and industry, law, government, and the military services.

PSYC 63 Sexual Assault, Police and Community Response 4 Units

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or

English as a Second Language 272 and 273.

(Also listed as Administration of Justice 62. Students may enroll in either department, but not both, for credit.)

Four hours lecture (48 hours total per quarter).

Societal and psychological aspects of sexual assault, the perpetrators and the victims; practical application of the police investigation, the criminal justice process, and social service intervention.

PSYC 64 Psychology Internship 1 Unit**PSYC 64X 2 Units****PSYC 64Y 3 Units****PSYC 64Z 4 Units**

Advisory: English Writing 1A or English as a Second Language 5; Psychology 1.

Four hours laboratory per unit of supervised internship in an authorized office or agency (48 hours total for each unit of credit per quarter).

(Any combination of Psychology 64, 64X, 64Y and 64Z may be taken up to six times, not to exceed 18 units, as long as the topics/projects are different each time.)

Program of work experience and study in Psychology or Human Services under the supervision of the instructor and agency personnel.

PSYC 67 Introduction to Clinical Psychology 4 Units

Advisory: English Writing 1A or English as a Second Language 5.

Four hours lecture (48 hours total per quarter).

An analysis of the major theoretical formulations in the history of clinical psychology, from classical psychoanalysis to contemporary existentialism and behavior modification. An overview of diagnosis, assessment and treatment methods. An examination of clinical psychology as a profession including education, training, specialties and employment.

PSYC 74A Interviewing, Interrogation and Crisis Intervention 4 Units

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or

English as a Second Language 272 and 273.

(Also listed as Administration of Justice 74A and Paralegal 74A. Students may enroll in only one department for credit.)

Four hours lecture (48 hours total per quarter).

Theories, principles and strategies of tactical and interpersonal communication necessary to interview victims, witnesses, and suspects; crisis intervention strategies for victims and witnesses of crime; communication with individuals from diverse backgrounds with consideration to race, ethnicity, gender, age and special needs.

Reading

(See other self-paced Reading courses under Skills.)

READ 70 Reading Across the Disciplines 1 Unit

Advisory: English Writing 1A or English as a Second Language 5.

One hour lecture (12 hours total per quarter).

(May be taken up to six times, as long as the topics are different each time.)

Improve comprehension of reading materials in a specific content-area course through the application of reading strategies and critical analysis of reading materials specific to course. This course offered in coordination with specific sections of content area courses.

READ 80 Advanced Reading for College Success 4 Units

Advisory: English Writing 1A or English as a Second Language 5.

Four hours lecture (48 hours total per quarter).

College-level reading techniques and practice to enhance reading efficiency for academic, career, and personal growth. Application of comprehension, analysis, and interpretation skills to a range of challenging readings, including texts and primary-source materials from various cultural perspectives and across disciplines.

READ 200 Reading Fundamentals 5 Units

(Formerly Reading 201.)

Credit course - Does not apply to De Anza Associate degree.

Prerequisite: A qualifying score on the Reading Placement Test.

Five hours lecture (60 hours total per quarter).

Pass-No Pass (P-NP) course.

An introduction to everyday benefits of reading. A practice in learning and applying reading methods to appropriate reading material and learning strategies for improving reading comprehension and rate.

READ 211 Developmental Reading 5 Units

(Formerly Reading 100.)

Credit course - Does not apply to De Anza Associate degree.

Prerequisite: Reading 200; or a qualifying score on the Reading Placement Test.

Five hours lecture (60 hours total per quarter).

Pass-No Pass (P-NP) course.

Improve ability to read independently and effectively in work, academic, and personal environments.

Real Estate

REST 50 Real Estate Principles 4 Units

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273; Mathematics 212 or equivalent.

Four hours lecture (48 hours total per quarter).

Fundamental principles of real estate: economics, law, working concepts, forms and terminology.

REST 51 Real Estate Practices 4 Units

Prerequisite: Real Estate 50.

Four hours lecture (48 hours total per quarter).

Real estate business practices: procedures, forms and contracts.

REST 52A Legal Aspects of Real Estate 4 Units

Prerequisite: Real Estate 50.

(Also listed as Paralegal 52A. Students may enroll in either department, but not both, for credit.)

Four hours lecture (48 hours total per quarter).

California real property laws with emphasis on their practical application. Sources of real estate law; classes of property; fixtures; easements; estates or interest in real property; contracts of sale; covenants; conditions; and restrictions.

REST 53 Real Estate Finance 4 Units

Prerequisite: Real Estate 50.

Four hours lecture (48 hours total per quarter).

Regulations and procedures for financing real estate: types of lenders; primary and secondary investors; methods and guidelines for qualifying for real property loans.

REST 54 Real Estate Economics 4 Units

Prerequisite: Real Estate 50.

Four hours lecture (48 hours total per quarter).

Economic factors affecting real estate; urban development, renewal and regulation of land uses; business fluctuations and real estate cycles; mortgage market; commercial, industrial and residential income properties and trends; rural and special purposes properties and trends.

REST 56A Real Estate Appraisal I 4 Units

Prerequisite: Real Estate 50.

Four hours lecture (48 hours total per quarter).

Principles of real property valuation; sales market data, construction, methods of appraising; current trends and new technologies; uniform standards for appraising (USPAP), career opportunities.

REST 59 Survey of Real Estate Property Management 4 Units

Prerequisite: Real Estate 50.

Four hours lecture (48 hours total per quarter).

Successful techniques and practices in the management of income property from acquisition to disposal; neighborhood analysis, rent schedules, renting, credit and collections, maintenance, insurance, tax considerations, pitfalls in the purchase of income property.

REST 61 Real Estate Investments 4 Units

Advisory: Real Estate 50.

Four hours lecture (48 hours total per quarter).

Real estate investments including apartments, commercial, and industrial buildings.

Russian

RUSS 1 Elementary Russian (First Quarter) 5 Units

(Formerly Russian 91.)

(See general education pages for the requirement this course meets.)

Advisory: English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263.

Five hours lecture (60 hours total per quarter).

Introduction to the language and culture of Russia. Basic speaking, listening, reading, and writing of Russian will be introduced and practiced within a cultural framework. Emphasis will be on language as an expression of culture. Oral practice and conversation based on understanding of the language structure. Language laboratory practice will be part of the regular instruction to reinforce pronunciation, grammar, syntax, and simple conversation.

RUSS 2 Elementary Russian (Second Quarter) 5 Units

(Formerly Russian 92.)

(See general education pages for the requirement this course meets.)

Prerequisite: Russian 1 (equivalent to one year of high school Russian) or equivalent.

Advisory: English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263.

Five hours lecture (60 hours total per quarter).

Further development of material presented in Russian 1. Continuation of introduction to the language and culture of Russian Federation. Elementary speaking, listening, reading, and writing of Russian will be continued and practiced within a cultural framework. Emphasis will be on language as an expression of culture. Language laboratory will be practiced to reinforce pronunciation, grammar, syntax, and simple conversation.

RUSS 3 Elementary Russian (Third Quarter) 5 Units

(Formerly Russian 93.)

(See general education pages for the requirement this course meets.)

Prerequisite: Russian 2 (equivalent to two years of high school Russian) or equivalent.

Advisory: English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263.

Five hours lecture (60 hours total per quarter).

Further development of material presented in Russian 1 and 2. Continuation of introduction to the language and culture of Russia. Elementary speaking, listening, reading, and writing of Russian will be continued and practiced within a cultural framework. Emphasis will be on language as an expression of culture. Language laboratory will be practiced to reinforce pronunciation, grammar, syntax, and conversations.

RUSS 61A Russian - Intermediate Conversation (First Quarter) 3 Units

Advisory: English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263; Russian 3.

Three hours lecture (36 hours total per quarter).

Designed to develop conversational skills based on language structures acquired during the previous studies and to increase language accuracy and fluency. It will emphasize usage of idiomatic expressions and conversational exchanges on common topics. Students will be using language through different forms such as reading, listening, speaking. There will be discussions on daily-life situations and cultural topics.

RUSS 61B Russian - Intermediate Conversation (Second Quarter) 3 Units

Advisory: English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263; Russian 61A.

Three hours lecture (36 hours total per quarter).

Designed to develop conversational skills based on language structures acquired during the previous studies and to increase language accuracy and fluency. Students will be using language through different forms such as reading, listening, speaking. There will be discussions on daily-life situations and cultural topics. More idiomatic expressions and newer discussions subjects will be introduced.

RUSS 61C Russian - Intermediate Conversation (Third Quarter) 3 Units

Advisory: English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263; Russian 61B.

Three hours lecture (36 hours total per quarter).

Designed to improve conversational skills and communicative competence. More idiomatic expressions will be introduced. Students will be using language in different forms such as reading, listening, speaking. There will be discussions on daily-life situations as well as historical, cultural and political topics.

Sign Language

SIGN 1 Elementary American Sign Language (First Quarter) 5 Units

(See general education pages for the requirement this course meets.)

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Five hours lecture (60 hours total per quarter).

Development of and practice in elementary American Sign Language (ASL): preparation for acquiring a visual gestural language; finger spelling; vocabulary; modeling and use of basic grammatical structure. Beginning communication skill with emphasis on comprehension. Basic cultural aspects of deafness; historical and linguistic elements of sign language. Taught primarily in American Sign Language.

SIGN 2 Elementary American Sign Language (Second Quarter) 5 Units

(See general education pages for the requirement this course meets.)

Prerequisite: Sign Language 1 or equivalent.

Five hours lecture (60 hours total per quarter).

Continuation of elementary American Sign Language (ASL) skills in targeted language functions: finger spelling; vocabulary; modeling and use of grammatical structure. Focus on greater communicative competence. Study of deaf culture and the development and linguistics of American Sign Language. Taught in American Sign Language.

SIGN 3 Elementary American Sign Language (Third Quarter) 5 Units

(See general education pages for the requirement this course meets.)

Prerequisite: Sign Language 2 or equivalent.

Five hours lecture (60 hours total per quarter).

Continuation of elementary American Sign Language (ASL) skills in targeted language functions with focus on greater structural accuracy and communicative competence. Study of deaf culture and the development and linguistics of American Sign Language. Taught in American Sign Language.

Skills

(See other reading courses under Skills.)

SKIL 200 Reading Skills 1/2 Unit **SKIL 200X 1 Unit**

(Formerly Skills 100 and 100X respectively.)

Credit course - Does not apply to De Anza Associate degree.

Requisite/Advisory: None.

Two hours lecture-laboratory for each unit of credit (24 hours total for each unit of credit per quarter).

(Any combination of Skills 200 and 200X may be taken up to six times for credit.)

Pass-No Pass (P-NP) course.

An individualized program of instruction for students who want to improve their reading skills for academic or workplace environments. Focus on active reading, previewing techniques, textbook reading strategies, basic and critical comprehension, vocabulary in context, textbook reading strategies, and workplace reading, using culturally relevant methods and texts.

SKIL 205 Vocabulary Skills 1/2 Unit

(Formerly Skills 105.)

Credit course - Does not apply to De Anza Associate degree.

Requisite/Advisory: None.

One hour lecture-laboratory (12 hours total per quarter).

(May be taken up to six times for credit.)

Pass-No Pass (P-NP) course.

An individualized program in vocabulary development designed to improve reading comprehension and the ability to communicate effectively when speaking and writing English through the use of culturally relevant methods and texts.

SKIL 210 Basic Mathematic Skills 1/2 Unit

(Formerly Skills 110.)

Credit course - Does not apply to De Anza Associate degree.

Requisite/Advisory: None.

One hour lecture-laboratory (12 hours total per quarter).

(May be taken up to six times for credit.)

Pass-No Pass (P-NP) course.

An individualized program of instruction for students who want to improve their basic math skills for academic or workplace environments. Focus on study strategies for learning math and overcoming math anxiety, and addition, subtraction, multiplication and division using whole numbers, fractions, decimals, and percentages.

SKIL 220 Writing Skills 1/2 Unit **SKIL 220X 1 Unit**

(Formerly Skills 120 and 120X respectively.)

Credit course - Does not apply to De Anza Associate degree.

Requisite/Advisory: None.

One hour lecture-laboratory for each one-half unit of credit (12 hours total for each unit of credit per quarter).

(Any combination of Skills 220 and 220X may be taken up to six times for credit.)

Pass-No Pass (P-NP) course.

A self-paced, individualized program of instruction for students who want to improve their writing skills for academic or workplace environments. Focus on writing process, paragraph development, organization, and editing skills, using culturally relevant methods and texts.

SKIL 221 Spelling Skills 1/2 Unit

(Formerly Skills 121.)

Credit course - Does not apply to De Anza Associate degree.

Requisite/Advisory: None.

One hour lecture-laboratory (12 hours total per quarter).

(May be taken up to six times for credit.)

Pass-No Pass (P-NP) course.

An individualized program focusing on basic rules, editing and memory strategies to improve spelling and written communication through culturally relevant methods and texts.

SKIL 222 Grammar Skills 1/2 Unit **SKIL 222X 1 Unit**

(Formerly Skills 122 and 122X respectively.)

Credit course - Does not apply to De Anza Associate degree.

Requisite/Advisory: None.

One hour lecture-laboratory for each one-half unit of credit (12 hours total for each unit of credit per quarter).

(Any combination of Skills 222 and 222X may be taken up to six times for credit.)

Pass-No Pass (P-NP) course.

A self-paced, individualized program of instruction for students who want to improve their grammar skills for academic or workplace environments. Focus on fundamentals of English grammar, parts of speech, verb tenses, punctuation, sentence boundaries, and editing for sentence correctness using culturally relevant texts and methods.

SKIL 230 Study Skills 1/2 Unit **SKIL 230X 1 Unit**

(Formerly Skills 130 and 130X respectively.)

Credit course - Does not apply to De Anza Associate degree.

Requisite/Advisory: None.

One hour lecture-laboratory for each one-half unit of credit (12 hours total for each unit of credit per quarter).

(Any combination of Skills 230 and 230X may be taken up to six times for credit.)

Pass-No Pass (P-NP) course.

A self-paced, individualized program of instruction covering study skills such as time management, textbook reading, note taking, and test taking using culturally relevant methods and texts.

SKIL 232 Adjunct Study Skills 1/2 Unit

(Formerly Skills 132.)

Credit course - Does not apply to De Anza Associate degree.

Co-requisite: Student must be concurrently enrolled in an approved content course.

One hour lecture-laboratory (12 hours total per quarter).

(May be taken up to six times for credit.)

Pass-No Pass (P-NP) course.

Small group collaborative instruction linked to specific content courses and individualized study skills lab modules. Students learn, practice, and apply to targeted courses skills such as time management, textbook reading, note taking, and test taking.

Social Science

SOSC 77 Special Projects in Social Sciences 1/2 Unit

SOSC 77W 1 Unit

SOSC 77X 2 Units

SOSC 77Y 3 Units

SOSC 77Z 4 Units

Prerequisite: Consent of instructor and division dean.

Three hours laboratory for each unit of credit (36 hours total for each unit of credit per quarter).

(Any combination of Social Sciences 77, 77W, 77X, 77Y and 77Z may be taken up to six times for credit, not to exceed 18 units, as long as the projects are different each time.)

Individual special reading, writing or study projects in such disciplines as political science, sociology, history, philosophy, or psychology.

SOSC 80	Community Based Learning in Social Sciences	1/2 Unit
SOSC 80W		1 Unit
SOSC 80X		2 Units
SOSC 80Y		3 Units
SOSC 80Z		4 Units

Requisite/Advisory: None.

Three hours laboratory for each unit of credit (36 hours total for each unit of credit per quarter).

(Any combination of Social Sciences 80, 80W, 80X, 80Y and 80Z may be taken up to six times for credit, not to exceed 18 units, as long as the topics/projects are different each time.)

Practical work with a community, business or civic institution and reflection on that activity.

SOSC 97W	Topics in Social Sciences	1 Unit
SOSC 97X		2 Units
SOSC 97Y		3 Units
SOSC 97Z		4 Units

Advisory: English Writing 1A or English as a Second Language 5.

One hour lecture for each unit of credit (12 hours total for each unit of credit per quarter).

(Any combination of Social Sciences 97W, 97X, 97Y and 97Z may be taken up to six times for credit, not to exceed 18 units, as long as the topics are different each time.)

Topics in the social sciences that deal with one or more of the political, sociological, legal, cultural, psychological, historical, and/or economic aspects of our contemporary world.

Sociology

SOC 1	Introduction to Sociology	4 Units
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(See general education pages for the requirement this course meets.)

Advisory: English Writing 1A or English as a Second Language 5.

Four hours lecture (48 hours total per quarter).

The sociological approach to the study of human behavior from a variety of perspectives. Explore important concepts in sociology, including culture, social structure, socialization, social institutions, groups, social interaction, social inequality, collective behavior, and social change in human societies.

SOC 4	Race, Ethnicity and Inequality	4 Units
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(See general education pages for the requirement this course meets.)

Advisory: English Writing 1A or English as a Second Language 5.

(Also listed as Intercultural Studies 4. Students may enroll in either department, but not both, for credit.)

Four hours lecture (48 hours total per quarter).

An interdisciplinary examination of major concepts and controversies in study of racial and ethnic difference in the United States. Exploration of race and ethnicity as historical and contemporary categories of identification in the context of social inequality. Social movements and policy debates on racial equity will be analyzed.

SOC 5	Sociology of Globalization and Social Change	4 Units
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(Formerly Sociology 58.)

(See general education pages for the requirement this course meets.)

Advisory: English Writing 1A or English as a Second Language 5.

(Also listed as International Studies 8. Students may enroll in either department, but not both, for credit.)

Four hours lecture (48 hours total per quarter).

Introduction to the sociological study of globalization and other forms of social change. Macrosociological analysis of economic, political, military, cultural, technological, and environmental aspects of globalization; history of globalization, European colonialism and decolonization processes; impact of multinational corporations and global political and financial institutions, and social movements from cross-cultural and global perspectives.

SOC 8	Sociology of Religion	4 Units
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(Formerly Sociology 85.)

(See general education pages for the requirement this course meets.)

Advisory: English Writing 1A or English as a Second Language 5.

Four hours lecture (48 hours total per quarter).

Introduction to the sociological study of religion. Cross-cultural analysis of the social dimensions of religious life, including doctrine, practices, symbology, organization, political economy, racial, ethnic, gender and class differences, sexuality, media, social movements and change. Active, major world religions explored, including Indigenous American and African Ancestral traditions, Hinduism, Daoism, Judaism, Confucianism, Buddhism, Christianity, and Islam in their specific historical and cultural contexts.

SOC 15	Basic Statistics and Research Methods in Social and Behavioral Sciences	4 Units
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(See general education pages for the requirement this course meets.)

Prerequisite: Psychology 1 or Sociology 1; Mathematics 114 or equivalent.

Advisory: English Writing 1A or English as a Second Language 5.

(Also listed as Psychology 15. Students may enroll in either department, but not both, for credit.)

Four hours lecture (48 hours total per quarter).

Elementary statistics including measures of central tendency, variability, probability, correlation, tests of significance, experimental and quasi-experimental designs.

SOC 20	Social Problems	4 Units
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(See general education pages for the requirement this course meets.)

Advisory: English Writing 1A or English as a Second Language 5.

Four hours lecture (48 hours total per quarter).

Exploration of sociological perspectives on contemporary social problems. Examination of the social processes through which issues come to be viewed as social problems and the dynamics through which groups attempt to respond to and solve these problems.

SOC 25	Law and Social Change	4 Units
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Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

(Also listed as Administration of Justice 25 and Paralegal 25. Students may enroll in only one department for credit.)

Four hours lecture (48 hours total per quarter).

Exploration of the use of law as an instrument for social change. Examination of the relationship between law and social change in cross-cultural settings. Analysis of legislation, case law, the process of conflict resolution and legal institutions as they relate to social change.

SOC 28	Sociology of Women and Men	4 Units
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(See general education pages for the requirement this course meets.)

Advisory: English Writing 1A or English as a Second Language 5.

(Also listed as Women's Studies 28. Students may enroll in either department, but not both, for credit.)

Four hours lecture (48 hours total per quarter).

Application of sociological perspectives to an understanding of gender. Focuses on how we come to think and act as men and women and on gender as an organizing principle of social life. Includes investigation of masculinities and femininities, gender socialization, gender inequality, how gender is shaped by race, class, nation and sexuality, and the family, media, education, economics, politics and religion as gendered institutions, from a cross-cultural and global perspective.

SOC 35	Marriage, Family, and Intimate Relationships	4 Units
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(See general education pages for the requirement this course meets.)

Advisory: English Writing 1A or English as a Second Language 5.

Four hours lecture (48 hours total per quarter).

A sociological investigation and analysis of the diversity of family structures and intimate relationships in society. Topics to be explored include the history of the family, gender socialization and inequality, dating, divorce and remarriage, gay and lesbian relationships, the family as an economic unit, communication and conflict resolution, sexuality, interracial relationships, and domestic violence.

SOC 50	Crime, Correction and Society	4 Units
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Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

(Also listed as Administration of Justice 50. Students may enroll in either department, but not both, for credit.)

Four hours lecture (48 hours total per quarter).

A legal and sociological approach to understanding the fundamental ideas which have shaped correctional theories and practices. An in-depth study of adult sentencing, prisons, and jails subsystem including institutions by type and function, probation, parole and community based programs. A comprehensive examination of current correctional practices, punishment, rehabilitation, and community treatment programs with an emphasis on issues concerning race, ethnicity and gender.

SOC 51	Women in Crime	4 Units
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Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

(Also listed as Administration of Justice 51. Students may enroll in either department, but not both, for credit.)

Four hours lecture (48 hours total per quarter).

An examination of the changing role of women in crime with emphasis on gender and cultural based differences related to victims, offenders and criminal justice professionals.

SOC 54 Youth and the Law 4 Units

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

(Also listed as Administration of Justice 54 and Paralegal 54. Students may enroll in only one department for credit.)

Four hours lecture (48 hours total per quarter).

A legal and sociological approach to understanding the causes of juvenile delinquency; an examination of race, culture and gender in juvenile delinquency; community responses to delinquency; organization, functions and jurisdiction of both social and legal agencies; processing and detention; case disposition; statutes and court procedures.

SOC 73 Crime and Criminology 4 Units

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

(Also listed as Administration of Justice 73. Students may enroll in either department, but not both, for credit.)

Four hours lecture (48 hours total per quarter).

Introduction to major types of crime and criminal behavior, examining demographics and measurement of crime, theories of causation and victimization, crime prevention and crime control.

SOC 77X Special Projects in Sociology 2 Units

SOC 77Y 3 Units

Prerequisite: Consent of instructor and division dean.

Three hours laboratory for each unit of credit (36 hours total for each unit of credit per quarter).

(Any combination of Sociology 77X and 77Y may be taken up to six times for credit, not to exceed 18 units, as long as the projects are different each time.)

Individual and/or group projects in sociology that deal with one or more aspects in the field of sociology.

Spanish**SPAN 1 Elementary Spanish (First Quarter) 5 Units**

(See general education pages for the requirement this course meets.)

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Five hours lecture (60 hours total per quarter).

Introduction to the language and cultures of Spanish-speaking world areas. Speaking, listening, reading and writing language skills at the first level of elementary Spanish are developed within the framework of language as a fundamental expression of culture. Spanish is the primary language of instruction. Language laboratory practice and/or assignments, at home and/or in the language lab, are an integral part of instruction supporting the development of language skills in the areas of pronunciation, structure, syntax, and oral communication.

SPAN 2 Elementary Spanish (Second Quarter) 5 Units

(See general education pages for the requirement this course meets.)

Prerequisite: Spanish 1 (equivalent to one year of high school Spanish) or equivalent.

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Five hours lecture (60 hours total per quarter).

Development of elementary language skills for oral and written communication using language structures and functions targeted for the second level of elementary Spanish. Spanish is the primary language of instruction. Speaking, listening, reading and writing skills at the second level of elementary Spanish will be developed within the framework of language as a fundamental expression of culture, with continued presentation of the cultures of Spanish-speaking world areas. Language laboratory practice and/or assignments at home and/or in the language lab, are an integral part of instruction supporting the development of language skills in the areas of pronunciation, structure, syntax, and oral communication.

SPAN 3 Elementary Spanish (Third Quarter) 5 Units

(See general education pages for the requirement this course meets.)

Prerequisite: Spanish 2 (equivalent to two years of high school Spanish) or equivalent.

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Five hours lecture (60 hours total per quarter).

Development of elementary language skills for oral and written communication using language structures and functions targeted for the third level of elementary Spanish. Spanish is the working language. Focus is on greater structural accuracy and communicative competence within the framework of language as a fundamental aspect of culture. Language laboratory practice and/or assignments at home and/or in the language lab are an integral part of instruction, supporting the development of language skills in the areas of pronunciation, structure, syntax and oral communication.

SPAN 4 Intermediate Spanish (First Quarter) 5 Units

(See general education pages for the requirement this course meets.)

Prerequisite: Spanish 3 (equivalent to three years of high school Spanish) or equivalent.

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Five hours lecture (60 hours total per quarter).

Reading and discussion of texts dealing with the literature, arts, culture, history and geography of the Spanish-speaking world. Review and expansion of the structures, grammatical features and linguistic functions of elementary Spanish. Development of reading, writing, speaking and listening skills at the first intermediate level within the framework of language as a fundamental expression of culture.

SPAN 5 Intermediate Spanish (Second Quarter) 5 Units

(See general education pages for the requirement this course meets.)

Prerequisite: Spanish 4 (equivalent to four years of high school Spanish) or equivalent.

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Five hours lecture (60 hours total per quarter).

Reading and discussion of texts dealing with the literature, arts, culture, history and geography of the Spanish-speaking world. Review and expansion of the structures, grammatical features and linguistic functions of Spanish 4. Development of reading, writing, speaking and listening skills at the second intermediate level within the framework of language as a fundamental expression of culture.

SPAN 6 Intermediate Spanish (Third Quarter) 5 Units

(See general education pages for the requirement this course meets.)

Prerequisite: Spanish 5 or equivalent.

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Five hours lecture (60 hours total per quarter).

Reading and discussion of texts dealing with the literature, arts, culture, history and geography of the Spanish-speaking world. Review and expansion of the structures, grammatical features and linguistic functions of Spanish 5. Development of reading, writing, speaking and listening skills at the third intermediate level within the framework of language as a fundamental expression of culture.

SPAN 60A Spanish - Introductory Conversation (First Quarter) 3 Units

(Formerly Spanish 90A.)

Requisite/Advisory: None.

Three hours lecture (36 hours total per quarter).

Practice of elementary speaking and listening skills in targeted language functions. Introduction to selected cultural, geographical and linguistic aspects of Spanish-speaking world areas.

SPAN 60B Spanish - Introductory Conversation (Second Quarter) 3 Units

(Formerly Spanish 90B.)

Prerequisite: Spanish 60A.

Three hours lecture (36 hours total per quarter).

Development and practice of elementary speaking and listening skills in targeted language functions. Further exploration of selected cultural, geographical and linguistic aspects of Spanish-speaking world areas.

SPAN 60C Spanish - Introductory Conversation (Third Quarter) 3 Units

(Formerly Spanish 90C.)

Prerequisite: Spanish 60B.

Three hours lecture (36 hours total per quarter).

Focus on greater structural accuracy and communicative competence in elementary speaking and listening skills. Continued exploration of selected cultural, geographical and linguistic features of Spanish-speaking world areas.

SPAN 61A Spanish - Intermediate Conversation (First Quarter) 3 Units

(Formerly Spanish 13A.)

Prerequisite: Spanish 3 (equivalent to three years of high school Spanish) or equivalent.

Three hours lecture (36 hours total per quarter).

Review and development of conversational skills in the targeted functions studied in first-year Spanish with attention to fluency, vocabulary, idiom, and pronunciation. Practice in conversational exchanges and strategies. Discussion of culturally relevant topics and situations.

SPAN 61B Spanish - Intermediate Conversation (Second Quarter) 3 Units

(Formerly Spanish 13B.)

Prerequisite: Spanish 4 (equivalent to four years of high school Spanish); or Spanish 61A; or equivalent.

Three hours lecture (36 hours total per quarter).

Continued practice and development of conversational skills in the targeted functions studied in first-year Spanish with increased attention to fluency, vocabulary, idiom, and pronunciation. Practice in conversational exchanges and strategies emphasizing improvisational skills. Discussion of culturally relevant topics and situations.

SPAN 61C Spanish - Advanced Conversation 3 Units

(Formerly Spanish 13C.)

Prerequisite: Spanish 5 or 61B, or equivalent.

Three hours lecture (36 hours total per quarter).

Continued practice and development of conversational skills in the targeted functions studied in first-year Spanish, with greater communicative competence. Increased control of conversational exchanges and strategies. Discussion of culturally relevant topics and situations.

SPAN 110A Elementary Spanish for the Health Professions (First Quarter) 3 Units

Requisite/Advisory: None.

Three hours lecture (36 hours total per quarter).

Development and practice of elementary language skills in targeted language functions for the health professions, with Spanish as the primary language of instruction. Introduction to selected cultural, geographical and linguistic aspects of Spanish-speaking world areas relevant to these professional fields.

SPAN 110B Elementary Spanish for the Health Professions (Second Quarter) 3 Units

Advisory: Spanish 110A.

Three hours lecture (36 hours total per quarter).

Continued development and practice of elementary Spanish language skills useful to the health professional whose work entails communication situations with Spanish speakers. Linguistic functions and lexicon are targeted to these professional needs. Spanish is the working language of instruction, with emphasis on the further development of listening and speaking skills. Consideration given to a number of linguistic and geographical aspects of Spanish-speaking cultures relevant to the work of health professionals.

SPAN 110C Elementary Spanish for the Health Professions (Third Quarter) 3 Units

Advisory: Spanish 110B.

Three hours lecture (36 hours total per quarter).

Continued development and practice of elementary Spanish language skills useful to the health professional whose work entails communication situations with Spanish speakers. Linguistic functions and lexicon are targeted to these professional needs. Spanish is the working language of instruction, with emphasis on the further development of listening and speaking skills. Consideration is given to a number of linguistic and geographical aspects of Spanish-speaking cultures relevant to the work of health professionals.

Special Education

SPED 230 Vocational Interests and Aptitudes 1 Unit

SPED 230R	2 Units
SPED 230S	3 Units
SPED 230T	4 Units
SPED 230U	5 Units
SPED 230V	6 Units
SPED 230W	7 Units
SPED 230X	8 Units
SPED 230Y	9 Units
SPED 230Z	10 Units

Credit course - Does not apply to De Anza Associate degree.

Requisite/Advisory: None.

Three hours laboratory for each unit of credit (36 hours total for each unit of credit per quarter).

(Any combination of Special Education 230, 230R-Z are repeatable as needed to meet Student Educational Contract (Title V, section 56029c).)

Pass-No Pass (P-NP) course.

Exploration of vocational interests and aptitudes. Development of essential work related attitudes, behaviors, interpersonal skills, and work skills of adults with disabilities through individualized instruction and training to meet the skill level identified in the Student Educational Contract.

SPED 231	1 Unit
SPED 231R	2 Units
SPED 231S	3 Units
SPED 231T	4 Units
SPED 231U	5 Units

SPED 231V	6 Units
SPED 231W	7 Units
SPED 231X	8 Units
SPED 231Y	9 Units
SPED 231Z	10 Units

Credit course - Does not apply to De Anza Associate degree.

Requisite/Advisory: None.

Three hours laboratory for each unit of credit (36 hours total for each unit of credit per quarter).

(Any combination of Special Education 231, 231R-Z are repeatable as needed to meet Student Educational Contract (Title V, section 56029c).)

Pass-No Pass (P-NP) course.

Development of workforce skills in support of entry-level jobs and the goals identified in the Student Educational Contract. Individualized instruction and training designed for adults with disabilities.

SPED 232	Workplace Culture	1 Unit
SPED 232R		2 Units
SPED 232S		3 Units
SPED 232T		4 Units
SPED 232U		5 Units
SPED 232V		6 Units
SPED 232W		7 Units
SPED 232X		8 Units
SPED 232Y		9 Units
SPED 232Z		10 Units

Credit course - Does not apply to De Anza Associate degree.

Requisite/Advisory: None.

Three hours laboratory for each unit of credit (36 hours total for each unit of credit per quarter).

(Any combination of Special Education 232, 232R-Z are repeatable as needed to meet Student Educational Contract (Title V, section 56029c).)

Pass-No Pass (P-NP) course.

Identification of the different aspects of workplace culture and how these differences affect employer's expectations regarding conduct and attitude for adults with disabilities. Individualized instruction and training used to meet the goals identified in the Student Educational Contract.

SPED 233	Professional Conduct	1 Unit
SPED 233R		2 Units
SPED 233S		3 Units
SPED 233T		4 Units
SPED 233U		5 Units
SPED 233V		6 Units
SPED 233W		7 Units
SPED 233X		8 Units
SPED 233Y		9 Units
SPED 233Z		10 Units

Credit course - Does not apply to De Anza Associate degree.

Requisite/Advisory: None.

Three hours laboratory for each unit of credit (36 hours total for each unit of credit per quarter).

(Any combination of Special Education 233, 233R-Z are repeatable as needed to meet Student Educational Contract (Title V, section 56029c).)

Pass-No Pass (P-NP) course.

Development of an understanding of and comparison of professional conduct and behavior in various work environments. Designed for adults with disabilities through individualized instruction and training to meet the goals identified in the Student Educational Contract.

SPED 234	Civic Responsibility	1 Unit
SPED 234R		2 Units
SPED 234S		3 Units
SPED 234T		4 Units
SPED 234U		5 Units
SPED 234V		6 Units
SPED 234W		7 Units
SPED 234X		8 Units
SPED 234Y		9 Units
SPED 234Z		10 Units

Credit course - Does not apply to De Anza Associate degree.

Requisite/Advisory: None.

Three hours laboratory for each unit of credit (36 hours total for each unit of credit per quarter).

(Any combination of Special Education 234, 234R-Z are repeatable as needed to meet Student Educational Contract (Title V, section 56029c).)

Pass-No Pass (P-NP) course.

Developed for adults with disabilities, determination of an individual's role within the community. Exploration of legal, social and environmental issues from the perspective of adults with disabilities. Individualized instruction and training to meet the skill level identified in the Student Educational Contract.

SPED 235	Transition to Campus	1 Unit
SPED 235R		2 Units
SPED 235S		3 Units
SPED 235T		4 Units
SPED 235U		5 Units
SPED 235V		6 Units
SPED 235W		7 Units
SPED 235X		8 Units
SPED 235Y		9 Units
SPED 235Z		10 Units

Credit course - Does not apply to De Anza Associate degree.

Requisite/Advisory: None.

Three hours laboratory for each unit of credit (36 hours total for each unit of credit per quarter).

(Any combination of Special Education 235, 235R-Z are repeatable as needed to meet Student Educational Contract (Title V, section 56029c).)

Pass-No Pass (P-NP) course.

Designed for adults with disabilities to understand the campus culture and succeed in college. Explores the requirements, coursework, and strategies to obtain a certificate or degree appropriate for individual abilities. Provides time management techniques for balancing work, school, and home. Individualized instruction and training to meet the skills identified in the Student Educational Contract.

SPED 240	Technology Access Evaluation for Special Needs Students	1/2 Unit
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(Formerly Special Education 140.)

Credit course - Does not apply to De Anza Associate degree.

Requisite/Advisory: None.

One and one-half hours laboratory (18 hours total per quarter).

(Repeatable as needed to meet the Student Educational Contract (Title 5, section 56029).)

Pass-No Pass (P-NP) course.

Computer and technology access evaluation for students with physical disabilities, sensory impairments and/or learning disabilities. Appropriate access requirements will be individually determined in order to enable students to utilize computer technology.

SPED 245	Technology Access for Special Needs Students (Windows)	2 Units
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(Formerly Special Education 145.)

Credit course - Does not apply to De Anza Associate degree.

Requisite/Advisory: None.

Four hours lecture-laboratory (48 hours total per quarter).

(Repeatable as needed to meet the Student Educational Contract (Title 5, section 56029).)

Development of basic skills in the use of computer access technologies to enhance the disabled student's ability to access and use computer technology.

SPED 290X	Technology Access Practice for Special Needs Students	1/2 Unit
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(Formerly Special Education 190X and 190Y respectively.)

Credit course - Does not apply to De Anza Associate degree.

Prerequisite: Special Education 240 or consent of instructor.

Three hours laboratory for each unit of credit (36 hours total for each unit of credit per quarter).

(Any combination of Special Education 290X and 290Y may be repeated as needed to meet the Student Educational Contract (Title 5, section 56029).)

Pass-No Pass (P-NP) course.

Individualized development of skills in the analysis and use of assistive technology in an adapted computer laboratory.

Speech/Communication

Some courses in this department have prerequisites. Students who have not met these prerequisite requirements may be dropped from the course. Check with an advisor or the course instructor if you are unsure of your standing with regard to meeting prerequisite requirements.

SPCH 1	Public Speaking	4 Units
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(See general education pages for the requirement this course meets.)

Advisory: English Writing 1A or English as a Second Language 5.

Four hours lecture (48 hours total per quarter).

Theory and techniques of public speaking in a democratic society. An introduction to a variety of perspectives and approaches used to research, organize, deliver, and evaluate public presentations.

SPCH 7	Intercultural Communication	4 Units
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(See general education pages for the requirement this course meets.)

Advisory: English Writing 1A or English as a Second Language 5.

(Also listed as Intercultural Studies 7. Students may enroll in either department, but not both, for credit.)

Four hours lecture (48 hours total per quarter).

Study of intercultural communication in domestic and global contexts. Examines how differing cultures, languages, and social patterns influence the way members of groups relate among themselves and with members of other ethnic and cultural groups. Emphasizes development of interpersonal skills for communicating effectively across cultures and encourages appreciation of diverse cultural voices.

SPCH 8	Argumentation and Critical Inquiry in Oral Communication	4 Units
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(See general education pages for the requirement this course meets.)

Advisory: English Writing 1A or English as a Second Language 5; Speech Communication 1 or 10.

Four hours lecture (48 hours total per quarter).

Prepare students to confidently, responsibly, and effectively engage in public and private discourse. Practice in the principles of critical inquiry, advocacy, and debate including analysis of propositions, research and testing evidence, advancing reasoned positions, and defending and refuting claims.

SPCH 9	Argumentation: Analysis of Oral and Written Communication	5 Units
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(See general education pages for the requirement this course meets.)

Prerequisite: English Writing 1A.

Advisory: Speech Communication 1 or 10.

Five hours lecture (60 hours total per quarter).

Study of argumentation and critical thinking in the context of reading, discussion, and writing. Argumentation is studied as a mode of discourse aimed at critically testing the acceptability of a point of view through the use of inquiry, reasoning, and discussion with the goal of establishing reasonable and defensible arguments while addressing differences of opinion and working towards resolution.

SPCH 10	Fundamentals of Oral Communication	4 Units
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(See general education pages for the requirement this course meets.)

Advisory: English Writing 1A or English as a Second Language 5.

Four hours lecture (48 hours total per quarter).

An introduction to the basic principles and methods of oral communication with emphasis on improving speaking and listening skills in the multicultural contexts of interpersonal, small group, and public communication.

SPCH 15	Critical Decision-Making in Groups	4 Units
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(See general education pages for the requirement this course meets.)

Advisory: English Writing 1A or English as a Second Language 5; Speech Communication 1 or 10.

Four hours lecture (48 hours total per quarter).

Study in communication and critical decision making in the context of effective group problem solving with an emphasis on principles of evidence, logic, and reasoning. Application of group discussion and management concepts along with methods of problem solving to understanding different points of view in an increasingly diverse and interconnected global society.

SPCH 16	Interpersonal Communication	4 Units
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(See general education pages for the requirement this course meets.)

Advisory: English Writing 1A or English as a Second Language 5; Speech Communication 1 or 10.

Four hours lecture (48 hours total per quarter).

Study of interpersonal communication principles with an emphasis on developing the self concept through listening, verbal and nonverbal communication, language and cultural knowledge as a means of maintaining effective relationships in an increasingly diverse and interconnected global society.

SPCH 70	Effective Organizational Communication	4 Units
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(See general education pages for the requirement this course meets.)

Advisory: English Writing 1A or English as a Second Language 5.

Four hours lecture (48 hours total per quarter).

A study of organizational communication concepts and theories. Impact of networks, superior/subordinate message patterns, team building, climate, cultural and gender influences, communication technology, ethics, and globalization on organizational effectiveness. Emphasizes development of communication skills useful for working productively in a dynamic, collaborative, multicultural work environment.

SPCH 77	Special Individual Projects in Speech Communication	1 Unit
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SPCH 77X		2 Units
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SPCH 77Y		3 Units
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SPCH 77Z		4 Units
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(Formerly Speech Communication 40, 40X, 40Y and 40Z respectively.)

Prerequisite: Consent of instructor and division dean.

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Three hours laboratory for each unit of credit (36 hours total for each unit of credit per quarter).

(Any combination of Speech Communication 77, 77X, 77Y and 77Z may be taken up to six times for credit, not to exceed 15 units, as long as the projects are different each time.)

Specific projects related to the topic of speech communication.

SPCH 78W	Special Topics in Speech Communication	1 Unit
SPCH 78X		2 Units
SPCH 78Y		3 Units
SPCH 78Z		4 Units
<i>(Formerly Speech Communication 35W, 35X, 35Y and 35Z respectively.)</i>		
<i>Advisory: English Writing 1A or English as a Second Language 5.</i>		
<i>One hour lecture for each unit of credit (12 hours total for each unit of credit per quarter).</i>		
<i>(Any combination of Speech Communication 78W, 78X, 78Y and 78Z may be taken up six times for credit, not to exceed 18 units, as long as the topics are different each time.)</i>		
<i>Examination of selected topics relating to the Speech Communication discipline. Subject matter will vary. Some courses may involve a service learning component.</i>		
SPCH 79	Special Group Projects in Speech Communication	1 Unit
SPCH 79X		2 Units
SPCH 79Y		3 Units
SPCH 79Z		4 Units
<i>(Formerly Speech Communication 47, 47X, 47Y and 47Z respectively.)</i>		
<i>Prerequisite: Consent of instructor and division dean.</i>		
<i>Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.</i>		
<i>Three hours laboratory for each unit of credit (36 hours total for each unit of credit per quarter).</i>		
<i>(Any combination of Speech Communication 79, 79X, 79Y and 79Z may be taken up to six times for credit, not to exceed 15 units, as long as the projects are different each time.)</i>		
<i>Specific projects related to the topic of speech communication.</i>		
SPCH 96	Introduction to Peer Tutoring in Groups	2 Units
<i>Prerequisite: Must be hired as a De Anza tutor.</i>		
<i>Advisory: English Writing 1A or English as a Second Language 5.</i>		
<i>(Also listed as Learning Assistance 96. Students may enroll in either department, but not both, for credit.)</i>		
<i>Two hours lecture (24 hours total per quarter).</i>		
<i>Pass-No Pass (P-NP) course.</i>		
<i>Introduction to the principles and practices of group tutoring. Development of effective communication and leadership skills to facilitate collaborative, dynamic and productive learning groups in a multicultural environment.</i>		

Technical Writing

NOTE: The Technical Writing program is being phased out. Technical Writing classes will no longer be offered after spring quarter 2013 with the exception of TWRT 64 which will end after fall 2013.

TWRT 61	Introduction to Technical Writing	5 Units
<i>Prerequisite: English Writing 1A or English as a Second Language 5.</i>		
<i>(Also listed as Business 61 and English Writing 61. Students may enroll in only one department for credit.)</i>		
<i>Five hours lecture (60 hours total per quarter).</i>		
<i>Technical writing skills focusing on basic techniques of exposition for the technical field, functional description, process writing, technical vocabulary, correct usage, and accurate editing.</i>		
TWRT 62	Survey of Technical Writing	5 Units
<i>Prerequisite: Business 61 or English Writing 61 or Technical Writing 61 (may be taken concurrently).</i>		
<i>(Also listed as Business 62 and English Writing 62. Students may enroll in only one department for credit.)</i>		
<i>Five hours lecture (60 hours total per quarter).</i>		
<i>Technical writing skills focusing on short document formats, production of sections of various technical documents, and incorporation of graphics within text.</i>		
TWRT 63	Technical Publications	5 Units
<i>Prerequisite: Business 61 or English Writing 61 or Technical Writing 61.</i>		
<i>(Also listed as Business 63 and English Writing 63. Students may enroll in only one department for credit.)</i>		
<i>Five hours lecture (60 hours total per quarter).</i>		
<i>Technical writing and editing skills applied through individual and group assignments with emphasis on planning, scheduling, and producing longer reports, manuals, and instructions. Development of organizational skills and individual documentation solutions.</i>		

TWRT 64	Technical Writing Seminar	5 Units
<i>Prerequisite: Business 62 or 63; or English Writing 62 or 63; or Technical Writing 62 or 63.</i>		
<i>(Also listed as Business 64 and English Writing 64. Students may enroll in only one department for credit.)</i>		
<i>Five hours lecture (60 hours total per quarter).</i>		
<i>Technical communication and editing skills applied through the preparation and presentation of a complete document according to the standards of the student's chosen technical field.</i>		
TWRT 66W	Special Topics in Technical Writing	1 Unit
TWRT 66X		2 Units
TWRT 66Y		3 Units
TWRT 66Z		4 Units
<i>Prerequisite: Technical Writing 61 or Business 61 or English Writing 61.</i>		
<i>One hour lecture for each unit of credit (12 hours total for each unit of credit per quarter).</i>		
<i>(Any combination of Technical Writing 66W, 66X, 66Y and 66Z may be taken up to six times for credit, not to exceed 18 units, as long as the topics are different each time.)</i>		
<i>Intensive study and analysis of a special topic in Technical Writing. Subjects vary.</i>		
TWRT 67	Writing for Publication (Nonfiction)	4 Units
<i>Advisory: Business 61 or English Writing 61 or Technical Writing 61.</i>		
<i>Four hours lecture (48 hours total per quarter).</i>		
<i>Students conduct on-line computer searches using the World Wide Web, organize, develop, and write nonfiction articles for publication; obtain feedback for revision; and submit articles to editors.</i>		
TWRT 71	Writing and Designing On-Line Documentation	2 Units
<i>Advisory: Business 61 or English Writing 61 or Technical Writing 61.</i>		
<i>Two hours lecture (24 hours total per quarter).</i>		
<i>Differences between on-paper and on-line writing, on-line design methods, and use of commercially available on-line/hypertext development software. Development and implementation of on-line documentation project.</i>		
TWRT 77W	Special Projects in Technical Writing	1 Unit
TWRT 77X		2 Units
TWRT 77Y		3 Units
TWRT 77Z		4 Units
<i>(Formerly Technical Writing 70W, 70X, 70Y and 70Z respectively.)</i>		
<i>Prerequisite: Technical Writing 61 or Business 61 or English Writing 61.</i>		
<i>Three hours laboratory for each unit of credit (36 hours total for each unit of credit per quarter).</i>		
<i>(Any combination of Technical Writing 77W, 77X, 77Y and 77Z may be taken up to six times for credit, not to exceed 18 units, as long as the projects are different each time.)</i>		
<i>Special research, writing, or study projects in technical writing as determined in consultation with the department chair, such as participating in a department approved internship or other project/assignment.</i>		

Television

(See Film and Television Production)

Theatre Arts

THEA 1	Appreciation of Theatre	4 Units
<i>(See general education pages for the requirement this course meets.)</i>		
<i>Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.</i>		
<i>Four hours lecture (48 hours total per quarter).</i>		
<i>An introduction to theatre from an audience perspective. Study of elements of dramatic art form and play production, including dramatic theory, language, space, plot, characterization, technical theatre, acting, directing, playwriting, design, and the relationship with other art forms. Includes drama written from diverse cultural and historical perspectives. Attendance at assigned performances required.</i>		
THEA 20A	Theory and Technique of Acting (Introduction)	3 Units
<i>Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.</i>		
<i>Six hours lecture-laboratory (72 hours total per quarter).</i>		
<i>(Any combination of Theatre Arts 20A, 20B and 20C may be taken up to six times for credit for the family of courses.)</i>		
<i>Basic theory and techniques of acting. An examination of the actor's range of choices within the framework of scenarios and improvisation. A beginning analysis of acting styles and methods from diverse cultural and historical perspectives.</i>		

All courses are for unit credit and apply to a De Anza associate degree unless otherwise noted. 215



THEA 20B Theory and Technique of Acting (Modern Period) 3 Units
Prerequisite: Theatre Arts 20A.
Six hours lecture-laboratory (72 hours total per quarter).
(Any combination of Theatre Arts 20A, 20B and 20C may be taken up to six times for credit for the family of courses.)
 A continued study of the acting process, including extensive participation in the performance of contemporary dramatic scripts from diverse theatre traditions.

THEA 20C Theory and Technique of Acting (Classic Period) 3 Units
Prerequisite: Theatre Arts 20A.
Advisory: Theatre Arts 20B.
Six hours lecture-laboratory (72 hours total per quarter).
(Any combination of Theatre Arts 20A, 20B and 20C may be taken up to six times for credit for the family of courses.)
 A continuation of acting study including extensive participation in the performance of selected scenes from classic period plays of diverse theatre traditions.

THEA 48 Technical Production for Dance and Theatre 2 Units
(Formerly Theatre Arts 58.)
Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.
(Also listed as Dance 48. Students may enroll in either department, but not both, for credit.)
Four hours lecture-laboratory (48 hours total per quarter).
(Any combination of Dance 48 and Theatre Arts 48 may be taken up to three times as long as the topics/projects in musical drama, dance concert, etc. are different each time.)
 Introduction to the theoretical, technical and craft of dance and theatre production with practical experience in public presentation.

THEA 80A Theory and Technique of Acting for the Camera 3 Units
(Formerly Theatre Arts 86A.)
Prerequisite: Theatre Arts 20A.
Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.
(Also listed as Film/Television 80A. Students may enroll in either department, but not both, for credit.)
Six hours lecture-laboratory (72 hours total per quarter).
(Any combination of Film/Television 80A and Theatre Arts 80A may be taken two times for credit as long as the topics/projects are different each time.)
 The basic fundamentals of acting for the camera are explored. Exercises, demonstrations and improvisations are used to practice the techniques of acting. Scenes are rehearsed, taped and critiqued.

THEA 80B Theory and Technique of Advanced Acting for the Camera 3 Units
(Formerly Theatre Arts 86B.)
Prerequisite: Theatre Arts 80A or Film/Television 80A.
Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.
(Also listed as Film/Television 80B. Students may enroll in either department, but not both, for credit.)
Six hours lecture-laboratory (72 hours total per quarter).
(Any combination of Film/Television 80B and Theatre Arts 80B may be taken two times for credit as long as the topics/projects are different each time.)
 A continuation of Acting for the Camera through further exploration of equipment used in media performance: blue screen acting, ear prompting, teleprompting and microphone applications in voice recording and voice over. Continued exploration and skill building of techniques used in performance before the camera including but not limited to advanced character development, make-up techniques and special problems in character preparation for feature film.

THEA 143 Bay Area Theatre Visits 2 Units
(Formerly Theatre Arts 153.)
Advisory: English Writing 1A or English as a Second Language 5.
Six hours laboratory (72 hours total per quarter).
(May be taken up to three times for credit as long as subject matter is different each time.)
Pass-No Pass (P-NP) course.
 Designed to develop skills in viewing and critical analysis of live theatre events through attending theatre performances, tours and lectures.

Urdu

URDU 1 Elementary Urdu (First Quarter) 5 Units
(Formerly Urdu 91.)
(See general education pages for the requirement this course meets.)
Advisory: English Writing 200 and Reading 200 (or Language Arts 200), or English as a Second Language 261, 262 and 263.
Five hours lecture (60 hours total per quarter).

Introduction to the language and cultures of the Urdu-speaking states. Basic speaking, listening, reading, and writing of Urdu will be introduced and practiced within a cultural framework. Urdu will be the primary language of instruction. Emphasis will be on language as an expression of culture. Language laboratory practice will be part of the regular instruction to reinforce pronunciation, grammar, syntax, conversation, understanding letters of the alphabet, joining words, and writing sentences.

URDU 2 Elementary Urdu (Second Quarter) 5 Units
(Formerly Urdu 92.)
(See general education pages for the requirement this course meets.)
Prerequisite: Urdu 1 (equivalent to one year of high school Urdu) or equivalent.
Five hours lecture (60 hours total per quarter).

Further development of material presented in Urdu 1. Continuation of introduction to the language and cultures of the Urdu-speaking states. Basic speaking, listening, reading, and writing of Urdu will be continued and practiced within a cultural framework. Emphasis will be on language as an expression of culture. Language laboratory will be practiced to reinforce pronunciation, grammar, and syntax. Furthermore, writing of the alphabet will be mastered and practice in joining Urdu letters will be reinforced.

URDU 3 Elementary Urdu (Third Quarter) 5 Units
(Formerly Urdu 93.)
(See general education pages for the requirement this course meets.)
Prerequisite: Urdu 2 (equivalent to two years of high school Urdu) or equivalent.
Five hours lecture (60 hours total per quarter).

Further development of material presented in Urdu 1 and 2. Completion of introduction to the language and cultures of the Urdu-speaking countries. Basic speaking, listening, reading, and writing of Urdu will be introduced and practiced within a cultural framework. Emphasis will be on language as an expression of culture. Language laboratory will be practiced to reinforce pronunciation, grammar, and syntax. A collection of short stories will be read and studied. Pakistani dramas will be a continued practice where students will view sections of the drama and predict outcomes of the story line based on cultural values.

URDU 4 Intermediate Urdu (First Quarter) 5 Units
(Formerly Urdu 94.)
(See general education pages for the requirement this course meets.)
Prerequisite: Urdu 3 (equivalent to three years of high school Urdu) or equivalent.
Five hours lecture (60 hours total per quarter).

Reading and discussion of texts focusing on the literature, arts, geography, history, and culture of the Urdu-speaking world. Review of the linguistic functions and grammar structures of introductory Urdu. Development of reading, writing, speaking, and listening skills at the first intermediate level. Introduction to poetic and literary forms; such as short story, Ghazals, novellas, and contemporary writers' short nonfiction.

URDU 5 Intermediate Urdu (Second Quarter) 5 Units
(Formerly Urdu 95.)
(See general education pages for the requirement this course meets.)
Prerequisite: Urdu 4 (equivalent to four years of high school Urdu) or equivalent.
Five hours lecture (60 hours total per quarter).

Reading and discussion of texts dealing with the literature, arts, geography, history and culture of the Urdu-speaking world. Review of the linguistic functions and grammar structures of intermediary Urdu. Development of reading, writing, speaking and listening skills at the second intermediate level.

URDU 6 Intermediate Urdu (Third Quarter) 5 Units
(Formerly Urdu 96.)
(See general education pages for the requirement this course meets.)
Prerequisite: Urdu 5 or equivalent.
Five hours lecture (60 hours total per quarter).

Reading and discussion of texts dealing with the literature, arts, geography, history and culture of the Urdu-speaking world. Review of the linguistic functions and grammar structures of intermediary Urdu. Development of reading, writing, speaking and listening skills at the third intermediate level.

Vietnamese Language

VIET 1 Elementary Vietnamese (First Quarter) 5 Units
(See general education pages for the requirement this course meets.)
Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.
Five hours lecture (60 hours total per quarter).

Introduction to the language and cultures of Vietnam and Vietnamese communities. Basic speaking, listening, reading and writing of Vietnamese will be introduced and practiced within a cultural framework. Vietnamese will be the primary language of instruction. Emphasis will be on language as an expression of culture and a medium of communication.

VIET 2 Elementary Vietnamese (Second Quarter) 5 Units
(See general education pages for the requirement this course meets.)
Prerequisite: Vietnamese 1 (equivalent to one year of high school Vietnamese) or equivalent.
Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Five hours lecture (60 hours total per quarter).

Further development of material presented in Vietnamese 1. Continuation of introduction to the language and cultures of Vietnam and Vietnamese communities. Speaking, listening, reading and writing of Vietnamese will be continued and practiced within a cultural framework. Vietnamese will be the primary language of instruction. Emphasis will be on language as an expression of culture and a medium of communication.

VIET 3 Elementary Vietnamese (Third Quarter) 5 Units

(See general education pages for the requirement this course meets.)

Prerequisite: Vietnamese 2 (equivalent to two years of high school Vietnamese) or equivalent.

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or

English as a Second Language 272 and 273.

Five hours lecture (60 hours total per quarter).

Further development of material presented in Vietnamese 1 and Vietnamese 2. Basic speaking, listening, reading and writing of Vietnamese will be further introduced and practiced within a cultural framework. First introduction to popular sayings, literary texts for a better examination and appreciation of Vietnamese language and culture, life and civilization.

VIET 4 Intermediate Vietnamese (First Quarter) 5 Units

(See general education pages for the requirement this course meets.)

Prerequisite: Vietnamese 3 (equivalent to three years of high school Vietnamese) or equivalent.

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or

English as a Second Language 272 and 273.

Five hours lecture (60 hours total per quarter).

Reading and discussion of texts dealing with the literature, arts, geography, history and the culture of the Vietnamese-speaking world. Review of the linguistic functions and grammar structures of first-year Vietnamese. Speaking, listening, reading and writing of the first quarter low intermediate level of Vietnamese will be introduced and practiced within a cultural framework.

VIET 5 Intermediate Vietnamese (Second Quarter) 5 Units

(See general education pages for the requirement this course meets.)

Prerequisite: Vietnamese 4 (equivalent to four years of high school Vietnamese) or equivalent.

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or

English as a Second Language 272 and 273.

Five hours lecture (60 hours total per quarter).

Continuation of Vietnamese 4. Review the linguistic functions and further discussion of grammatical features beyond the low intermediate level. Development of reading, writing, speaking and listening skills at the intermediate level needed to spontaneously request and provide a greater range of more sophisticated information. Read and discuss texts dealing with geography, history, literature, social and cultural practices of the Vietnamese-speaking world.

VIET 6 Intermediate Vietnamese (Third Quarter) 5 Units

(See general education pages for the requirement this course meets.)

Prerequisite: Vietnamese 5 or equivalent.

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or

English as a Second Language 272 and 273.

Five hours lecture (60 hours total per quarter).

Continuation of Vietnamese 5. Complete review of the linguistic functions and the grammar structures of Vietnamese language and further discussion of grammatical features needed to spontaneously and accurately request and provide information, orally and in writing, about a wide variety of topics. Development of reading, writing, speaking and listening skills at the high intermediate level. Analysis and discussion of texts and out-of texts dealing with the literature, arts, history and culture of the Vietnamese-speaking world.

Women's Studies

WMST 1 Introduction to Women's Studies 4 Units

(See general education pages for the requirement this course meets.)

Advisory: English Writing 1A or English as a Second Language 5.

Four hours lecture (48 hours total per quarter).

An examination of the varying positions of women in society, emphasizing the diverse nature of women's experiences. Includes investigation of family, work, embodiment, popular culture, and social movements. Focuses on power and gender roles and how they vary for women and men of different racial, ethnic, class, national and sexuality groups.

WMST 3C Women and Art 4 Units

(See general education pages for the requirement this course meets.)

Advisory: English Writing 1A or English as a Second Language 5.

(Also listed as Arts 3TC. Students may enroll in either department, but not both, for credit.)

Four hours lecture (48 hours total per quarter).

A history of women in relation to society and the visual arts from prehistory to the present. Social perceptions and obstacles relevant to women artists will be discussed, and students will engage in cross-cultural comparison of works produced in western and non-western cultures made by women, and in which women serve as subject matter.

WMST 8 Women of Color in the USA 4 Units

(See general education pages for the requirement this course meets.)

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or

English as a Second Language 272 and 273.

(Also listed as Intercultural Studies 8. Students may enroll in either department, but not both, for credit.)

Four hours lecture (48 hours total per quarter).

An interdisciplinary, multi perspective and comparative study of the experiences of women of color in the United States. The constructs of race, ethnicity, class, gender and sexuality as they relate to social institutions and national ideologies will be explored. Examination and analysis of the historical, political, and economic influences that have informed the relationships between women of color and white women in the U.S.A, is foundational to this course.

WMST 9 Women in American History 4 Units

(See general education pages for the requirement this course meets.)

Advisory: English Writing 1A or English as a Second Language 5.

(Also listed as History 9. Students may enroll in either department, but not both, for credit.)

Four hours lecture (48 hours total per quarter).

Critical examination of the social, economic, cultural and political history of American women from the colonial times to the present. Emphasis on the movements which enhanced women's political and economic rights, the social roles which defined women primarily by their gender and the legal realities that women faced. Significant moral, political and economic issues will be assessed.

WMST 12 Psychology of Gender 4 Units

(See general education pages for the requirement this course meets.)

Advisory: English Writing 1A or English as a Second Language 5.

(Also listed as Psychology 12. Students may enroll in either department, but not both, for credit.)

Four hours lecture (48 hours total per quarter).

A survey of the psychological, cultural, social and intellectual factors influencing the psychology of gender.

WMST 21 Women in Literature 4 Units

(See general education pages for the requirement this course meets.)

Advisory: English Writing 1A or English as a Second Language 5.

(Also listed as English Literature 21. Students may enroll in either department, but not both, for credit.)

Four hours lecture (48 hours total per quarter).

Intensive study of representative literary works by or about women including an analysis of different historical, cultural, and critical perspectives.

WMST 28 Sociology of Women and Men 4 Units

(See general education pages for the requirement this course meets.)

Advisory: English Writing 1A or English as a Second Language 5.

(Also listed as Sociology 28. Students may enroll in either department, but not both, for credit.)

Four hours lecture (48 hours total per quarter).

Application of sociological perspectives to an understanding of gender. Focuses on how we come to think and act as men and women and on gender as an organizing principle of social life. Includes investigation of masculinities and femininities, gender socialization, gender inequality, how gender is shaped by race, class, nation and sexuality, and the family, media, education, economics, politics and religion as gendered institutions, from a cross-cultural and global perspective.

WMST 30 Women, Gender and Politics 4 Units

(Formerly Women's Studies 60.)

(See general education pages for the requirement this course meets.)

Advisory: English Writing 1A or English as a Second Language 5.

(Also listed as Political Science 30. Students may enroll in either department, but not both, for credit.)

Four hours lecture (48 hours total per quarter).

Survey of the multiple ways in which women are active in politics at the community, local, state, national and global levels, primarily in the U.S., with some consideration of women's diverse political engagements elsewhere.

WMST 49 Women and Philosophy 4 Units

(Formerly Women's Studies 55.)

(See general education pages for the requirement this course meets.)

Advisory: English Writing 1A or English as a Second Language 5.

(Also listed as Philosophy 49. Students may enroll in either department, but not both, for credit.)

Four hours lecture (48 hours total per quarter).

Examination of feminist theory and philosophy produced by a diverse range of women and investigation of the ways that understandings of the relations between the sexes have influenced the work of philosophers from different cultures.

FACULTY, CLASSIFIED PROFESSIONALS and ADMINISTRATORS

Faculty

ABRAHAMS, MATTHEW (2004)

Speech
B.A., Stanford University;
M.A., University of California, Davis.

ACEVEDO-AVILA, VERONICA (1995)

Reading
B.A., University of California,
Santa Cruz; M.A., Counseling,
Santa Clara University.

ALEXANDER, ROBERT (2009)

Counselor
B.A., San Francisco State University;
M.A., St. Mary's College.

ALTMAN VON MATT, DANIELLE (2010)

Physical Education
B.A., University of Redlands,
M.A., Cal State San Bernardino.

ALVES DE LIMA, DIANA (1996)

Tutorial/Academic Skills
B.A., University of California,
Berkeley;
M.A., Stanford University.

ANNEN, VICKIE (1997)

Biology
B.A., Florida Atlanta University;
M.A., San Francisco State University.

APPIO, MICHAEL (2006)

Machine Tools
A.A., De Anza College.

ARGYRIOU, ANNE (2000)

Reading
B.A., University of California,
Santa Cruz;
M.A., San Francisco State University;
M.Phil., University of Cambridge.

ATENCIO, DAN (2007)

Physical Education/
Head Football Coach
B.A., M.A., San Francisco State
University.

AUGENSTEIN, RENEE (1997)

Articulation Officer/
Transfer Services Coordinator
B.A., University of Redlands;
M.A., Counseling, Loyola Marymount.

BAIAMONTE, NICHOLAS (2007)

Philosophy
B.A., Metro State College of Denver;
M.A., University of California,
Riverside.

BAMBHANIA, DOLI (2002)

Mathematics
B.A., M.A., University of California,
San Diego; M.S., University of
California, Santa Barbara.

BEGGS, THOMAS W. (1981)

Physical Education;
Adaptive Physical Education
A.A., De Anza College; B.S.,
M.A., San Jose State University;
Ed.D., University of San Francisco.

BENNETT, MARY FRANCIS (1990)

Adaptive Physical Education
A.A., West Valley College;
B.S., M.A., San Jose State University.

BETLACH, MARCY (1996)

English as a Second Language
B.A., Washington State University;
M.A., San Jose State University.

BLOOM, ROBERTA (2001)

Mathematics
B.A., Princeton University;
M.A., Harvard University.

BOARD LILJENSTOLPE, REBECCA (1997)

Language Arts
B.A., M.A., California State University,
San Luis Obispo.

BONILLA, MARYALICE (2006)

English
B.A., M.A., California State University,
Los Angeles.

BOTSFORD, LYDIA (2007)

Accounting
B.A., University of California,
Santa Cruz;
M.B.A., Santa Clara University.

BOURGEOIS, MARY JOY (1990)

Child Development Center
B.A., University of Guam.

BOURGOU, HASSAN (1999)

Mathematics
B.S., M.S., California State University,
Los Angeles.

BRAM, JASON (2010)

Biology
B.A., UC San Diego;
M.A., Cal State Northridge.

BRANDT, MICHAEL (1975)

Automotive Technology
A.A., De Anza College.

BREEN, MARY (2000)

Accounting
B.A., University of California,
Berkeley.

BREITER, SALAMANDER (2001)

Humanities
B.A., Fairhaven College;
M.A., Western Washington University.

BRYANT, ROBERT (2001)

Automotive
A.S., College of the Air Force;
B.A., American Military University.

BUCHANAN, ANGELA (1990)

Social Sciences
B.A., Oberlin College;
M.A., Ohio State University;
M.A., Ph.D., Stanford University.

CADGE-MOORE, CATIE (1999)

Art History
B.A., State University, New York,
Binghamton;
M.A., University of Washington;
Ph.D., University of Victoria.

CALGHER, PAUL F. (1966)

Chemistry
Ph.D., University of California,
San Francisco.

CAPITOLO, DAVE (2003)

Automotive Technology
A.A., De Anza College;
B.S., Eastern New Mexico University.

CASTANO, WILFREDO Q. (1989)

Photography
B.F.A., San Francisco Art Institute;
M.A., San Francisco State University.

CENTANNI, DEBORAH (2007)

Special Education
B.A., St. Mary's College;
M.A., San Jose State University.

CHAI, CHRISTINE (2002)

English as a Second Language
B.A., B.S., University of California,
Davis;
M.A., San Francisco State University.

CHAN, SUSANNE W. (1977)

Counseling
B.A., University of Maryland; M.S.,
Ed.S., State University of New York.

CHANG, LENA (2000)

Library
B.A., San Francisco State University;
M.L.I.S., University of California,
Berkeley.

CHANG, MICHAEL S. H. (1989)

Asian/Asian-American Studies
B.S., B.A., San Francisco State
University;
M.A., Ph.D., Stanford University.

CHENOWETH, WAYNE (1990)

Special Education
B.A., M.A., California State University,
Chico.

CHOW, KAREN (2002)

English
B.S., University of Southern
California; M.A., Ph.D., University of
California, Santa Barbara.

CICHANSKI, MAREK (1998)

Geology
B.S., University of Washington;
Ph.D., Geology, University of
Southern California.

CINI, CAROL (2001)

History
B.A., Stanford University; M.A.,
San Francisco State University; Ph.D.,
University of California, Los Angeles.

CLAROS, RANDY (2010)

Counseling
B.A., San Diego State University;
M.A., San Jose State University.

CLAVIJO, JUDITH (1992)

Nursing
B.S., University of Rosario, Bogota
Colombia; M.S., University of
Michigan, School of Nursing.

CLEAVELAND, CORRINE (1975)

Child Development Center
B.A., University of California, Davis.

CLEM, ROBERT (1998)

Counselor, Career Center
B.C.J., Ohio University;
M.S., San Francisco State University.

CLINCHARD, LORI (2006)

Humanities
B.A., University of California, Davis;
M.A., California Institute of
International Studies.

COGNETTA, JOHN S. (1989)

Director, Student Activities
B.A., University of California,
Berkeley; M.S., University of Oregon;
Ed.D., University of San Francisco.

COLE, MICHAEL (1989)

Design/Computer Graphics
B.A., California State University,
Northridge; M.A., University of
California, Los Angeles.

COLEMAN, DAVID (1990)

Counseling
B.A., M.A., University of California,
Santa Barbara.

CONROY, LINDA C. (1987)

Child Development Center
A.A., De Anza Community College;
B.A., San Jose State University.

CORONADO, MARC (2004)

English
B.A., University of El Paso;
M.A., Ph.D., University of California,
Santa Barbara.

CORTEZ, ALICIA (1990)

Counselor
B.A., Saint Mary's College; M.S.W.,
University of California, Berkeley;
M.A., San Jose State University.

COZZENS, SHERRI (1996)

Nursing
B.S.N., M.S., San Jose State
University.

CRUZ, MAYRA (2000)

Social Sciences
B.A., University of Puerto Rico
M.A., San Jose State University.

CUFF-ALVARADO, JUDY (1996)

Physical Therapy
B.S., Ithaca College;
M.S., Long Island University.

DAHLKE, BARBARA (2007)

Counseling
B.S., University of California,
San Diego;
M.S., Colorado State University;
M.A., San Jose State University.

DAMJANOVIC, JASON (2006)

Physical Education
B.A., Sonoma State University;
M.A., National University.

DELANEY, ANTHONY (2007)

English
B.A., University of Oregon; M.A.,
University of California, Berkeley.

DELAS, MARIA (2006)

Disability Support Services
B.S., California Polytechnic, SLO;
M.A., Santa Clara University.

DENNY, DAVID (1990)

English
B.A., California State University, Long
Beach; M.F.A., University of Oregon;
M.A.T., Fuller Theological Seminary.

DESILETS, LENORE (1993)

Mathematics
B.A., University of California,
Los Angeles;
M.S., University of Maryland.

DETORO, ALICIA (2010)

Environmental Studies
B.S., M.S., UC Santa Barbara

DHALIWAL, HARMAN (2006)

Mathematics
B.S., San Jose State University;
M.S., Ohio State University.

DILEONARDO, CHRISTOPHER (1990)

Geology
B.A., M.A., SJSU
Ph.D., UC Santa Cruz

DICKERSON, ROBERT C. (1989) English/Composition B.A., University of Texas; M.A., Memphis State University.	FU, MARK (2000) Counseling B.A., University of California, Berkeley; M.A., San Jose State University.	HANNA, CASSIE (2006) Nursing B.S., Michigan State University; M.S., University of San Francisco.	HUYNH, KY-DUYEN (1975) Counseling B.A., M.A., San Jose State University.
DOBOSZ, DEBRA (2011) Nursing B.S., San Jose State University M.S., Regis University	GALLEGOS, VERNON (2004) Dance B.A., University of California, Los Angeles; M.A., California State University, Los Angeles.	HANSEN, RICHARD N. (1991) Mathematics A.B., Cornell University; M.A., University of California, Berkeley; M.A., California State University, Los Angeles.	IFFT, MARY ANN (2000) English as a Second Language M.A., San Francisco State University.
DOLEN, THOMAS (2002) Library B.A., University of California, Santa Cruz; M.P.A., University of California, San Diego; MLS, Rutgers University.	GARBACEA, DELIA (1998) Computer Information Systems B.S., Babes-Bolyai University, Cluj, Romania.	HARRINGTON, SHERWOOD (1989) Astronomy B.A., Amherst College; M.A., University of California, Berkeley.	ILLOWSKY, BARBARA S. (1989) Mathematics B.S., State University of New York at Albany; M.A., University of Pennsylvania, The Wharton School; Ph.D., Capella University.
DOMINGUEZ, ALFRED (2007) Counseling B.A., University of California, Berkeley; M.P.A., California State University, Hayward; M.A., San Jose State University.	GEORGIOU, SPERANTZA (2002) CIS B.S., Santa Clara University; M.S., University of Illinois, Champaign-Urbana.	HASSETT, SHANNON (2007) Psychology B.A., California State University, Fullerton; M.A., California State University, Long Beach.	ISON, MILLIA (1990) Mathematics B.S., Shanghai Teachers College; M.A., State University of New York.
DUBARRY, MICHELE (2002) ESL/Readiness B.A., M.A., San Francisco State University.	GERAGHTY, MAURICE (2002) Mathematics B.A., University of California, Berkeley; M.S., California State University, Hayward.	HAYNES, JAMES H. (1976) Adaptive Physical Education A.A., West Valley College; B.S., M.A., San Jose State University.	JENNINGS, VICKY (2002) Biology/Environmental Studies B.A., M.A., San Jose State University.
DUNN, RONALD (2001) Music B.A., University of California, San Diego; M.M., Florida State University.	GIARDINO, ALEXANDRIA (2006) English B.A., University of Oregon; M.A., Mills College.	HECTOR, JANICE (1994) Mathematics B.S., M.A., University of California, Davis; M.B.A., Pace University, New York.	JOHNSON, ERNEST (2000) Accounting B.S., University of Dayton; M.B.A., Harvard University.
ELLIS, TERRY R. (1991) Paralegal/Administration of Justice B.A., University of California, Los Angeles; J.D., University of Santa Clara.	GIBSON, PATRICIA (2000) Counselor B.A., San Jose State University; M.A., San Jose State University.	HELFMAN, SUZANNE (2002) English B.A., M.A., San Francisco State University.	JOHNSON, MICHAEL (2006) HTCTU Specialist B.A., Fort Lewis College.
FARRINGTON, ROBERT P. (1981) Music B.A., University of California, Los Angeles; M.A., California State University, Hayward.	GLAPION, KEVIN (2001) Special Education B.A., University of New Orleans; M.S., Loyola University.	HERNANDO, HERMINIO (2001) Counseling B.A., University of Hawaii; M.A., New York University.	JOPLIN, NATASHA (2001) Counseling B.S., Fisk University; M.S., University of LaVerne.
FERNANDEZ, PURBA (2000) Geography B.S., University of Calcutta; M.S., Pennsylvania State University.	GLASMAN, ILAN (2008) Music B.A., University of California, Santa Barbara; M.A., San Jose State University; D.M.A., University of Southern California.	HERTLER, D. SCOTT (2002) Physical Education/Baseball Coach B.S., San Jose State University; M.A., St. Mary's College.	JUDSON, ZACHARY (2011) Mathematics B.S., UCLA Ph.D., UC Berkeley.
FISCHER, KEI (2012) Community Organizer B.A., UC Berkeley M.A., San Francisco State University M.A., University of San Francisco.	GOLDMAN, BARAK (2007) Film/TV B.A., New York Institute of Technology; M.A., The New School; M.F.A., University of California, Los Angeles.	HEYER, BRUCE (2006) Biology B.S., University of California, Davis; M.A., San Francisco State University.	KANG-ROBINSON, JULIANA (2006) Art B.S., Virginia Tech; M.F.A., Art Institute of Chicago.
FLEMING, DIANA (2000) English B.A., Mills College; M.A., San Francisco State University.	GONZALEZ-YUEN, NICHOLAS (1992) Political Science B.A., Carleton College; Ph.D., J.D., University of California, Berkeley.	HOWARD-PITNEY, DAVID (1992) History B.A., Oregon State University; M.A., Ph.D., University of Minnesota.	KARST, LAURA (2001) French B.A., University of California, Santa Cruz; M.A., San Jose State University.
FLORES, KATHY (1996) English as a Second Language B.A., Santa Clara University; M.A., San Jose State University.	GOUGH, W. MICHAEL (1985) Business and Computer Information Systems B.A., M.B.A., University of Santa Clara; M.A., Notre Dame de Namur University.	HONG, RUSSELL (2010) Speech B.A., UCLA; M.A., San Jose State University.	KAUFMAN, CYNTHIA (1991) Director, ICCE B.A., University of California, Berkeley; M.A., Ph.D., University of Massachusetts.
FORMAN, JEFFREY W. (1978) Adaptive Physical Education B.S., Med., Springfield College, Massachusetts; Ph.D., United States International University.	GRAY, DAVID (1999) Chemistry B.A., Rice University; Ph.D., University of California, Berkeley.	HOWLAND, STEPHEN (2006) English B.A., University of California, Berkeley; M.A., San Francisco State University.	KESSLER, CYNTHIA (2000) Child Development Center B.A., M.A., Pacific Oaks College.
FRANCIS, RONALD (2009) Physics B.S., California Institute of Technology; Ph.D., Massachusetts Institute of Technology.	GUEVARA, DAWNIS (2001) Physical Education B.A., M.A., San Jose State University; M.A., St. Mary's College.	HRZYCK, CATHERINE (2000) Nursing B.A., University of Winnipeg, Canada; B.S.N., University of Saskatchewan, Canada; M.Sc.N., University of Western Ontario, Canada.	KHANNA, ANU (2000) Communications/Intercultural Studies B.A., University of Illinois; M.A., University of Wisconsin, Milwaukee; Ph.D., Arizona State University.
FREEMAN, CLEVE (2009) Counselor B.A., California State University, Long Beach; M.S., San Francisco State University.	GRAY, DAVID (1999) Chemistry B.A., Rice University; Ph.D., University of California, Berkeley.	HUBBARD, JUDITH A. (1991) English Ph.B., Grand Valley State College; M.A., San Francisco State.	KHOSRAVI, MEHRDAD (2008) Mathematics B.S., M.S., Ph.D., University of Central Florida.
FRIESEN, JOAN (1999) Learning Disabilities B.A., San Jose State University; M.A., Santa Clara University; M.A., Santa Clara University.	GUEVARA, JORGE (1979) A.A., De Anza College; B.A., M.A., San Jose State University.	HUGHES, MELINDA (1999) Counseling B.A., California State University, Long Beach; M.A., San Jose State University; Ed.D., Argosy University.	KLEIN, CHARLES S. (1989) Mathematics B.A., Hobart College; M.A. University of Northern Colorado.
FRITZ, MICHELE (2000) Business B.S., Boston University; M.S., California State University, East Bay; M.B.A., Harvard University.	GUITRON, PATRICIA (2001) Counseling B.A., M.S., San Francisco State University.	HUI, CECILIA (2011) Librarian B.A., M.S., McGill University	KLINGMAN, PAUL (2000) Computer Aided Design B.S., M.A., Pacific Montana University.
	HALWANI, ESTHER (2008) Disability Support Services Counselor B.A., Sonoma State University; M.S., San Francisco State University.	HUNTER, TRULY (1996) Counseling B.A., Winthrop University; M.Ed., Clemson University.	KOVACH-LONG, SANDRA (1976) Special Education A.A., Riverside City Junior College; B.S., M.S., San Jose State University.
			KRAGALOTT, ARDEN (2004) Physical Education B.A., Ohio Wesleyan University; M.A., Ohio State University.

Faculty

KRAMER, ALEX (2004) Speech A.A., De Anza College; B.A., San Jose State University.	LIZZARDI-FOLLEY, CARMEN (2000) Spanish B.A., University of Puerto Rico M.A., Ph.D., Cornell University.	MCCART, MICHAEL (2010) Auto Tech B.S., M.A., CSU Fresno	NEWTON, DAVID (1987) Physics B.A., Sonoma State University; B.A., M.S., San Francisco State University.
KRESTAS, GEORGE V. (1989) Engineering B.S., San Jose State University; M.S., Santa Clara University.	LO, BERTRAND (2006) Mathematics B.A., University of California, Berkeley; M.S., Harvard University.	MCCAULEY, BRIAN (1998) Biology B.A., University of California, Santa Cruz; Ph.D., University of Hawaii.	NGUYEN, UYEN (CLARE) (1999) Computer Information Systems B.S., M.S., University of California, Davis.
KRYLIOUK, IAROSLAV (2008) Mathematics Ph.D., University of Saskatewam.	LOGVINENKO, VLADIMIR (2000) Mathematics B.A., M.S., University of the Ukraine; Ph.D., Institute for Low Temperatures Physics and Engineering, Ukraine.	MCMAMARA, MARTIN (1996) Animation B.A., University of Notre Dame; M.A., San Francisco State University.	NICKEL, DONALD (2001) Counseling B.A., M.A., San Jose State University.
KWAK, CHRISTOPHER (2000) Accounting B.A., Korea University; B.S., California State University, Hayward; M.B.A., Golden Gate University.	LOPEZ, RICHARD (1998) Mathematics B.S., University of California, Davis; M.A., California State University, Sacramento.	MCPARTLAN, ELIZABETH (1997) Biology B.A., M.S., San Francisco State University.	NJINIBAM, EDWIN N. (1991) Mathematics B.S., Cuttington University; M.S., Georgia Technical College.
LAM, CLARA YIN PING (1991) English B.S., The Chinese University of Shatin, Hong Kong; M.Ed., Ed.D., University of Georgia.	LUCAS, WARREN R. (1991) Dance B.A., North Carolina School of Arts; M.A., University of California, Los Angeles.	MELAS, HEIDI (1993) German B.S., M.S., San Jose State University.	NORMAN, CRAIG (2007) English as a Second Language B.A., California Lutheran University; M.A., San Francisco State University; Ph.D., San Diego State University.
LAMIT, LOUIS G. (1984) Computer Assisted Drafting Program B.S., Western Michigan University.	LUNA, EDUARDO (1999) Physics B.S., M.S., California State University, Fresno.	MELLO, KEVIN (2009) Accounting B.S., Santa Clara University; M.B.A., Arizona State University.	OHTAKE, MOTOSUKE (2006) Art B.F.A., Nihon University, College of Arts; B.F.A., Academy of Art College; M.F.A., San Francisco Art Institute.
LARSON, MARK (2008) Manufacturing B.S., Sonoma State University.	LUNA WOO, SHIREEN (2000) Counseling B.A., California State University, Hayward; M.A., San Jose State University.	MILLER, ANNA (2004) Nutrition B.S., University of California, Davis; M.S., Pennsylvania State University.	OLDHAM, IRA (1999) Computer Information Systems B.A., M.A., Oklahoma University; M.S., Ph.D., Carnegie Mellon University.
LEE, CHARLES (2002) English as a Second Language B.A., Hebei University, China; M.A., San Francisco State University.	MADDEN, LYDIA HEARN (2000) English B.A., M.A., University of California, Santa Barbara.	MILONAS, FAITH E. (1986) Counselor B.A., Westfield State College, Mass.; M.S., State University of New York; Ed.D., University of Nevada.	OLEJNICZAK, PAUL (2000) Meteorology/Astronomy B.S., M.S., Duquesne University.
LEE-KLAWENDER, CYNTHIA (2000) CIS B.A., California State University, Los Angeles; M.S., University of Southern California.	MADIGAN, JULIE (2001) English as a Second Language B.A., California State University, Chico; M.A., San Jose State University.	MITCHELL, G. DAN (1989) Music Theory and Composition B.A., M.A., San Jose State University.	O'NEILL, PATRICIA (1990) Nursing B.S., Montana State University; M.S., University of California, San Francisco.
LEE, MAE (2003) Intercultural Studies B.A., M.A., Stanford University; M.A., Ph.D., University of California, Santa Cruz.	MAGNIN, CHRISTINE (2008) Special Education B.S., Trenton State College; M.A., San Jose State University.	MJELDE, ELIZABETH (1993) Creative Arts M.S., University of California, Santa Barbara.	OSBORNE, SCOTT (2004) Accounting B.A., University of California, Berkeley; M.B.A., Golden Gate University.
LEE, MARIE ELAINE (1991) Speech B.A., M.A., University of Hawaii.	MAIERO, MARCIA SMITH (1990) Physical Education B.A., California State University, Chico; M.S., California State University, Hayward.	MOEN, LORRAINE (2001) Mathematics B.A., California Polytechnic State University, San Luis Obispo; M.S., California State University, Hayward.	OWIESNY, CHERYL (1999) Physical Education B.A., California State University, Chico; M.A., San Jose State University.
LEONARD, AMY (2012) English B.A., San Jose State University M.A., San Francisco State University.	MAILHOT, JAMES (2011) Mathematics B.S., Stanford University M.S., Stanford University Ph.D., University of Washington.	MORENO, VICTORIA (1999) Counselor B.A., San Jose State University; M.A., San Jose State University.	PACHECO, RACHEL (2007) Physical Education/Women's Softball B.S., M.S., Virginia Tech.
LEW, ESTHER (2004) Child Development Center B.A., San Francisco State University.	MARCUS, LISA (1998) Mathematics B.S., University of Sheffield; M.S., Ph.D., Vanderbilt University; M.S., Santa Clara University.	MOSH, FARSHOD (2000) Mathematics M.S., University of Iran.	PALMORE, KIM (2012) English B.A., Cal State University Long Beach M.A., Cal State University Long Beach Ph.D. UC Riverside.
LEWIS, JULIE (2011) African American Studies B.A., San Francisco State University M.A., San Francisco State University.	MARIN, MARIA (2002) English as a Second Language B.S., Biola University; M.A., San Francisco State University.	MUJAL, CARLOS (2001) History B.S., University of California, San Francisco; B.A., San Francisco State University; M.A. University of California, Berkeley.	PAPE, MARY (1998) Computer Information Systems B.S., Santa Clara University; M.B.A., Capella University.
LIBOVA, OLGA (2006) Nursing B.S., Moscow; M.S., State University of New York.	MATHIOS, DIANE (1996) Mathematics B.A., M.A., University of California, Berkeley.	MUZZI, CINZIA (2004) Chemistry B.S., B.A., Ph.D., University of California, Davis.	PARKER, GERALDINE (1993) Native American Studies B.A., California State University, Hayward.
LILLY, BYRON (2000) Business B.A., M.A., M.B.A., University of California, Berkeley.	MATTIS, NICHOLAS (2010) Physical Education B.A., Saint Ambrose University; M.S., Western Illinois University.	MYHRE, JENNIFER (2000) Sociology M.A., Ph.D., University of California, Davis.	PATTON, MARILYN (1991) English/Composition B.A., Stanford University; M.A., Ph.D., University of California, Santa Cruz.
LIMCOLIUC, LUIS (1996) English/Composition B.S., University of Notre Dame; M.A., San Francisco State University.	MAYNARD, RICHARD (2004) Automotive Technology A.A., Chabot College.	NEAL, VERONICA (2012) Director, Equity, Social Justice & Multicultural Education B.A., San Jose State University M.A., Mills College Ph.D., Mills College.	PEARCE, KIMBERLY A. (1987) Speech-Communication B.A., Azusa Pacific University; M.A., San Jose State University.
LISHA, ZAKI (1974) Film/TV B.A., University of Southern California; M.A., San Francisco State University.		NENGO, ISAIAH (2006) Anthropology B.A., Nairobi University; M.A., Ph.D., Harvard University.	
LIU, HUA-FU (2007) Mandarin B.A., National Tsing Hua University; M.S., Radford University.			

PESANO, JULIE (2005) English B.A., M.A., University of Florida.	SALAH, DAN (2001) Business B.A., University of California, Berkeley; M.B.A., University of Pennsylvania.	SINGH, SUKHJIT (2001) CIS B.S., M.S., California State University, Hayward; M.S., Carnegie Mellon University.	TORRES, LAUREL (1996) Counseling R.N., A.D.N., College of San Mateo; B.A., University of California, Davis; M.S., California State University, Hayward.
PHILLIPS, JULIE (1993) Morgan Family Endowed Chair in Environmental Studies/Instructor Biological Sciences B.A., California State University, Chico; M.A., San Jose State University.	SARTWELL, JULIE (2000) English B.A., California Polytechnic State University, San Luis Obispo; M.A., San Francisco State University.	SKAGER, KRISTIN (1999) Reading B.A., Humboldt State University; M.A., San Francisco State University.	TRAN, DANNY (2011) Mathematics B.A., UC Berkeley M.E., Harvard University.
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PIERRE, ADRIENNE (1999) Counseling B.S., M.A., San Jose State University.	SCHAFER, KARL (1989) Mathematics B.S., University of Alabama; M.A., Ph.D., University of California, Santa Cruz.	SPENCER, SANDRA (1997) Business B.A., University of California, Berkeley; M.A., California State University, Hayward.	VERNAZZA, LAWRENCE (PETE) (1998) Automotive Technology A.A., De Anza College.
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QUINN, ROSEANNE (2010) English B.A., UC Davis M.A., Sussex University Ph.D., University of Iowa	SHEIRICH, MONICA (1997) Vocational/Special Education B.A., M.A., San Francisco State University.	SULLIVAN, KRISTIN (2002) Biology/Environmental Studies B.S., M.S., San Jose State University.	WETHINGTON, PAULINE (2007) Counseling B.A., M.A., San Jose State University.
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REBER, MARIETTA (2002) Technical Communication B.A., M.A., Brigham Young University.	SHIVELY, TIM (2000) English B.A., Old Dominion University; M.A., San Francisco State University.	TAO, LAN (2001) Counseling B.A., University of California, Santa Barbara; M.S.W., California State University, Long Beach.	YECKLEY, PAULINE (1986) Library B.A., M.A., Michigan State University; M.A., University of Michigan.
REZA, JACQUELYN VALERIE (1985) Director of Staff and Organizational Development B.A., M.S.S., San Francisco State University; B.S., Ahmadu Bello University, Zaria Nigeria; Ed.D., University of San Francisco.	SILVA, PAULA (2007) English B.A., University of California, Santa Cruz; M.A., San Francisco State University.	TAVERNETTI, SUSAN (2001) Film B.A., University of the Pacific; M.A., University of Southern California.	YEE, LINDA (2007) English as a Second Language B.A., M.A., University of California, Los Angeles.
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MURPHY, BRIAN (2004)
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Dean, Biological, Health and
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RAY, THOMAS (2010)
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Physics
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Machine Technology
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ALLEN, ROBERT R. (1961-1993)
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B.A., University of California,
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ARAKI, JOANNE M. (1989-2005)
Nursing
B.S.N., University of Hawaii;
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Mathematics
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BARKER CHARLES B. (1969-1999)
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BARTUNEK, CAROL R. (1975-1998)
Religious Studies
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BEAN, ROBERT H. (1969-1984)
Business
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BENDIGHEIT, HAROLD E. (1969-1993)
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Illinois Institute of Technology.

BERNASCONI, ROBERT A. (1962-1989)
English/Philosophy
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BERRY, FRANK W. (1969-2002)
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BOGUS, SDIANE (1990-2001)
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B.A., Stillman College;
M.A., Syracuse University;
Ph.D., Miami University.

BOTHMAN, RICHARD W. (1988-1995)
Administration of Justice
B.A., M.S., San Jose State University.

BOWER, JOAN (1975-1990)
Older Adult Services
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BRESNAN, PATRICK S. (1967-2009)
History
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BROCK, ROBERT E. (1968-1991)
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BRUCE, KENNETH R. (1968-1995)
History
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BUCK, DONALD E. (1966-1991)
History
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BULL, MICHAEL A. (1976-2011)
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BURCHELL, DONALD S. (1963-1990)
Computer Information Systems
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BURKE, LAWRENCE J. (1989-2011)
Social Sciences/Humanities
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BURLING, EDWIN (1968-2002)
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Barbara; M.A., Dartmouth College.

BUSHNELL, W. GLEN (1960-2000)
Counselor, Business,
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CAMPBELL, DAVE (1998-2005)
Accounting
B.S., La Salle College;
M.B.A., San Jose State University;
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CANTRELL, JOSEPH E. (1984-1997)
Business
B.S., Oklahoma State University;
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CASTILLO, CINDY (1977-2012)
Director, Financial Aid and
Scholarships
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Library
B.S., Hong Kong University;
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CHEESEMAN, DOUGLAS T. (1967-1997)
Biology
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CHESLER, PAUL B. (1977-2006)
Social Sciences
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B.A., New York University;
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CLEVELAND, WILLIAM (1968-2003)
Humanities
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Sociology
A.A., Yuba College;
B.A., San Jose State University;
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COLEMAN, JOSE M. (1963-1987) Spanish B.A., M.A., University of California, Berkeley.	DOUGHERTY, CHARLES S. (1977-2008) Physical Education B.A., San Jose State University; M.A., M.S., San Jose State University; M.A., U.S. Coast Guard; Ph.D., University of Iowa.	FINK, BARBARA (1975-2011) Mathematics B.S., City College of New York; M.S., Stanford University.	GRAY, WINSTON GRANT (1975-1991) Theatre Arts, Dance B.S., Delta State College, Cleveland, Mississippi; M.A., San Francisco State University; Ph.D., University of Utah.
COLEMAN, JUDY C. (1989-2012) Counseling A.A., De Anza College; B.A., University of California, Berkeley; M.A., Santa Clara University.	DOWDNEY, DONNA (1990-2001) Chair, Technical Communication Department B.A., Wheaton College; M.A., Indiana University; Ph.D., Columbia Pacific University.	FINSTON, GLORIA (1975-2001) Learning Disabilities Specialist B.A., Earlham College, Richmond, Ind.; M.A., University of Santa Clara.	GRAY, ZENA (1975-2009) B.A., University of California, Los Angeles; M.A., College of Notre Dame.
COLTRIN, DOROTHY M. (1970-2003) Nutrition B.S., University of California, Berkeley; M.S.P.H., University of California, Los Angeles.	DRESSLER, FRANCES R. (1971-1992) Sociology/Psychology A.A., College of Sequoias; B.A., Fresno State University; M.A., Syracuse University; Ph.D., United States International University.	FISHER, GARY (1996-2011) Chemistry B.S., Ph.D., University of California, Santa Cruz.	GREEN, PHILLIP S. (1989-2010) Automotive Technology A.A., De Anza College; B.A., San Jose State University.
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COOLIDGE, FRANCES E. (1966-1978) Reading Improvement Study Skills A.A., Stockton Junior College; B.A., M.A., College of the Pacific; M.A., San Jose State University.	DUNBAR, MAURICE V. (1977-1998) English A.A., Compton Junior College; B.A., University of California, Berkeley; M.A., Sacramento State University.	FOROUZAN, BEHROUZ A. (1991-2009) Computer Information Systems B.S., University of Tehran; M.S., University of California, Irvine.	GRIFFIN, ROBERT E. (1994-2008) Vice President, Student Services and Institutional Research B.A., M.S., San Jose State University; Ed.D., University of LaVerne.
COOPER, MICHAEL J. (1969-2004) Art B.A., M.A., San Jose State University; M.F.A., University of California, Berkeley.	DUNIVIN, J. D. (1964-1999) Sociology B.A., M.A., San Jose State University.	FORSYTH, TONI M. (1991-2009) English/Composition B.A., M.A., California State University, Los Angeles; Ph.D., University of California, Los Angeles.	GROBMAN, BETH A. (1987-2011) Journalism/Mass Communication B.A., Pitzer College; M.A., St. Louis University.
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CUMMINGS, GARY (1969-1995) English B.A., Portland State College; M.A., University of Oregon.	EKNOIAN, GERALD (1968-1992) Art B.S., University of California, Los Angeles; M.A., in Painting, University of California, Berkeley; M.A., in Art History, San Jose State University.	GARCIA, PAULA (1976-2008) Child Development Center B.A., M.A., San Jose State University.	HAMER, REGINALD (1985-2010) Mathematics B.S., Lowell University, Mass.; M.S., Ph.D., New York University.
CUNY, ANN WHARTON (1975-1993) P.E./Recreation A.A., Monterey Peninsula College; B.A., M.S., San Jose State University; Ph.D., United States International University.	ELDER, CHARLES L. (1968-2004) Physical Education B.A., M.A., San Jose State University.	GATES, ELMER C. (1966-1993) Physical Education B.S., M.S., Indiana University.	HAMES, JOANNE (1989-2004) Paralegal/Administration of Justice B.A., J.D., Santa Clara University.
CUSTODIO, JAMES G. (1972-1995) Counselor A.A., City College of San Francisco; B.A., M.A., San Francisco State University.	EMERICK, PAUL L. (1970-1989) Computer Information Systems B.M.E., Rensselaer Polytechnic Institute; B.S.C., Salmon P. Chase College, Cincinnati, Ohio; M.B.A., Xavier University.	GEISINGER, JR., WILLIAM L. (1978-2012) Creative Arts A.A., San Joaquin Delta College; B.A., M.A., San Jose State University.	HAMLIN, DOROTHY C. (1967-1988) Early Childhood Education B.A., University of Vermont.
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		GRAME, CARL A. (1964-1993) Computer Information Systems B.S., Rider College; M.B.A., University of Santa Clara, Certificate in Data Processing.	HART, THOMAS A. (1973-1988) Music B.A., M.A., San Francisco State University.

Emeriti Faculty/Administrators

HASSEL, PATRICIA L. (1969-2012) Medical Assisting/Health Technologies B.S., The University of Phoenix; R.N., Montreal General Hospital, Quebec, Canada.	JURIKA, LILLIAN U. (1978-1999) Counselor B.A., University of San Diego; M.A., Stanford University, English; M.A. San Jose State, Counseling; San Jose State University Certificate, Applied Social Gerontology.	LEWIS, WILLIAM G. (1968-2003) Automotive Technology B.A., M.A., San Jose State University; Journeyman Machinist.	MITCHELL, GLORIA (1976-2004) Psychology A.A., Foothill College; B.A., San Jose State University; M.A., Santa Clara University.
HAY, EDWARD A. (1961-1995) Geology B.A., M.A., University of California, Berkeley.	KEEN, CAROLYN M. (1962-1999) English B.A., M.A., Stanford University.	LINTHICUM, JAMES A. (1965-2004) Physical Education B.S.Ed., Ohio University; M.S., University of Colorado.	MOLANDER, MARK L. (1968-2003) English B.A., M.A., Colorado State College.
HEFFNER, SCOTT C. (1976-2012) Political Science B.A., San Jose State University; M.A., University of Santa Clara; M.A., San Jose State University.	KELLER, INGRID (1963-1992) German A.A., Pasadena City College; B.A., Occidental College; M.A., Stanford University.	LOGAN, GEORGIA H. (1961-1992) English B.A., Oberlin College; M.A., Stanford University.	MOORE, THOMAS O. (1966-1998) Mathematics B.S.E.E., University of California; M.A., San Francisco State University.
HENDERSON, BRUCE (1997-2010) English B.A., M.A., English, San Francisco State University; Ph.D., Stanford University.	KENDALL, SHIRLEY (1995-2007) Professional & Workforce Development B.A., University of Southern California; M.A., National University.	LOMAX, C. RANDY (1971-2009) Counselor B.A., M.A., San Jose State University.	MORENO, M. CRISTINA (1991-2010) Spanish B.A., M.A., M.S., Indiana University.
HENDRICKSON, MARY E. (1984-1999) Business and Computer Information Systems B.A., Hamline University; M.S., San Francisco State University.	KEPLINGER, MIREILLE G. (1966-1991) French A.A., Monterey Peninsula College; Baccalaureat-Philosophie-Letters, University de Grenoble; B.A., M.A., San Jose State University.	LOPEZ-MORGAN, CHRISTINA A. (1988-2010) Social Sciences A.A., Los Angeles City College; B.A., M.A., Pacific Oaks College.	MORENO, MOSES S. (1972-1993) Chicano Studies A.A., Chaffey College; B.A., M.A., Stanford University.
HENDRY, JOYCE M. (1971-1981) Art B.A., M.A., San Jose State University.	KLANG, ROBERT (1970-1997) English B.A., M.A., San Francisco State University.	LUCAS, JAMES S. (1975-2000) B.A., M.A., San Francisco State University; Ed.D., University of California, Berkeley.	MOSTYN, CHARLES R. (1966-1986) Business B.S., Armstrong Business College; B.A., Humboldt State University; M.A., San Jose State University.
HERMAN, SONDR A. (1966-1992) History, Political Science B.A., Barnard College; M.A., Ph.D., Rutgers University.	KLINT, GLORIA (JEAN) (1998-2007) Child Development Center B.S., University of Utah; M.A., California State Polytechnic, Pomona.	LUOTTO, JAMES A. (1966-2001) English B.A., University of Notre Dame; M.A., Ph.D., Loyola University, Chicago.	MOWREY, JUDITH M. (1986-2010) Library B.A., Oklahoma Baptist University; M.A., San Francisco State University; M.L.S., University of Oregon.
HOEFER, LEO A. (1977-1993) Older Adult Services B.A., St. Patrick College; M.A., San Francisco State University; Ph.D., University of Washington.	KODA, ANN Y. (1986-2001) Computer Applications and Office Systems B.A., University of California, Berkeley; M.A., San Jose State University.	LUPI-WILLIAMS, FRANCES (1970-1991) Physical Therapist Assisting B.S., University of the State of New York; M.A., Stanford University.	MUHLSTEIN, ELEANOR A. (1983-2002) Teacher, Child Care Program B.A., San Jose State University.
HOLLER, MICHAEL (1970-2006) Film/TV A.A., Chaffey College; B.A., M.A., Humboldt State University.	LANDRY, MARGARET M. (1977-1992) Child Development Center A.A., De Anza College; B.A., University of California, Santa Barbara.	LYNCH, JOHN (2005-2011) Business B.S., University of Mississippi; M.B.A., Harvard University.	MULLEN, WILLIAM (1972-1999) Automotive Technology B.A., University of Denver.
HOOKS, SYLVIA (1975-2004) Physical Education B.S., Central State University, Wiberville, Ohio; M.A., Stanford University.	LASSERRE, YVETTE M. (1991-2001) French A.A., De Anza College; B.A., M.A., San Jose State University.	LYON, LOUISE (1970-1998) Biology B.A., University of California, Berkeley; M.A., University of Wisconsin.	NAGEL, WILLIAM (2002-2012) Graphic Design B.A., San Jose State University.
HOWARD, CAROL M. (1968-1997) Counselor B.A., Regis College; M.Ed., Boston University.	LAU, PHILIP K. C. (1972-2007) Psychology B.A., San Francisco State University; M.S.W., University of California, Berkeley.	MACDONALD, JAMES D. (1964-1993) Chemistry B.S., University of Colorado; M.S., San Jose State University.	NAKASHIMA, WENDY (1982-1997) Child Development Center B.S., Miami University; M.S., Case- Western Reserve University.
HUBBS, ROBERT R. (1963-2001) Chemistry B.S., Western Illinois University; M.S., Purdue University.	LEAVITT, MURRAY P. (1965-1994) Business B.A., University of Missouri; M.B.A., Long Island University; M.A., Teacher's College, Columbia University; Ed.D., University of California, Berkeley.	MACK, ROGER W. (1977-2012) Economics B.A., M.A., San Francisco State University; Ph.D. Syracuse University.	NASH, JULIE S. (1974-1993) Sociology, Science A.A., Stephens College, Columbia, Missouri; B.A., University of Colorado; M.A., San Jose State University; M.A., Santa Clara University; Ph.D., United States International University.
HUNTER, EBENEZER (1970-2010) African American Studies B.A., M.A., San Jose State University.	LEIGH, ROBERT J. (1972-2003) Automotive Technology B.A., M.A., San Francisco State University.	MANRIQUEZ, NAPOLEON H. (1977-2006) Director, Assessment Center B.A., San Jose State University; M.A., Ph.D. Stanford University.	NELSON, ALICE (1987-2004) Computer Applications and Office Systems A.A., Canada College; B.A., M.B.A., San Francisco State University.
HUNTIMER, LINDA (1973-2006) Learning Disabilities B.A., M.A., Arizona State University; Ed.D., University of San Francisco.	LEE-YEN, ANN (1988-2012) Child Development Center B.A., Taiwan University; M.A., University of Oregon.	MAREK, WALTER W. (1971-1987) Automotive Technology Cred. Bus. Mgmt., Foothill College; A.A., De Anza College; Credential, University of California, Berkeley; B.V.E., San Jose State University.	NELSON, SHARON S. (1976-2003) Hope-De Anza Vocational Program B.A., Augustana College, Illinois.
JOHNSON, JUDITH (1988-2004) Center for Applied Competitive Technologies B.A., The College of Charleston; M.A., Webster University.	LESKINEN, ANNE L. (1985-2011) Mathematics B.A., M.A., University of Western Ontario.	MAZZUCA, ROBERT G. (1981-2001) Physical Education B.A., College of the Pacific; M.A., University of the Pacific.	NICHOLS, BARBARA (1977-1990) Older Adult Services A.A., Foothill College; B.A., San Jose State University; M.A., Santa Clara University.
JONES, HELEN B. (1974-1997) Instructor/Enabler, Physically Limited Program A.A., Boston University; B.A., University of Illinois; M.A., Hunter College, New York.	LETSON, ROGER L. (1979-2007) Music B.M.Ed., M.M., University of Montana.	MCCARTHY, JAMES (1976-2007) Dean, Library Services B.A., San Bernardino State University; M.S., USC.	NIELSEN, M. LANCE (1975-2006) A.A., Diablo Valley Junior College; B.S., Hayward State University; M.A., San Jose State University.
JONES, RUTH (1983-2012) Child Development Center B.A., San Jose State University.		MCDONNELL, BARBARA (1975-1991) Early Childhood Education B.A., M.A., San Jose State University.	NORRIS, MARCIA (1991-2001) High Tech Center Training Unit B.A., University of Alabama; M.A., English, M.A., Education, San Jose State University.
		MICHAELIS, MARGARET (2006-2012) Director, Budget and Personnel A.A., Pierce College; B.S., Pepperdine University.	NUNES, ANTHONY J. (1966-1992) Physical Education A.A., College of the Sequoias; B.S., M.S., California State Polytechnic College.
		MILTON, JOHN (1970-2005) English B.A., M.A., San Francisco State University.	

Emeriti Faculty/Administrators

O'BRIEN, FAY (1967-1993) Acting Executive Head, Allied Health and Nursing Diploma, French Hospital, San Francisco; A.B., San Francisco State University; M.A., College of the Holy Names, Oakland, California.	PRITCHARD, WILLIE (2006-2008) Academic Coordinator B.A., Duke University; M.A., Antioch University.	SCHOELLER, ARLENE J. (1970-1989) Nursing B.S.N., Keuka College; M.A., San Jose State University.	STERN, DEBORAH R. (1986-2008) B.A., University of California, Berkeley; M.S., California State University, San Francisco.
ODLE, CHARLES R. (1965-1999) Mathematics B.A., Fresno State University; M.A.T., San Diego State University.	QUARATO, PATRICIA S. (1992-2008) Biology B.S., Virginia Commonwealth University/Medical College; M.S., University of Southern California.	SCHROEDER, RICHARD V. (1984-2012) Dean, Physical Education and Athletics B.A., University of California, Berkeley; M.A., San Jose State University.	STERNLIEB, MYRA B. (1975-1999) Nursing/Health R.N., B.S.N., Ohio State; M.S., San Francisco State.
O'DONNELL, DANIEL J. (1968-1995) Computer Information Systems B.S.C., M.B.A., University of Santa Clara.	QUIRKE, LILLIAN M. (1964-1988) Art B.S., Southern Connecticut State College; M.A., Long Beach State University; Ed.D., Teacher's College, Columbia University.	SCHWOOB, LESLIE A. (1967-2003) Automotive Technology B.A., M.A., San Francisco State University.	STOKES, PHILLIP F. (1964-2000) English, English as a Second Language, Reading, Speech, Linguistics B.A., M.A., San Francisco State University.
ONEY, ANNE W. (1985-1999) Dean, Business and Compute Science Division B.A., Cornell University; M.A., San Jose State.	RAMIREZ, OSCAR (1973-1993) Vice President, Administrative Services B.A., M.A., Fresno State University; Ph.D., United States International University.	SCOTT, DANIEL R. (1970-2001) English B.S., M.A., Brigham Young University.	STOLL, EDWINA L. (1986-2009) Speech/Communication B.A., Linfield College; M.A., University of Hawaii; Ph.D., University of Utah.
OSTWALD, VENICE E. (1967-1987) Library A.B., University of Colorado; M.S., University of Southern California.	RAPPAPORT, STEVEN D. (1974-2007) Philosophy/Economics A.B., University of California, Berkeley; M.A., San Jose State University; Ph.D., University of Toronto, Canada.	SHROPE, C. WAYNE (1964-1991) Speech A.A., Placer Junior College; B.A., M.A., Sacramento State University.	STRAUSS, RAYMOND C. (1961-1985) Mathematics B.S., M.S., University of Chicago.
PABON, TONY (1981-1997) Mathematics A.B., M.S., California State University, Los Angeles.	RASHALL, BENITA (1977-2008) Physically Limited Counselor/Enabler B.S., University of California, Berkeley; M.S., San Francisco State University.	SKYLES, WILLIAM V. (1962-1989) English B.A., De Paul University; M.A., University of Chicago.	STRINGER, DAVID D. (1981-2011) Business B.S., San Jose State University; M.B.A., Golden Gate University, San Francisco.
PATTERSON, NORMA (1971-1986) Nursing B.S., University of Oregon; M.S., University of California.	REDD, JANET F. (1968-2002) Librarian, Collection Development/ Technical Services B.A., M.L.S., University of California, Berkeley; M.A., San Jose State University; Ph.D., Stanford University.	SMITH, DALLAS J. (1967-1989) Counselor A.A., Fullerton Junior College; B.A., University of California, Santa Barbara; M.A., San Francisco State University; M.S., California State University, Fullerton.	STURM, J. BRUCE (1976-2000) English B.A., Villanova University; M.A., Stanford University; M.A., Santa Clara University.
PECORARO, SALVATORE P. (1968-1997) Art A.B.Ed., California College of Arts and Crafts; M.A., San Francisco State University.	REID, BARBARA (1977-1989) Vice President, Instruction B.A., State University of Iowa; M.A., Ed.D., University of Northern Colorado.	SMITH, ELEANOR A. (1968-1989) Counselor A.A., Green Mountain College; B.S., University of New Hampshire; M.S., University of Colorado.	SULLIVAN, MICHAEL G. (1970-2004) Geography and Anthropology; Dean/Provost, Instruction, Career and Technical Education B.A., M.A., University of California, Santa Barbara; Ph.D., University of Pittsburgh.
PERATA, DONALD A. (1966-1996) Vice President, Student Services; Interim Chancellor B.A., M.A., San Jose State University.	REID, JOHN J. (1964-1989) Engineering B.S., University of New Mexico; M.S., Oklahoma State University.	SMITH, WENDY (1989-2004) Child Development Center B.S., Pennsylvania State University; M.Ed., University of Pittsburgh.	SULLIVAN, NELL D. (1970-1993) English B.A., M.A., University of California, Berkeley.
PERRY, JOHN W. (1989-2011) Computer Information Systems B.A., University of Delaware; M.C., M.S., Arizona State University.	RESSA, GARY (1967-1997) Counseling B.S., San Jose State University; M.A., Stanford University.	SOLER, FRANCISCO DE P. (1985-2011) Mathematics B.S., University of New Mexico; M.S., University of Oklahoma.	SWENSSON, JOHN (1989-2012) English B.A., West Point Military Academy; B.A., University of Northern Colorado; M.A., University of Virginia.
PETERSON, DENNIS E. (1968-1997) Biology Division Dean, Biological and Health Sciences (acting) B.A., M.S., Brigham Young University.	RIESE, TED (1969-1999) English B.A., University of California, Berkeley; M.A., San Francisco State University.	SPENCER, LEROY G. (1975-2000) Automotive Technology	TACANG, LEROY J. (1972-2004) Art B.A., M.A., San Jose State University.
PEURIFOY, BARBARA (2006-2011) Nursing B.S., California State University, Dominiguez Hills; M.S., University of Phoenix.	RICE, GEORGE A. (1975-2004) Computer Information Systems B.S., Stanford University.	SPENCER, WILLIAM A. (1976-2001) Language Arts B.S., Louisiana Southern University; M.A., San Francisco State University.	TANDOC, NELSON E. (1968-1997) Music B.M., University of Oregon; M.A., University of Washington.
PHILLIPS-PROUTY, BARBARA J. (1964-1993) Counseling, Physical Education B.S., Wheaton College; M.A., Colorado State College.	ROSE, THORA E. (1962-1983) Nursing Kahler School of Nursing, Rochester, Minnesota; B.S., M.Ed., University of Minnesota.	SPLITTER, RANDOLPH N. (1989-2011) English/Composition B.A., Hamilton College; B.A., University of California, Santa Cruz; Ph.D., University of California, Berkeley.	THOMAS, HUGH S. (1966-1998) Political Science B.Sc. (Econ), London University, London School of Economics; M.A., San Jose State University.
PICHON, ULYSSES A. (1975-2009) English/Reading B.S., Xavier University of Louisiana; M.A., San Jose State University.	ROSSI, DONALD E. (1969-2000) Mathematics A.B., University of California, Berkeley; Ed.M., Harvard University; M.A., University, Berkeley.	STANGA, FRANCES B. (1969-1990) Counselor B.A., Maryhurst College, Oregon; M.S., University of Oregon.	TOOTHMAN, GARY L. (1978-2001) Automotive Technology B.A., Indiana State University; M.A., San Jose State University.
PIFFERINI, ROBERT M. (1959-1990) Physical Education B.A., M.A., San Jose State University.	ROWE, JAMES K. (1968-1996) Counselor A.B., Occidental College; M.A., Stanford University.	STANN, SUSAN S. (1988-2007) English as a Second Language TESOL Certificate - Linguistics, San Jose State University; B.A., M.A., University of Michigan.	TRAVIS, BARBARA B. (1977-1995) Associate Director, Reading Skills, Readiness Lab B.A., Edinboro State College; M.A., Teachers' College, Columbia University.
POGGI, CLAUDINE (1989-2012) English as a Second Language, Linguistics and Writing B.A., City University of New York; M.A., San Francisco State University; M.A., University of Hawaii.	SANDELMAN, PEARL B. (1975-1992) Business B.A., M.A., San Jose State University.	STEINKE, RALPH (1987-1998) Dean, Learning Resources B.S., Anderson College; M.A., Ball State University; M.L.S., Indiana University.	TRAVIS, WALTER E. (1962-1991) Political Science B.A., M.A., San Francisco State University; Ed.D. (Government), Teachers' College, Columbia University.
POTTER, LEROY C. (1965-1993) Engineering B.S., Drexel Institute of Technology; M.S., Stanford University.	SAVAGE, FRANK C. (1963-2000) Psychology B.A., M.A., San Jose State University.	STEMLER, ANN B. (1977-2004) Biology B.S., M.S., Ph.D., University of Illinois.	TREJO, PAUL E. (1961-1989) Astronomy, Engineering B.S., University of Southern California; B.S., U.S. Naval Post Graduate School; M.A., San Jose State University.

Emeriti Faculty/Classified Professionals

TRIMBLE, JEAN C. (1966-1990) Nursing A.A., American River Junior College; B.S., Stanford University; M.S., University of California.	WERNER, JEAN (1975-2006) Counseling B.A., University of California, Berkeley; M.A., San Diego State University.
TURNER, WILLIAM (1998-2011) Reading B.A., M.A., California Polytechnic State University, San Luis Obispo.	WEUSI-PURYEAR, MUATA (1987-2008) Mathematics B.S., Monmouth College; M.S., New Mexico State University; Ph.D., Stanford University.
VACIO, ALEJANDRO V. (1991-2001) Physical Education/Athletic Director B.A., San Jose State University; M.S., California Polytechnic University.	WHITE, STEPHEN J. (1971-1994) Physical Therapist Assisting B.S., St. Lawrence University; M.A., Stanford University.
VAN FOSSEN, LELAND C. (1968-2010) Biology B.A., M.A., San Jose State University.	WILCOX, JEANNE O. (1963-1987) Executive Head, Allied Health & Nursing; B.S., University of Minnesota; M.S., University of California, Los Angeles.
VANNIASEGARAM, GNANALAKSHMI (1991-2010) Mathematics B.S., University of Colombo, Sri Lanka; M.S., University of California, Santa Cruz.	WILLIAMS, HILLIS P. (1968-1983) Theatre Arts A.B., McPherson College, Kansas; M.A., Northwestern University.
VICIAN, THOMAS A. (1968-2004) Philosophy B.A., Luther College; M.Th., Luther Theological Seminary; Ph.D., Claremont University Center.	WILLIAMS, JAMES C. (1985-2004) History B.A., University of Oregon; M.A., San Jose State University; Ph.D., University of California, Santa Barbara.
WAATHIQ, PAULINE (1974-2007) Learning Disabilities B.A., Indiana University; M.Ed., University of Pittsburgh.	WILLIAMS, RICHARD (1989-1999) Drafting CAD A.A., Bakersfield College; B.A., M.A., San Jose State University.
WAGNER, WESLEY W. (1975-1997) HOPE Vocational Program B.A., Washington State University; M.S., Portland State University.	WILSON, CAROLYN (1993-2004) B.A., California State University, Los Angeles.
WALKER, CHARLES A. (1967-1993) Art A.A., Contra Costa College; B.A., San Francisco State University; M.A., San Jose State University.	WINDHAM, HELEN (1958-1977) Recreation, Physical Education B.S., Boston University—Sargent College; M.Ed., University of Texas.
WALKER-ABSHIRE, TISA (1989-2005) Anthropology B.A., M.A., Stanford University.	WINTERS, MARION (1990-2009) Diversity Office/IIIS B.A., San Jose State University; M.S., San Francisco State University; Ed.D., University of San Francisco.
WALLACE, RUTH A. (1961-1981) Coordinator, Work Experience Education B.A., University of California; M.A., San Jose State University.	WOMER, CHARLES E. (1975-2000) Business B.S., University of California, Berkeley; M.P.H., University of California; M.B.A., San Jose State University.
WALSH, PATRICIA A. (1975-1989) History B.A., Queens College; M.Ed., D.Ed. University of California, Los Angeles.	WOOD, BARBARA (1964-1977) Public Services Specialist B.A., San Jose State University; M.A., University of New Mexico.
WANLASS, JOHN W. (1974-2009) Accounting and Computer Information Systems B.A., M.A., Brigham Young University.	WOOD, RICHARD (1996-2008) Sociology B.A., M.A., West Virginia University.
WARNOCK, RON (1998-2004) Dean, Physical Education B.S., State University of New York, Cortland; M.S., Washington State University; Ph.D., Florida State University, Tallahassee.	WOOD, SARAH D. (1989-1999) Reading B.A., Stanford University; M.A., Yale University.
WASKIEWICZ, EMILY M. (1958-1979) Business B.S., Western Michigan College; M.A., Stanford University.	WRENN, BRUCE G. (1974-1992) Mathematics B.S.M.E., University of Cincinnati; M.S.M.E., University of Southern California; Ph.D. Stanford University.
WASSMAN, ROSE MARIE M. (1971-1997) English, Reading Improvement B.A., M.A., Wayne State University.	WRIGHT, RICHARD D. (1963-1989) Dean, Administrative Services B.S., Ph.D., University of Utah.
WEBBER, BARBARA (1962-1984) Nursing B.S., Boston University; R.N., Faulkner Hospital School of Nursing.	YASUDA, PHYLLIS S. (1974-1998) Business B.A., M.A., San Jose State University.
WEGMAN, ROBERT W. (1974-1999) Physical Education B.A., San Jose State University; M.A., Stanford University.	YOLLES, ROBERT S. (1971-2000) Chemistry B.S., University of Dayton; Ph.D., University of California.

Classified Professionals

ABAD, SOFIA (1989) Occupational Training Institute	BRADSHAW, DONNALYNN (1997) Disabled Student Services
ABBRUSCATO, JOHN (1987) Educational Technology Services	BREAULT, EDWARD (1995) Technology Resources Group
AGEE, DORIS FERRIS (2005) Health Services	BUI, KIMPHUNG THI (2006) Child Development Center
AGUILAR, LENNY A. (2005) Adapted Physical Education	BURKE, JEAN (1982) Biological, Health and Environmental Sciences
AGUILAR, MELISSA (2010) Language Arts	BURLEY, CHRISTOPHER A. (2011) Foothill Global Access
AHRENS, PAULA (1999) Community Education	BUTTERFIELD, HAROLD R. (2010) Operations
AJDARIAN-FARD, VIDA (2006) Hope	BUXTON, PAUL (1979) Educational Resources
ALAMBAN, CARLITA (1990) Occupational Training Institute	BYARS, DAVID (2008) Library Services
ALDERETE, CONCEPCION (1999) Educational Resources	CABUAG, DEMETRIO (1997) Educational Resources
ALVARADO, WALTER (1997) Language Arts	CALDERON, MARIA (2002) Educational Resources
ANGELO, ROSE (1998) Disabled Student Services	CAMPBELL, MARY (2000) Biological, Health and Environmental Sciences
ANTHONY, RYAN (1998) Educational Technology Services	CARDOZA, SANDRA (2008) Library Services
APARICIO, VERONICA (2008) Admissions and Records	CASHMAN, DEBBIE (1984) Creative Arts
ARCETA C, RAFAEL (1999) Educational Resources	CASTILLO, MARIA (2001) Educational Resources
ARELLANO, ANTHONY (2010) Educational Resources	CEBALLOS, JULIE (2007) Technology Resources Group
ARGABRITE, DIANA (2001) Euphrat Museum of Art	CERVANTES, LETICIA (1999) Educational Resources
AVILA-CORTES, RENE (1997) Educational Resources	CHANG, MI (2002) Curriculum/Scheduling
AYERS, WILLIAM (1986) Educational Technology Services	CHANG, NEIL T. (2011) Adaptive Learning & Disability
BAEZ-ACEVEDO, MIGUEL (1991) Operations	CHENEY, MELODIE (1998) Admissions and Records
BARRETO, CARLOS (2007) Educational Technology Services	CHEUNG, MARILYN (2001) Counseling
BARTCH, JOHN (2001) Educational Technology Services	CHING, LAWRENCE (2007) Technology Resources Group
BAZAN, EDWARD (1988) Printing Services	CHUNG-TABANGCURA, TRACY (2000) Articulation and Transfer Services
BDZIL, MARGARET (2001) Workforce Development	CLARK, MARY (1999) Curriculum Services
BERG, SHARON (1997) Educational Technology Services	CLAROS, RANDY L. (2006) Counseling
BICHLER, SILVIA (2001) Creative Arts	CLOW, JAMES (1995) Educational Technology Services
BLOOM, LARRY (1977) Adapted Physical Education	COLE, NANCY (1985) Office of VP, Student Services
BLOOM, SUSAN (1997) Financial Aid	CONTRERAS, DIANA (2005) Counseling
BONNER, CHRISTIAN (2007) Creative Arts	CONTRERAS, LEONEL (1974) Operations
BOOYE, MARILYN (1990) Disability Programs and Services	COOKE, JOSEPH P. (2007) Grounds
BRACY, SHANNON (1987) Physical Education	CORNELY, PATRICIA (1999) Biological, Health and Environmental Sciences
BRADBURN, KENT (1997) Operations	CORPUZ, ANNETTE (1989) Library Services

Classified Professionals

CORRALES, FRANTIE Custodial Services	(1997)	GARCIA, ENRIQUE Disabled Student Services	(1984)	JENSEN, ROSEMARY C. Disabled Student Services	(2007)	LIAO, CHIEN-HUI Educational Technology Services	(2007)
COYNE, SHEILA Educational Technology Services	(1998)	GARCIA, JESUS Educational Resources	(1997)	JOBS, PATTY Budget and Personnel	(1990)	LIN, HSIAO Operations	(2001)
CREAMER, BRADLEY Technology Resources Group	(2001)	GATES, DENIS Educational Resources	(1992)	JOHNSON, BARRY Admissions and Records	(1996)	LINCOLN, CAROL M. Educational Diagnostic Center	(2005)
DAI, DAVID Operations	(1983)	GERARD, TERI Budget and Personnel	(2007)	JOHNSTONE, NORMA Educational Diagnostic Center	(2001)	LIPSIA, JOSEPH Financial Aid Help Desk	(2012)
DAM, TUYET Occupational Training Institute	(2007)	GIBSON, PHILIPPA Office of VP, Finance/Educational Resources	(2001)	JONES, CAROL Physical Education	(2001)	LISTER, CINDY Learning Resources	(2001)
DAVIS, PRISCILLA Special Education	(1999)	GIEBLER, THOMAS Athletics	(1979)	JOSEPH, PAULA Educational Resources	(1999)	LU, JOY Computer Applications & Office Systems	(1990)
DE LA CRUZ JR., ARMANDO E. Disabled Student Services	(2005)	GILBERTSON, K. DOROTHY Adapted Physical Education	(2005)	JUDKINS, STAN Educational Technology Services	(1985)	LU, SHAN Educational Technology Services	(2000)
DEBLER, NORBERT Student Success Center	(1997)	GILLELAND, MAX CAD/Digital Imaging	(2002)	KAHLER, VICTORIA Basic Skills	(2011)	MA, JIM Operations	(1996)
DELGADO, RICHARD College Services	(2011)	GILLET, DAVID Educational Technology Services	(2002)	KAHN, MARTIN Broadcast Media Center	(1997)	MACCUBBIN, KRISTA Health Services	(1990)
DICKARD, JEFFREY C. Admissions and Records	(2006)	GONZALES, JR., FRANCISCO District Police, De Anza	(1989)	KAN, DALE High Tech Center Training Unit	(2000)	MADDEN, WILLIAM Student Success and Retention Services	(2008)
DIMARE, KENNETH Bookstore	(1997)	GORE, SARAH Operations	(1989)	KAZEMPOUR, REZA Bookstore	(2009)	MAGNIN, CHRISTINE Special Education	(1986)
DISHNO, DANIEL Occupational Training Institute	(1984)	GREENE, LILY Extended Opportunities, Programs & Services	(1988)	KHA, BACHMAI Computer Applications & Office Systems	(1995)	MALLET, STEVE Bookstore	(1998)
DOAN, MICHELLE Physical Sciences, Math & Engineering	(2000)	HAWTHORN, MARGARITA Community Education	(2001)	KIRK, LISA Student Accounts	(1994)	MANN, ELLEN Adapted Physical Education	(1981)
DOWLING JR., PATRICK M. College Readiness	(2005)	HEGGLUND, MICHAEL M. Community Education	(2004)	KIRKPATRICK, KERI MARIE Library Services	(2006)	MARDUENO, JOSE Operations	(1997)
DUONG, GIOI College Services	(2010)	HEIN, GEORGE Language Arts	(1997)	KONG, JOHN Educational Resources	(2000)	MARDUENO, JUAN Operations	(1992)
DUQUE, INGRID FELK Occupational Training Institute	(2007)	HERNANDEZ, JOSEFA Educational Technology Services	(2000)	KONG, YUKBING Educational Resources	(1997)	MARQUEZ, VIRGINIA Extended Opportunities, Programs & Services	(1993)
DURHAM JR., GERALD Operations	(1990)	HERNANDEZ, JUAN HERNANDEZ Custodial Services	(2006)	KOYAMA, LINDA Child Development Center	(2008)	MARTE, JOSE Biological, Health and Environmental Sciences	(1998)
ECHEVERRIA, ARMANDO Adapted Physical Education	(2005)	HERNANDEZ, REYES Educational Resources	(1997)	KRAMASZ, VIRGINIA Admissions and Records	(2000)	MATHIR, YUSUF Educational Technology Services	(2000)
EDMAN, SUSAN Language Arts	(1989)	HIRATA, LUCILA Child Development Center	(2007)	KULUSICH, KRISAN L. Counseling	(2011)	MARTINEZ, DIANNA Environmental Studies	(2007)
EHLE, TAMARA Technology Resources Group	(2008)	HO, SHUK-YIN Tutorial Center	(2001)	KUO, ELAINE W. Ed Technology Services	(2010)	MAYNARD, LORNA Automotive Technology	(1991)
EHRMAN, SANDRA J. Educational Diagnostic Center	(2005)	HOLSTEIN, JAMES Educational Technology Services	(1979)	LA GRANGE, ERIK Educational Technology Services	(1998)	MC CANN, ANTHONY Art	(2005)
ENGLN, MARY KAY Staff Development	(1982)	HOM, NELSON Automotive Technology	(2007)	LAMBRUSCHINI, ALEJANDRO Bookstore	(1991)	MC COMAS, LYNN Operations	(1984)
ESTRADA, ALFREDO Educational Resources	(2001)	HUNTER, KAREN KAY Financial Aid	(2005)	LAMPO, JOSEPH Educational Technology Services	(1983)	MC CORTNEY, LESLEY Distance Learning	(1990)
ESTRADA, LUIS College Services	(2011)	HUTCHINSON, DAVID J. Operations	(2010)	LATONE, ROBERT Operations	(1987)	MC LAUGHLIN, PETER Educational Technology Services	(1987)
EVERT, OLGA Office of VP, Instruction	(2008)	HUYNH, ANDY Counseling	(2007)	LE, CHUONG Extended Opportunities, Programs & Services	(2002)	MC GEE, KENT Admissions and Records	(2001)
FERREIRA, ANA MARIA Educational Resources	(2012)	HUYNH, NICHOLAS Financial Aid	(1988)	LEAL, MARIA Educational Resources	(1997)	MELL, BONNIE Biological, Health and Environmental Sciences	(1987)
FIGLIOMENI, PAUL Educational Resources	(1990)	INGALLS, MELISSA Biological, Health and Environmental Sciences	(1996)	LEGOIS, JOHN Special Education	(1977)	METCALF, KEVIN Technology Resources Group	(2001)
FLETCHER, STEPHEN Counseling	(2008)	IZU, THOMAS California History Center	(1994)	LESSLIE, GORDON Operations	(1974)	MIGLIACCIO, ANDREA Student Services	(2008)
FOSNAUGH, MICHAEL High Tech Center Training Unit	(2001)	JECKELL, ROBERT RAY Nursing	(2007)	LEVIN, REBECCA Counseling	(1999)	MILLER, SUSAN L. Short Courses	(2005)
FRANCO, KAREN ANNTIONETTE Disabled Student Services	(2007)	JENKINS, JERRY Operations	(1978)	LI, LI Operations	(2000)	MONARY, BLANCHE Occupational Training Institute	(1994)
FUKUYAMA, KIMBERLY T. Educational Diagnostic Center	(2006)	JENKINS, LOIS Marketing/Communications	(2000)	LIANG, LILY L. Printing Services	(2006)		
GACA, RICHARD Educational Technology Services	(1999)						

Classified Professionals

MONSELL, CATHLEEN PSME	(2012)	PATLAN, OLIVIA Counseling	(1990)	SANTACRUZ, ANDREA Matriculation	(2007)	TRAN, HUNG Educational Technology Services	(1996)
MORALES, DAVID Occupational Training Institute	(2010)	PENA-FERRICK, JOAN Admissions and Records	(1986)	SCHMIDT, JANET Financial Aid	(2000)	TRINH, LAN Financial Aid	(2002)
MORALES, JORGE Outreach and Relations with Schools	(2007)	PEREIDA, CARMEN Occupational Training Institute	(1990)	SCHOOLER, SHIRLEY Disabled Student Services	(1992)	TROSPER, MATTHEW Athletics	(1989)
MORRISON, SYLVIA Adapted Physical Education	(2005)	PEREZALONSO, MARIA Transfer Center	(2000)	SCHOTT, THOMAS Film/TV	(1987)	VAN, HOANG Educational Technology Services	(1997)
MUNSON, KATHLEEN Library Services	(1997)	PETTIT, KELLY Educational Technology Services	(2000)	SEPULVEDA, JENNYLEA W. Educational Diagnostic Center	(2005)	VAN, NGUYEN Financial Aid	(2003)
MUSTACHIA, LISA Articulation and Transfer Services	(1991)	PHAM, THIEU BAO Educational Technology Services	(2002)	SERRANO, MARIA Educational Resources	(1989)	VANDIVER, GAIL Counseling	(2002)
NAKAHARA, CHRISTINE Sign Language Interpreter	(2009)	PHAM, TU Occupational Training Institute	(1989)	SHANNAKIAN, DENNIS Office of College Life	(1999)	VARELA, SOFIA MONTERROSA Child Development Center	(2006)
NAKAYAMA, CINDY Admissions and Records	(1998)	PHAN, DUC Printing Services	(1987)	SHELDON, MELISSA Special Education	(2009)	VARGAS, DENNIS Educational Resources	(1978)
NELSON, LEIF District Police, De Anza	(1994)	POJHAN, ATOUSA Admissions and Records	(2007)	SIGALA-AGUILAR, GRISELDA Student Success Center	(1981)	VIDAL, MAURA Custodial Services	(2007)
NEWELL, MALLORY A. Research	(2010)	QIAN, WEIMING Distance Learning	(2008)	SMITH, CYNTHIA Budget and Personnel	(1989)	VON AHNEN, KARL Planetarium	(1993)
NG, JOSEPH Counseling	(2002)	QUIDACHAY, JESSICA Custodial Services	(2005)	SOKABE, SANDRA Health Services	(2001)	VONG, JANET COUCH Educational Resources	(2009)
NGO, JOE Financial Aid	(1985)	RABBITT, PETER Physical Education	(2000)	SOLIZ, JOSHUA High Tech Center Training Unit	(2012)	WEINBERG, PATRICIA Assessment Center	(2001)
NGUYEN, BACHLAN Computer Information Systems	(1984)	REARDON, JAMES Operations	(2001)	SOUSA, ROSA Educational Resources	(2002)	WEN, CHIA C. Creative Arts	(2010)
NGUYEN, DUC Educational Resources	(1998)	REED, DENNIS Educational Resources	(1997)	STEFANINI, JEFFREY District Police, De Anza	(1988)	WHELAN, PATRICIA Educational Diagnostics Center	(2001)
NGUYEN, HA Educational Resources	(2002)	RICHARDSON, KEITH A. Operations	(2010)	STODDARD, ANDREW Applied Technologies	(2009)	WIDIARTA, ERWIN Educational Technology Services	(2002)
NGUYEN, JENNIFER Student Accounts	(1985)	RIVAS SANCHEZ, RENE Educational Resources	(1997)	STOECKLE, SHARON Bookstore	(1984)	WINN, KIM Audio Visual Services	(1988)
NGUYEN, LESLIE Social Sciences/Humanities	(1997)	ROBERTS, BRIAN Admissions and Records	(2005)	STRACHMAN, IRENE Educational Diagnostic Center	(2005)	WINN, MONIKA Bookstore	(1988)
NGUYEN, THANH T. Biological & Health Sciences	(2011)	ROBLES, GEORGE Extended Opportunities, Programs & Services	(1978)	STRONGONE, ANGELICA Counseling	(2000)	WOLIN, DAVID Educational Diagnostic Center	(2005)
NGUYEN, THANH Cashiering Services	(2000)	RODERIQUES, IVAN Educational Resources	(1995)	SUR, DWIGHT Bookstore	(2001)	WOO, CHRISTINE President's Office	(2001)
NGUYEN, THAO PHUONG Financial Aid	(2006)	RODRIGUEZ, MATTHEW Community Education	(1999)	SUSI, LORI Marketing/Communications	(1990)	WRIGHT, BILL E. Child Development Center	(2006)
NIAZOV, IRENE Library Services	(1997)	ROWE, TERRANCE Educational Technology Services	(2002)	SWANSON, JANE Scheduling	(1975)	YE, YUNFEI Physical Education	(2008)
NINE, NILA Educational Resources	(2012)	ROZA, THOMAS Educational Technology Services	(2002)	TAI, RACHEL Cashiering Services	(2010)	YUMORI-KAKU, LA DONNA College Life	(1979)
O'KEEFE, FAY M. Child Development Center	(2006)	RUEDA, JAVIER Physical Sciences, Math & Engineering	(1986)	TAO, RYAN Physical Education	(2000)	ZINK, PAUL Educational Technology Services	(1987)
O'MALLEY, DAWNA Financial Aid	(2001)	RUEDA, JOSE Educational Technology Services	(1985)	TAYLOR HARPER, MARIE Computer Information Systems	(2007)		
OKABE-KUBO, JOANN Intercultural/International Studies	(1981)	RUEDA, SYLVIA Student Development	(1989)	TE, SO Curriculum	(2002)		
OTA, WAYNE Operations	(1976)	SAINTEN, MARGARET Biological, Health and Environmental Sciences	(1987)	THAI, BINH Admissions and Records	(1984)		
PABROS, ANGELITA Counseling	(2001)	SALAZARES, MARIA Educational Resources	(1995)	THAI, JANNY Counseling	(1981)		
PACE, BERTA Business/Computer Systems	(2001)	SANCHEZ, AMELIA Counseling	(1995)	THAI, MAY Cashiering Services	(2000)		
PARTIDA-FLETES, JESUS Educational Resources	(1997)	SANCHEZ, RITA Child Development Center	(2002)	THANH, QUANG Library Services	(2001)		
PASQUALI, SHARON Student Services	(2008)						
PATEL, BHAVI Title III	(2010)	SANFORD, LISA Health Services	(1998)	TOMALINAS, ROBERT Admissions and Records	(2006)		

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Dean, Creative Arts
Dean, Intercultural/International Studies
Dean, Language Arts
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Dean, Physical Education and Athletics
Dean, Physical Science, Math and Engineering
Dean, Social Sciences and Humanities
Dean, Student Development and EOPS
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Director, Campus Center
Director, Campus Safety and Security
Director, Child Development Center
Director, Bookstore
Director, Financial Aid and Scholarships (Interim)
Director, High Tech Center Training Unit
Director, Marketing and Communications
Director, Outreach and Relations with Schools
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NOTICE REGARDING the DRUG-FREE SCHOOLS and CAMPUSES ACT

the most popular designer drug on college campuses today. The chart describes various drug categories and their risks.

Further detailed information on the state penalties and risks associated with the use of drugs and alcohol may be found at the following campus locations: Counseling and Advising Center, Student Activities Office, Health Services Office, Learning Center reference desk and division offices.

It is the policy of the college to impose appropriate disciplinary sanctions on employees and students for the unlawful possession, use or distribution of illicit drugs or alcohol. Appropriate disciplinary sanctions may include suspension or expulsion for students or suspension or termination for employees, and the applicable sanctions for violating the standards are contained in the De Anza Student Handbook.

De Anza College, in compliance with federal law, is providing all students and employees with the following statement regarding the unlawful possession, use or distribution of illicit drugs or alcohol on its campus or at any college event. The unlawful possession, use or distribution of any illicit drug or alcohol by students on district property or at district activities or events is prohibited.

The unlawful possession, use or distribution of illicit drugs or alcohol by students or employees on college property or at college events may constitute criminal prosecution under state and/or federal law.

Federal penalties are described on the chart on the next page.

De Anza College's policies and procedures for sexual assault, including rape, and sexual harassment along with information on alcohol and other drugs are located in the "College Policies and Guidelines" section of this catalog.

The use of drugs and alcohol may pose significant health risks including hangovers, blackouts, general fatigue, impaired learning, dependency and death. Drugs known as "designer drugs" are a unique combination of drugs listed below. Ecstasy (MDMA) is

Controlled Substances - Uses and Effects

Drug	Dependence physical/psychological	How Used	Duration (hours)	Possible Effects	Symptoms of Overdose	Withdrawal Syndrome
Opium Morphine	High/High High/High	Oral, smoked Oral, smoked, injected	3-6 3-6 3-6	Euphoria Drowsiness, respiratory depression Constricted (pin-point) pupils	Slow, shallow breathing, clammy skin Convulsions, coma, possible death	Watery eyes, runny nose, yawning, cramps Loss of appetite, irritability, nausea
Codeine Heroin	Mod./Mod. High/High	Oral, injected Smoked, injected, sniffed	3-6 3-6 3-6			
Hydromorphone Meperidine Methadone	High/High High/High High/High	Oral, injected Oral, injected Oral, injected	3-6 3-6 12-24			
Barbiturates Methaqualone Tranquilizers Chloral Hydrate Glutethimide	High/Mod. High/High High/High Mod./Mod. High/Mod.	Oral Oral Oral Oral Oral	1-16 4-8 4-8 5-8 4-8	Sensory alteration, anxiety reduction, intoxication Small amounts cause calmness, relaxed muscles Larger amounts cause slurred speech, impaired judgment, loss of motor coordination	Shallow respiration, clammy skin, dilated pupils Weak and rapid pulse, coma, death	Anxiety, insomnia, muscle tremors, loss of appetite Abrupt cessation or reduced high dose may cause convulsions, delirium, death
Cocaine*	Possible/High	Sniffed, smoked injected	1-2	Increased heart and respiratory rates, elevated blood pressure, dilated pupils and decreased appetite; high doses may cause rapid or irregular heartbeat, loss of coordination, collapse; may cause perspiration, blurred vision, dizziness, a feeling of restlessness, anxiety, delusions	Agitation, increase in body temperature, hallucinations, convulsions, possible death	Apathy, long periods of sleep, irritability, depression, disorientation
Amphetamines Methamphetamine Phenmetrazine Methylphenidate Other Stimulants Ice	Possible/High Possible/High Possible/High Possible/Mod. Possible/High High/High	Oral, injected Oral, injected Oral, injected Oral, injected Oral, injected Smoked, oral injec., inhaled	2-4 2-4 2-4 2-4 2-4 4-14			
PCP, Angel Dust Loveboat	Unknown/High	Smoked, oral, injected	Up to days	Rapidly changing feelings, immediately and long after use Chronic use may cause persistent problems, depression, violent behavior, anxiety, distorted perception of time Large doses may cause convulsions, coma, heart/lung failure, ruptured blood vessels in the brain May cause hallucinations, illusions, dizziness, confusion, suspicion, anxiety, loss of control	Longer, more intense "trip" episodes, psychosis, coma, death	No known withdrawal syndrome
LSD/Acid Green/Red Dragon Mescaline, Peyote Psilocybin	None/Unknown None/Unknown None/Unknown	Oral Oral, injected Oral, injected, smoked, sniffed	8-12 hrs. 8-12 hrs. Variable			
Marijuana	Unknown/Moderate	Smoked, oral pot, grass	2-4	Euphoria followed by relaxation; loss of appetite; impaired memory, concentration, knowledge retention; loss of coordination; more vivid sense of taste, sight, smell, hearing; stronger doses cause fluctuating emotions, fragmentary thoughts, disoriented behavior, psychosis; may cause irritation to lungs, respiratory system; may cause cancer	Fatigue, lack of coordination, paranoia, psychosis	Insomnia, hyperactivity, sometimes decreased appetite
Tetrahydro- cannabinol Hashish Hashish Oil	Unknown/Moderate Unknown/Moderate Unknown/Moderate	Smoked, oral Smoked, oral Smoked, oral	2-4 2-4 2-4			

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DIRECTORY

How to locate buildings and rooms

Building numbers are the first digit of room numbers. Example: Room S-73 is located in Building S-7.

Administration	President, Vice Presidents & Associate Vice Presidents (Instruction, Student Services, Finance and Educational Resources), Academic Services, Budget and Personnel, Equity Office, Institutional Research, Marketing/Communications, Campus Facilities Coordinator, Mailroom
Building	
Lobby	Gilbane Construction
ADM-101,102	Classrooms
103	Classroom
106, 109	Conference Rooms
119	Classroom
A-1	Choral Hall
A-4	Creative Arts Division Office, Faculty Offices
A-5	Ceramics/Painting Studio
A-6	Photography Studio
A-7	Sculpture Studio
A-9	Classrooms
AT –	Special Education
Advanced Technology Center	Division Office, Labs and Classrooms for Accounting, Computer Access Lab, Computer Applications and Office Systems (CAOS), Computer Information Systems (CIS), Engineering, English, English as a Second Language (ESL), Film/TV, Graphic Design, Language, Manufacturing and Design, Mathematics, Statistics, Student Success Center
Baldwin Winery	Financial Aid, Printing Services, Part-time Faculty Offices
Hinson Campus Center	Dining Rooms, Dining Services, Meeting Rooms:
Upper Level	Conference Rooms A and B, Don Bautista Room, El Clemente Room, Fireside Room, Meeting Rooms 1 and 2, Santa Cruz Room, Staff Lounge
Lower Level	Foothill-De Anza District Police, De Anza Associated Student Body (DASB) Offices, DASB Card Office, Office of College Life, Dean of Student Development, EOPS/CARE, Flea Market Office, Le Café, Health Services, Inter-Club Council (ICC) Office, Student Accounts, Student Council Chambers

CDC	Child Development Center
CHC	California History Center (Trianon Building)
ECOT-1	Institute of Community & Civic Engagement (ICCE)
E-1	Automotive Technology
E-2	Manufacturing and Computer Numerical Control, Faculty Offices
E-3	Classrooms, Faculty Offices
ESA	Environmental Study Area Lab
F-1 through 6	Faculty Offices
FC	Flint Center, Box Office
FOR – Forum	Art History Slide Library/Office, Lecture Halls
Forum 5	Plant Services Offices
F-1,2,3	Faculty Offices
F-4,6	Faculty Offices
G-1 through 10	General Purpose Classrooms
HTCTU –	High Tech Center Training Unit
Hoefler Building	
KC – Kirsch Center For Environmental Studies	Applied Technologies Division Office, Biological, Health and Environmental Sciences/Workforce Education Division Office, Faculty Offices, Classrooms
LCW – Learning Center West	Audio Visual, Classrooms, Educational Diagnostic Center, International Student Office, Library West Computer Lab
Library	Library, Distance Learning Center
L-1	Business/Computer Systems Division Office, Language Arts Division Office, Social Sciences/Humanities Division Office
L-2,3	Classrooms/Psychology Lab
L-4	La Voz, Red Wheelbarrow, Classrooms
L-5	Restrooms
L-6,8	Classrooms
L-7	Data Services
Media and Learning Center (MLC)	Technology Resources Group, Distance Learning, Staff and Organizational Development
Mod Quad	
MQ-1	ETS
MQ-2	Classroom
MQ-3	Classroom
MCC	Intercultural/International Studies Division Office and Multicultural Center

PE-1	Auxiliary Gyms, Physiology Lab
PE-2	Main Gym
PE-4	P.E. Division Office, Recreational Sports/Intramural Office, Faculty Offices
PE-5	Faculty Offices
PE-6	Fitness and Wellness Center, Locker Rooms, Faculty Offices
PLT –	Fujitsu Planetarium at De Anza College
Science Center	
SC-1	Lecture Hall, Faculty Offices
SC-2	Labs
SC-3	Pavilion
SEM – Seminar	CompTechS/Computer Donation Program, Outreach and Relations with Schools, Occupational Training Institute (OTI), County Office of Education
S-1	Geology/Physics Classrooms, Faculty Offices
S-2	Restrooms
S-3	Classrooms/Physical Science/Math/Engineering Division Office, Faculty Offices, Honors Program
S-4	Classrooms/Math and Science Tutorial Center, Faculty Offices
S-5	Classrooms, Faculty Offices
S-6	Restrooms
S-7	Classrooms, Faculty Offices
S-8	Nursing/Classrooms
S-9	Faculty Offices
SCS – Student and Community Services Building	Admissions and Records, Articulation, Assessment Center (Testing), Bookstore, Cashier, Community Education/Short Courses, Counseling and Advising Center, Disability Support Services, Matriculation, Special Education, Transcripts, Transfer Center, Veterans Affairs
VPAC – Visual and Performing Arts Center	Art History Classroom, Auditorium/Lecture Hall, Euphrat Museum of Art