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Peter Anning, Oxana Tocareva

Dividers: Nino Kikilashvili, Eriberto Nacion
OUR VISION
City College of San Francisco values and fosters superior levels of educational participation and academic success among all students. Reaching out to and including all populations, we strive to provide an affordable and unparalleled learning experience in a supportive and caring environment that leads students to successfully complete their goals.

A Teaching and Learning Community
Our principal distinction will be the high quality of instruction. The educational experience will feature successful learning in areas as varied as basic skills, academic courses, advanced honors, career and technical courses, retooling of job skills, and preparation for transfer to other educational institutions. Learning opportunities will extend to a broad array of courses and programs to offer any student a pathway to educational and career success.

An Inclusive Community
We will continue to reach out to all people, especially to those communities that encounter barriers to education; develop sustainable campuses and sites to better serve students and neighborhoods; diversify and improve programs and services for the benefit of the community; build partnerships with public, private, and community-based agencies to better respond to educational, economic, environmental, and societal needs; foster the participation of our students and employees in community life; and welcome students from around the world. Committed to lifelong educational opportunities for all, we will exchange expertise and innovation with colleagues in the state, the nation and the world.

A Diverse and Community
In our community, respect and trust are common virtues, and all people are enriched by diversity and multicultural understanding. We will maintain a supportive, positive, and productive working environment for our diverse faculty and staff, as well as a responsive environment in which student needs are met in a friendly, timely, and caring manner.

MISSION STATEMENT
Consistent with our Vision, City College of San Francisco provides educational programs and services that promote successful learning and student achievement to meet the needs of our diverse community:

Our primary mission is to provide programs and services leading to:
- Transfer to baccalaureate institutions;
- Achievement of Associate Degrees in Arts and Sciences;
- Acquisition of certificates and career skills needed for success in the workplace;
- Basic Skills, including learning English as a Second Language and Transitional Studies.

In the pursuit of their educational goals, students will learn critical thinking and information competency; effective communication skills; cultural, social, and environmental awareness; and personal and career development skills.

In addition, the college offers other programs and services consistent with our primary mission, only as resources allow and whenever possible in collaboration with partnering agencies and community-based organizations.

City College of San Francisco belongs to the community and continually strives to provide an accessible, affordable, and high quality education to all its students. The College is committed to providing an array of academic and student development services that support students’ success in attaining their academic, cultural, and civic achievements. To enhance student success and close equity achievement gaps, the college identifies and regularly assesses student learning outcomes to improve institutional effectiveness. As a part of its commitment to serve as a sustainable community resource, our CCSF mission statement drives institutional planning, decision making and resource allocation.
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BOARD OF TRUSTEES

John Rizzo, President
Dr. Anita Grier, Vice President
Dr. Natalie Berg
Lawrence Wong, Esq.
Rafael Mandelman
Steve Ngo
Shanell Williams, Student Trustee
Dr. Robert Agrella, Special Trustee
Dr. Arthur Q. Tyler, Chancellor
Chancellor’s Welcome

It is an exciting time to be City College’s Chancellor. There is motion and momentum everywhere I look. Our main campus and Centers throughout the city are bustling with students rushing from class to class. Our committed faculty and staff are fully engaged in the business of education. I am proud to be part of it all.

There are many reasons why City College of San Francisco should be your first choice to fulfill your higher education goals. Whether you plan to earn an associate’s degree or certificate, transfer to a university, upgrade your job skills, or simply take a class for personal enrichment, City College has classes and programs that will fit your needs and help you succeed. We have outstanding faculty and a great environment in which you can make dreams become a reality.

Because a well-rounded education is not earned solely in the classroom, we also offer a broad range of other activities: sports, theater, music, speakers, forums, clubs, and organizations, just to list a few. Our college family is committed to providing each student with a rewarding and fulfilling educational experience.

We are also committed to providing every student with outstanding surroundings in which to learn. Pursuing your goals by starting or returning to college is an exciting experience, but it can also be somewhat daunting. We offer a wide range of student support services to help you succeed, including financial aid, counseling, tutoring, and assistance for students with disabilities. Our faculty and staff pride themselves on the student-friendly atmosphere and help nurture students through our outstanding academic and skill development programs.

Finances are always a very important consideration in choosing a college. It makes good financial sense to complete your freshman and sophomore coursework at CCSF. Not only will you save money, you will be taught by outstanding faculty, receive personalized attention from your instructors, benefit from smaller class-sizes, and earn fully-transferable credits. These educational and fiscal advantages also apply to technical and career courses offered here.

No matter what your educational goals are, I hope you will consider everything that City College of San Francisco has to offer. We look forward to welcoming you and helping you achieve your dreams! Make City College of San Francisco your 1st choice!

Sincerely,

Dr. Arthur Q. Tyler
Chancellor
A STUDENT’S RIGHT TO PRIVACY

Occasionally, City College of San Francisco receives requests from various entities or private persons seeking directory information on our students. These entities can be public, private or governmental in origin, e.g., private scholarship search companies, public and private colleges and universities, U.S. Military (Department of Defense and others).

“Directory Information” is defined as information contained in an educational record of a student which would not generally be considered harmful or an invasion of privacy if disclosed. It includes, but is not limited to the student's name, address, telephone listing, date and any place of birth, level of education, major field of study, participation in officially recognized activities and sports, weight and height of members of athletic teams, dates of attendance, degrees and awards received, and the most recent previous educational agency or institution attended.

Directory information may be released at the discretion of the college; however, under Federal and State law, a student has the right to ask that City College of San Francisco withhold directory information about him/her. Once the request is made, directory information will be withheld from all entities. The college assumes no liability for honoring a student's request that such information be withheld.

Students who believe that directory information (that includes courses of study such as Lesbian, Gay Bisexual, and Transgender and Studies, Ethnic Studies, etc.) may identify their race, ethnicity, sexual orientation or otherwise subject them to discriminatory treatment, should be aware they have the option of not having any confidential information released to any group, agency or organization.

A request by a student to withhold directory information must be directed to the Dean of Admissions and Records in writing. This formal request must be made within the first two (2) weeks of the beginning of the academic year. Students who enroll other than in the beginning of the academic year (fall semester) must submit their request within the first two (2) weeks of the onset of his/her enrollment. This request must be signed and dated by the student. Students may also come to the Office of Admissions and Records and complete a “Request to Withhold Directory Form.”

For further information, please contact Admissions and Records, Conlan Hall, Room E-107, telephone (415) 239-3291.

CAMPUS SECURITY ACT OF 1990 (CLERY ACT)

Information regarding CCSF's Public Safety Data “Student/Employee Right to Know and Campus Security Act of 1990” is available online at www.ccsf.edu/Departments/Public_Safety/. Limited printed copies are available at all District campuses.

EDUCATIONAL CODE SECTION 66500 COMPLIANCE

Compliance with Education Code Section 66500, information regarding the obligation of male students to comply with the federal Military Selective Service Act, please fill out FAFSA Application #22. Additionally, Selective Services registration card will be available in the Office of Admissions and Records at the Ocean Campus.

STUDENT RIGHT-TO-KNOW

In accordance with federal law, City College of San Francisco is required to publish annually its “Student Right-To-Know” (SRTK) transfer preparation/graduation/completion and other transfers rates. These rates are determined by the California Community College Chancellor's Office and are based on a limited cohort of students. The rates are derived by tracking a Fall cohort of students over three years and dividing the number of students who successfully become transfer prepared/graduate/complete or actually transfer by the number in the initial cohort. This information is updated annually and is available online at www.ccsf.edu/Info/srtk.html
ACCESS TO PUBLIC RECORDS AND INFORMATION

City College of San Francisco maintains a website (www.ccsf.edu) that provides the public with a tremendous amount of information regarding the structure and operation of the College. If you are interested in the activities of the Board of Trustees (e.g., where and when meetings are held or personal biographies of board members) this information may be accessed through this web site. In addition, board agendas are available to the public through this web site under the Department of Finance and Administration. In order to keep the public informed, all Board of Trustees meetings are televised on Educational Cable Channel 27 which is maintained by the District.

Procedures for accessing public records held by City College of San Francisco may be reviewed on the College’s website at www.ccsf.edu. For those interested in accessing public records, please contact Office of the General Counsel, at (415) 452-5321. The designated Custodian of Public Records is Ron Gerhard, Vice Chancellor of Administration and Finance, who may be reached at (415) 241-2229.

Information regarding the District’s Strategic Plan, Educational Master Plan, and the Accreditation Self-Study Report (2006) are also available on this web site. These documents are found under the Research, Planning and Grants and provide a detailed overview of institutional activities that have occurred and are planned for the future. The Operational Budget for the College is found under the Office of the Vice Chancellor of Finance and Administration.

District procurement procedures are found on this web site under the Purchasing Department. If you are interested in doing business with the District, please send a letter of introduction along with a line card or catalog to Purchasing, 33 Gough St. San Francisco, CA 94103. If you are a small or local business certified by the City/County of San Francisco’s Human Rights Commission or with the State of California please indicate this status in your communication.

INJURY AND ILLNESS PREVENTION PROGRAM FOR WORKPLACE SECURITY

The San Francisco Community College District will make every reasonable effort to provide a safe and healthful working environment for all employees as required by federal, state or local laws, and a safe and healthful environment for students and visitors. For those desiring to know more about the district’s Injury and Illness Prevention Program, please access www.ccsf.edu for more information.
STUDENTS OF CITY COLLEGE

Discover your passion.
Make a new friend.
Chase your dreams.
Achieve your goals.

Becoming a Ram means joining a vibrant, diverse community of people who love to learn, love to teach, and form a network that lasts long after you leave these halls for bigger adventures.

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CCSF PRINCIPAL LOCATIONS
City College of San Francisco (CCSF) offers classes at Ocean Campus and 8 other center locations and more than 100 other instructional sites throughout San Francisco.

CCSF Campus locations are:
A. Ocean Campus, 50 Phelan Ave.
B. Civic Center, 750 Eddy St.
C. Chinatown/North Beach Center, 808 Kearny St.
D. Downtown Center, 88 Fourth St.
F. John Adams Center, 1860 Hayes St.
G. Evans Center, 1400 Evans Ave.
H. Mission Center, 1125 Valencia St.
I. Southeast Center, 1800 Oakdale Ave.
K. Airport Site, Bldg. 928, SF Airport

Identified below are some of CCSF's larger instructional sites:
1. San Francisco Senior Center, 890 Beach St.
2. Marina Middle School, 3500 Fillmore St.
4. On Lok, 1333 Bush St.
5. Jewish Community Center, 3200 California St.
7. S.F. Human Services Department, 50 Van Ness Ave.
8. Glide Memorial Church, 330 Ellis St.
10. Mission High School, 3750 18th St.
11. Mission Language Vocational School, 2929 19th St.
12. A.P. Giannini, 3151 Ortega St.
13. Stationary Engineers JATC, 560 Barneveld Ave.
14. YMCA (Stonestown), 333 Eucalyptus Dr.
15. The Janet Pomeroy Center (formerly Recreation Center for the Handicapped), 207 Skyline Blvd.
17. Visitacion Valley Community Center, 66 Raymond St.
18. Golden Gate Park Senior Center, 6101 Fulton St.
19. Eureka Valley Recreation Center, 100 Collingwood Street
20. SF Home Health, 225 30th Street
EQUAL OPPORTUNITY STATEMENT

The San Francisco Community College District is committed to providing a workplace and an educational environment free of discrimination, harassment, intimidation, threats, or coercion based on a legally protected status. Therefore it is the policy of the San Francisco Community College District to provide all persons with equal educational opportunities in all of its programs and activities regardless of race, color, national origin, ancestry, ethnic group identification, religion, age, gender, marital status, domestic partner status, sexual orientation, disability or AIDS/HIV status, medical conditions, gender identity, or status as a Vietnam-Era veteran. This will include anyone perceived as having these characteristics or associated with anyone having these characteristics. The compliance officer for purposes of this policy is the District Affirmative Action Officer, 31 Gough Street, San Francisco, CA 94103, (415) 241-2281. Information concerning the provisions of the applicable laws and complaint procedures is available from the District Affirmative Action Officer.

You can access the above statement translated into Spanish, Tagalog, Chinese, Vietnamese and Russian on the college’s web site at www.ccsf.edu/Catalog/Admin/nondiscrim.html.

EQUALITY OF OPPORTUNITIES

El San Francisco Community College District apoya y se adhiere a la política de proveer a todo aquel que reúna las condiciones de protegido legal, un ambiente laboral y educacional libre de discriminación, hostigamiento, intimidación, amenaza o coerción. Por lo tanto, el San Francisco Community College District tiene como norma el extender oportunidades de empleo y educación a todos los interesados, sin miramientos de raza, origen, ascendencia étnica, nacionalidad, religión, edad, sexo, estado o convivencia civil, orientación o identidad sexual (hombres o mujeres homosexuales, bisexuales, transexuales o individuos de preferencia sexual indefinida), y a aquellos que padezcan de alguna incapacidad o sufran del SIDA/VIH u otras condiciones médicas. Esta protección también incluye a veteranos de la Guerra de Vietnam.

Lo que es más, los reglamentos del SFCCD prohíben la toma de represalias contra empleados o estudiantes que presenten quejas o cargos válidos o contra aquellos que participen y cooperen en investigaciones relacionadas con la violación de este reglamento.

El San Francisco Community College District se adhiere a todas las leyes aplicables, incluyendo los Títulos VI y VII del Acta de Derechos Civiles de 1964, el Acta de Discriminación de Oportunidad de Empleo por Razones de Edad, las Secciones 504 del Acta de Rehabilitación de 1973, el Acta de Americanos con Incapacidades de 1990, el Título IX de las Enmiendas Educacionales de 1972, el Código del Gobierno de California Sección 11135 y siguientes, y los reglamentos y requisitos aplicables a entidades subvencionadas por fondos federales y/o estatales.

El District Affirmative Action Officer (Autoridad de Acción Affirmativa), es la autoridad responsable de coordinar y hacer cumplir estos reglamentos. Sus oficinas se hallan en el 31 Gough Street, San Francisco, California 94103, (415) 241-2281. Para mayor información sobre estos reglamentos o sobre el procedimiento para sentar una queja, se debe consultar con la Autoridad de Acción Affirmativa del San Francisco Community College District.

PAHAYAG TUNGKOL SA PANTAY NA OPORTUNIDAD

Ang San Francisco Community College District (San Francisco Distrito ng Kolehiyong Pang-madla) ay naka-pangako na magbigay ng lugar ng trabaho at kapaligiran edukasyonal nang walang diskriminasyon, harassment (paulit-ulit na paggugulo), pananakot, pagba-banta, o pagpili-lit at magbigay ng katayuan ipagtagtangol batay sa batas. Sa gayon, ito ang patakarang ng San Francisco Community College District na magbigay ng trabaho sa lahat ng tao nang magkapareho at pagkakataong edukasyonal sa lahat ng programa at mga gawain nito nang hindi isaalang-alang ang lahi, kulya, angkang pinagmuman, bang-sang pinangalingan, pagkilala ng grupong panlahi, relihiyon, edad, kasarian, kalagayan ng pag-asawa, kalagayang may kasamang pantahan-an, oriyentasyon ng tauhin, pagkainut, o lagay na may AIDS/HIV, kondisyong medikal, pagkakakilanlan ng kasarian, o kalagayang bilang isang beterano sa panahon ng digmaan sa Vietnam.

Ang mga kategoriyang ito, lalong
lalo na ay kabibilang na ang kalagayan bilang isang lesbian (parehong babaying magkasintahan), gay (parehong alalaking magkasintahan), taong may dala-waang kasarian, taong nagsalin ng kasarian o taong hindi malinaw ang kasarian sa ilalim ng mga kondisyon sa pangamaraang walaang diskriminasyon, o para sa kooperatiba sa inmigasyon.

Pinagsusunod ng San Francisco Community College District ang lahat ng naaangkop na batas, kabibilang ang Titulong VI at VII ng Civil Rights Act (Batas ng mga Karapatan Sibil) sa taong 1964, ang Age Discrimination (Diskriminasyon dahil sa Edad) sa Employment Act (Batas na Pang-employado), Seksiyon 504 ng Rehabilitation Act (Batas sa Pagpanibagong-ayos) sa taong 1973 at ang Americans with Disabilities Act (Mga Amerikano sa Batas ng Kawalan-lakas) sa taong 1990, ang Titulong IX ng Education Amendments (Pagsususog sa Edukasyon) sa taong 1972, California Government Code Section 11335 et seq. at ang lahat ng bagay na regulasyon, at kasama ang lahat ng naaangkop na pangangailangang kaugalian sa pagtanggap ng pondo galing sa federal at/o state.

Ang impormasyon tungkol sa mga tadhana ng mga naaangkop na batas at pamamaraan ng pag-reklamo ay puwedeng maikusa sa District Affirmative Action Officer.
OVERVIEW OF THE COLLEGE

Associate in Arts or Associate in Science Degree
City College of San Francisco, a two-year college, confers the degrees of Associate in Arts, Associate in Science, Associate in Arts for Transfer or Associate in Science for Transfer on students who satisfy the course and grade requirements for graduation.

Extensive Choice of Disciplines and Courses
The College offers you an extensive choice of disciplines and courses. Additionally, you may complete the first two years of training for a profession, satisfy freshman and sophomore requirements for transfer to baccalaureate degree-granting institutions; prepare for employment at the end of two years or a shorter period of training; take evening, Saturday, and summer courses; remove educational deficiencies; or get other special preparation.

Instructional areas include the following:
Program in General Education. An extensive selection of courses in the humanities, the arts, the natural and social sciences, and other fields.
Transfer Program. Courses offered to satisfy lower-division requirements to enable students to transfer to baccalaureate degree-granting institutions as juniors.
Occupational Program. Training for employment in occupations normally requiring two years or less of specialized career preparation.
Diversity Studies. Courses directed specifically to the interest and educational objectives of major segments of the San Francisco community including courses in African American, Asian American, Latin American, Lesbian, Gay, Bisexual and Transgender, and Philippine Studies.
International Education. Courses taught in other countries through Study Abroad and courses taught locally for international students, including an Intensive English Institute.
Distance Education Courses. Courses that are offered via online, hybrid and televised instruction.
Foundation Courses. Basic courses in business, English, guidance, and mathematics.
Noncredit Courses. Mostly open-entry/open-exit courses, many emphasizing vocational education, leading to employment or job upgrading but also including courses in English as a second language, elementary-level and secondary-level skills, workforce preparation, parent education, health and safety, home economics, citizenship for immigrants, and special courses for disabled persons and older adults.
Community Service Offerings. Workshops and other short-term offerings that serve community interests and for which fees are charged because no tax support is available.

City College at a Glance
- Approximately 80,000 students served annually in a diverse campus community
- Eight centers and over 100 instructional sites throughout the city
- 2,000 faculty
- High transfer rate to 4-year universities
- Over 350 degree and certificate programs
- Extensive student support services
- Job placement assistance
- Free noncredit courses
- Low cost credit courses

College Accreditation
City College of San Francisco is accredited by the Accrediting Commission for Community and Junior Colleges of the Western Association of Schools and Colleges, 10 Commercial Blvd., Ste. 204, Novato, CA 94949, (415) 506-0234, an institutional accrediting body recognized by the Council for Higher Education Accreditation and the U.S. Department of Education. The accreditation evaluation report is available for examination in the Chancellor's Office, Conlan Hall, Room 200. In addition, many occupational curricula the College offers have specialized accreditation by, or approval from, recognized national or state agencies. For further information, please see the catalog sections for the following departments: Administration of Justice and Fire Science, Aircraft Maintenance Technology, Culinary Arts and Hospitality Studies, Dental Assisting, Environmental Horticulture, Health Education, Health Information Technology, Home Health Aide/Nurse Assistant, Medical Assisting, Nursing (Registered), Nursing (Licensed Vocational) Paramedic, Radiologic Sciences.

Student Development
City College offers a wide variety of services which are designed to help make your educational experience successful and rewarding. The Scholarship and the Financial Aid Programs, the Student Health Service, Veterans Services, Disabled Students Programs and Services, the Extended Opportunity Program and Services, the Childcare Service, the Peer Adviser Program, the Information Center, and other services are available to assist you as you work toward attaining your educational goals.

Counseling Services
As a student at City College, you receive individual counseling from a professional counselor. Your instructors also advise and help you. Through its counseling programs, the College helps you choose an occupation; plan a program of study based on your interests, abilities, and needs; develop educational plans; provide various types of educational counseling, including academic, career, transfer, and personal, and assist you with personal problems or other matters affecting your studies or your college career.

Career Center
As a CCSF student or alumni, you are entitled to all the career services provided by the Career Center. Counselors will assist you in making your career/job choices, setting your educational career goals, selecting your major, becoming job ready and seeking employment.

Counseling services include individual career counseling, online advising, workshops, career success courses (CRER 60, 61, 62, 63, 64, 68, and LERN 1062), job resource information and job placement referrals.

The schedule of classes and workshops, as well as other events can also be found on our website www.ccsf.edu/CareerCenters. For more questions call 239-3117.

Learning Assistance Center
The Learning Assistance Center offers a variety of programs and services designed to help you become a more efficient, independent learner and to make your educational experience at City College more successful. The Tutorial Center provides free tutoring in mathematics, sciences, business, social sciences, foreign languages, and other subjects. English instructors and tutors are available to help you in the Writing Success Project. The LAC Computer Lab offers access to the Internet and e-mail, and to educational CD, DVD, and software programs. College Success Courses are offered through the Learning Assistance Department. The Learning Assistance Center at the Mission Center offers many of these services. Online tutoring for some subjects
is offered from the Ocean campus to students taking courses on other campuses. Collaborative Workstations assist students who wish to work together on their assignments.

**Associated Students**

Any student currently enrolled in a class at City College of San Francisco is a member of the Associated Students (AS). The AS Constitution sets up an Executive Board as a representative body for all CCSF locations to facilitate communication, leadership, and advocacy. Each location may adopt its own set of by-laws to guide local governance.

Each spring the Associated Students elects a student trustee to represent their interests on the San Francisco Community College Board of Trustees. Further, AS appoints all student participants for shared governance.

The AS Ocean Campus funds such diverse programs as the Book loan program for low income students; an emergency student loan fund; developing a program of cultural events and activities; selecting student representatives on college-wide shared governance committees; Dr. Betty Shabazz Family Resource Center, Guardian Scholars, HARTS, Multi Cultural Resource Center, Queer Resource Center Women's Resource Center, Student Health, Students Supporting Students, and more than 70 clubs and campus organizations. There is a $5 optional Student Activity Fee, payable at registration, to help support these activities.

The Associated Students can be reached in the Student Union Building at the Ocean Campus or by contacting the main office at (415) 239-3801 all other locations.

**Inter-Club Council (ICC)**

Recognized and funded by the Ocean Campus Associated Students, the ICC consists of elected representatives from over 70 clubs. For more information about an existing club or about starting a new club, please stop by the Student Union Room 213 and pick up a club packet.

**Student Activities Office - Student Union**

City College of San Francisco provides a program of student activities that encourages student leadership, participation in shared governance, and involvement in campus life. Information is available in the Student Union Building, Room 205, Ocean Campus.

The Student Union at the Ocean Campus is a place where recognized student organizations can meet, socialize, and sponsor events. It is also a place where individual students and small groups can study and relax. There are AS Councils that sponsor student activities at the following locations: Civic Center, Chinatown, Downtown, Evans, Gough, John Adams, Mission and Southeast.

**Transfer to Universities and Colleges**

To earn the Bachelor's or a higher degree, or to complete training for a profession, you may transfer from City College to a university or a college as follows:

If, when you enter City College, you have already satisfied the requirements for admission to a university or a college, you may transfer with full credit whenever you have completed the proper university courses satisfactorily. Because the College is accredited nationally and offers preparation for so many fields, you have a wide choice of schools at which to take advanced courses. Generally, to be eligible for transfer, you will need an average final grade not lower than C in all courses that you attempt.

If you need to make up high school courses or grades, you may remove your deficiencies while you take the university courses for which you are qualified. The courses and grades necessary for transfer and the number of semesters you will need to complete depend upon the requirements of the university or college at which you plan to continue your studies.

The section in this catalog entitled “Transfer Information” lists general transfer requirements for the University of California (all campuses) and California State University (all campuses).

Articulation agreements which list detailed information concerning specific majors and which describe course transferability and applicability between City College of San Francisco and public baccalaureate degree-granting institutions in California are available online, [www.assist.org](http://www.assist.org). Other articulation information for City College can be found at [www.ccsf.edu/artic](http://www.ccsf.edu/artic).
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<td>January 11, 2014</td>
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<tr>
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<td>August 18, 2014</td>
<td>January 12, 2015</td>
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<td>First day of Saturday classes</td>
<td>August 23</td>
<td>January 17</td>
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<tr>
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<tr>
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<td>January 19</td>
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<td>August 29</td>
<td>January 26</td>
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<td>enrollment fee &amp; N/R foreign student tuition fee</td>
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<td>First day of Monday-only credit classes</td>
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<td>September 5</td>
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<td>August 30 -</td>
<td>February 6</td>
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<td>Last day to drop credit classes w/ no notation on academic record</td>
<td>September 11</td>
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<td>Last day to drop or reduce course work to qualify for a 50% pro-</td>
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<td>February 14 – 15</td>
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<td>March 31</td>
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<td>May 14</td>
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<td>December 16</td>
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<td>December 17</td>
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ADMISSION TO THE COLLEGE

Step 1: Go to www.ccsf.edu on your web browser.
Step 2: Click on the MyCCSF button.
Step 3: Click on Web4 under “For Students” column.
Step 4: Under Student login, enter your 9-digit User ID: [*******] Student I.D. Number. Enter your PIN: [*****] normally your Birth Date (example April 1, 1975 is 040175). NOTE: To ensure maximum security it is advised that you change your PIN.
Step 5: Re-enter PIN: [*****] on the Login Verification page.
Step 6: On the Main Menu page click on Student Services & Financial Aid.
Step 7: On the Student & Financial Aid page click on Registration.
Step 8: Follow the instructions on the Registration page.
Step 9: You can buy a Parking Permit on the web. Click on Purchase Parking Sticker and follow the instructions.

Helpful Hints for Online Registration
- Students must be admitted to the College and have met the matriculation requirements prior to registration. A registration appointment is required to use WebSTARS. To view a registration appointment, log on to www.ccsf.edu and go to the Registration page and click on “Check Your Registration Status”, or call (415) 239-3732.
- To protect confidentiality, it is strongly recommended that each student process his/her own registration.
- Be prepared for registration. Your first choice may not be available. Therefore, select two or more sections of the same course before attempting to register.
- All administrative and/or academic holds that prevent enrollment must be cleared prior to registration.
- The registration system does not allow time conflicts, multiple registrations in the same course, enrolling in a course without fulfilling the prerequisite, multiple unauthorized repeats, exceeding the maximum number of units (17 semester units).
- After a student's registration has passed, courses may be added or dropped as often as necessary while the registration system is available.

I have questions. Who can help?
Answers for online registration questions are available Monday through Thursday, 8 A.M. to 5 P.M. and on Friday 8 A.M. to 2 P.M. by calling (415) 239-3732.
In addition you may email your question to register@ccsf.edu
NOTE: If you have forgotten your PIN number or your PIN number has been disabled, please email us at corrects@ccsf.edu

Admissions Policy (Credit Classes)
City College has an open admissions policy. Eligibility to attend is satisfied if you have met at least one of the following requirements:
- You are eighteen (18) years old on or before the first day of instruction for the term which you are applying
- You are a high school graduate.
- You are the equivalent of a high school graduate, i.e., you have passed the GED or a state's high school proficiency examination.

Please note that the above requirements are general; other factors may determine eligibility.

Contact the Office of Admissions and Records for more details or visit our website at http://www.ccsf.edu.

Admissions as a Special Part Time Student (Concurrently Enrolled in High School)
The Board of Trustees of the San Francisco Community College District authorizes certain High School students under the age of 18 years of age to enroll in one or more courses of instruction at City College of San Francisco.

To be considered for admissions as a Concurrently Enrolled High School Student, Section 76011 of the California Code of Regulations requires the recommendation of the high school principal and the consent of the parent or guardian.

For more information regarding admissions deadline dates and enrollment policies, please call (415) 239-3286 or visit www.ccsf.edu/NEW/ en/educational-programs/k-12-programs/concurrent.html.

Advanced Standing
Students who have previously completed course work at other schools of collegiate rank may transfer to City College of San Francisco. One month after enrolling at the College, they may request an evaluation from the Office of Admissions and Records to determine which of their courses are transferable for a City College degree or certificate. Only courses from regionally accredited institutions will be considered for transfer to City College. For information on how coursework transfers to universities, consult with a counselor.

High School Honors Courses. City College grants advanced standing and units to students who have completed high-school advanced placement courses and present scores of 5, 4 or 3 certified by the College Entrance Examination Board. A grade of Credit will be entered for an appropriate college course or courses when suitable verification is provided to the Office of Admissions and Records.

Readmission to City College
Students who have completed a semester, but have interrupted their attendance by an absence of two semesters or more, may not register until they have been readmitted to the College. Such students must be readmitted before the beginning of the semester for which they plan to re-enroll.

If the entire enrollment process (See "Procedures for Enrollment in Credit Classes") outlined in steps two, three, and four have never been completed, they will need to be completed before registering for classes, unless an exemption has been granted. Please see Matriculation Section for exemptions.

Applications for readmission are available on-line at http://www.ccsf.edu or in the Office of Admissions and Records.
Reduced Fees Under AB540
Nonresident students may be eligible to pay the $46 per unit fees just like California residents.

What is AB540? AB540 is a state law that exempts certain students who are not residents of California from paying non-resident tuition at California Community Colleges and California State Universities.

Who is eligible? Students who meet all of the following requirements:

- You attended a California high school for three or more years.
- You graduated from a California high school or attained the equivalent of a high school diploma from California (e.g., GED or California Proficiency Exam).
- You registered in Spring 2002 or later.
- You completed a California Nonresident Tuition Exemption Request form.

What steps do I take to determine whether I qualify? Complete a California Nonresident Tuition Exemption Request form. City College will determine your eligibility.

If I qualify for nonresident tuition under AB540, how much do I have to pay to attend CCSF? $46 per unit.

When can I apply? You can apply at any time. Complete the California Nonresident Tuition Exemption Re-quest form and submit it to City College of San Francisco, Admissions and Records Credit Division, Conlan Hall 107, 50 Phelan Ave., San Francisco, CA 94112.

Where can I go for more information and a California Nonresident Tuition Exemption Request form? Contact: Admissions and Records-Credit (Conlan Hall 107); Admissions and Records-Noncredit (31 Gough St.); Admissions and Enrollment (all locations); Counseling (all locations); Chinatown/North Beach (940 Filbert); African American Scholastic Programs (Bungalow 500); and Latino Services Network (Cloud 364).

If I am a U.S. citizen, does this apply to me? Yes. AB540 applies to you if you attended a California high school for three or more years AND you graduated from a California high school or attained the equivalent of a high school diploma from California (e.g., GED or California Proficiency Exam).

What if I have more questions? Contact the Residency Department, Office of Admissions and Records, City College of San Francisco, Conlan Hall 107, 50 Phelan Ave., San Francisco, CA 94112, (415) 239-3287, fax (415) 239-3936 or email resident@ccsf.edu.

International Students
City College of San Francisco enthusiastically welcomes international students from throughout the world. Currently there are students from more than fifty countries studying at CCSF. Their presence on campus complements a broad mosaic of multi-ethnic students from San Francisco.

Credit students who wish to be admitted to CCSF’s credit program must:

1. Be eighteen (18) years old or submit evidence of a degree of academic achievement the equivalent of an American high school education. The student must submit an official transcript of his/her school record accompanied by a certified translation in English.
2. Demonstrate sufficient command of English to profit from instruction at the college. Accepted test scores are minimum score of 473 on the written TOEFL Exam or 52 iBT or 4.5 IELTS.
3. Submit current certification of sufficient financial resources to cover tuition fees and living expenses while attending CCSF.

The documents listed above must be fully completed and submitted to the International Students Office, Conlan Hall, Room 107 by November 2nd for the Spring Semester, and by June 1st for the Fall Semester.

International students are required to complete 12 units of class work each semester to maintain their status. Application forms for international students who are interested in the credit program are available from the International Students Admissions Office, City College of San Francisco, 50 Phelan Avenue, Conlan Hall, Room 107, San Francisco, CA 94112. Phone (415) 239-3837, Fax (415) 239-3936. You may request in writing for one to be mailed to you. Please include your return address.

Conditional Admission is offered to international students whose TOEFL score is below the required score of 473. For more information, please contact (415) 239-3895 or read below.

Conditional Admission Through the Intensive English Program
International students who have a TOEFL score lower than the required 473 PBT (152 Computer-based) or iBT 52, or IELTS 4.5 for CCSF but wish to enroll in the Academic Program, may be conditionally admitted to the Academic Program. Full admission to the Academic Program is contingent upon the successful completion of the Intensive English Program offered at CCSF. Students must also achieve a score of 473 on the Institutional TOEFL Examination or place in ESL 150. Students interested in Conditional Admission to CCSF should complete the application form from the Academic Program and check off Conditional Admission on the form. Applications are available on the website: www.ccsf.edu/international. For more information, call 415 239-3895 or e-mail: international@ccsf.edu

San Francisco Consortium: Cross-Registration
City College of San Francisco is a member of the San Francisco Consortium. Through the functions of the Consortium, a variety of educational opportunities are made available to students of the member institutions. For example, currently enrolled, full-time, matriculated students may register for credit in courses offered by the following institutions: Golden Gate University, San Francisco State University, and the University of San Francisco. Cross-registration is permitted if the course is not currently offered at the home institution, if the course is lower division, if space is available in the course offered by the host institution, and if the student has satisfied course prerequisites and is enrolled in 12 units at the home institution. This cross-registration policy applies only to the regular sessions of the academic year and specifically excludes summer sessions, extension courses, and similar programs.

Further information for students whom the Consortium may help is available in the Registration Center, Smith Hall 118 and the Office of Admissions and Records, Conlan Hall E107.

Matriculation Policy for Credit Classes
It is the policy of the District to ensure equal educational opportunity for all students. The Matriculation process at CCSF brings the student and the College into a partnership agreement to develop and realize the student's educational goals.
City College of San Francisco agrees to provide the following services:

1. Basic skills assessment and career guidance
2. Orientation to College programs and services
3. Counseling and advisement
4. Opportunity to develop an educational plan
5. Continued monitoring of academic progress

The student agrees to:

1. Attend classes regularly and complete assigned course work
2. Use support services as needed
3. Consult with counselors and advisors when appropriate
4. Be willing to declare an educational goal following the completion of 15 semester units

**Matriculation Exemption Policy**

All new students enrolling in credit classes are required to participate in the matriculation process. However, you may be excused from participation in the assessment, orientation, or counseling components if you meet either of the criteria below:

1. You have already earned an A.A./A.S. degree or higher (U.S. accredited institutions only). Or,
2. You do not intend to ever enroll in more than 9 units of courses at CCSF. You do not intend to enroll in courses with prerequisites, enroll in any Math, English or ESL courses, AND do not intend to earn a degree or certificate from CCSF or transfer to a university.

**Matriculation Steps for Enrollment in Credit Classes**

Students are more likely to succeed in college when they have an accurate assessment of their skills, an idea of their educational goals, and an understanding of the course selection and registration processes. Matriculation services are designed to inform students about how the "system" works. Therefore, unless exempted, all new students must complete the five-step matriculation enrollment process. Students should complete the process as early as possible to receive a priority registration appointment, which will increase chances of enrolling in classes of choice.

**STEP ONE — APPLICATION FOR ADMISSION.** All new students must file an application for admission via the world wide web at www.ccsf.edu, or with the Office of Admissions and Records, Conlan Hall, Room E107.

NOTE: An additional application may be required for admission into specific programs. Consult the department chairperson of the program you are interested in.

**STEP TWO — PLACEMENT ASSESSMENT.** City College of San Francisco placement tests are administered to all new students who plan to enroll in credit classes unless they meet the waiver or exemption criteria. These tests are one way of measuring students' skills in English or ESL, reading and mathematics. Counselors will use these results along with other information to help students decide on a program of courses that best suits the students' educational needs and interests. The test results are used for placement purposes only; they cannot be used to prevent any student from studying at CCSF. (See "Placement Testing Waiver" for alternate way to meet the assessment component.) CCSF placement test results achieved before March 1993 are no longer valid and cannot be used to meet course or program prerequisites. If your placement test results were achieved before March 1993, you must retake the tests if you wish to use the results to meet prerequisites.

For further information, see www.ccsf.edu/New_Students/test.htm.

**All students must take either the English or ESL placement test:**

- **English** - For native English speakers or those whose primary language is English, OR
- **ESL (English as a Second Language)** - For those whose primary language is not English.

All students must begin Math placement testing with either the Arithmetic or Elementary Algebra Test:

- **Arithmetic** - For students who need to strengthen their basic arithmetic skills or who may be ready to study Elementary Algebra.
- **Elementary Algebra** - For students who have studied beginning algebra and may be ready to study Intermediate or Advanced Algebra.
- **College Level Math** - For students who wish to enroll in Trigonometry, Calculus, or higher. (Students must take Elementary Algebra Test first.)

Placement tests may be taken in a computerized or paper-pencil format.

- **Computerized version:** Seating for the computerized version is limited. Reservations are required. To make a reservation, call 239-3124.
- **Paper-pencil version:** Students may attend the paper-pencil version of the tests on a drop-in basis. No reservation is required.

For dates and times of both computerized and paper-pencil testing, consult the CCSF Placement Testing Schedule available in the Admissions Office, Testing Office, or online at www.ccsf.edu/New_Students/test.htm

**STEP THREE — ORIENTATION.** The orientation session will focus on registration activities, test score interpretation, and information about programs and services that students need to know upon enrollment. Students may also participate in the online orientation at www.ccsf.edu/New_Students.

**STEP FOUR — MEET WITH COUNSELOR.** At the counseling appointment, a student will receive a program of courses and registration information.

**STEP FIVE — REGISTRATION.** Registration is by appointment, the time and date of which appear on the registration ticket that each student receives.

**Placement Testing Waiver**

An alternate way of satisfying the assessment component is to waive placement testing if you have already taken specific tests and/or courses. Submit proof of any of the following criteria and a completed Placement Testing Waiver Form to the Office of Matriculation and Assessment, Conlan Hall 204, 50 Phelan Ave., San Francisco, CA 94112, in person or by mail.

**English**

Students may be excused from taking the English Placement Test and may demonstrate their eligibility for English 1A or 1B by attaching proof (e.g., transcripts, official test result reports) of one of the following:
1. University of California Analytical Writing Placement Exam score of 8 or higher - Eligibility: English 1A
2. Completion of a U.C. course satisfying the U.C. Entry Level Writing Requirement - Eligibility: English 1A
3. International Baccalaureate Exam scores:
   - IB High Level English A1 or A2, Exam score of 4 or higher – Eligibility: English 1A
4. Any of the following SAT scores:
   - SAT Verbal (before 4/95): 510 - Eligibility: English 1A
   - SAT Verbal (after 4/95): 590 - Eligibility: English 1A
   - SAT II Writing Subject Test: 660 - Eligibility: English 1A
   - SAT Reasoning Test, Writing Section: 680 - Eligibility: English 1A
5. ACT Combined English/Writing Test with score of 30 or higher - Eligibility: English 1A
6. Advanced Placement (AP) Exams:
   - ENGLISH LITERATURE AND COMPOSITION:
     - Score of 3 or 4 - Equivalency of completion of ENGL 1A;
     - Eligibility for ENGL 1B and 1C and Speech 2
   - Score of 5 - Equivalency of completion of ENGL 1A+1B
   - ENGLISH LANGUAGE AND COMPOSITION:
     - Score of 3, 4, 5 - Equivalency of completion of ENGL 1A;
     - Eligibility for ENGL 1B and 1C and Speech 2
7. Completion (with “C” or higher) of English 1A - College Level Reading and Composition course or the equivalent - Eligibility: English 1B and 1C and Speech 2

**Mathematics**

Students may be excused from taking the Math Placement Test and be eligible for at least Math 60 (Intermediate Algebra) by attaching proof of one of the following:

1. Any of the following SAT scores:
   - SAT I Math: 600
   - SAT II Math: 550
   - SAT Reasoning Test, Math Section: 600
2. ACT Math score of Level I or II or 28.
3. Advanced Placement Exam in Calculus AB or BC, Computer Science AB or Statistics score of 3 or higher.
4. EAP (Early Assessment Program) of the California Standards Test with a status of “Ready for CSU college-level mathematics course”
5. GRE (Graduate Record Exam) Quantitative Section:
   - Score of 600 - Eligibility for MATH 70, 75, 80, 90 and 95
6. Completion (with a “C” or higher) of a college-level math course equivalent to MATH 40 (Elementary Algebra) or higher.

**Test Retake Policy**

The placement tests are used only for initial placement in English, ESL and Mathematics. Students who have not yet enrolled in English, ESL or Math can retake the placement test after two weeks for a maximum of two tests per testing cycle. Student who have completed or withdrawn from English or ESL classes may retake the tests three months after the posting of the final grade received in the course. Students currently enrolled in English or ESL who wish to jump classes in these sequences must contact the English Eligibility Coordinator at 239-3574 or the ESL Eligibility Coordinator at 239-3427.

**Alternative Matriculation Services**

You can access alternative services for the matriculation process if you indicate the following:

1. English is not your primary language and you do not feel proficient enough in English to take the regular English Placement Test
   OR
2. You have a physical, visual, or communication limitation that might require accommodation in an educational setting
   OR
3. You have extreme difficulty with reading, writing, spelling, math, or understanding and remembering information.

**Students’ Rights**

Any student who feels he/she has experienced discrimination regarding the matriculation process has the right to file a grievance. Information regarding filing a grievance may be obtained at the Matriculation Office. Any student also has the right to file an appeal regarding participation in the matriculation process. An appeal may be filed at the Matriculation Office.

**Enrollment Fees**

**Fee Schedule for Credit Classes:**

All enrollment fees and applicable nonresident tuition fees are due and payable at the time of registration.

(Fees subject to change)

- Enrollment fee per semester unit .................. $46.00
- Non-Resident tuition per semester unit .............. $211.00 + $7 per unit for capital outlay fee + $46.00 enrollment fee
- Non-Resident tuition per semester unit for International students & students with F-1 visas ............... $211.00 + $7 per unit for capital outlay fee + $46.00 enrollment fee per unit

The capital outlay fee is assessed for all international and non-resident students.

- Health fee per semester (non-refundable)* ........ $17.00
- Web Registration fee per semester (non-refundable). $3.00
  (Students may also register in person during the “Open Registration” period.)

- Voluntary Student Activity Fee ..................... $5.00
- Voluntary Student Representative Fee ................ $1.00

*Assembly Bill 982, eliminating health fee waiver for all students, was signed into law by the Governor of California on September 22, 2005. On January 26, 2006, Board of Trustees voted to implement fully AB982 at City College of San Francisco starting summer of 2006. The health fee for summer 2009 will be $14.00 and starting spring 2009 semester will be $17.00. The California State legislature also periodically allows the districts to increase health fee by one dollar increments. This health fee is not refundable.

**Health Fee**

Health fee (non-refundable): $17.00 for students registered in .50 semester unit or more.

*NOTE: Students who qualify in the following categories will be exempted from payment of the health fee.
1. Students who depend exclusively upon prayer for healing in accordance with the teachings of a bona fide religious sect, denomination, or organization. (Documentation required.)

2. Students who are attending college under an approved apprenticeship training program. (Documentation required.)

Financial Assistance Program to Waive Enrollment Fee

The Board of Governors of the California Community Colleges allocates funds to help qualifying students meet enrollment fee costs. For more information about these programs, turn to the Financial Aid heading under the General Information section of this catalog, visit the Financial Aid Office in Cloud Hall, Room 324, or call (415) 239-3575.

Payment Methods and Policies

Effective with the Spring 2014 registration, City College of San Francisco will be enforcing its Payment Policy which requires students to pay fees at the time of registration by dropping classes during the registration period for Non-Payment of fees. Students may sign up for a low cost payment plan at the time of registration through Nelnet Business Solutions for a small fee. Refer to the semester schedule of classes for payment schedule.

Non-Payment of fees will result in your courses being dropped (during the registration period) and/or a HOLD being placed on your account. This could also result in not receiving college services. Students who register for classes once the semester begins WILL NOT BE DROPPED for non-payment of fees. However, students are liable for all fees for classes not dropped by the mandated refund deadline dates.

Exemptions from immediate payment of fees are available to accommodate the following groups of students: students receiving financial aid based on BOG and FAFSA eligibility, students who sign up for a tuition payment plan, and self-certified exemptions for military service, among others. Please be advised that students are responsible for self-certified exemptions. If your certified exemption is not processed, students are responsible for all fees assessed and must adhere to the drop deadline dates.

Any classes added to your schedule, after you have paid for your initial registration fees are also subject to be dropped for nonpayment of fees. If your classes were dropped for nonpayment and you believe there was an error, please notify the Registration Office immediately at (415) 239-3732 or email register@ccsf.edu.

Please note: City College of San Francisco participates in the Chancellor’s Office Tax Offset Program (COTOP). All past due accounts are submitted to COTOP for collection. All Admissions, Registration and Fee correspondence will be sent to your CCSF email account.

Enrollment Fee Refund Policy

The enrollment fee may be refundable for full-semester courses and short term courses. The refund policy also applies to Summer Sessions intervals. Please see calendar of instruction and online class schedule for refund deadline dates.

Enrollment Fee Refund Procedures

The enrollment fee refund is not automatic. To obtain a refund for courses dropped on or before the deadline, the student must submit a completed application for refund form to the Tuition and Fees Office, Smith Hall, Room 118, no later than the last day of final examinations. Please refer to the Calendar of Instruction and online class schedule for deadline dates. Refund procedures also apply to summer session intervals.

Student Activity Fee Refund and Request to Reverse Procedures

The student activity fee may be refunded if you have paid your fees by submitting a Request for Refund form through Tuition and Fees Office, Smith Hall, Room 118. The student that has not paid for their fees may reverse the Student Activity Fee from their account by completing the Request to Reverse Student Activity Fee Form through the Tuition and Fees Office, Smith Hall, Room 118.

Nonresident Tuition Fee Refund Policy

Paid nonresident tuition will be refunded in accordance with the following refund schedule: 100% Nonresident Tuition Refund for courses officially dropped during the first two calendar weeks of instruction.

50% Nonresident Tuition Refund for courses officially dropped during the third and fourth calendar weeks of instruction.

0% Nonresident Tuition Refund for courses officially dropped after the fourth calendar week of instruction.

Refer to the Calendar of Instruction and online class schedule for the specific refund deadline dates listed for each Fall and Spring semesters. Please call the Tuition and Fees Office for the nonresident tuition refund policies regarding short-term courses, courses which begin at variable times other than the beginning of the instructional calendar, summer session courses, etc.

The ultimate responsibility for dropping classes in order to receive a nonresident tuition refund rests solely upon the student. Nonresident tuition will be refunded if the drop is student-initiated or instructor-initiated. It is the student's responsibility to: (1) check if an instructor has initiated a drop by the deadline date and (2) apply for a refund as stated in the next paragraph.

Nonresident Tuition Fee Refund Procedure

The nonresident tuition fee refund is not automatic. All nonresident students who have paid and are eligible to receive a nonresident tuition fee refund for courses dropped on or before the deadline must submit a completed Application for Refund form to the Tuition and Fees Office or the Registration Center NO LATER THAN THE LAST DAY OF FINAL EXAMINATIONS. Nonresident tuition fee refunds will be based upon the units dropped in accordance with the above pro-rated schedule. Any nonresident tuition fee refund requests received AFTER this date will NOT be processed for refund. All applications for nonresident tuition fee refund must be submitted during the current semester in which courses are dropped. No nonresident tuition fee payment credits will be carried into the next semester.

Please call the Tuition and Fees Office (415) 239-3521 for assistance and information regarding the nonresident tuition refund policy, procedures, and schedules.

Nonresident Tuition Policies and Procedures are subject to change during the 2013–2014 academic year.

In as much as City College is required by statute to report the California residence classifications of all students by the fourth week of the current semester, those students who fail to establish California residency by the fourth week of the current semester will be classified...
as nonresident students and be required to pay the nonresident tuition fee.

**Enrollment, Nonresident and International Student Tuition Fee Credit Balances**

City College of San Francisco allows all enrollment fees, nonresident and international student tuition balances to be credited to the students' accounts, which may be utilized to pay for tuition and/or enrollment fees in subsequent school terms. The students' account will be held for a period for two years. All balances not utilized within the two-year period will be credited to the District.

**Residency Requirements**

**California Residence**

Under the State of California Education Code, in order to establish residency, a person must pair his or her physical presence in California with the following provisions: 1) objective evidence of physical presence (one year and one day prior to the first day of instruction for the term for which he/she has applied as indicated in the Calendar of Instruction) and 2) intent to make California the home for other than a temporary purpose. There are other factors to be considered for non-resident students holding different visa types. These students are advised to contact the Office of Admissions and Records at (415) 239-3287 for clarification. Evidence of intent could include but is not limited to at least two of the following: voting in California elections, paying state income tax, obtaining a California driver's license, registering a motor vehicle, maintaining continuous residence in California. Act of intent must be accomplished for one year.

City College may determine at the time of admissions or at a later date that such students may not have met the aforementioned residence requirement set forth for all California community colleges. Such students will subsequently be assessed and billed the nonresident tuition fee per unit at the current academic year rate.

Students who have not reached the age of 18 years are regarded as minors; their residence is that of one or both parents. Therefore, a student who is a minor is regarded as a resident of California if one or both parents couple their physical presence in California (one year and one day prior to the first day of instruction for the term for which the minor has applied as indicated in the Calendar of Instruction) with objective evidence that the physical presence is with the intent to make California the home for other than a temporary purpose.

It is the student’s responsibility to clearly demonstrate both physical presence in California and intent to establish California residence.

Special residence regulations are in effect for married minors, for minors whose parents are deceased, for certain military members and their dependents, and for various others.

Continuing nonresident students at City College (with the exception of foreign students), who think that they meet the time and intent requirements necessary to establish California residency must contact the Office of Admissions & Records for residency verification and adjustment.

For more information regarding California residency please call (415) 239-3287 or e-mail resident@ccsf.edu.

**Residency Adjustments**

Residency adjustments are not automatic. It is the student’s responsibility to initiate a residency inquiry and to provide proof of California residency. Please call the Office of Admissions & Records (239-3287) or e-mail resident@ccsf.edu for the documents accepted as verification.

Students who do not meet the residency requirements will continue to be charged the nonresident tuition as well as the enrollment fee.

**Residency Appeals**

Students may appeal their residency status as determined by the College through the following procedures:

1. Requests must be addressed, in writing, to the Associate Registrar, within two weeks of receipt of the notification.
2. If further review of residency status is required, a meeting with the Dean of Admissions and Records may be requested within two weeks of the review by the Associate Registrar.
3. Students are required to provide ALL documents required to verify their residency status.

**Filing of Students’ Addresses**

Every student must file his/her local and legal addresses with the Office of Admissions and Records. Students are required to notify the Office of Admissions and Records promptly concerning change of either address. Students may update their address on-line at http://www.ccsf.edu. Click on to Personal Information.

**Student Classification**

**Full Time Students** - Students carrying 12 or more semester units in the fall or spring semester are full-time students for that semester. A full-time student during the summer session must enroll for six or more semester units in that session.

**Half/Part Time Students** - Students carrying a minimum of six semester units in the fall or spring semester are half-time students for that semester.

**Enrollment Limitations**

Students may enroll in a maximum of seventeen (17) semester units, including physical education courses each Fall and Spring school terms. Students may enroll in a maximum of seven (7) semester units, including physical education courses during the Summer Session. Students wishing to enroll in more than the maximum units allowable must receive permission from his/her academic counselor. Approval to take more than 17 semesters unit will not be given unless students need such units to be candidates for graduation, or have completed their last full semester of work at the College with an average grade of B (3.00 grade-point average) or higher.

NOTE: Enrollment maximums are strictly enforced by our computer systems. Therefore, students who have received permission from their counselor to enroll in over the maximum units authorized by College policy must process those units in-person at the Registration Center, Smith Hall, Room 118.

**Adding Classes, Changing Sections, Dropping or Withdrawing from Classes**

After a student has officially registered in classes, the student may add a course, change a section, drop or withdraw from a course within certain dates specified in the Calendar of Instruction. Information regarding these procedures is available in the online time schedule or from the office of Admissions and Records.

A student who stops attending a course and does not file an official drop form with the Office of Admissions and Records may be marked as having failed the course by his/her instructor.
Class Attendance
Attendance at the first class session is very important. Your instructor MAY drop you if you do not attend. If you must be absent during the first few days of class, contact the instructor directly.

Do not rely on the instructor to drop or withdraw you from class for non-attendance. If you have registered for a class, but no longer attend it, or have never attended it, you must drop or withdraw from the class.

Students are expected to attend class regularly and punctually. At the first class meeting, the instructor will give students a written statement of how many times a student can miss class. Excessive tardiness may be considered equivalent to absence. If a student exceeds this number, the instructor may remove the student from the class roll within certain dates as specified in the Calendar of Instruction (see the section under Credits and Grades entitled "W" Withdrawal). If a student disagrees with having been removed from the class roll, the student can appeal to the Vice Chancellor of Academic Affairs. The student will not be allowed back into the class unless the Vice Chancellor of Academic Affairs and the instructor agree.

A student who is absent from a class for any reason is responsible for the content covered during the absence and for making up any course work that was required.

Auditing
In both the credit and noncredit programs, only students who are officially enrolled in a course may attend class. Classes may not be audited. However, some credit classes are offered through a concurrent enrollment option for students who are interested in enrolling in a class but not interested in receiving credit. For a list of credit classes offered through this concurrent enrollment option, students should contact the Continuing Education Office.

Student Email
All City College credit students are issued a CCSF Mail address, provided by Google. All official CCSF email will be sent to the CCSF GMail address. By using the CCSF Mail address, CCSF can ensure that students receive registration, financial aid and other important information. Students have the option to forward CCSF GMAIL messages to an email account which they check regularly.

Students can find information about their CCSF GMail address and password by:
1. Logging on to Web-4
2. Clicking on the Personal Information tab.
3. Scrolling down

Additional information may be obtained by phone from GMail Help Desk at 415-239-3987, by email at mailhelp@mail.ccsf.edu, or from the CCSF Mail FAQ website at http://ccsf.edu/gmailfaq. The FAQ website has details for logging on and forwarding email to a different address.

Students who object to using Google software should go to the Admissions and Records Office to request City College notifications via hardcopy.

Admissions Policy (Noncredit Classes)
Anyone 18 years or older can enroll in a noncredit class. Students may enroll in most classes by attending the first class meeting. Provided space is available, students may also enroll in most classes any time during the semester because these classes are open entry-open exit. Class and program information may be obtained from the individual locations.

Note: Students enrolling in ESL, Citizenship, or Transitional Studies classes, and many Business, Trade & Industry, Child Development & Parent Education, or DSPS classes must participate in the Matriculation Services outlined below.

Matriculation Services for Students Enrolling in Noncredit Classes
Matriculation is a process that enhances student access to the California Community Colleges and promotes and sustains the efforts of students to be successful in their educational endeavors. Noncredit matriculation services, minimally, include:

- Assessment (of English or ESL and math skills, career interests)
- Orientation (to noncredit programs and procedures)
- Counseling (to assist students in identifying educational and career goals and developing an appropriate program of study)

Please contact the Admissions and Enrollment Office at the location that you wish to attend for more information.

How to Enroll in Free Noncredit Courses
Students can earn special certificates and/or diplomas by enrolling in the noncredit division. Courses include Adult Basic Education (ABE), Business, Child Development and Family Studies, Citizenship, Consumer Arts and Sciences, Consumer Education, Disabled Students Programs and Services, English as a Second Language (ESL), GED, High School, Older Adults, and Trade and Industry.

Noncredit division courses are tuition free. However, students are expected to buy books and supplies. A few courses require the purchase of additional materials or the payment of a materials fee. For the most accurate and up-to-date enrollment information, please contact the location offering the course you want to take. The locations and phone numbers are listed on the inside front and inside back covers of the class schedule. Counselors are available to help you select and enroll in classes.

New students are required to complete a Noncredit Application. You may complete a Noncredit Application by 1.) Going to www.ccsf.edu on your web browser; 2.) Clicking on the Admissions/Registration link; 3.) Clicking on noncredit admissions link; 4.) Clicking on noncredit application link. Students may also pick up an application at the location they plan to attend and submit it to the Office of Admissions & Enrollment.

Programs such as ESL, Citizenship, Adult Business Education/High School, DSPS, Child Development and Family Studies and short-term vocational courses such as Office Technology and Trade and Industry require that students go through the matriculation process. Please contact the Admissions & Enrollment office at the location that you wish to attend for more information.

In many cases, you can enroll in classes by attending the first class meeting. You can also enroll after the start of the semester. Speak to a counselor or the instructor.

IMPORTANT: Students holding F1/F2 and B1/B2 Visas are prohibited from enrolling in noncredit courses.

Eligibility for Noncredit High School Program
Students must be 18 years old or older, or if between 17 and 18 years old they must have an exemption from their home school district.
General Programs Of Study

Career and Technical Education Programs

City College of San Francisco provides Career and Technical Education (CTE) to meet the needs of students, employers, and the community. CTE programs are developed in cooperation with industry, organized labor, professional organizations, subject matter experts, and outside credentialing agencies to assure they are relevant and up-to-date. CTE programs consist of specialized occupational training designed to:

- qualify students for entry-level employment
- help students build or upgrade skills in fields in which they have prior experience or training
- prepare students for external certification or credentialing in certain fields

Credit and Noncredit Programs. Many CTE programs earn college credits (or units) that may be applied toward a college degree; others consist primarily of noncredit courses. For more information about credit or noncredit classes in a specific program, please consult the “Programs and Courses” section of this catalog.

Program Completion Awards. CTE programs consist of one extensive course or a series of courses designed to prepare students for entry-level employment in a specific field of study. Upon successful completion of the program, students may earn an associate degree (A.S. or A.A.), a credit certificate (Certificate of Achievement or Certificate of Accomplishment), or a noncredit certificate (Certificate of Completion or Certificate of Competency).

Certificate programs consist primarily of CTE courses, and are generally 12 to 30 units. Associate degree programs require 60 or more units of coursework, including courses required for the major and for General Education.

Skills Building. Students who have prior experience or training in a field may enroll in specific CTE classes within a program in order to upgrade or build their skills, improve their employability, prepare for an external credential, or advance in their current career.

Employment. Although the College cannot promise employment, it uses various means of helping students find positions. Instructors in career and technical fields maintain advisory committees and extensive contacts with employers, and can assist students in making valuable connections with employers. CTE programs, in partnership with employers, often have recruitment programs through which students meet employers on campus. Many programs have off-campus work experience or internship opportunities. Additionally, students can access the Career Development Center’s services, and the College’s online resources at http://career.ccsf.edu.

Transfer. Although the College does not offer career and technical training primarily for transfer students, various universities and colleges may accept coursework as credit toward completion of a major or as elective credit.

Work Experience Education. City College provides a variety of structured work-based and school-based learning experiences through cooperative agreements between the student, the employer, and the instructor in several academic and career and technical courses. Students who fulfill the agreement achieve several job objectives and earn transferable college units. For more detailed information about work experience and internship classes in a specific program, please consult the “Programs and Courses” section of this catalog.

Transfer Program

Credit earned in City College courses is transferable to universities and colleges, but not on a uniform basis, since the transfer policies of these institutions vary. Students who intend to transfer may satisfy lower division requirements for the professions or the liberal arts, and transfer to baccalaureate degree-granting institutions.

Articulation agreements which list detailed information concerning specific majors and which describe course transferability and applicability between City College of San Francisco and baccalaureate degree institutions are available online at www.assist.org and at www.ccsf.edu/artic.

Specific Programs Of Study

Programs for High School Students

We offer three types of programs for high school students. For more information on any of these programs, please check with your school counselor or call Admissions and Recruitment at (415) 239-3557.

Dual Enrollment Program. This program allows students to earn high school credits while earning college credits simultaneously. Students are enrolled both in their high school and at CCSF.

Concurrent Enrollment Program. This program allows high school students to enroll in college level courses and receive college credits. Students must have a minimum of 2.0 GPA with 120 high school credits. Courses offered cannot be a part of the high school student’s basic education plan of courses required for high school graduation. The courses must be above and beyond graduation requirements. There is no cost for college tuition.

High School Credit Program. This program allows students to receive high school credits and/or equivalency.

Continuing Education Program

Continuing Education (CE) is the extended learning program of CCSF. It is a not-for-credit, fee based, self-supporting program offering short term classes and workshops in a wide variety of areas. Class meetings are generally held on evenings and Saturdays. Workshops vary from two to thirty-two hours in length. CE receives no state funding; student fees cover the cost of instruction and all related expenses. Classes and workshops are held in the following subject areas: art, business and finance, computer software applications, food and wine, foreign language, health and fitness, home and garden, music, ornithology, personal development, photography, professional re-licensing, test preparation, theater arts, and writing. On-line classes are also available. For information on these visit www.ed2go.com/ccsf.

Pre-registration is encouraged for Continuing Education classes and workshops; however, some space may be available at the first class meeting. Students may register online at www.ccsf.edu/continued. Scroll down the left-hand side of the screen and click on “online registration”. Registration information and a class schedule may be obtained from CCSF Continuing Education Office, Fort Mason Center, Laguna St. and Marina Blvd., Building B, SF, 94123. Telephone: 415-561-1860. Fax: 415-561-1849.

Contract Education Program

It is the policy of the San Francisco Community College District to build partnerships with business, industry, government, trade unions, and community agencies. In support of this policy, a unified,
District-wide effort has been established to develop and implement not-for-credit and credit contract educational programs.

Contract education consists of those educational services which the District provides for employees and other individuals sponsored by public, private, or community organizations, and for which the District charges a fee to the sponsoring organization. Contract education is an alternative vehicle through which the District can serve all educational needs. Contract education expands access to higher education and, at the same time, affords the faculty an avenue to expand their professional horizons (267-6545).

**Diversity Studies**

Through the eight diversity studies departments in the School of Behavioral and Social Sciences, the College seeks to promote greater understanding of the cultures, history, languages, contributions, and Intersecting Identities of African Americans, Asian Americans, Latin Americans, and Filipino Americans, Working Class, LGBT, and Women. The Program is also designed to serve the broad educational needs and interests of the student body and to provide the curricula necessary to satisfy the degree requirements of the various departments of instruction in diversity and social justice programs.

**Admission.** Enrollment is open to all students, regardless of their ethnic origin, whether they desire to complete a major or to take a particular course or group of courses. In some instances, primarily in courses such as English, foreign languages, and social studies, students are required to satisfy prerequisites before enrolling.

**Curriculum.** The courses offered by the African American Studies Department (AFAM); the Asian American Studies Department (ASAM); Interdisciplinary Studies (IDST); Labor and Community Studies (LBLS); the Latin American and Latino/a Studies Department (LALS); Lesbian, Gay, Bisexual, Transgender and Queer Studies (LGBTQ); the Philippine Studies Department (PHST) and Women's Studies (WOMN) are listed under the above titles in the "Announcement of Programs and Courses" section of this catalog.

**Family Studies**

Noncredit course topics include infant development, preschool years, school age child, adolescents and their families, child-parent relationship, parents in the business community, state preschool, preschool parent participation, child development centers, and foster parent training. Classes are free and offered in convenient locations in the city. For enrollment information, call 452-5905 or 239-3172 or visit the Orfalea Family Center Bldg. 200 or, the Multi-Use Bldg., MUB 249 on the Ocean Campus. For enrollment information in CCSF Child Development Centers, call 561-1895. Training for the preschool age children of students, foster parents and those interested in their issues/concerns is available through a special grant from the California Community College State Chancellor's office. For further information call 239-3172 or visit our website at: [www.ccsf.edu/Departments/Child_Development](http://www.ccsf.edu/Departments/Child_Development).

**Honors Program**

The Honors Program offers students an enhanced educational experience along with potential transfer and scholarship benefits.

Honors courses provide students with an enriched curriculum either in:

- specific sections of core transfer courses or
- honors contracts (Students complete an agreement with the faculty member for Honors work in addition to the regular course work.)

**Transfer Benefits of Honors Work.** In either case, the course is designated "Honors" on the student's transcript.

Many universities and colleges recognize the academic achievement represented by Honors courses with preferential transfer tracks, supplemental points in transfer evaluation, scholarships for honors students, etc. Successful completion of honors course work can be a big asset especially in transferring to programs in heavy demand at universities.

CCSF Honors students may also look forward, after transfer, to participation in honors programs in many universities and colleges.

**Eligibility for Honors Courses.** While any CCSF student may take an honors course, to participate fully in the Honors Program and have your work recognized on a certificate, you need to meet ONE of the following criteria:

- College GPA of 3.0 or higher
- SAT score of 1650 (1100 if pre-Spring 2005) or higher, ACT score of 24 or higher
- TOEFL score of 500 (PB+), 61 (IB+), or 173 (CB+)
- Score of 4 or higher on AP classes in high school

To remain in the program, you must maintain a GPA of 3.0 or better. To receive an Honors designation on a certificate, you must complete at least 15 units in Honors. By completing at least 15 units via at least five honors classes you may also be eligible for our Honors Transfer Partnerships, which will give you preferential treatment when applying for a variety of colleges and universities. Most of these partnerships require that you do no more than 9 of your 15 units of honors credits during your last semester at CCSF. Please note that while completing 15 units is an admirable goal, it is not a requirement for membership. The word “Honors” will appear on your transcripts next to all honors classes you complete, even if you do not complete all 15 units.

**UC Transfer Alliance Program.** If you are applying for the UCLA Transfer Alliance Program, at least 6 of the 15 required Honors Program units for certification must be completed by the end of the fall semester the academic year before the student wants to begin at UCLA. So for example if a student wants to start at UCLA in the fall of 2011, s/he must complete at least 6 honors units of the required 15 honors units by the end of fall 2010 in order to get TAP certified. The remaining 9 units can be completed in the spring. It should also be noted that in order to be eligible for TAP certification, the student’s "UC GPA" must be at least a 3.0. TAP certified students are eligible for priority admissions to the UCLA College of Letters and Science and may be eligible for UCLA honors scholarships. Please visit [http://www.ugraducation.ucla.edu/tap](http://www.ugraducation.ucla.edu/tap) for additional details on the UCLA TAP Program.

**Honors Courses Offered.** Check the Time Schedule for the list of courses in honors each semester. Look under "Honors Courses." To date, honors courses at City College have included the following instructional areas: anthropology, art, Asian American Studies, biology, broadcasting, business, Chinese, economics, English, French, geography, interdisciplinary studies, Japanese, mathematics, music, nutrition, political science, psychology, sociology, Russian, Spanish, speech, and Women's Studies.

The Honors Program instructors will work with all CCSF students on honors projects with some exceptions. Some instructors are so popular with honors students that they cannot work with everyone that wants to do honors projects with them. They may give students a test and work with only the top scorers. Others may have various other
criteria. Some instructors will not work with students on honors projects who have not earned a CCSF GPA of 3.0 or higher (your GPA goes on the honors contract form so that is how they know about it). The best way to find out is to ask them. The CCSF website (http://www.ccsf.edu/Info/Dir/dir.shtml) has every instructor's e-mail address and phone number on it so students can ask them.

For questions concerning the Honors Program, please call the Honors Office Cloud Hall 214 at (415) 239-3376 or e-mail skuds@ccsf.edu. Additional information is also featured on our web page: http://www.ccsf.edu/Departments/Honors.

Intensive English Program for International Students
City College of San Francisco offers an intensive English program for college-oriented students on F-1 (student) visas. The program is one semester (18 weeks) or nine weeks in length, 20 hours per week, and prepares the student for further academic study and to achieve a higher score on the TOEFL examination. A 4 or 8 week summer program is also available. For additional information, contact the Intensive English Program, City College of San Francisco, 50 Phelan Avenue, Box C-208D, San Francisco, CA 94112, USA or call (415) 239-3895 or visit the CCSF website: www.ccsf.edu/international. E-mail: international@ccsf.edu

Interdisciplinary Studies
The Interdisciplinary Studies Department is committed to innovation, diversity, and collaboration. The College provides interdisciplinary instruction through courses in multimedia as well as in those covering various aspects of the biological, physical, social, and behavioral sciences, humanities, and ethnic studies. The courses are listed under “Interdisciplinary Studies” in the “Announcement of Programs and Courses” section of this catalog.

Labor and Community Studies Program
Credit and noncredit classes in employment rights, leadership development and power relations in society are offered throughout the year. Classes include organizing for economic and social justice, collective bargaining, shop steward training, working class history, health and safety, environmental justice and social action theater and music. Students can earn certificates or an Associate in Arts.

Lesbian, Gay, Bisexual, and Transgender Studies
In the fall of 1972, an English Department instructor launched one of the first Gay Literature courses in the country. The durability and popularity of Gay Literature resulted over time in the development of gay and lesbian identified courses in other departments of the College and, in the spring of 1989, to the establishment of the first Gay and Lesbian Studies Department in the United States. In Spring 1996, the name of the department was changed to Gay, Lesbian and Bisexual Studies. In 2008, the name was changed again to Lesbian, Gay, Bisexual, and Transgender Studies. The courses offered in this department explore the social and cultural dimensions of the phenomenon of homosexuality and include bisexuality and transgenderism. They aim to promote objective understanding of the complexity of the gay, lesbian, bisexual, and transgender experiences while serving the broad educational needs of the student body. The department hopes to increase social awareness with regard to the gay, lesbian, bisexual, and transgender subcultures while recognizing the contributions of their members to society at large.

Noncredit Programs, Services, and Resources
Students enrolled in noncredit courses have access to a variety of services which are designed to help each student attain educational and career objectives. There are counseling services for students seeking postsecondary and/or continuing education as well as vocational training. Counseling services reinforce the overall goals and objectives of the College. Adults seeking assistance and guidance are helped to become financially, educationally, and personally self-sufficient.

GED Testing Center. The tests of General Education Development (GED) were developed to assist individuals, who have not completed their high school education, with obtaining a certificate equivalent to a traditional high school diploma. The GED battery consists of four subject areas: Math, Science, Social Studies, and Language Arts. Upon successful completion of the GED tests, the California State Department of Education awards an equivalency certificate to the GED candidate. By California law, the equivalency certificate is considered equal to a high school diploma for purposes of employment in all state and local public agencies. The certificate is also accepted nationally by most employers, colleges, and universities.

City College offers the GED tests in English and Spanish. Special editions are available for the legally blind. Modifications and special accommodations for learning or physically disabled students can be made by prior arrangement and approval of the State GED Administrator only after providing supporting documents.

Students and members of the public who wish prepare for the exams should enroll in Transitional Studies GED preparation courses offered at several CCSF locations. The City College of San Francisco GED Testing Center is located at the Mission Center, 1125 Valencia St. Rm 110 San Francisco, CA 94110, (415) 561-1824 GED Testing Computer Lab: Room 105.

Older Adults Classes. Taught at thirty different locations in San Francisco, no-fee classes are available in a variety of subject areas including art, music, literature, health, writing, theater, computers and more. A brochure with the schedule of classes and locations is printed each semester and is available by calling the CCSF Older Adults Department at (415) 452-5839.

Transitional Studies. The Transitional Studies Department offers noncredit classes that are free of charge, offered at various locations during the day, evenings and Saturdays. Courses include a wide variety of High School subjects, GED Preparation and Adult Basic Education in reading, writing, mathematics and study skills. In the Transitional Studies Department, students may earn the CCSF HS Diploma, transfer high school credits to other schools, study to pass the GED, and improve academic skills. Student goals may be to prepare for academic college credit courses, vocational training programs, the workplace, and life enrichment. Courses may be small or large group instruction, individualized, and may include computer assisted instruction and field trips. Programs include opportunities for individual tutoring, GED courses taught in Spanish, and courses to which students may enroll at any time during the semester. Telephone: (415) 920-6131.

Online Courses
Online courses provide students with the opportunity to learn in an environment that is physically remote from their instructors and classmates making it easier to balance higher education goals with other responsibilities. Students may choose to combine online learning with on-campus classes or take an entire course load online. City College offers over 150 online credit courses, many meeting AA-T degrees, AA/AS degrees, certificate, major and transfer requirements. Online courses are as demanding as lecture courses. Students must be self-motivated, possess effective study skills, and be able to work independently.
A computer with Internet capability is the primary tool used for online courses. Insight (Moodle) is the Learning Management System (LMS) CCSF uses for all online courses. Online courses require textbooks, assignments, exams, interaction between students and the instructor, and offer tools that support student learning. Some online courses require students to come to a CCSF campus for orientations and mandatory meetings. Students are strongly encouraged to have basic experience with the internet and regular access to a computer. Some courses may require software downloads as well as minimum hardware and software requirements.

Registration for online courses is the same as for face-to-face classes. Information on course offerings is listed in the printed and online version of the Class Schedule as well as at http://www.ccsf.edu/online. Visit the website for a list of online courses, for guidelines for successful online learning, and to take a short self-evaluation to decide if online classes are right for you.

Study Abroad Programs

The Study Abroad Programs Office provides students with the opportunity to study and live in another country while receiving CCSF credit and continuing to work towards their academic goals. Both semester length and short term programs are offered. Students are encouraged to explore the use of financial aid and scholarships in order to help finance a study abroad experience. International study provides unique insights into culture, language, history and oneself. Participants will gain a more global perspective on cultural, international, political, and economic issues; interpersonal relationships; and career choices.

For more information contact the Study Abroad Coordinator by calling 239-3778, or visiting Cloud Hall, Room 212. Students can request program brochures by e-mailing studyabroad@ccsf.edu. Program information and brochures are also available on the program website: www.ccsf.edu/studyabroad.

Telecourses

Telecourses are college courses offered via television. By enrolling in a telecourse, students can complete graduation area requirements needed for a general AA/AS degree, as well as complete requirements to transfer to the CSU and complete IGETC requirements. Telecourses are as demanding as lecture courses. Students must be self-motivated, possess effective study skills, and be able to work independently.

Telecourses are broadcast on the San Francisco educational access cable Channel 27 and Channel 75. Students take telecourses primarily by watching their video lessons on EATV-Channel 27. In addition, students attend three required meetings on the Ocean Campus—an orientation, a midterm, and a final. Telecourses require textbooks, assignments, exams, interaction between students and the instructor, and offer tools that support student learning. The instructor of each telecourse is available via telephone during scheduled office hours every week in order to answer questions about the course. Each video lesson is available in the Media Center in the Rosenberg Library on the Ocean Campus. Most courses are available for rent from private firms via streaming. Support material and newsletters for each class are sent directly to students' mailing address by the instructor of the class.

Registration for telecourses is done the same as for a face-to-face course. Textbooks are available in the CCSF bookstore. Fees for the telecourses are the same as the fees for credit courses. More information on course offerings is listed in both the printed and online version of the Class Schedule as well as at http://www.ccsf.edu/Telecourses.

Working Adults Degree Program

The Working Adults Degree Program is a fast-paced degree program for working adults offered at the Mission and Southeast Centers. It is designed for students to attain their Associate degree while fulfilling general education requirements that are transferable for a Bachelor’s degree. Classes offered at these neighborhood locations are chosen to meet as many requirements as possible for both degrees. Every effort is made to meet the needs of the students enrolled in this program. The WADP is characterized by a high degree of support for students, priority registration, and convenient daytime, evening, and weekend classes. In addition, students have the benefit of attending classes in a smaller setting. For further information, call (415)920-6010 for Mission Center and (415)550-4300 for Southeast Center. You may also explore the website at http://www.ccsf.edu/WADP.

Women’s Studies

In Spring 1971, City College of San Francisco offered its first course directed specifically to women’s interests and educational objectives - Interdisciplinary Studies 20, Women in the Modern World. Its success led to the institution of the Women’s Studies program, one of the first in the nation. The program’s 30 plus courses, taught in various disciplines, focus on the complex role of women in society. Women’s Studies courses are open to all students. In some instances, students are required to satisfy prerequisites before enrolling. Please see “Women’s Studies” in the “Announcement of Programs and Courses” section of this catalog for details.

Other Areas Of Interest

Concert and Lecture Series

A wide variety of concerts and lectures are presented by professionals each semester. These programs are free, and the entire campus community and the community at large are invited. Students, faculty, administrators and staff may submit proposals for programs to the Concert Lecture Series Committee for its consideration. For more information call 239-3211.

Course Offerings to Fit Your Schedule

The College provides semester-length as well as shorter-term credit and noncredit courses at times and places which are designed to be convenient to students. Instruction is offered days, evenings and weekends. In addition, there are telecourses which can be viewed on your tv at home and online courses which can be accessed through your computer. All of the College’s offerings for the fall, spring, and summer terms are listed in their respective Schedule of Classes which includes all forms necessary for you to enroll at City College of San Francisco. Easy online enrollment is also available at www.ccsf.edu.

Fitness Center

Fitness Center provides a full-body workout utilizing the state-of-the-art Fitlinxx computerized system that is attached to Life Fitness strength machines and cardio machines, including programmable treadmills, elliptical trainers, and bikes. The Fitness Center staff are CCSF instructors in the Physical Education and Dance Department, with a range of experience including strength, sports, dance, pilates, yoga, aerobic fitness, and rehabilitation techniques, and all have received additional training on the Fitlinxx system. Students must enroll in PE 200B/C in order to use the Fitness Center.

Intercollegiate Athletics

Intercollegiate athletics are offered for men and women. College teams compete in the Coast Conference and with teams from other schools.
Intercollegiate sports include baseball, basketball, cross-country, football, soccer, softball, swimming, tennis, track, badminton and volleyball.

**Intercollegiate Speech and Debate Team**
The CCSF Speech and Debate Program is a nationally ranked team that participates in intercollegiate tournaments locally, statewide, and nationally. The Speech and Debate Team is a member of the Northern California Forensic Association, the California Community College Forensic Association and the Phi Rho Pi Forensic Honor Society. Students have the opportunity to compete in all 11 individual events as well as various styles of debate. Events include informative, persuasive, impromptu, prose, poetry, duo, parliamentary debate and Lincoln/ Douglas debate. For more information call Dr. Kristina Whalen at 452-4842 or email at kwhalen@ccsf.edu. See courses listed under “Speech Communication.” The Speech and Debate Program is located in Cloud Hall, Room 208B.

**Lost and Found Articles**
Persons who find lost articles are requested to bring them to the college Police Department: for Ocean Campus, Cloud Hall, Rm 119, for center locations, items can be turned in to the site officer. Persons wishing to claim requested articles should contact college Police Department or on-site officer. Due to the limited storage space, unclaimed items are purged periodically.

**Performing Arts**
Performances given by students enrolled in courses in music, dance, and theatre arts contribute much to the enrichment of campus life.

The Music Department schedules both professional and student recital series each semester, presenting an average of two concerts weekly. Audiences from the College as well as the community-at-large are invited to attend without charge.

Frequent campus and community programs are also offered by the College dance classes. Dancers of all degrees of ability may study and perform a variety of dance styles, including classical, modern, jazz, folk, ethnic, social, tap, and square dancing.

The Theatre Arts Department offers several major productions each year in the Diego Rivera College Theatre. Participation is open to all students regardless of experience and background. In addition, smaller dramatic productions are developed each semester that may include dinner theatre, club sponsored productions and use of the Venue 222. Occasionally, all three performing arts areas cooperate to produce a major production.

**Ocean Campus Boundaries**
The City College of San Francisco Ocean Campus is bounded on the north by Judson Avenue and Havelock Street; on the east by U.S. Interstate 280; on the south by Ocean Avenue; and on the west by Phelan Avenue.

**Public Transportation**
The City College Ocean Campus is two blocks from BART’s Balboa Park Station and the end of the J-Church line. It is also served by the following MUNI lines direct to the campus:
K-Ingleside, 36-Teresita, 43-Masonic, 49-Van Ness and 9X, 9AX, 9BX Bayshore Express. The following buses stop within walking distance of the campus: 23-Monterey, 26-Valencia, 29-Sunset, and 54-Felton. For additional route information contact BART and MUNI directly.

**Student Housing**
The College does not provide residences for students. The Housing Bulletin Board is located in the Student Union, where postings can be found for students who seek rental housing. CCSF does not assume any responsibility for the condition of the rentals listed.

**Symphony Forum**
City College students may attend Wednesday and Friday evening concerts of the San Francisco Symphony Orchestra on a season-ticket basis. This activity is made possible through the San Francisco Symphony Forum, a self-governing student organization representing many Bay Area collegiate institutions. In addition to concert attendance, students are offered the opportunity to meet guests of the Orchestra, both on the various locations as well as after performances in Davies Hall. City College also sends students to usher at many performing arts houses in exchange for free admittance to the shows. More information can be obtained from Creative Arts Building, Room 213.
STUDENT FINANCIAL RESOURCES

Financial Aid, CalWORKs, and EOPS

Student Financial Resources are the offices of Financial Aid, CalWORKs, and EOPS Office. Together they serve students who need assistance in meeting the basic cost of their education. This section outlines the application procedures and how student need and eligibility are determined. Because funds are limited, federal and state regulations require that Financial Aid and CalWORKs funds go to students who demonstrate financial need. Funds available through the Scholarship Office are competitively awarded and based on the criteria specified by the donor.

Financial Aid

How to Apply for Aid

1. Apply for admission to the College.
2. File Free Application for Federal Student Aid (FAFSA) on the web at www.FAFSA.ed.gov. A new application must be filed every academic year a student wishes to receive financial aid.
3. Complete and submit all forms and documents requested by the Financial Aid Office.
4. The Financial Aid Office staff evaluates the documentation and processes your Financial Aid award. Awarding priority is given to early applicants.

Eligible students will be offered a financial aid package consisting of a combination of grants, work, and/or loans. Along with the Award Letter, the Financial Aid Office will mail disbursement schedule to financial aid recipients.

College Policy on Financial Aid

All financial aid at CCSF is administered in accordance with policies and philosophies which have been established nationally. The basis of such programs is the belief that students and their parents have the primary responsibility to meet educational costs and that financial aid is available only to fill the gap between the family’s and/or student’s contribution and allowable educational expenses. The amount of expected student or family contribution is determined by a careful analysis of financial strength: income and net assets which the family may have versus the allowable expenses.

Educational expenses which are considered a basis for establishing student need include nonresident tuition, fees, books and supplies, room, board, transportation, and personal expenses. The CCSF Financial Aid Office has an established student budget to reflect the costs of each of these items based on a statewide cost survey.

General Eligibility for Financial Aid

Specific eligibility requirements vary from program to program. The following criteria apply to all financial aid programs. To receive financial aid, a student must:

1. Be accepted and enrolled as a regular student in an eligible program leading to an Associate Degree, an eligible certificate, or transfer to a four-year college or university;
2. Be a U.S. citizen or an eligible non-citizen;
3. Demonstrate financial need for need-based programs;
4. Maintain satisfactory academic progress in a course of study according to the standards and practices of CCSF;
5. Not owe a refund on a Federal Pell Grant, Federal SEOG;
6. Not be in default on any Federal Perkins, Federal Stafford Loan, Federal Direct Loan, or California Loan to Assist Students/PLUS;
7. Male applicants between the ages of 18 through 25 must be registered with Selective Service;
8. Have a valid Social Security Number;
9. Must not have federal benefits suspended due to drug offense conviction;
10. Have a high school diploma. Another alternative is when the student was enrolled in an eligible program prior to July 1, 2012, and passed the Ability to Benefit Test or, prior to 01/07/2012, has completed six degree applicable units at CCSF or transfer applicable units completed at other colleges or universities.

Determining Financial Need

The amount of financial aid is subject to available federal and state funds. The type of aid and amount received by each student will be determined by the Financial Aid Office. Need-based financial aid awards are based on demonstrated financial need which is the difference between allowable educational expenses and the family’s expected contribution (or the student’s own expected contribution) and other resources.

The amount of financial aid is subject to available federal and state funds. The type of aid and amount received by each student will be determined by the Financial Aid Office. Need-based financial aid awards are based on demonstrated financial need which is the difference between allowable educational expenses and the family’s expected contribution (or the student’s own expected contribution) and other resources.

Contribution is determined from the financial aid application and other required documentation, such as the 1040 Federal Income Tax Return of the parents and/or student. All information is held in strictest confidence.

Satisfactory Academic Progress

Federal regulations require that all students receiving financial aid comply with the financial aid Satisfactory Academic Progress Policy established by the College. To receive financial aid, students must maintain the standards described below:

Length Of Eligibility

City College of San Francisco (CCSF) has established a maximum time frame (150% of the length of the program). For example, the maximum time frame for completing an Associate Degree is 90 cumulative units attempted. Students are no longer eligible for financial aid after attempting 90 units, whether or not financial aid was received. All transferred units are also counted in the 90 units).

Grade Point Average (GPA)

To maintain satisfactory academic progress and remain eligible for financial aid, students must maintain a minimum cumulative GPA of 2.0.

Unit Completion Requirement

CCSF will review each student’s record at the end of each academic semester. To maintain satisfactory academic progress, students must have completed a total of 67% of all the units attempted.

For noncredit students the requirements for satisfactory academic progress are:

1. The student must keep a cumulative 2.0 grade point average or a passing grade in all eligible classes enrolled each semester.
2. The student must maintain at least 80% attendance in all hours he/she declares each term. Repeated classes are not included.

Right to Information

Students have the right to a full explanation of CCSF financial aid programs, policies, and procedures.

For information on academic programs and facilities, faculty, accreditation, refund policies and non-discrimination policies, see appropriate section of this Catalog.
Financial Aid Programs
Financial aid consists of programs which are funded and regulated by the federal and state governments. The programs are of four different kinds: Grants, Work, Loans and Fee Waivers.

Grants
A grant is money which students do not have to work for or repay. Students with bachelor’s degrees are not eligible for grants.

Federal Pell Grant - Maximum grant amount may exceed $5000 depending on federal allocations. Eligibility restricted to 18 semesters or equivalent.

Federal Supplemental Educational Opportunity Grant (FSEOG) - A grant is awarded at CCSF according to a formula based on student need and generally will range from $200 to $230 per academic year.

Board of Governors Fee Waiver (BOGW) - A financial assistance program to offset enrollment fees, the Financial Aid Office determines student eligibility based on state guidelines and authorizes the Tuition and Fees Office to use BOGW funds to waive the fee charges. BOGW is available to California residents only.

Cal Grant: A, B, and C - The State of California, through the Student Aid Commission, offers and administers several grant programs for undergraduate students. These include Cal Grant A, B, and C. A student can receive only one type of Cal Grant.

Cal Grant A is to be used when a student transfers to a four-year institution in California. This grant provides tuition assistance. If the student qualifies for a Cal Grant A and wants to attend a public community college, the Student Aid Commission will hold the Cal Grant A award until the student transfers to a four-year college.

Cal Grant B is awarded to disadvantaged students at the community college. The student can receive up to $1551 in Cal B Grant per year.

Cal Grant C helps vocational program students with tuition and training costs. Students enrolled in eligible Vocational Programs may receive up to $576 per year.

Federal Work Study Program
The Federal Work-Study Program offers jobs for students with financial need, allowing them to earn money to help pay education expenses. The program encourages community service work and work related to the student’s course of study. If the student works off campus, the employer will usually be a private non-profit organization or a public agency, and the work performed must be in the public interest. The amount earned cannot exceed student’s total Federal Work Study award.

Loans
Loans are monies which are borrowed now and must be paid back after leaving school.

Federal Perkins Loan - This loan is awarded at CCSF according to a formula based on student need and generally will range from $200 to $1500 per academic year depending on the loan collection. A student may borrow a cumulative total of $27,500 throughout his undergraduate career.

The Federal Perkins loan comes with a 5% interest, to be repaid nine months after the student borrower drops below half-time, withdraws, or leaves school. A loan may be cancelled in part or entirely under certain circumstances.

The Student Account Services, located in Bungalow 619, is responsible for collections of the Perkins (NDSL) loans.

Federal Direct Loans - Direct Loans are originated by the Financial Aid Office and are obtained from The US Department of Education.

City College has a multi-disbursement schedule for the issuance of checks. Interest on the Direct Unsubsidized Loan accrues on the unpaid principal balance on each loan from the date of disbursement by the lender until the entire principal balance is paid in full. Students do not have to demonstrate financial need to qualify for Direct Unsubsidized Loan. Interest on the Federal Subsidized Direct Loan is paid by the federal government while borrowers are enrolled in school or in deferment. Students have to demonstrate financial need to qualify for Subsidized Stafford Loan.

Repayment on the Federal Direct Loan begins six months after the student borrower drops below half-time, withdraws or leaves school.

Noncredit Financial Assistance
Financial assistance consists of grants and student employment programs offered singly or in combinations to students who demonstrate financial need. The purpose of financial assistance is to provide monetary assistance to students who could benefit from furthering their education but cannot without financial assistance.

To be eligible for financial assistance, students must be enrolled in any of the following noncredit certificate programs which qualify for these funds:

Programs Hours
Accounting Assistant .......................... 615-645
Administrative Assistant .......................... 810-885
Baking and Pastry .................................. 1020
Basic Business Skills for Medical Office ........... 720
Clerical Support Specialist .......................... 675-750
Computer Application for Business ................. 615-645
Computerized Accounting Specialist ............... 705-735
Culinary and Service Skills Training (CSST) ...... 1020
Microsoft Office Specialist ....................... 645
Office Receptionist ................................. 645-660
Vocational ESL Office Training ..................... 810

Financial Aid Payment of Nonresident Tuition and Enrollment Fee Charges
After the Office of Tuition and Fees determines student nonresident tuition and enrollment fee charges, payment will be drawn from the student financial aid award. Charges which are not met with financial aid are the responsibility of the student.

Return of Title IV Funds
In accordance with federal law, students who receive federal financial aid and withdraw from all their classes before completing at least 60% of the semester will have their financial aid eligibility recalculated based on the percentage of the semester completed, and will be required to repay any unearned financial aid they received. Students who complete 60% or more of their classes will not be required to pay.

Withholding of Services to Students in Default on Loans or Owing Refunds
If a student or former student is in default on the Title IV loan (Federal Family Education Loan, formerly Guaranteed Student Loan) or on a Federal Perkins Loan (formerly National Direct/Defense Student Loan) or owes a refund on a grant (Pell, FSEOG), the District shall withhold the following services: provision of grades, provision of transcripts, and provision of diploma.
The term “default” is defined by the U.S. Department of Education as the failure of a borrower to make an installment payment when due or to meet other terms of the promissory note.

The services withheld may be provided in certain circumstances which will be addressed on an individual basis by the administration.

**CalWORKs**

CalWORKs (California Work Opportunity and Responsibility to Kids) is designed to assist individuals moving from welfare to work. The CalWORKs program at City College of San Francisco provides education, training and support services. It also links students to employment opportunities related to the student’s employment goal. Through this program students receive assessment, counseling services, assistance with textbook purchases, transportation, and childcare. For additional information, please visit the website at [www.ccsf.edu/info/CalWORKs](http://www.ccsf.edu/info/CalWORKs).
Learning Resources

City College Learning Resources provide equitable access and instructional support to facilitate academic achievement and personal growth. The faculty and staff are available to answer all inquiries into resources, and to provide assistance and instruction in their use.

The College Library

Libraries are located on the Ocean Campus and the Chinatown-North Beach, Downtown, John Adams, Mission and Southeast Centers. The CCSF Library has print and media resources in excess of a quarter million items; it licenses Ebook, Reference and Periodical databases which can be accessed on or off campus through the Internet. The Library supports the college curriculum in order to foster student success and envisions itself as the primary location, physically and remotely, for supporting students, staff and faculty in their information needs. Library users may refer to its website for current and complete information on locations, services, collections, instruction, exhibitions and programs. See: www.ccsf.edu/NEW/en/library/about-library.html.

Library Locations:

The Claude and Louise Rosenberg Library & Learning Resource Center is located on the Ocean Campus. In addition to holding the largest general collection, the Rosenberg also houses the Diego Rivera Collection and College Archives. The Language Center and Media Center share space in Rosenberg 403. Audio-active stations, video and language learning software offer students of American Sign Language and foreign languages a variety of activities to enhance their language study. Foreign Language instructors may arrange class visits to a traditional audio language classroom, located in, Rosenberg 205E. The Media Center houses non-print materials for class assignments or for personal use and enjoyment. The Media Center is closely affiliated with the Audio Visual Department, located on the 3rd floor of the Rosenberg building, which provides services for classroom instruction. The Alice Statler Library, on the lower level of the Statler Wing of Smith Hall, provides resources tailored for instructional programs in Culinary Arts and Hospitality Studies.

The College Center libraries are growing to support the development of program pathways for certificate and degree earners at locations throughout the city. The Chinatown-North Beach Center library is located on the 2nd and 3rd floors at 808 Kearny Street, near Portsmouth Square. The library houses a significant collection of Chinese Language materials and emphasizes ESL, child development and basic education. The Downtown Center Library, located on the 2nd floor at Fourth and Mission Streets, houses collections supporting programs in ESL, business and careers, and computer technology. The Downtown Center library also supports media collections and a foreign language lab. The John Adams Library is located at 1860 Hayes Street, Room 204. The collection has a strong emphasis on Allied Health fields, ESL, business and careers, computing, child development and basic education. The Josephine Cole Library at the Southeast Center is located on the 5th floor at 1800 Oakdale Avenue. The collection emphasizes African American studies, Transitional Studies,

ESL, technology and trade skills. The library holds a media collection and equipment for student use. The Mission Center Library is located on the fourth floor of 1125 Valencia Street. Its collections and exhibitions reflect the history and cultural significance of its location in the Mission District. The Mission Center Library houses media and audio visual resources as well as a language lab.

The Tutorial Center provides one-to-one and small group tutoring in Basic skills areas, mathematics, chemistry, physics, accounting, economics, psychology, anatomy, physiology, statistics, music, nursing, and foreign language courses. Academic peer tutors are students who received high grades in their courses and recommendations from their instructors. These trained tutors assist students in their weekly assignments as well as with their study techniques. Students drop in daily to meet with tutors after a short registration process.

The Writing Success Project links with English and ESL composition sections to provide weekly group study sessions. Additional services, including workshops, student grants, help with scholarship and transfer applications, and counseling, are available to TRIO-eligible students. Services are intended for US citizens and residents who meet federal criteria based on family income, parent education, and/or disability.

The LAC at Mission Center offers tutoring and computer lab support for students taking credit courses at that campus in Room 401.
## Tutorial and Academic Support Programs

City College offers a variety of tutorial and academic support programs. Students should visit the program for further information.

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<th>Subject</th>
<th>Description</th>
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<td>ESLCLAD</td>
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<tr>
<td>English</td>
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<td>English Reading and Writing Center</td>
<td>A265 and R205 Southeast 402</td>
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<tr>
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<tr>
<td>ESL and English</td>
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<tr>
<td>Reading</td>
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<td>Math Area: Learning Assistance Center</td>
<td>R207 Mission Center 401</td>
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<tr>
<td>Math</td>
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<td>Math Tutoring Lab</td>
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<td>Foreign Languages</td>
<td>Tutoring for each language</td>
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<td>R207</td>
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<tr>
<td>Foreign Languages</td>
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<td>Language Center</td>
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<td>Sciences</td>
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<td>Biology</td>
<td>Materials and tutoring for biology students</td>
<td>Biology Resource Center</td>
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<td>Nursing</td>
<td>Materials and tutoring for nursing students</td>
<td>Nursing Skills Lab and Media Center</td>
<td>C343 R403</td>
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<tr>
<td>Business</td>
<td>Tutoring for acct, econ, and statistics</td>
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<td>Speech</td>
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<td>Misc. Subjects</td>
<td>Audio and visual materials</td>
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<tr>
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<tr>
<td>Basic Skills and GED</td>
<td>Tutoring and diagnostics for adult basic ed. students</td>
<td>Adult Learning and Tutorial Center</td>
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</table>
College Success Classes are offered through the Learning Assistance Department (LERN 50 and LERN 51) and through the Interdisciplinary Studies Department (IDST 50). These classes are especially valuable to students attempting to raise their grade-point averages, re-enter college, or succeed in college. The focus is on life management, learning styles, personal and educational values, instructor-student relations, maintaining health, memory and concentration, lecture notetaking, textbook studying, subject-specific studying, test taking, using the library, critical analysis, problem solving, and creative thinking. Drop-in college success workshops are also available.

The Learning Assistance Center Computer Lab located in Rosenberg Library, R207 offers open access to a 100 computers with Internet, email, MS Office and a variety of educational software programs for all CCSF students. Laser black and white printing, scanners and 14 laptop stations equipped with power strips and local wireless access point are available. Laboratory assistants help students in selecting and using the laboratory's hardware and software.

The Academic Computing and Resource Center in Batmale Hall room 301 continues to support students in Computer Science, Computer Networking Information Technology, Multimedia, and there are specialized software to support students from Broadcasting, Graphic Communications, Photography and Cinema. In addition, the lab is open to all CCSF students who need Internet access, Microsoft applications or wireless Internet connectivity.

The lab houses 168 workstations including 122 Windows PCs, 40 Macs and 6 Linux stations. Software includes programs for Introduction to Macintoshes, cross platform Multimedia (Graphic Design, Audio/Video Editing, DVD Authoring, 3-D modeling and Post-Production), Linux with its dedicated subnet, Microsoft Office, web development and programming (C, C++, C#, Java, PHP, Perl, Oracle, SQL, etc.).

36 Windows PCs and 8 Macintoshes are available to CCSF students who require Internet connectivity and Microsoft Office applications. Wireless Internet connectivity is also available in the lab.

The ACRC is open M - Th 9:00 a.m. to 9:00 p.m., F 9:00 a.m. - 3:00 p.m. Call (415) 239-3492.

The Biology Resource Center is a study hall specifically designed to meet the learning needs of biology students. The Biology Resource Center is located in Science Hall, Room 350 and contains a variety of instructional materials for the biological sciences, which can be used in coordination with specific courses or as supplementary materials. The collection includes reference books, videotapes and self-instructional CD ROMS. The Biology Resource Center also contains anatomical and organismal models, charts, specimens, microscopes and slides. Instructors and qualified student tutors staff the laboratory. Hours of operation are posted at the laboratory and on the biology department website.

The Communication Lab (operated by the Speech Communication Program) located in Cloud Hall, room 208B, provides one-to-one tutoring for students enrolled in a Speech class. Staffed by Speech Instructors, the Lab offers students help in all stages of the speech-making process as well as assistance in understanding interpersonal communication concepts and group dynamics theories. In particular, the Lab provides support in anxiety reduction, topic selection, thesis writing, main point construction, outline development, beginning and ending speeches, delivery and visual aids. Computers are available for research, the creation of PowerPoint presentations and outline writing. Drop-in or call 239-3390 for Lab hours.

The Math Lab (operated by the Mathematics Department), housed in Bungalow 602 on the Ocean Campus, offers an array of services for students. Drop-in tutoring for basic mathematics (MATH E1 and MATH E3), pre-algebra (MATH 35), elementary algebra (MATH 40), and applied geometry (MATH 50) is provided in Bungalow 602. Students can also use the computers in Bungalow 602 to view videos and use software in these subject areas. The basic mathematics classes (MATH E1 and MATH E3) that use the individualized and small group lecture formats meet in Bungalow 603.

The Nursing Skills Laboratory, located in Cloud 343, is a supervised open laboratory where Registered Nursing Students may complete and/or reinforce their course work. The Laboratory provides a collection of Audio-Visual References. A registered nurse serves as a resource person for nursing students to answer questions, direct independent studies, and give workshops on skill procedures.

The Transitional Studies Department Adult Learning and Tutorial Center The mission of the Adult Learning and Tutorial Center (ALTC) is to provide an environment where adults who are learning basic skills can thrive and build strong academic and vocational foundations. Group and individualized classes with tutor support are offered in beginning literacy, math, and writing as well as in preparation for the GED exams.

Program and Services-The ALTC is an open entry program offering clusters of morning, afternoon, and evening classes to meet adults’ scheduling needs. The intake/orientation process includes preliminary assessment of reading levels and administration of official GED practice tests as appropriate. More in depth diagnostic tests are offered by a faculty reading specialist. A disabilities counselor assists with adaptations and GED accommodations.

While the majority of students have English as their first language, English speaking adults from many countries also study at the ALTC. Volunteer tutors come from Project Read, The Volunteer Center, San Francisco State University, Project 20, Pretrial Diversion, City College of San Francisco credit classes, and from among the ALTC’s alumni and retirees. The Center has a student mentor, student workers, and active student council, a computer lab, an annual book of student writings, and an annual GED graduation/all-level student awards ceremony. Telephone (415) 920-6042 for more information.
### Student Services
#### Counseling Services
See the surrounding text for more detailed information on Counseling Services or contact the individual department for information on workshops available to help you succeed.

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<th>Location</th>
<th>Contact Information</th>
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<tr>
<td>Academic Counseling Department (NSCD)</td>
<td>Conlan 205</td>
<td>239-3296</td>
<td>Are you a new student to City College with less than 24 units? Do you need help with academic and career planning?</td>
</tr>
<tr>
<td>General Counseling Department</td>
<td>Arts 201/Cloud 207/Multi-Use Bldg-Mezzanine</td>
<td>452-5235</td>
<td>Do you need an Educational Plan, degree or transfer information?</td>
</tr>
<tr>
<td>Extended Opportunity Programs and Services (EOPS)</td>
<td>EOPS Bldg.</td>
<td>239-3561</td>
<td>Do you need academic counseling, books, tutoring, and childcare? Come to EOPS to find out how to qualify for services.</td>
</tr>
<tr>
<td>International Student Counseling Program (ISCP)</td>
<td>Multi-Use Building-1st Floor</td>
<td>239-3942</td>
<td>Are you a new or continuing International student here on an F-1 Visa? Do you need specialized assistance and orientation?</td>
</tr>
<tr>
<td>Latino Services Network (LSN)</td>
<td>Cloud 364</td>
<td>452-5335</td>
<td>Are you interested in bilingual and bicultural (Spanish-English) programs and support services?</td>
</tr>
<tr>
<td>African American Scholastic Programs (AASP)</td>
<td>Rosenberg Library 209</td>
<td>452-5315</td>
<td>Are you interested in programs for African Americans and the Diaspora, Black College tours and transfer assistance?</td>
</tr>
<tr>
<td>Asian Pacific American Students Success Program (APASS)</td>
<td>Batmale 208</td>
<td>452-5620</td>
<td>Are you interested in bilingual and bicultural counseling (Cantonese, Mandarin, Tagalog, and Vietnamese), programs, and support services?</td>
</tr>
<tr>
<td>Career Counseling</td>
<td>Multi-Use Bldg 39 (on the Mezzanine)</td>
<td>239-3117</td>
<td>Are you undecided about your educational or career interests and goals or looking for job placement information?</td>
</tr>
<tr>
<td>Transfer Center</td>
<td>Science 132</td>
<td>239-3748</td>
<td>Need information to apply or transfer to a university? Interested in college tours or guaranteed admission agreements?</td>
</tr>
<tr>
<td>Psychological Services/Student Health Center</td>
<td>Student Health Center</td>
<td>239-3148</td>
<td>Been feeling kind of down lately? Having concerns of a personal nature? Stop by the Health Center for assistance.</td>
</tr>
<tr>
<td>Veteran’s Educational Benefits Program</td>
<td>Cloud 332</td>
<td>239-3486</td>
<td>Do you qualify for Veteran’s benefits? Come to the Veteran’s Office for assistance.</td>
</tr>
<tr>
<td>Disabled Student Programs and Services (DSPS)</td>
<td>Rosenberg 323</td>
<td>452-5481</td>
<td>Do you need an accommodation due to a medical, physical, or psychological condition or learning disability?</td>
</tr>
<tr>
<td>Lesbian/Gay/Bisexual/Transgender Counseling (LGBT)</td>
<td>Cloud 207</td>
<td>239-3320, 452-7302</td>
<td>Want information about student activities, scholarships, support services, counseling, courses and programs for LGBT students?</td>
</tr>
<tr>
<td>Athletic Counseling Services</td>
<td>Well 139</td>
<td>239-3260</td>
<td>Are you a member of a City College intercollegiate athletic team? Do you need academic, career, or personal counseling?</td>
</tr>
<tr>
<td>Homeless At-Risk Transitional Students (HARTS)</td>
<td>Cloud 205</td>
<td>452-5355</td>
<td>Are you homeless and in need of special services such as transportation, food, books, and housing?</td>
</tr>
<tr>
<td>Financial Aid Counseling</td>
<td>Cloud 324, Centers</td>
<td>239-3576, 239-3576</td>
<td>Are you concerned about financing your education? Are you interested in financial aid? Are you eligible for CalWorks? Do you want to apply for a scholarship?</td>
</tr>
<tr>
<td>Civic Center Counseling</td>
<td>750 Eddy Street, Room 105</td>
<td>561-1878</td>
<td>Do you hope to study English as a Second Language? Are you interested in citizenship, how to use computers, or communications?</td>
</tr>
<tr>
<td>Chinatown/North Beach Counseling</td>
<td>808 Kearny Street, Room 119</td>
<td>395-8611</td>
<td>Are you interested in Asian American Studies, business, child development, Health Education, sign language, or ESL?</td>
</tr>
<tr>
<td>Downtown Center Counseling</td>
<td>800 Mission Street, 1st Floor</td>
<td>267-6503</td>
<td>Are you interested in Computer Studies, ESL, Food Technology or Business? Are you an entrepreneur seeking the support of our Small Business Development Center?</td>
</tr>
<tr>
<td>Learning Center</td>
<td>Address</td>
<td>Phone Numbers</td>
<td>Services Provided</td>
</tr>
<tr>
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</tr>
<tr>
<td>Evans Center Counseling</td>
<td>1400 Evans Avenue, Room 104</td>
<td>550-4409 or 550-4506</td>
<td>Looking for assistance in entering vocational programs? Interested in apprenticeship programs and cooperative work experience?</td>
</tr>
<tr>
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<td></td>
<td><strong>Gough Street Center</strong></td>
</tr>
<tr>
<td></td>
<td>31 Gough Street, Room 29</td>
<td>241-2300</td>
<td>Looking for the Adult Learning and Tutorial Center? Literacy Education? Transitional Studies or GED Preparation?</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td><strong>John Adams Counseling</strong></td>
</tr>
<tr>
<td></td>
<td>1860 Hayes Street, Room 142</td>
<td>561-1925</td>
<td>Are you interested in the health professions, child development, computer training, Consumer Education, ESL or GED preparation?</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td><strong>Mission Center Counseling</strong></td>
</tr>
<tr>
<td></td>
<td>1125 Valencia Street, First Floor</td>
<td>550-1130</td>
<td>Are you interested in Digital Printing, Office Technology, GED (in Spanish), or a Working Adults Degree Program? Are you interested in ESL studies?</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td><strong>Southeast Center Counseling</strong></td>
</tr>
<tr>
<td></td>
<td>1800 Oakdale Street, Room 201</td>
<td>550-4320</td>
<td>Are you interested in GED preparation or ESL courses, certificate programs or our Working Adults Degree Program?</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td><strong>Re-Entry Counseling Services</strong></td>
</tr>
<tr>
<td></td>
<td>Smith Hall 106</td>
<td>239-3297</td>
<td>Are you returning to school after a prolonged absence?</td>
</tr>
</tbody>
</table>

Not sure who to contact? Need general college information? Want information on the many student workshops offered each semester? E-mail your quick questions to the Online Advisor at **advisor@ccsf.edu**.
Student Counseling Services
City College is fortunate to have several different types of professional counseling services. They include the following:

The Multicultural Retention Services Department (MRSD) was established in January 2010 and consists of four (4) academic retention programs, providing support services to underrepresented students. The four programs are the African American Scholastic Programs (AASP), the Asian Pacific American Student Success (APASS) program, the Latino Service Network (LSN) and TULAY (Tagalog for "BRIDGE")/Filipino American Student Success program, which are detailed below. For more information, you may contact the department chairperson at 415-452-5625.

African American Scholastic Programs
The goals of African American Achievement Program (AAAP) are to increase students' ability to understand developments in the world, to think critically; to express thoughts clearly orally and in writing, and to make informed decisions.
The four components that drive the program are:
1. A series of English courses that include:
   - English 90/91-Basic Composition & Reading I
   - English 92-Basic Composition & Reading 2
   - English 93-Intro to Academic Writing & Reading
   - English 96-Academic Writing and Reading
   - English 1A-University Reading and Composition
2. College Success courses
3. Library 10-Information Resources
4. Counseling Services
The counseling services component is an integral part of the instruction, which helps students acquire personal development skills. Both the instruction and counseling components are integrated. Intensive individual and group sessions provide students with educational, career and personal counseling to assist them in making appropriate choices in meeting their respective goals.
The AAAP program helps students to identify learning styles, effectively use informational resources and develop sound study habits.

The African American High School/College Program: In partnership with San Francisco Unified School District, the African American Scholastic Programs provide high school students with the opportunity to:
- Earn high school credits to complete high school graduation requirements.
- Earn college units towards an Associate in Arts Degree while still attending high school.
- Earn units which may begin to satisfy admissions requirements to a Baccalaureate Degree granting institution.

Each semester a variety of courses are offered in English, Math, History, Psychology, and Interdisciplinary Studies.

High school juniors and seniors are enrolled each semester with a recommendation from their high school principal or counselor. A program application is required and can be obtained from a participating SFUSD high school or from Rosenberg 209 at CCSF. Please see your high school counselor for more information.

The Summer Bridge Program is designed to assist high school students in the transition from high school to college. This program allows students to matriculate in the summer and enroll in college credit courses. The Summer Bridge Program is a six week summer program and students are eligible to enroll in a maximum of seven (7) units. Courses are pre-selected for program participants based on an English and Math placement exam prior to the beginning of the Summer semester.

Other support services that are provided are an orientation to college, a financial aid workshop, a campus tour, group and individual counseling sessions and the development of an educational plan.

After the successful completion of the Summer Bridge Program, participants are considered continuing students who will receive an early registration date for the following Fall semester.

There is no fee to graduating high school seniors; however, students must purchase required class text books and materials.

The Historically Black College/Universities (HBCU) Transfer Program is designed to provide CCSF students the opportunity to attend and graduate from CCSF, then transfer as a junior to an HBCU of their choice. CCSF/HBCU transfer students will participate in collaborative learning environment while earning a General Education Associate Degree and completing transfer requirements. The program provides a variety of support services that include individual and group counseling and student mentoring.

The Peer Mentoring Program provides peer mentoring for high school and CCSF students enrolled in African American Scholastic Programs. Students enrolled in the CCSF/High School program are mentored by college students making a successful transition from high school to college.

The Peer Mentoring Program provides CCSF students and SFUSD elementary students, grades 2-6, the opportunity to interact and develop positive relationships, to encourage younger students to stay in school and understand the benefits of a college education.

Counseling Services: AASP provides academic, career and personal counseling to all students who utilize AASP programs and services. Students meet with academic counselors on a regular basis to create educational and career plans and monitor their progress. Counselors are available by appointment or drop in sessions. Counselors’ schedules are available in Rosenberg 209.

APASS: Asian Pacific American Student Success Program
APASS offers services to Asian and Pacific Islander (A/PI) and all students in pursuit of academic success through early intervention and effective support services.

Our counseling services include:
- Academic, career, and personal counseling
- Bilingual/ bicultural counselors (Cantonese, Mandarin, Tagalog, and Vietnamese)
- Student educational plans
- Assistance with financial aid appeals
- Early alert referrals by instructors of APASS classes
- Referrals to campus and community services

APASS Center offers:
- Support services to students who are either on academic or progress probation
- APASS classes: English 91, 92/93 (95), 96, 1A; IDST 45, 50; Math E3, 40, and 60
- Study groups and tutoring
- Computer lab
- APASS and Mosaic (basic skills) Scholarships
- Bilingual/bicultural staff and student workers
- Outreach to A/PI high school and college students

The APASS Center is located in Batmale Hall, Room 208. For more information, call (415) 452-5620 or visit our website at www.ccsf.edu/apass

Latino Services Network (LSN)
The Latino Services Network (LSN) is dedicated to the development and implementation of effective support services and programs to
meet the academic, vocational, and career needs of the Latino student community.

Our services include:

**Bilingual (Spanish and English) Counseling**
- Academic, personal, and career
- Goal setting, educational plan development
- Graduation, certificate, and transfer information
- Bilingual (Spanish and English) college orientations
- AB 540 Counseling Services
- Workshops
- Outreach to SFUSD High Schools

**The LSN CLASS Project**
- Targeted sections for LSN students in English and Math classes.
- (Course offerings vary by semester). English courses address multicultural issues.
- Collaboration between students, counselors and instructors.

**The LSN Learning Center**
- Computer laboratory use for homework and research
- A friendly place to meet other students and study
- Educational and cultural events and workshops
- Assistance with financial aid
- Advocacy and referrals to campus and community services
- Book Loan Program
- Mosaic Scholarships

For more information, please call us at (415) 452-5335, email us at latino@ccsf.edu, visit our website at www.ccsf.edu/lsn, or come visit us in Cloud Hall, Room 364.

**TULAY (BRIDGE) Filipino-American Student Success Program**
The TULAY Program is a learning community with a Filipino-American experience & student success theme. TULAY provides counseling & mentoring services, and offers linked courses in English, Math, College Success & Philippine Studies. The Tulay Ate/Kuya Peer Mentor Project pairs you with a student peer that can help you navigate through classes and life at CCSF. The Faculty/Staff/Community Mentors volunteers provide academic support and career advising. Some services also available in Filipino (Tagalog). Our services include:

- Computer/Study Lab
- Academic & Personal Counseling
- Ate/Kuya (Big Brother/Big Sister) Peer Mentoring
- Faculty/Staff/Community Mentors
- Support in Math & English
- Community Service Opportunities
- Bilingual Services
- Private Study Room
- Philippine Studies, FAA, PEACE, UPASA, and Fill-Am Community Scholarships
- TULAY early registration classes: English 91, English 92, Math E3, Math 40, Math 60
- Learning community in Philippine Studies and PEP (Filipino/a Educational Partnerships) courses
- Recommended courses: IDST 30, PHST 30, IDST 45, IDST 42, PHST 20, Hits 37, Pil 10A, Pil 1, Psych 22, IDST 37, IDST 36

The TULAY Program is located in Cloud Hall, Room 363. For additional information call (415) 452-5922.

**General Counseling Department**
The General Counseling Department (GCD) addresses the needs of students at City College of San Francisco. Students can work with counselors to discuss their academic goals, and develop or revise educational plans. They can also discuss the requirements needed for a certificate, a degree, or transfer to a 4-year institution. counselors make referrals to helpful support services on and off campus and provide specialized workshops including probation, transfer planning, and Internet resources. The GCD offers both express counseling for short questions, and counseling by appointment for educational plans and more complicated academic planning issues. Students may call 452-5235 to make a counseling appointment. Counselors are available Monday-Thursday from 8 a.m. until 6:00 p.m. Counselors are available on the Ocean Campus in A201, C207 and Multi-Use Building Mezzanine.

**International Student Counseling Program**
Counseling services are available for International Students (F-1 Visa students). Counselors will assist new and continuing International Students with their academic, career, personal issues, and assist with understanding F-1 regulations which govern them. Additionally, counselors can assist students in resolving other problems of adjustment to college life and life in the United States. The International Student Counseling Program is located in MUB 101. For more information call 239-3942.

**Academic Counseling Department**
City College of San Francisco's New Student Counseling Department (NSCD) assists students entering the college with fewer than 24 units completed in the following ways: 1) Orienting the student to their educational choices, 2) Assisting students in the decision making process needed to begin their academic life on campus, 3) Discuss requirements for CCSF certificates, graduation, transfer to public and private institutions, 4) Support them in their academic life and career achievement goals, 5) Offer information regarding access to campus resources and student support services, 6) Through counseling, educational planning, workshops and classes, teach students about skills and strategies that support their academic success, 7) Support students problem resolution through appropriate counseling and referrals to personal counseling services as needed to enhance their success in college.

Our services include orientation to the college workshops, retention intervention classes for general and Basic Skills students, educational planning, student growth/development classes and short personal counseling sessions leading to appropriate referrals. Our goal is supporting student success.

Students are expected to go through the matriculation process as mandated by Title V of California Ed Code or waive their participation when they begin their studies here at CCSF. This process is comprised of the following steps:

1. Applying to the college
2. Taking a placement test or waiving testing appropriately
3. Attending an orientation workshop or doing online orientation
4. Seeing a counselor to assist with course selection
5. Registering for classes

City College of San Francisco offers counseling services at the following locations: Ocean Campus, Civic Center, Chinatown, Downtown Center, Evans Center, John Adams Center, Mission Center, and Southeast Center.

The Ocean Campus office is open Monday - Friday. To reach the Campus please call (415) 239-3296 for current hours. Call the main switchboard at (415) 239-3000 for other locations' counseling department numbers and contact each location directly for their office hours. Please see the City College of San Francisco map for campus locations. You may view our New Student Counseling Department website at the following address: www.ccsf.edu/nscd
Additional Counseling Services
The Athletic Counseling Services (239-3260) provides academic, career, educational planning, and personal counseling to male and female students who are members of City College's intercollegiate athletic teams.

Counseling for Gay, Lesbian, Bisexual and Transgender Students
Academic, career, and personal counseling is available with gay and lesbian identified counselors in the General Counseling Department (C207), as well as in the Disabled Student Programs and Services Department (DSPS), the Career Development and Placement Center (CDPC), and Extended Opportunity Programs and Services (EOPS). For more information, please call Sarah Thompson in C207 at 239-3320, or the Queer Resource Center, B201, at 452-5919.

Career Counseling Program
The Career Center (part of the General Counseling Department) provides career planning and job information services to students and alumni who want to best utilize their college/educational experience and prepare for their future careers/jobs. For a full description of the Career Center and its services online, visit the website: www.ccsf.edu/CareerCenters.

Help for Non-Majors (Undecided) or Career Changers: Students who have not yet chosen careers or majors, or who wish to change their careers or majors may obtain assistance with these decisions from the career counselors. Through individual or group counseling, career assessment and exploration, labor market information, career workshops, and career success courses (LERN 60, Career Success and Life Planning; 61, Orientation to Career Success; 62, Successful Job Search Techniques; 63, Career Counseling for Work Experience; 64, Financial Planning for Academic/Career Success; and 68, Career Coaching; and 1062, Job Skills, students will develop personal awareness and information essentials in making sound careers and major choices.

Disabled Students Programs and Services (DSPS)
In compliance with Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act (ADA), City College of San Francisco is committed to making programs, services and activities accessible for students with disabilities. DSPS provides reasonable accommodations and support services for students with verified disabilities. Services may include, but are not limited to, counseling, advocacy, priority registration, testing accommodations, classroom relocation, learning disability assessments, hearing screenings, sign language interpreters, real-time captioning, assistive listening devices, note takers, alternate formats (Braille, electronic text, Audio Books) for reading material, lockers, scooters, adaptive technology, adaptive furniture and special classes. Emphasis is given to those services which allow the student with a disability to fully participate in academic and vocational programs for which they are otherwise qualified. Students wishing to receive services through DSPS should schedule an appointment to meet with a counselor. Services are confidential. Students with disabilities who need to bring an animal on campus, other than a service animal as defined in law, such as a guide dog, need to check with the DSPS office.

The DSPS Accessible Computer Labs are designed for students with disabilities, but are open to all City College students, regardless of ability. The DSPS Accessible Computer Labs offer free non-credit instruction in adaptive computer software and/or hardware and tutorial software for the development of academic, vocational and daily living skills. City College has two DSPS Accessible Computer Lab locations: one on the Ocean Campus in Batmale Hall, Room 231, and the other at the John Adams Center, Room 104.

The DSPS Strategies Lab located on the Ocean Campus in Batmale Hall, Room 231, provides special classes with small group instruction on learning strategies. The classes (DSPS M and DSPS O, Diagnostic Learning) are designed for students with disabilities. The instructor and trained instructional aides assist students in applying learning strategies as they work on homework assignments.

DSPS has offices on the Ocean campus, John Adams, Mission and Chinatown centers. DSPS services are also available at other centers by appointment. For further information, for office hours or to request an appointment, call or visit one of the offices. The Ocean Campus DSPS office is located in the Rosenberg Library, Room 323, (415) 452-5481. The DSPS office at the John Adams Center is in Room 106, (415) 561-1001 (voice). To reach the Mission Center DSPS office in Room 161, call (415) 920-6038. To reach the Chinatown Center DSPS in Room 104, call (415) 395-8606. Hearing impaired students may contact DSPS by email at deafserv@ccsf.edu. A Sorenson public Video Phone is available for students who are deaf and use American Sign Language. It is located inside the Rosenberg Library on the 3rd Floor near the restrooms.

To view the Campus Access Guide and updated accessibility information, the DSPS Student Handbook, policies and procedures or Ocean and John Adams office hours, please visit the DSPS website at www.ccsf.edu/dsps. Should you have questions or encounter difficulty regarding access, please contact the DSPS Accommodations Specialist at (415) 452-5481.

Extended Opportunity Programs and Services (EOPS)
The Extended Opportunity Programs and Services (EOPS) assists low-income, educationally under-prepared students by providing support services that are over, above, and in addition to those provided by the College as a whole. A state-funded program, EOPS provides counseling, one-on-one tutorial, priority registration, orientation to college, financial aid advising, book services, transfer workshops, and CSU and UC transfer application fee waivers. EOPS coordinates its resources with other CCSF departments and programs to enhance student success. In addition, eligible EOPS/TANF students may participate in the Cooperative Agencies Resources for Education (CARE), a program which provides counseling, advising, and transportation assistance to EOPS students who are single head of household with dependent(s) less than 14-years-old. Noncredit and international students are ineligible for EOPS services. The Extended Opportunity Programs and Services offices are located in the EOPS Center adjacent to Smith Hall. Go to our webpage at http://www.ccsf.edu/Services/EOPS for more information, or call (415) 239-3561.

Student Health Services
Student Health Services assists students in achieving their educational goals by providing services that address their physical and emotional health needs. Additionally, students are informed of community resources with the goal of becoming more effective health care consumers.

Medical/Nursing Health Services
The following services are only for currently enrolled students taking credit classes.

Services include campus emergency care, first aid, nursing assessment and treatment of common acute illnesses and infections, TB tests, vision tests, blood pressure screening, selected lower cost immunizations (MMR, Td, Tdap, Twinrix, HepA + HepB), reproductive health care, health promotion programs and referrals to specialists by appointment. Nurse practitioners are also available for consultation with faculty regarding their students. A part-time physician is available on limited basis and serves as a consultant for the nurse practitioners.
Family Planning Clinic and Sexually Transmitted Infections (STI) services for both men and women are available to those who qualify for the State Family P.A.C.T. Program. This service includes Pap testing, STI screening, breast exam, and birth control methods.

For appointments and hours of operation call 239-3110. Most services are without additional charge. However, some services such as lab tests are charged a discounted fee.

When further off-campus evaluation or treatment is needed, students will be referred to their private health care provider or a community health agency. Students are financially responsible for all of their off-campus health care charges. For additional information, see our website at www.ccsf.edu/Services/Student_Health.

Psychological Services
The following services are only for currently enrolled students taking credit classes.

The goal of Psychological Services is to support in student retention and contribute to the psychological well-being of the campus community. As such, our services include short-term psychotherapy for individuals and couples, crisis intervention, assessment, information, referrals, and consultation with faculty regarding student concerns. Each semester staff conducts groups on topics such as procrastination, relationship problems, managing anxiety and panic attacks, stress reduction, and meditation. There are also workshops on test anxiety. Appointments can be scheduled at the Student Health Center (HC 100), or by calling (415) 452-5386.

HIV/STI Prevention Studies
HIV/STI Prevention Studies is a program in the Health Education Department. We serve the CCSF campus to deliver prevention activities, services, and advocacy through the Gender Diversity Project and Project SAFE (ICC clubs).

The program offers a certificate “Infectious Disease Prevention in Priority Populations” that reflects the emerging area of front line community health training in infectious disease prevention and management; primarily HIV, STIs, Hepatitis and TB.

The Link Center is a student resource center providing free condoms and safer sex supplies as well as information and referrals for HIV and STI testing. The link Center also provides computers, mentoring/tutoring and meeting space for students.

The Link Center and HIV/STI Prevention Studies is located in MUB 301 with hours on Monday–Thursday 10am–5pm. Telephone (415) 452-5070 or (415) 452-5202.

Teacher Prep Center
The Teacher Prep Center at City College of San Francisco is located in the Multi-Use Bldg. on Phelan Ave. Room 249 on the Ocean Campus. A program of the Child Development and Family Studies Department, the Center provides resources, workshops, counseling, advising, career planning and job information, coursework, outreach and support to future teachers. Current programs include: the Metro CDEV Program, The Youth Worker to Teachers Program and information on the certificates, permits and credentials required in the field. Co-located with the Early Childhood Professional Development Project, which assists all future and current ECE staff in San Francisco, the Center provides assistance to students and community members interested in entering the field of ECE, T-K, elementary, secondary, or CTE teaching. Call 452-5605, PDP or 239-3890, Teacher Prep, for additional information or visit the web at: www.ccsf.edu/Departments/Child_Development.

Transfer Center
Students seeking to transfer to baccalaureate degree-granting institutions upon completion of lower division course requirements may obtain specialized resources at the Transfer Center located in the Science Hall, Room 132, Telephone 239-3748. Information concerning academic majors, general education requirements, and transfer admissions policies can be researched through the Center’s reference library, computer lab, and pre-admissions advising with college representatives. Special programs of the Transfer Center include the annual Transfer Day college fair and university campus tours. Please refer to the Transfer Center’s monthly calendar of workshops and events at www.ccsf.edu/Services/Transfer_Center.

Transfer Admission Guarantee (TAG) Programs. TAG programs are designed to facilitate the admissions process for CCSF students prior to submitting an official application to the university. Students can take advantage of guaranteed early admission opportunities with a variety of public and private institutions: UC Davis, UC Irvine, UC Merced, UC Riverside, UC San Diego, UC Santa Barbara, UC Santa Cruz, St. Mary’s College, and University of the Pacific. In most cases, eligible students must be permanent residents of the U.S. who are seeking their first bachelor’s degree. Obtain additional TAG eligibility requirements and applications from the Transfer Center.

Concurrent Enrollment Program. CCSF has this program with Mills College in Oakland and the University of California, Berkeley to provide qualified students the opportunity to experience courses at these institutions. The Mills College program’s eligibility requirements are completion of 12 units of CSU or UC transferable course work with a minimum 2.0 gpa, eligible for, enrolled in, or have completed English 1A, and students must be enrolled in 12 units (including the Mills course) during the semester of participation. Students may take one course per semester for a total of four. The UC Berkeley program’s eligibility requirements are completion of 20 UC transferable units with a minimum 2.4 gpa, eligible for, enrolled in, or have completed English 1A, and students must be enrolled in 12 units (including the UCB course) during the semester of participation. Students may take one course per semester for a total of two. Call 415-239-3334 for more information or visit the Transfer Center in Science Hall 132.

Additional Student Programs And Services
Alumni Relations Program
You are an alumnus of CCSF if you graduated, transferred, received a degree or certificate, or just attended a few classes. The Alumni Relations Program engages in a variety of activities to meet your needs.

Specifically, the Alumni Relations Program maintains an ongoing relationship with alumni by: informing alumni of important services the College offers to them, such as free access to the Career Development and Placement Center; alerting alumni to College and department activities and other professional development opportunities; tracking alumni success stories; and offering opportunities for alumni to contribute their time, talent, and resources to help other students succeed and realize their educational goals.

If you wish to receive periodic news and updates or share your success story via e-mail, send a note to alumni@ccsf.edu or visit www.ccsf.edu/alumini. For more information, call (415) 452-4711.

Child Care Services
The Child Development & Family Studies Department administers child development centers in San Francisco for children of CCSF students and other low income families. These centers function as labschools for child development students. The centers feature subsidized child care and development services and are full time at most locations. Children between the ages of 3-5 years are eligible for services and are admitted on a low income priority basis. Care for toddlers is only available at the Orfalea Family Center at the Ocean Campus. Parents can learn about how to enroll their children by calling (415)
Learning Resources and Student Services

561-1895. The Department also features Parent/Child Observation courses at 8 sites throughout the city for parents who wish to participate in adult education opportunities with their children. For further information on specific Child Observation classes operated by the Department, please call the non-credit office at the Orfalea Family Center, Room 203, (415) 452-5905 or the main office at Ocean Campus, Multi-Use Bldg., Room 249 (415) 239-3172 or visit our website at: www.ccsf.edu/Departments/Child_Development.

Lactation Center
The Child Development & Family Studies Dept. operates "Effie's Room" in the Orfalea Family Center (OFC 200) on the Ocean Campus. The room provides access to new breastfeeding moms who need to use a private lactation area. Baby-changing facilities, a refrigerator and privacy are available during the day. The area is open on a first-come, first-serve basis during the school year and is generally open between 9-4 daily. Funded by the Orfalea Foundation, the lactation center provides support to new breast-feeding moms who are working or attending school. Employees and students are invited to use the facility. Questions on usage can be directed to 452-5905 or 239-3172.

HARTS Program
The Homeless/At Risk Transitional Students Program (HARTS) serves particularly needy students. A recent referral letter from a local agency along with our application is all that is needed to apply. We assist with enrollment, financial aid, transportation, clothing, and cafeteria food. Advocacy for academic or administrative problems is provided, and personal issues are given an empathetic hearing. Advising in all these matters is essential to maintain students in programs and keep up their grades. Referrals are provided for shelters, low income housing, meals, and other food resources away from the College. Mentoring from other students in similar situations provides the benefit of experience to those unable to cope affectively with their daily needs. Student Union MLK Center, Ocean Campus. thehartsprogram@gmail.com. Ph. 415 452-5355.

Math Bridge Program
The purpose of this two-semester program is to assist students in the successful completion of transfer-level statistics and to increase the number of transfers to baccalaureate colleges and universities. The program targets African American, Latino, Filipino, and Native American students, however, all students are welcome to apply. Math Bridge begins each fall semester and finishes at the end of the following spring semester. Interested students must attend an orientation and submit an application during the prior spring semester in order to enter the program the following fall semester. The schedule for orientations is posted at math.ccsf.edu/bridge.

Math Bridge is not a remedial program. The program provides City College students an opportunity to take Preparation for Statistics (MATH 45) and Probability and Statistics (MATH 80) in a cohort community, with attention to affective issues that often impact students' success in math courses. Contact mathbridge@ccsf.edu for more information regarding admission to the program.

Orientation Classes
To help students receive a more comprehensive understanding of the College, counselors offer Orientation Classes which thoroughly acquaint students to the demands of academic programs, the College's various services, including the development of personal, career, educational goals including a transfer plan, and obtaining job-seeking skills. Orientation classes are also offered through the Career Development and Placement Center, the Extended Opportunity Programs and Services (EOPS), and through New Student Counseling.

Peer Advisors
The Peer Advisors are a group of students who have been trained extensively to offer support toward students' success at CCSF. They provide numerous services such as assistance with orientation workshops, registration, financial aid forms, and general campus information. The Peer Advisors are located in the Information Center on the second floor of Conlan Hall. For more information call (415) 239-3296.

Peer-Mentoring and Service-Learning
The Office of Mentoring and Service-Learning offers two types of programs to increase student success and transfer, and enrich the college experience with hands-on application of classroom learning. In the Peer-Mentoring program, a student is matched with a peer mentor. The peer-mentor is a student who has experience in a particular course or program, and who provides information, advice, support and encouragement. The peer-mentor is selected by a Project Sponsor for the course or program. Mentors are currently available to students taking specific courses in science, social science, liberal arts, and vocational programs.

In the Service-Learning program, students enrolled in courses offering service-learning are placed in the community, where they apply both academic and practical skills for the benefit of society. Service-Learning integrates community service, and civic engagement with academic instruction and campus-community outreach so that each strengthens the other, and provides time for reflection and critical thinking while making significant contributions to individuals, organizations, and neighborhoods. For example, students taking biology courses may contribute to habitat restoration. In Project SHINE (Students Helping in the Naturalization of Elders), students in political science, psychology, sociology, foreign languages, and health prepare elders to take the citizenship exam.

Students involved in service-learning or volunteer opportunities may enroll (when available) in IDST 12 - Reflection on Service-Learning to share their experiences with other students (see course description). For more information about mentoring or service-learning opportunities, call (415) 239-3771.

Project SURVIVE
Project SURVIVE is a peer education program dedicated to promoting healthy relationships and ending sexual violence, especially rape and battery in intimate relationships. For more information call (415) 239-3899. Located in Cloud Hall, Room 402.

Puente Program
The Puente Project is an academic and community leadership program designed to increase the number of community college students transferring to four-year colleges and universities. Puente meets this goal through a writing, counseling, and mentoring program taught and conducted by a specially trained English instructor and a counselor. The program is open to all interested students. For more information call Griselle Schmidt-Fonseca (415) 239-3035.

Dr. Betty Shabazz Family Resource Center
The Dr. Betty Shabazz Family Resource Center empowers students with children through information, resources, and support and builds a stronger student parent community on campus. The Center is student-run and provides the following services: supervised children's activities, use of FRC computers, job referrals, information about CalWORKs, peer mentoring, and support groups. For further information, come to the Student Union, Room 202, or call (415) 239-3109.

Queer Resource Center
The Queer Resource Center seeks to empower the lives of LGBTQQI (lesbian, gay, bisexual, transgender, queer, questioning, intersex)
students at CCSF by uniting the diverse individuals in the community across gender, race, age and economic standing, religion, and ability differences. It provides access to a support system of peers and allies and strengthens the LGBTQQI community at CCSF. In addition, the QRC acts as a center of education for and about the queer community through peer-led teachings, workshops, and other such events. The Queer Resource Center is a safe place for queer and transgender students and all, welcoming the opportunity to outreach to its community. For further information, come to Bungalow 201, or call (415) 452-5723.

**Students Supporting Students (S Cube or S³)**

Students Supporting Students is the only student-initiated peer mentoring program on the Ocean Campus. S³ Peer mentors help students navigate their way through CCSF by providing vital information on topics such as financial aid, academic support, campus clubs/organizations, and other campus resources through a variety of ways including workshops and campus-wide events. The program's unique student perspective provides a welcoming environment for students who may feel uncomfortable going to other resources on campus. S³ was established through the advocacy and organizing of students affiliated with underrepresented communities at CCSF. Students Supporting Students' goal is to increase the transfer rates of these communities to 4-year universities and empower them during their time at CCSF. For further information, visit the Student Union, Room 203, or call (415) 239-3660.

**Veterans Services**

The Veterans Center is located in Cloud Hall, room 333. The Veterans Resource Center is located next door in Cloud Hall, room 332. Please go to the college website at www.ccsf.edu for more information about Veterans Services.

Veterans, veterans’ dependents and eligible persons may apply online for benefits directly to the VA at www.gibill.va.gov for application and complete details.

Students must also apply for admission to City College of San Francisco online at www.ccsf.edu, for assistance contact the Office of Admissions and Records, Conlan Hall, Room E107.

**Available Benefits:**

1. GI Bill – Active Duty Educational Assistance Program (Chapter 30)
2. Vocational Rehabilitation, Veterans with Service Connected Disabilities (Chapter 31)
3. Post 9/11, (Chapter 33) Detailed chapter 33 information is online at www.gibill.va.gov. Students who believe they may be eligible for chapter 33 should review chapter 33 online and call the Education Call Center (1-888-442-4551) with any questions.
4. Survivors and Dependents of Veterans’ (who are either 100% disabled or died due to service-related conditions) Educational Assistance Program (Chapter 35)
5. Selected Reserve Educational Assistance Program (Chapter 1606)
6. Reserve Educational Assistance Program (REAP) Chapter 1607

Please inquire at the VA Web site (www.gibill.va.gov) or at the Veterans Educational Benefits Office for further details regarding benefits. Eligible disabled veterans may qualify for Chapter 31 Vocational Rehabilitation Benefits. Disabled veterans are encouraged to contact the main DVA Regional Office for more information at 1-800-827-1000.

**Credit for Military Training.** City College will grant six semester units of credit and waive the Physical Skills graduation requirement (Area G2) for students who present to the Office of Veterans Educational Benefits official documentation showing that they have completed one year or more of active duty in any of the Armed Forces of the United States. Veterans who have completed military-training courses may be awarded up to a maximum of ten additional units. These are based on the recommendations made by the American Council of Education. Students may use such credit in partial unit satisfaction of the requirements for the degree of Associate in Arts or Associate in Science. Since many universities and colleges do not accept credit that other schools have granted for military service, students who desire to transfer such credit should consult the policy of the school to which they intend to transfer.

**Academic Progress Policy for Veteran Students.** If the student has been on either academic probation or on progress probation or on both academic and progress probation for more than two consecutive semesters, he or she will have their veteran's education benefits terminated. Appeals to the termination of veteran's educational benefits must be submitted and addressed to the Dean overseeing the Veterans Benefits Office. All appeals will be reviewed on a case-by-case basis.

**Women's Resource Center**

The Women's Resource Center is a safe place that provides information to women about resources available to them both on and off campus. The Center houses a lending library of nearly 1,000 books by and about women. It sponsors campus-wide events and hosts various support groups. The Center is run by students who work closely with a faculty advisor from the Women's Studies department. For more information, call (415) 239-3112. Located in Smith Hall, Room 103-104.
ASSOCIATE DEGREE
GRADUATION REQUIREMENTS

City College of San Francisco is dedicated to the principle that the highest quality education possible be provided to all students. Central to this philosophy is the belief that all students granted an associate degree should be required to study a variety of general breadth courses in addition to those courses which are required by a student’s major. These courses shall introduce the student to the languages, the methods of inquiry, and the achievements of the major academic disciplines. Consistent with this philosophy, it is the intent of the College to involve students in the various disciplines in such a way that students will develop an interest in learning that will continue and expand throughout their lives.

Goals of the General Education Program
Through its general education program, the College intends to graduate students who have developed:

a. skills in the principles and applications of language toward logical thought, clear and precise expression, and critical evaluation of communication in whatever symbol system the student uses.

b. English language and information competency skills so that they can communicate clearly, both orally and in writing; can evaluate what they hear and read; and can acquire, interpret and use information appropriately.

c. an appreciation and understanding of the scientific method, of the achievements of at least one of the natural sciences, and of the relationships between the natural sciences and other human activities.

d. an appreciation and understanding of the methods of inquiry used in the social and behavioral sciences and of the ways people act and have acted in response to their societies.

e. an appreciation and understanding of the ways in which people throughout the ages and in different cultures have responded to themselves and to the world around them through artistic and cultural creation, and have developed aesthetic sensitivity and skills as well as an ability to make informed value judgments.

f. an appreciation and understanding of American history and government so that they can be responsible and active citizens.

g. an appreciation and understanding of the physical skills and health knowledge essential for mental and physical well-being.

h. an appreciation and understanding of the history, culture, and perspective of diverse ethnic groups, of women and of gays, lesbians and bisexuals.

Catalog Rights
City College of San Francisco issues a new catalog yearly. The courses required for a specific degree or certificate may change from one catalog to the next and often change during a student’s tenure. For the purposes of meeting degree or certificate requirements based on catalog rights, students may elect to meet the requirements of either:

1. The catalog which was in effect at the time the student began his/her course work at City College of San Francisco, or

2. Any catalog that is or has been in effect during the time that the student has maintained continuous enrollment before graduation with the associate degree.

Students maintain catalog rights through continuous enrollment at City College of San Francisco prior to graduation with the associate degree. Continuous enrollment is defined as enrollment in at least one course per academic year (fall or spring semester only). Any of the following academic record symbols (A–F, P, NP, I, UG, IP, RD, W and MW) shall constitute continuous enrollment. Documented military or medical leave, not exceeding two years, will not be considered an interruption of enrollment. If an interruption in enrollment occurs, or if the student completes the associate degree, catalog rights are re-established based on the date of re-enrollment. Catalogs from years prior to re-enrollment are no longer available once an interruption in enrollment or completion of the associate degree occurs. Students planning to transfer to a four-year institution are advised to review that institution’s catalog for “rights” accorded community college transfers. City College of San Francisco reserves the right to not offer course work which has been offered in the past.

*Students who initially enroll in summer session may claim catalog rights for the preceding academic year. Likewise, students who re-enroll in summer session after an interruption in continuous enrollment may also claim catalog rights for the preceding academic year.

Graduation Requirements
A student may be graduated from City College of San Francisco by satisfying the requirements established by the Board of Governors of the California Community Colleges, the Governing Board of the San Francisco Community College District, and the faculty of the College. Two paths are available:

Option 1. CCSF Associate Degree
CCSF offers the Associate in Arts (AA) and Associate in Science (AS) degree. Students must complete the CCSF General Education requirements, the major requirement, 60 degree-applicable units, and other graduation requirements.

Option 2. CCSF Associate Degree for Transfer
CCSF offers Associate in Arts for Transfer (AA-T) and the Associate in Science for Transfer (AS-T) degrees. Students must complete the requirements listed below, including completion of either the CSU General Education or IGETC requirements, the major requirement, and 60 degree-applicable and CSU transferable units.

The following chart summarizes the two options. Details on the specific requirements of these two options follow the chart.
## Associate Degree Graduation Requirements Overview

<table>
<thead>
<tr>
<th></th>
<th>Option 1: CCSF Associate Degree Associate in Arts (AA) or Associate in Science (AS)</th>
<th>Option 2: CCSF Associate Degree for Transfer Associate in Arts for Transfer (AA-T) or Associate in Science for Transfer (AS-T)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. General Education</strong></td>
<td>Completion of City College of San Francisco General Education pattern, Areas A-H.</td>
<td>Completion and certification of California State University (CSU) General Education pattern, Areas A-E or Completion and certification of the IGETC pattern, Areas 1-6 (CSU Transfer: Complete IGETC Areas 1-5; UC Transfer: Complete IGETC Areas 1a, 1b and 2-6). Advisory Note: Students transferring to CSU are strongly encouraged to complete the CSU American Institutions and U.S. History requirement.</td>
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<tr>
<td><strong>2. Mathematics</strong></td>
<td>Satisfactory math placement score, or completion of an approved math course, or satisfactory score on SAT, ACT, or Advanced Placement (AP) exam.</td>
<td>Completion of Area B4 of the CSU General Education pattern, or Area 2 of the IGETC pattern.</td>
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<tr>
<td><strong>3. Major</strong></td>
<td>Completion of a major program specified by the department; or completion of 18 semester units in one of the four Liberal Arts and Sciences Areas of Emphasis.</td>
<td>Completion of an AA-T or AS-T program as specified by the department.</td>
</tr>
<tr>
<td><strong>4. Units</strong></td>
<td>A minimum of 60 semester units of degree applicable courses.</td>
<td>A minimum of 60 semester units that are both degree applicable and CSU transferable. Advisory Note: Students planning to transfer to UC must have 60 UC-transferable units to meet UC Admission requirements.</td>
</tr>
<tr>
<td><strong>5. Grade Point Average</strong></td>
<td>Cumulative grade point average of at least 2.0, including a grade of C or higher in each course taken towards the Major Requirement.</td>
<td></td>
</tr>
<tr>
<td><strong>6. Residence</strong></td>
<td>Completion at CCSF a minimum of 12 degree applicable semester units required for graduation.</td>
<td></td>
</tr>
<tr>
<td><strong>Petitioning for the Associate Degree</strong></td>
<td>Submission of a Petition for Graduation Form to the Office of Admission and Records by the deadline.</td>
<td></td>
</tr>
</tbody>
</table>
CCSF Associate Degree
1. General Education Requirements

General educational courses are required in the following areas:
A. communication and analytical thinking,
B. written composition and information competency,
C. natural sciences,
D. social and behavioral sciences,
E. humanities,
F. United States history and government,
G. health knowledge and physical skills, and
H. ethnic studies, women's studies, and lesbian, gay, bisexual and transgender studies.

Most general education areas require a minimum of 3 semester units of coursework. However, a 4 quarter-unit course (transferred in from another college) may be used to satisfy a 3-semester-unit general education area. Students transferring in quarter-unit courses must complete, at minimum, the total numerical equivalent of 18 semester units (e.g., 27 quarter units) of general education coursework.

The requirement in each of the areas may be satisfied in any semester in which the student is in attendance, subject to the satisfaction of prerequisites.

Students satisfy the information competency requirement by successfully completing the Area B: Written Composition requirement, which includes teaching and assessment of specific information competency skill areas. Students who transfer in with a course approved as equivalent to English 1A have met this requirement.

A course listed in more than one of the areas may be offered in satisfaction of the requirement in only one of those areas. Exception: If an Area H course selected is also listed in Areas A through G, the course may be used to satisfy this requirement and one other area.

The student may satisfy the requirement for a general education course or courses by offering credit earned by examination, provided that he has earned that credit in conformance with the College regulations governing credit granted in this manner.

Area A: Communication and Analytical Thinking Requirement

Upon completion of this coursework, a student will be able to:
1. use the principles and application of language toward logical thought
2. demonstrate clear and precise expression
3. critically evaluate communications in whatever symbol system the student uses

To satisfy the graduation requirement in Communication and Analytical Thinking, the student must complete at least three semester units from the following courses.

- American Sign Language 1A, 1B
- Biotechnology 108A
- Broadcast Electronic Media Arts 101
- Business English 74, 76
- Business Mathematics 66, 68
- Career Development 60, 61*, 62*
- Chemistry 17
- Child Development 108A, 108B
- Chinese 1, 1A, 1B, 2A, 2B, 3, 3A, 3B, 4, 4A, 4B, 10A, 10B, 10C, 10D, 12A, 12B, 12C, 14A, 14B, 14C, 16, 17, 31A, 31B
- Computer Networking and Information Technology 131, 132
- Design 110
- Economics 5
- Engineering 38
- Engineering Technology 50, 108A, 108B
- English as a Second Language 79
- French 1, 1A, 1B, 2, 2A, 2B, 3, 3A, 3B, 4, 10A, 10B, 10C, 10D, 10E, 11A, 11B, 22
- German 1, 1A, 1B, 2, 2A, 2B, 3, 3A, 3B, 4, 4A, 4B, 10A, 10B, 10C, 10D, 11A, 11B
- Interdisciplinary Studies 50
- Italian 1, 1A, 1B, 2A, 2B, 3A, 3B, 4A, 4B, 10A, 10B, 10C, 10D, 15A, 15B
- Japanese 1, 1A, 1B, 2, 2A, 2B, 3, 3A, 3B, 4, 4A, 4B, 10A, 10B, 10C, 10D, 16
- Journalism 19, 26
- Learning Assistance 50
- Library Information Technology 51
- Mathematics 40, 50, 55, 60, 70, 75, 80, 90, 92, 95, 97, 100A, 110A
- Microcomputer Applications for Business 160
- Music 3A, 29
- Philosophy 2, 4, 12A, 40
- Pilipino 1, 10A, 10B, 10C
- Psychology 5
- Russian 1, 1A, 1B, 2, 2A, 2B, 3A, 3B, 10A, 10B, 10C, 10D, 15A, 15B, 21, 21A, 21B, 22, 22A, 22B
- Spanish 1, 1A, 1B, 2, 2A, 2B, 3A, 3B, 5, 5S, 7, 10A, 10B, 10C, 10D, 31, 31A, 31B, 32
- Speech 1A, 3, 4, 6, 11, 12, 20
- Supervision and Business Management 234
- Visual Media Design 103

*Only partially satisfies number of units required for this area

Area B: Written Composition Requirement

Upon completion of this coursework, a student will be able to:
1. develop a topic using non-narrative writing techniques, using abundant detail and examples, including comparison, summary, argument, analysis and definition.
2. show control of all major conventions of standard English grammar usage and punctuation.
3. obtain appropriate information, evaluate the credibility and accuracy of information, and document external sources using a standardized citation format.

The student may satisfy the graduation requirement in Written Composition and information competency in either of these two ways:
1. Completing English 1A with a grade of C or higher
2. Scoring:
   - 3, 4 or 5 on the Advanced Placement Examination in Language & Composition; or
   - 3, 4 or 5 on the Advanced Placement Examination in Literature and Language.

While English 1A satisfies this requirement, students intending to transfer to a four-year institution may need to complete an additional critical thinking course.

Area C: Natural Sciences Requirement

Upon completion of this coursework, a student will be able to:
1. apply scientific inquiry and investigation of evidence to critically evaluate scientific arguments
2. communicate scientific ideas and theories effectively
3. apply scientific principles, theories, or models to explain the behavior of natural phenomena
4. apply scientific knowledge and reasoning to human interaction with the natural world and issues impacting society.
To satisfy the graduation requirement in the Natural Sciences, the student must complete at least three semester units from the following courses.

Anatomy 14, 25
Anthropology 1
Astronomy 1, 4, 14, 16*, 17, 18, 19
Biology 9, 11, 15, 30, 31, 32, 33, 40, 100B
Botany 10
Chemistry 32, 40, 101A, 103A, 110
Ecology 10, 20
Energy 3
Genetics 10, 15
Geography 4, 7
Microbiology 10, 12, 51*
Nutrition 12, 51*, 52
Oceanography 1
Ornamental Horticulture 76, 77
Paleontology 1
Physical Science 11
Physiology 1, 12, 67
Sustainability 31
Zoology 10
*Only partially satisfies the number of units required for this area.

Area D: Social and Behavioral Sciences Requirement

Upon completion of this coursework, a student will be able to:

1. exhibit an understanding of the method of inquiry used by the social and behavioral sciences.
2. critically evaluate the ways people act and have acted in response to their societies
3. demonstrate an understanding that actions, thinking, and feeling are culturally conditioned
4. compare how societies and social subgroups operate

To satisfy the graduation requirement in the Social and Behavioral Sciences, the student must complete at least three semester units from the following courses.

Academic Achievement Personal Success 100
Administration of Justice 57, 59, 67
African American Studies 30, 31, 40, 55, 60
American Civilization 11A, 11B
American Studies 5
Anthropology 2, 3, 3AC, 4, 8, 11, 12, 15, 20, 25
Asian American Studies 6, 20, 21, 25, 27, 30
Asian Studies 1
Broadcast Electronic Media Arts 104
Child Development 53, 67, 68
Economics 1, 6, 10, 25, 30
Fashion 28*
Geography 4, 7
Health Education 6, 10, 30, 36, 48, 52, 54, 97, 221, 231
Interdisciplinary Studies 7, 17, 28G, 29, 30, 31, 37, 45, 80A*, 80C*, 80D*, 80E*, 80F*, 80G*, 81B*
Labor and Community Studies 15, 70A, 70B, 71B*, 74, 78B*, 85*, 88, 91D*, 100
Latin American and Latino/a Studies 1, 9, 10, 11, 13, 14, 15
Lesbian/Gay/Bisexual/Transgender Studies 5, 9, 10, 21, 24, 30, 50, 60
Philippine Studies 20, 30
Physical Education 13
Political Science 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 12, 13, 18, 20, 22, 25, 35, 43, 45, 46, 47, 48, 53A
Psychology 1, 4, 10, 11, 14*, 15*, 17*, 21, 23, 25, 26, 40
Sociology 1, 2, 3, 25, 30, 35
Speech 5
Women's Studies 25

*Only partially satisfies the number of units required for this area.

Area E: Humanities Requirement

Upon completion of this coursework, a student will be able to:

1. exhibit an understanding of the ways in which people through the ages in various cultures have created art
2. demonstrate an aesthetic understanding
3. make informed value judgments
4. create an example of linguistic expression or philosophical reasoning
5. contribute to the disciplines of fine and performing arts and analytical or creative writing

To satisfy the graduation requirement in the Humanities, the student must complete at least three semester units from the following courses.

American Civilization 11A, 11B
Architecture 31A, 31B, 32
Art 101 through 109, 116, 118, 123, 125A, 126, 130A, 140A, 146A, 160A, 170A, 180A
Asian American Studies 6, 10, 20, 30
Asian Studies 11, 12
Broadcast Electronic Media Arts 103, 106
Chinese 1, 1A, 1B, 2, 2A, 2B, 3, 3A, 3B, 4, 4A, 4B, 10A, 10B, 10C, 10D, 12A, 12B, 12C, 14A, 14B, 14C, 16, 17, 31A, 31B, 39
Cinema 18, 20A, 20B, 21, 22, 23A
Classics 35
Dance 30, 32
Design 101, 105, 110
English 20, 30B, 36, 43, 44A, 44B, 50, 55, 57, 58, 60
Fashion 23
French 1, 1A, 1B, 2, 2A, 2B, 3, 3A, 3B, 4, 10A, 10B, 10C, 10D, 10E, 11A, 11B, 22, 41, 42
German 1, 1A, 1B, 2, 2A, 2B, 3, 3A, 3B, 4, 4A, 4B, 10A, 10B, 10C, 10D, 11A, 11B
Graphic Communications 21
Humanities 7, 8, 11, 12, 20, 25, 35, 41A, 41B, 48
Interdisciplinary Studies 3, 4, 14, 27A, 27B, 29, 30, 36, 38, 42, 44, 46, 47
Interior Design 138
Italian 1, 1A, 1B, 2, 2A, 2B, 3A, 3B, 4A, 4B, 10A, 10B, 10C, 10D, 15A, 15B
Japanese 1, 1A, 1B, 2, 2A, 2B, 3, 3A, 3B, 4, 4A, 4B, 10A, 10B, 10C, 16, 39
Labor and Community Studies 93A, 104A
Latin American and Latino/a Studies 1, 14
Lesbian/Gay/Bisexual/Transgender Studies 11, 12, 15, 18, 20, 25, 55, 77
Philippine Studies 30
Philosophy 2, 4, 25A, 25C
Photography 50A, 50B, 100
Pilipino 1, 2, 10A, 10B, 10C, 39A, 39B
Area F: United States History and Government Requirement
Upon completion of this coursework, a student will be able to:
1. examine, summarize, and evaluate American history
2. examine, summarize, and evaluate American government
3. examine and understand the importance of participating in civic duties and responsibilities based on historical and political precedent

To satisfy the graduation requirement in United States History and Government, the student must complete at least three semester units from the following courses.

- African American Studies 60
- American Civilization 11A, 11B
- Asian American Studies 20
- History 1, 9, 12A, 12B, 17A, 17B, 21, 41A, 41B, 45
- Labor and Community Studies 70, 70A, 70B
- Latin American and Latino/a Studies 1
- Political Science 1, 46

Area G: Health Knowledge (G1) and Physical Skills (G2) Requirement
Upon completion of this coursework, a student will be able to:
1. examine, summarize, and value health information essential for mental and physical well being.
2. examine, summarize, and value the physical skills essential for mental and physical well being.

To satisfy the graduation requirement (1–3 units) in Physical Skills and Health Knowledge a student must complete one course from area G1 and one course from area G2. If in fulfilling this requirement a student selects courses which total more than three units, the additional units may be counted towards the 60-unit graduation requirement.

Area G1
- Anatomy 14
- Child Development 107
- Culinary Arts and Hospitality Studies 244
- Health Education 10, 25, 27, 33, 36, 48, 53, 54, 97, 176, 177, 221
- Interdisciplinary Studies 17
- Nutrition 12, 51, 52
- Physical Education 6, 14, 20

Area G2
- Dance 34A, 100A–200
- Emergency Medical Technician 12, 14, 21
- Fire Science 17
- Health Education 17, 18, 50, 67
- Labor and Community Studies 101
- Physical Education 2, 60–300
- Physical Education Athletics 60–100
- Psychology 9, 17
- Women's Studies 55

The general education graduation requirement for Area G, Health Knowledge and Physical Skills, may be waived for those students in career technical or occupational education programs who have completed thirty semester units at the College. A petition must be filed with the program adviser, or the person who maintains the students' official file. Approval is based upon the hardship imposed by the number of units required by the career technical program. The Vice Chancellor of Academic Affairs or his/her designee, shall review the approved petition. The petition and review processes are to be completed no later than the end of the semester prior to the semester in which the student graduates. The waiver applies only to students who are petitioning for the Associate Degree with a career technical major. Area G1 may be waived upon successful completion of a competency examination. Students should contact their counselor or program adviser for additional information.

The Area G2 Physical Skills graduation requirement may be waived for those students who have completed one year or more of active duty in any of the Armed Forces of the United States and who present official documentation of this service to the CCSF Office of Veterans Educational Benefits.

Area H: Ethnic Studies (H1), Women's Studies (H2), and Lesbian, Gay, Bisexual, and Transgender Studies (H3)
Upon completion of this coursework, a student will be able to:
1. identify and compare the historical and cultural/aesthetic experiences of women, different ethnic/racial minority groups, lesbians, gays, bisexual, and transgendered persons
2. identify and compare personal value systems and/or styles of creative expression to those of other ethnic/racial groups, women, lesbians, gays, bisexual, and transgendered persons
3. recognize the diversity of attitudes and values which are projected in verbal and nonverbal behavior, and the dynamics of interpersonal interactions from others' perspectives
4. identify ethnic/racial, gender, and lesbian, gay, bisexual, and transgender stereotypes
5. demonstrate socio-cultural participation skills, decision-making abilities, and political awareness in order to be effective citizens in a diverse world

To satisfy the graduation requirement in Ethnic Studies (H1), Women's Studies (H2), and Lesbian, Gay, Bisexual and Transgender Studies (H3), the student must complete at least three semester units from Area H1, H2, or H3. If the course(s) selected is (are) also listed in Areas A through G, the course(s) may be used to satisfy this requirement and one other area.

Area H1 (Ethnic Studies)
- Administration of Justice 67
- African American Studies 30, 31, 35, 40, 55, 60
- Anthropology 3AC, 11, 12, 15
- Art 104, 105, 106, 107, 146A
- Asian American Studies 6, 8, 10, 20, 22, 27, 30, 35, 40, 42, 62*, 63
- Asian Studies 1, 11, 12
- Broadcast Electronic Media Arts 104
- Child Development 93
- Chinese 39
- Dance 32, 132A*
- Economics 30
- English 36, 57, 58
- Health Education 50
- Humanities 35, 48
- Interdisciplinary Studies 14, 27A, 27B, 28G, 29, 30, 36, 37, 40, 42, 44, 45, 46, 80A*, 81B*

Area H2 (Women's Studies)
- American Civilization 11A, 11B
- Asian American Studies 6, 8, 10, 20, 22, 27, 30, 35, 40, 42, 62*, 63
- Asian American Studies 6, 8, 10, 20, 22, 27, 30, 35, 40, 42, 62*, 63
- Asian Studies 1, 11, 12
- Broadcast Electronic Media Arts 104
- Child Development 93
- Chinese 39
- Dance 32, 132A*
- Economics 30
- English 36, 57, 58
- Health Education 50
- Humanities 35, 48
- Interdisciplinary Studies 14, 27A, 27B, 28G, 29, 30, 36, 37, 40, 42, 44, 45, 46, 80A*, 81B*
Japanese 39
Labor and Community Studies 15, 100
Latin American and Latino/a Studies 1, 9, 10, 11, 13, 14, 15
Lesbian/Gay/Bisexual/Transgender Studies 9
Music 21, 23, 24, 25, 26
Philippine Studies 20, 30
Filipino 39A, 39B
Political Science 7, 8, 12, 13, 18, 35, 47, 48
Psychology 23
Speech 5
*Only partially satisfies the number of units required for this area

Area H2 (Women's Studies)
African American Studies 60
Anthropology 25
Art 108
Asian American Studies 35
Broadcast Electronic Media Arts 105
Economics 25
English 57, 58
Health Education 25
History 12A, 12B
Humanities 25
Interdisciplinary Studies 31, 80C*, 80G*
Labor and Community Studies 78B*
Latin American and Latino/a Studies 10
Lesbian/Gay/Bisexual/Transgender Studies 21, 30
Psychology 25
Sociology 25
Speech 8
Supervision and Business Management 236
Women's Studies 10, 20, 25, 54, 55
*Only partially satisfies the number of units required for this area

Area H3 (Lesbian/Gay/Bisexual/Transgender Studies)
Anthropology 20
Broadcast Electronic Media Arts 106
Child Development 76
English 55
Health Education 25, 27, 67, 95*
History 45, 47D*
Interdisciplinary Studies 80D*
Labor and Community Studies 91D*
Latin American and Latino/a Studies 9
Lesbian/Gay/Bisexual/Transgender Studies 5, 9, 10, 11, 12, 15, 18, 20, 21, 24, 25, 30, 40, 50, 55, 60, 77
Music 27C
*Only partially satisfies the number of units required for this area

**CCSF Associate Degree 3. Major Requirement**

A student must complete a major in one of the following two ways.

Courses taken to complete this requirement must be completed with a final grade of C or higher, or P if taken Pass/No Pass:

a. completion of 18 or more semester units in an Area of Emphasis of the Liberal Arts and Sciences degree program described in the Programs and Courses section of this catalog. The four areas of emphasis are:
   - Arts and Humanities
   - Communication
   - Science and Mathematics
   - Social and Behavioral Sciences

or

b. completion of the 18 or more semester units in a curriculum specified by the department, which includes the following majors:
   - Accounting
   - Administration of Justice
   - Administrative Support
   - Aircraft Powerplant Maintenance Technology
   - Airframe-Maintenance Technology
   - Architecture
   - Automotive Mechanics
   - Avionics-Maintenance Technology
   - Biological Sciences
   - Biotechnology
   - California Real Estate
   - Cardiovascular Technology and Echocardiography (pending state approval)
   - Chemistry (pending state approval)
   - Child Development
   - Chinese
   - Cinema Production
   - Commercial Cut Flower Greenhouse Production
   - Computer Networking and Information Technology
   - Computer Science
   - Construction Management
   - Culinary Arts Management
   - Dance-Performance Art
   - Dental Assisting
   - Diagnostic Medical Imaging

1. Achieving a score on the algebra placement examination that places the student into a course at a level higher than MATH 60. (See the Test Retake Policy in the Admissions section of the catalog for information about retaking the placement test.)

2. Completing with a grade of C or higher MATH 60 (formerly 860), or MATH 50 (formerly 850), or MATH 55 (formerly 855), or ET 108B/CDEV 108B, or ET 50, or PSYC 5, or ECON 5, or PHIL 12A. Mathematics department courses at a level higher than MATH 60 also satisfy this requirement.

3. Completing at an accredited college with a grade of C or higher any mathematics course equivalent to MATH 60, or equivalent to a higher level CCSF mathematics course.

4. Scoring:
   - 550 or higher on the SAT Subject Test in Mathematics (Level 1 or Level 2), or
   - 600 or higher on the Mathematics Section of the SAT Reasoning Test, or
   - 600 or higher on the Quantitative Section of the Graduate Record Examination (GRE), or
   - 28 or higher on the American College Test (ACT), or
   - 3, 4, or 5 on the Advanced Placement Examination in Calculus AB or Calculus BC or Computer Science AB or Statistics, or
   - Mathematics Status: “Ready for CSU college-level mathematics course,” on the Early Assessment Program (EAP) of the California Standards Test.
Earth Sciences
Electronic Engineering Technology
Engineering
Environmental Studies and Science
Fashion Design
Fashion Merchandising
Finance
Fire Science Technology
Floristry
Food Service Management
French
General Business
Geology
Graphic Design
Health Education
Health Information Technology
Hotel Management
Interior Design
Italian
Japanese
Journalism
Labor and Community Studies
Landscape Gardening and Landscape Contracting
Latin American and Latino/a Studies
Lesbian/Gay/Bisexual/Transgender Studies
Library Information Technology
Marketing
Mechanical Engineering Technology
Medical Administrative Assisting
Medical Office Assisting
Motorcycle Technician
Nursery and Garden Center Operation
Nursing
Oceanography
Paralegal/Legal Studies
Paramedic
Photography
Physics
Radiation Therapy Technology
Spanish
Travel and Tourism
Women's Studies;

CCSF Associate Degree
4. Unit Requirement
To satisfy the unit requirement for graduation, the student must complete a minimum of 60 semester units of college-level (degree applicable) work that include the courses and units
   a. required for the student's major, and
   b. specified in the general education requirements described above.

Advisory Note: Students planning to transfer to UC must have 60 UC-transferable units to meet UC Admission requirements.

CCSF Associate Degree
5. Grade-Point Requirement
To satisfy the grade-point requirement for graduation, a student must maintain a cumulative grade point average of at least 2.0 in all associate degree applicable courses at City College of San Francisco. Unless otherwise noted (as in Written Composition Requirement and Major Requirement), it is not necessary to receive a grade of “C” or better in each course, but the overall grade point average in degree applicable courses must be at least 2.0. The student must also have at least a 2.0 combined grade point average which includes the cumulative grade point average for all associate degree applicable courses at City College of San Francisco combined with the grade point average of all transferable units completed at other accredited postsecondary institutions.

CCSF Associate Degree
6. Residence Requirement
The student may satisfy the residence requirement for graduation by completing at City College of San Francisco a minimum of 12 of the 60 degree applicable semester units required for graduation.

CCSF Associate Degree for Transfer
1. General Education Requirements
Students satisfy the general education requirements for the Associate Degree for Transfer by completing and obtaining certification of one of the following two options:
   - California State University (CSU) General Education pattern, Areas A-E
   - IGETC pattern, Areas 1-6
     CSU Transfer: Complete Areas 1-5
     US Transfer: Complete Areas 1a, 1b and 2-6

These requirements are outlined in the Transfer Information section of the catalog. Students transferring to CSU are strongly encouraged to complete the CSU American Institutions and U.S. History requirement.

CCSF Associate Degree for Transfer
2. Mathematics Requirement
Students satisfy the Mathematics requirement for the Associate Degree for Transfer by completing one of two options, concurrent with their completion of the General Education requirements noted above:
   - Completion of Area B4 of the CSU General Education pattern
   - Completion of Area 2 of the IGETC pattern

CCSF Associate Degree for Transfer
3. Major Requirement
Students satisfy the major requirement for the Associate Degree for Transfer by completing 18 or more units in a curriculum specified by the department. Courses taken to complete this requirement must be completed with a final grade of C or higher. Specific requirements are listed in the Programs and Courses section of the catalog. Currently, City College of San Francisco offers the Associate Degree for Transfer in:
   - Administration of Justice
   - Anthropology
   - Business Administration (pending state approval)
   - Communications Studies
   - Computer Science
   - Early Childhood Education
   - Economics (pending state approval)
   - English
   - Geology (pending state approval)
   - History
   - Mathematics
   - Physics
   - Political Science
   - Psychology
   - Sociology
   - Studio Arts
Students should also look at the online catalog for the most recent updates.

**CCSF Associate Degree for Transfer**  
**4. Unit Requirement**

To satisfy the unit requirement for graduation, the student must complete a minimum of 60 semester units that are both CCSF degree applicable and CSU transferable. This includes the courses and units specified in the general education requirements described above.

**CCSF Associate Degree for Transfer**  
**5. Grade-Point Requirement**

To satisfy the grade-point requirement for graduation, a student must maintain a cumulative grade point average of at least 2.0 in all CSU transferable courses at City College of San Francisco and any other institution. While it is not necessary to receive a grade of “C” or better in each course, the overall grade point average in degree applicable courses must be at least 2.0. However, each course taken to satisfy the major requirement must be completed with a final grade of C or higher.

**CCSF Associate Degree for Transfer**  
**6. Residence Requirement**

The student may satisfy the residence requirement for graduation by completing at City College of San Francisco a minimum of 12 of the 60 units required for graduation.

**Petitioning for the Associate Degree**

Students seeking the Associate in Arts, the Associate in Science, Associate in Arts for Transfer, or Associate in Science for Transfer must complete and submit a Petition for Graduation Form to the Admissions and Records Office on or before the dates specified in the Calendar of Instruction.

Students should not petition for the Associate Degree until all the requirements are met or about to be satisfactorily completed in the current school term. Students are requested to review the completion of all requirements with their counselor or advisor prior to submitting the Petition for Graduation Form.

**Multiple Majors/Multiple Degrees**

Students may graduate with multiple majors or earn multiple degrees at City College. Multiple majors are considered to be the completion of more than one program of study (major) prior to graduation with the associate degree. Multiple degrees are the attainment of an additional degree after the student has already completed an associate degree or higher.

**Multiple Majors**

Students may earn an associate degree in more than one major providing:

1. Minimum requirements have been met for each major;
2. The majors are available in the same catalog year; and
3. General education and all other graduation requirements in that same catalog year have been met.

Courses used to fulfill the requirements of one major may be used to meet the requirements of an additional major. Courses used to meet major requirements may be applied to general education requirements as well. The general education courses used to satisfy graduation requirements for one major may also be applied to additional majors.

For multiple majors, a single diploma with all majors listed will generally be issued. If one major leads to an Associate in Arts and another to the Associate in Science, two diplomas will be issued.

**Multiple Degrees**

Students who already possess an associate degree from City College of San Francisco may be awarded an additional degree upon completion of the following:

1. All requirements for the major in a different field of study;
2. General education requirements for the catalog in effect when the student re-enrolls (subsequent to graduation with the associate degree) and for which the student maintains catalog rights; and
3. All other City College graduation requirements. Previous coursework may be used to meet the new major and general education requirements.

Catalog rights end upon completion of the Associate of Arts or Associate of Science degree. If the student did not meet the requirements of the additional degree prior to graduation, catalog rights for the additional degree will begin after the previous degree was awarded.

Students who possess an associate degree or higher from another regionally accredited college or university may earn an associate degree from City College upon completion of the following:

1. All requirements for the major in a different field of study
2. General education requirements for the catalog in effect when the student enrolls and for which the student maintains catalog rights; and
3. All other City College graduation requirements. Previous coursework may be used to meet the new major and general education requirement.

**Certificate Programs**

**Types of Certificate Programs**

City College of San Francisco offers both credit and noncredit certified programs of study.

**Certificate Curricula — Credit**

City College offers two types of credit certicates, Certificate of Achievement and Certificate of Accomplishment, which prepare students for entry-level employment or further study, add special knowledge and skills to existing occupational competence, or mark an accomplishment in a particular area.

A Certificate of Achievement is a sequence of courses usually consisting of 18 or more units of degree-applicable coursework that has been approved by the State Chancellor’s Office. Students who successfully petition for a Certificate of Achievement will have the name of the certificate appear on their transcript.

A Certificate of Accomplishment is a sequence of courses consisting of fewer than 18 units of degree-applicable coursework. Students who successfully petition for a Certificate of Accomplishment will not have the name of the certificate appear on their transcript.

Credit that students earn in a certificate curriculum may also be used toward satisfaction of the requirements for graduation from the College with an associate degree.

**Certificate Curricula — Noncredit**

City College offers two types of noncredit certicates, Certificate of Completion and Certificate of Competency, which prepare students for entry-level employment or further study. A Certificate of Completion is a sequence of courses designed to prepare students to progress in a career path or to undertake degree-applicable or non-degree applicable
credit courses. A Certificate of Competency is a sequence of courses preparing students to demonstrate achievement in a set of competencies that prepares the student to progress in a career path or to undertake degree-applicable or non-degree applicable credit courses. Some noncredit certificate programs meet required guidelines for student financial assistance.

**Petitioning for Certificate Programs**

Students who have fulfilled the certificate program course requirements as stated in the CCSF college catalog may petition to receive their certificate. Petitions are available at the Admissions and Records Office, Conlan Hall, Room 107. Petitions should be submitted by the deadline posted in the Calendar of Instruction. Information: (415) 239-3046

The guidelines for petitioning for certificate programs are as follows:

- Discuss the curriculum requirements with your program advisor or department chair to assure that all program requirements are met.
- Submit your petition before the deadline indicated in the current College Catalog or Schedule of Classes.
- If you are applying for multiple certificates, please complete separate petitions for each.
- If any of the requirements for the Certificate you are applying for (as published in the CCSF Catalog) are being substituted by courses taken at another college or university or substituted with CCSF coursework, or are being waived by the department, be sure the department chair or faculty advisor completes and signs the appropriate areas of the petition form.

If your petition is denied because you have not met all the requirements, consult the College Catalog for the catalog rights year you are claiming. If you need further clarification, contact the department chair or a faculty advisor. DO NOT call the Office of Awards and Certificate Evaluations or the Admissions and Records Office to request a waiver of requirements. The requirements for Certificates have been established by the faculty and the administration and approved by the Governing Board. The Admissions and Records Office does not have the authority to change or waive any of the requirements.
TRANSFER INFORMATION

General Information
This section of the College catalog contains general information for students planning to transfer to any of the University of California (UC) campuses or to any of the campuses of the California State University (CSU).

Listed in this section of the catalog (in the order given below) are three categories of information: (1) Courses which satisfy the general education requirements for all campuses of the California State University; (2) Courses from City College of San Francisco acceptable at all campuses of the University of California for elective credit; (3) Courses from City College that satisfy the Intersegmental General Education Transfer Curriculum (IGETC);

Transfer Information
Courses numbered from 1 through 799 are university courses except for some listed as “Credit, non-degree applicable” and a few others. With these exceptions, courses numbered 1 through 799 are considered to be baccalaureate in nature and carry transfer credit. However, according to their transfer policies, some universities and four-year colleges may not grant transfer credit for every City College baccalaureate course.

Courses named with one of the letters from A through Z are foundational courses: for example, English K. Credit earned in these courses is not accepted for graduation from City College and is generally not transferable to a university or a four-year college.

Credit earned in courses numbered 800 through 899 is generally not transferable to a bachelor degree-granting institution. Such credit, however, is accepted for the City College Associate Degree.

Courses numbered 0001 through 9999 (the zeroes are significant) are noncredit courses. No college credit is given for these.

The California State University grants transfer credit for all courses numbered 1 through 799, except for some courses in Biotechnology, Child Development, English, English as a Second Language, Engineering Technology and Mathematics. Those courses which are transferable to the California State University for elective credit are labeled with “CSU” following the description of the course content in its announcement.

A complete list of courses for which the University of California accepts credit is given in the Transfer section of this catalog. In addition, each course that is acceptable for elective credit at all campuses of the University of California has “UC” following the description of the course content in its announcement.

Courses designated as “UC upon review” are independent studies or variable topics courses which may earn UC elective credit, but which must be evaluated by the UC campus at the time the student is admitted for transfer before credit can be granted.

Students are advised to see their counselors or advisors for further information beyond that which is given on the following pages regarding transferring to a four-year college or university.

Articulation Agreements
Articulation agreements which list detailed information concerning specific majors and describe course transferability from City College of San Francisco CSU and UC campuses are available on ASSIST, www.assist.org. Articulation agreements with private or out-of-state colleges may be found on the City College Articulation website: www.ccsf.edu/artic.

Associate Degrees for Transfer
City College of San Francisco also offers associate degrees for transfer primarily to the CSU. These include Associate in Arts (AA-T) or Associate in Science (AS-T) degrees. These degrees are designed to provide a clear pathway to a CSU major and baccalaureate degree. Students who are awarded an AA-T or AS-T degree are guaranteed admission with junior standing somewhere in the CSU system and given priority admission consideration to their local CSU campus or to a program that is deemed similar to their community college major. This priority does not guarantee admission to specific majors or campuses.

Students who have been awarded an AA-T or AS-T are able to complete their remaining requirements for the similar 120 semester-unit or 180 quarter-unit baccalaureate degree within 60 semester or 90 quarter units.

For more information on the Associate Degrees for Transfer, see the Associate Degree Graduation Requirements section of this catalog. To find out which CSU campuses accept each degree, please go to http://www.adegreewithaguarantee.com/Degrees.aspx. Current and prospective CCSF students are encouraged to meet with a counselor to review their options for transfer and to develop an educational plan that best meets their goals and needs.

California State University (All Campuses)

Admission Application Dates
To ensure consideration for admission to the campus of first choice, students are reminded to file a CSU application during the appropriate filing period shown below:

Term: Applications First Accepted
Summer Quarter: February 1 (preceding the summer term)
Fall Semester/Quarter: October 1 (preceding the term)
Winter Quarter: June 1 (preceding the term)
Spring Semester/Quarter: August 1 (preceding the term)

Application for impacted programs and campuses must be filed during the initial application filing period. Otherwise, each campus accepts applications until capacities are reached. If you are applying after the initial filing period, consult the campus admissions office for current information.

Apply online, www.csumentor.edu.

Admission as a Transfer Student
A student may satisfy CSU admission requirements as an upper division transfer student by:

- Completing a minimum of 60 transferable semester units (CCSF courses numbered 1 through 799 except for some non-degree applicable Biotechnology, Child Development, English, English as a Second Language, Engineering Technology, and Health Education and Mathematics courses).
- Maintaining a grade point average of 2.00 or higher in all transferable units attempted.
- Satisfying a minimum of 30 units of General Education with grades of C or better including: A1 Oral Communication, A2 Written Communication, A3 Critical Thinking, B4 Quantitative Reasoning.

Supplementary Admissions Requirements. Some majors and campuses receive more applications during the initial filing period than can be accommodated and have higher admission standards. For detailed information regarding Impacted Undergraduate Majors and Campuses in the California State University, go to http://www.calstate.edu/AR/impactioninfo.shtml.
Transfer of Credit to the California State University (All Campuses)
The campuses of the California State University accept credit from City College of San Francisco as follows:

1. They accept as elective credit toward graduation the units earned in all City College courses numbered 1 through 799, except for BTEC 108A, CDEV 108A, ESL 20, 23, 26, 75, 85, 110, 112, 120, 120R, 120W, 122, 130, 132, 142; ENGL 9, 90, 91, 92, 93, 95X, 96, ET 108A, and MATH 35, 40, 50, 55, 60.
2. They do not accept credit earned in City College foundational courses. (These courses are named with only one letter—for example, English K. Other of these courses are numbered from 800 through 899.)
3. They accept transfer credit as indicated above, but do not accept more than 70 semester units of community college credit to be used to satisfy the unit requirements for the baccalaureate degree.
4. They accept partial or full certification of completion of the Lower Division General Education requirements for graduation from the California State University for courses completed at City College.
5. They do not necessarily accept credit that City College has granted for work completed at other collegiate institutions or for The College Board's AP examinations.
6. They grant six units of credit for one year or more of military service.

American Institutions and United States History Requirement
Candidates for a bachelor's degree must satisfy the requirement in American Institutions and United States History by completing one course from each of the following two groups:
Group 1. Political Science 1
Group 2. Asian American Studies 20; History 1, 9, 12A, 12B, 17A, 17B, 41A, 41B; Labor and Community Studies 70, 70A, 70B; Latin American and Latino/a Studies 1

General Education Requirements for the California State University (All Campuses)
NOTE: The information below is valid for 2013–14. The new 2014–15 list is available from a counselor; the Transfer Center; WebAssist, www.assist.org; or the CCSF articulation webpage, www.ccsf.edu/artic.

Requirements for the baccalaureate degree at the California State University include the completion of a minimum of 48 semester units in general education within a prescribed pattern, including 9 semester units of upper-division work. A maximum of 39 semester units may be certified by City College as having met the CSU lower division General Education requirements.

The 39 semester unit pattern is distributed among five broad areas as noted below. City College will certify completion of each area according to the unit limits shown. Students who complete the entire pattern may also petition for the Certificate of Achievement in CSU General Education Breadth.

Students have the option to complete the Intersegmental General Education Transfer Curriculum (IGETC) in lieu of the 39 unit CSU general education pattern.

AREA A: Communication in the English language and critical thinking

<table>
<thead>
<tr>
<th>Area</th>
<th>Courses</th>
</tr>
</thead>
<tbody>
<tr>
<td>A1 Oral Communication:</td>
<td>English as a Second Language 79</td>
</tr>
<tr>
<td>A2 Written Communication:</td>
<td>English 1A</td>
</tr>
<tr>
<td>A3 Critical Thinking:</td>
<td>English 1B, 1C, Philosophy 2, 4, 40</td>
</tr>
</tbody>
</table>

AREA B: Physical Universe and its Life Forms
(9 certifiable semester units or 12–15 quarter units with at least one course from each of A1, A2, and A3)

<table>
<thead>
<tr>
<th>Area</th>
<th>Courses</th>
</tr>
</thead>
<tbody>
<tr>
<td>B1 Physical Science:</td>
<td>Astronomy 1, 14, 17, 18, 19, 20</td>
</tr>
<tr>
<td>B2 Life Science:</td>
<td>Anthropology 1</td>
</tr>
<tr>
<td>B3 Laboratory Activity (to be taken with course from B1 or B2)</td>
<td>Anatomy 14, 25, Astronomy 4, Botany 10, Ecology 10, 20, Genetics 10, 15, Interdisciplinary Studies 9, Microbiology 10, 12, Physiology 1, 12, Psychology 1B, Zoology 10</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Area</th>
<th>Courses</th>
</tr>
</thead>
<tbody>
<tr>
<td>B4 Mathematics/Quantitative Reasoning:</td>
<td>Economics 5, Engineering Technology 50</td>
</tr>
</tbody>
</table>
Mathematics 70, 75, 80, 90, 92, 95, 97, 100A, 100B, 110A, 110B, 110C, 115, 120, 125, 130
Philosophy 12A
Psychology 5

**AREA C: Arts, literature, foreign language and philosophy**
(9 certifiable semester units or 12-15 quarter units with at least one course in the Arts and one course in the Humanities)

**C1 Arts:**
African American Studies 55
Architecture 31A, 31B, 32, 102, 134
Asian Studies 11

**C2 Humanities:**
African American Studies 30, 35, 40, 60
American Civilization 11A, 11B
American Studies 5
Asian American Studies 6, 10, 30, 35
Asian Studies 12, 30
Broadcast Electronic Media Arts 106
Chinese 1, 1A, 1B, 2, 2A, 2B, 3, 3A, 3B, 4, 4A, 4B, 10A, 10B, 10C, 10D, 12A, 12B, 12C, 14A, 14B, 14C, 16, 17, 31A, 31B, 39

**C3 Social political and economic institutions and behavior, historical background**
(9 certifiable semester units or 12-15 quarter units with courses to be selected from at least two disciplines from the following)

**D0 Sociology and Criminology**
Administration of Justice 59, 67
Asian Studies 20
Broadcast Electronic Media Arts 103
Lesbian/Gay/Bisexual/Transgender Studies 10
Physical Education 13
Psychology 4
Sociology 1, 2, 3, 25, 30, 35

**D1 Anthropology and Archeology**
Anthropology 2, 3, 3AC, 4, 8, 11, 12, 15, 20, 25

**D2 Economics**
Economics 1, 3, 6, 10, 25, 30
Labor and Community Studies 74

**D3 Ethnic Studies**
African American Studies 30, 31, 60
Anthropology 3AC, 12, 20
Asian American Studies 8, 20, 22, 27, 30, 35, 40, 42
Broadcast Electronic Media Arts 104
Economics 30
History 9, 15A, 15B, 21, 38, 41A, 41B, 44
Interdisciplinary Studies 10D, 37, 40, 45
Labor and Community Studies 100
Latin American and Latino/a Studies 9, 10
Lesbian/Gay/Bisexual/Transgender Studies 9, 50
Political Science 7, 12
Psychology 23

**D4 Gender Studies**
African American Studies 60
Anthropology 20, 25
Asian American Studies 35
Economics 25
History 12A, 12B, 45
Labor and Community Studies 78, 78B
Latin American and Latino/a Studies 9
Lesbian/Gay/Bisexual/Transgender Studies 5, 9, 10, 21, 30, 35, 40
Psychology 25
Sociology 25
Women's Studies 25

**D5 Geography**
Geography 4, 7

**D6 History**
Asian American Studies 20
Economics 10
Humanities 7, 8, 11, 12, 20, 25, 35, 41A, 41B, 48

**Interdisciplinary Social or Behavioral Science**
American Studies 5
Minimum U.C. Transfer Eligibility Requirements

To be eligible for admission to UC as a transfer student, you must fulfill the following criteria:

1. Complete 60 semester units (90 quarter units) of transferable college credit with a grade point average of at least 2.4, and
2. Complete a course pattern requirement to include:
   - Two transferable college courses (3 semester units or 4–5 quarter units each) in English composition; and
   - One transferable college course (3 semester units or 4–5 quarter units) in Mathematical Concepts and Quantitative Reasoning; and
   - Four transferable college courses (3 semester units or 4–5 quarter units each) chosen from at least two of the following subject areas: the arts and humanities, the social and behavioral sciences, the physical and biological sciences.

The current admission requirements for nonresident transfer applicants are the same as those for residents except that nonresidents must have a grade point average of 2.8 or higher in all transferable college course work.

In recent years, the number of applicants to many campuses and majors has greatly exceeded the spaces available. This increased competition means the University may no longer be able to guarantee admission to all eligible students. When a campus has to choose among qualified students, it applies standards that are more demanding than the minimum requirements. Using a process called comprehensive review, admissions officers look beyond the required course work and grades to evaluate applicants' academic achievements in light of the opportunities available to them and the capacity each student demonstrates to contribute to the intellectual life of the campus.

Courses from City College of San Francisco Acceptable at All Campuses of the University of California

(The following information is based upon information received from the University at the time of the publication of this catalog. The University may decide after the publication of this catalog to limit or not to accept units earned in some City College courses. Further information, when it is received from the University, will be made available to students online, www.assist.org.)

1. The University of California (all campuses) accepts as elective credit toward graduation the units earned in the courses listed below, subject to the limitations and exclusions noted.
2. The following is a complete list of City College courses for which the University of California accepts credit, subject to the limitations listed. If a City College course does not appear on this list, the course is not accepted for credit by the University of California.

City College courses which are accepted for credit by all campuses of the University of California (valid 2013–14):

- Academic Achievement Personal Success 103
- Administration of Justice 52, 57, 67
- African American Studies +10, 30, 35, 40, 55, 60, PE 14 and *HLTH courses combined: maximum credit, one course
- +Independent Study course — to be reviewed for credit by UC campus upon transfer
- American Civilization 11A, 11B
- American Sign Language 1A, 1B
- American Studies 5
- Anthropology 1, 2, *3, *3AC, 4, 8, 11, 12, 15, 20, 25,
  *3 and 3AC combined: maximum credit, one course
Architecture 22A, 29A, 29B, +31A, +31B, 32, 100, 101, 102, 103, 134 +31A, 31B and 134 combined: maximum credit, two courses
*Variable Topics course — to be reviewed for credit by UC campus upon transfer
Asian American Studies 6, 8, 10, 20, 22, 27, 30, 35, 40, 42, *65
*Independent Study course — to be reviewed for credit by UC campus upon transfer
Asian Studies 1, 11, 12, 30
Astronomy *1, 4, 16, *17, *18, *19, 20
*1, 17, 18, 19 combined: maximum credit allowed, 2 courses

BIOLOGICAL SCIENCES:
Anatomy *14, *25
*No credit for 14 if taken after 25 or Physiology 1 or 12; 14 or 25 combined with Physiology 1 or 12: Maximum credit, 2 courses.

Anthropology 1

Biology 9, *11, 15, 16, 30, #31, **32, 32L, 40, 41L, 55, 70A, 70B, 100A,100B
*No credit for 11 if taken after Biology 100A,100B

#Same as Geography 31, Sustainability 31
**Same as Interdisciplinary Studies 9

Botany 10

Ecology 10, 20, *26X
*Same as Environmental Monitoring & Assessment Program 26X

Genetics *10, 11, *15

10 and 15 combined: maximum credit allowed, one course

Microbiology 10, 12

Nutrition *12, *52
*12 and 52 combined: maximum credit, one course

Physiology **1, **12, 67
**1 and 12 combined: maximum credit, one course; 1 or 12 combined with Anatomy 14 or 25: maximum credit 2 courses

Zoology ++10
++No credit for 10 if taken after Biology 11, 100A,100B, or Physiology 1 or 12

Broadcast Electronic Media Arts 103, 104

BUSINESS:

Accounting 1, 2

Business Law 1, 2

General Business 119, 120

Microcomputer Applications for Business +60

+CNIT 100, CS 100M, 101 and MABS 60 combined: maximum credit, one course

Paralegal Studies 10

Supervision and Business Management 235

Career Development 60

Chemistry #40, *101A, 101B, *103A, 107, #110, 110L, 205, **208A, **208B, **212A, **212B

*101A, 103A combined: maximum credit allowed, one course.

#40, 110 combined: maximum credit allowed, one course. No credit for 40, 110 if taken after 101A or 103A

**208A-208B and 212A-212B combined: maximum credit allowed, one series; no credit for 212AB if taken after 208AB


*1AB is equivalent to 1: maximum credit, 6 units;
+2AB is equivalent to 2: maximum credit, 6 units;
#3AB is equivalent to 3: 3, 3AB, and 31AB combined: maximum credit, 6 units;
*4AB is equivalent to 4: maximum credit, 6 units;

Child Development 53, 67, 75, 150


*24, 124A, and 124B combined: maximum credit allowed, one course

**20A, 20B, and LGBT 11 and 12 combined: maximum credit allowed, two courses

Classics 35

Computer Assisted Drafting 181

Computer Networking and Information Technology +100

+CNIT 100, CS 100M, 101, and MABS 60 combined: maximum credit, one course


+CNIT 100, CS 100M, 101, and MABS 60 combined: maximum credit, one course

#160A and 160B must both be taken in order to receive transfer credit

*Independent Study course — to be reviewed for credit by UC campus upon transfer

Culinary Arts and Hospitality Studies 247


*Any or all of these courses, Health 50 and Music 47, (*)Physical Education and (**Physical Education Athletics courses combined: maximum credit, 4 units

Design 101, 105, 110, 150

Drama (see Theatre Arts)

Economics 1, 3, *5, 6, +10, 25, 30

*5 combined with Mathematics 80 and Psychology 5: maximum credit allowed, one course

+No credit for 10 if taken after History 17A or 17B, or 41A or 41B

Emergency Medical Technician 14

Energy 3, 3L

Engineering 1A, 10A, 10B, 20, 20L, 24, 36, 37, 38, 45


*Variable Topics course — to be reviewed for credit by UC campus upon transfer


*Any or all of these courses combined: maximum credit allowed, 8 units

Environmental Monitoring & Assessment Program *26X

*Same as Ecology 26X

Ethnic Studies (see African American, Asian American, Chinese, Latin American and Philippine Studies)

Fashion 22, 28

French *1, *1A, *1B, +2, +2A, +2B, #3, #3A, #3B, 4, 11A, 11B, **20, 22, 41, 42

*1AB is equivalent to 1: maximum credit, 6 units;
+2AB is equivalent to 2: maximum credit, 6 units

#3AB is equivalent to 3: maximum credit, 6 units

**Independent Study course — to be reviewed for credit by UC campus upon transfer

Game Design and Development 130

Genetics (See Biological Sciences)
Geography Information Systems *110
*Same as GEOG 110

Geography 1, 1L, 4, 7, *31, +41A, *110
*Same as GIS 110
#Same as BIO 31, SUST 31

Health Education

Graphic Communications

German *1, *1A, *1B, +2, +2A, +2B, #3, *3A, *3B, **4A, **4B, **4C, 11A, 11B,
*1AB is equivalent to 1: maximum credit, 6 units;
+2AB is equivalent to 2: maximum credit, 6 units;
#3AB is equivalent to 3: maximum credit, 6 units;
**4AB is equivalent to 4: maximum credit, 6 units;

Library Information Skills 10

Mathematics 70, ^75, +80, **90, **97, *100A, *100B, *110A, *110B,
*110C, 115, ^120, #125, #130
^No credit for 75 if taken after 100A or 110A
+ 80 combined with Economics 5 and Psychology 5: maximum credit, one course
** 90 and 97 combined: maximum credit one course
* 110B combined with 100A-B: maximum credit allowed, one series

Microbiology (See Biological Sciences)

Multimedia Studies 125

Music 1A, 1B, 2A, 2B, 2C, 2D, 3A, 3B, *4, 5A, 5B, 6A, 6B, 6C, 6D, 7C1,
7C2, 7C3, 7C4, 7P1, 7T1, 7V1, 7V2, 7V3, 7V4, 7W1, 7W2, 7W3,
7W4, 8A, 8B, 9A, 9B, 9C, 10A, 10B, 10C, 10D, 11, 12, 13A, 13B,
14, 15, 16, 17, 18, 19, 20, 21, 22A, 22B, 22C, 23, 24, 25, 26, 27A,
27B, 27R, 27T, 28, 29, 30, 41, 42, 44, 45, 46, ^47, **48A, ++48B,
#48C, 50, 200ABC,
* No credit for 4 if taken after 1A or 3A
47, Health 50, (^)Dance, (^)Physical Education and (^)Physical Education Athletics courses combined: maximum credit, 4 units
**MUS 48A same as LBCS 98A
++MUS 48B same as LBCS 98B
#MUS 48C same as LBCS 98C

Nutrition (See Biological Sciences)

Oceanography 1, 1L

Ornamental Horticulture 50, *76, *77
*76 and 77 combined: maximum credit, one course

Paleontology 1

Paralegal Studies (see Business)

Philippine Studies *10, 20, 30 (See also Pilipino courses)
*Independent Study Course — to be reviewed for credit by UC campus upon transfer

Philosophy 2, 4, 12A, 12B, 25A, 25C, 40

Photography 50A, 50B, 51, 81A, 100

Physical Education *2, 6, *7, 13, #14, *40, +41, +42, +43, +45,
*Any or all of these courses, Music 47, Health 50, (^)Dance, (^)Physical Education and (^)Physical Education Athletics courses combined: maximum credit, 4 units
++Maximum credit, two courses

*Any or all of these courses, Music 47, Health 50, (^)Dance, (^)Physical Education and (^)Physical Education Athletics courses combined: maximum credit, 4 units
Physical Science *11, 11L

*No credit if taken after a college course in Astronomy, Chemistry, Geology or Physics


*2A-2B combined with 4ABCD: max. credit, one series; Deduct credit for duplication of topics; No credit for 10 if taken after 2A or 4A

#40 and 41 combined: maximum credit allowed, one course; no credit for 40 or 41 if taken after 2A or 4A

Physiology (See Biological Sciences)

Pilipino 1, 2, 39A, 39B (See also Philippine Studies)

Political Science 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 12, #13, 18, 22, 35, +41, +42A, +42B, +42C, +42D, 43, 45, *46, 47, 48

*No credit for 46 if taken after 1

+Variable Topics course — to be reviewed for credit by UC campus upon transfer

#Same as LALS 13

Psychology 1, 1B, 2, *5, 10, 11, 21, 23, 25, 40, +41, +42, +43

*5 combined with Economics 5 and Mathematics 80: maximum credit allowed, one course

+Variable Topics course — to be reviewed for credit by UC campus upon transfer


*1AB is equivalent to 1; 21AB is equivalent to 21

1A, 1B, 21 and 21AB combined: maximum credit, 6 units; +2AB is equivalent to 2; 22AB is equivalent to 22;

2, 2AB, 22 and 22AB combined: maximum credit, 6 units; #3AB is equivalent to 3: maximum credit, 6 units;

Sociology 1, 2, 3, 25, 30, 35


*1AB is equivalent to 1; 21AB is equivalent to 21

1A, 1B, 21 and 21AB combined: maximum credit, 6 units; +2AB is equivalent to 2; 22AB is equivalent to 22;

2, 2AB, 22 and 22AB combined: maximum credit, 6 units; #3AB is equivalent to 3: maximum credit, 6 units;

Speech 1A, 2, 3, 4, 5, 7, 20

Sustainability *31

*Same as BIO 31, GEOG 31

Theatre Arts 30, 31, 32, 60, 61, 62, 71, 72, 73, 107, 150ABC, 151ABC, 152ABC, 153ABC, 154ABC, 155ABC, 160A, 161A, 162A, 166A, 201ABC, 202ABC, 203ABC, 204ABC

Visual Media Design 101, 103, 120, 170, 182


*Variable Topics course — to be reviewed for credit by UC campus transfer

Zoology (see Biological Sciences)

The University accepts transfer credit as indicated above, but does not accept more than 70 semester units of such credit toward graduation. Courses in excess of 70 semester units will receive subject credit and may be used to satisfy University subject requirements. The University does not accept credit that students have been granted for military service, nor does the University necessarily accept credit that City College of San Francisco has granted for work completed at other institutions.

**Intersegmental General Education Transfer Curriculum (IGETC) For 2013–14**

NOTE: The information below is valid for 2013–14. The new 2014–15 list is available from a counselor; the Transfer Center;

**ASSIST, www.assist.org:** or the CCSF articulation webpage, **www.ccsf.edu/artic.**

Completion of all the requirements in the Intersegmental General Education Transfer Curriculum (IGETC) will permit a student to transfer from a community college to a campus in either the California State University or the University of California system (generally in those majors at the UC campus which are included in those offered in the College of Letters and Science) without the need, after transfer, to take additional lower-division, general education courses to satisfy general education requirements. Students completing the IGETC pattern may petition for a Certificate of Achievement.

In general, it is not advisable for transfer students preparing for engineering majors (at any UC campus) to use the IGETC. Students entering “high unit” majors, such as those in the sciences, can follow the IGETC but must be careful to complete all lower division major preparation.

**CHECK WITH YOUR COUNSELOR OR THE UC CAMPUS WHICH YOU PLAN TO ATTEND TO DETERMINE IF YOU MAY USE IGETC OR IF YOU MUST FOLLOW THE CAMPUS-SPECIFIC REQUIREMENTS FOR YOUR PARTICULAR MAJOR.**

The course requirements for ALL areas must be completed before IGETC can be fully certified, though IGETC may now be partially certified if all but two courses on the IGETC pattern have been completed. Additionally, students who complete the entire IGETC pattern may petition for the Certificate of Achievement in IGETC. ALL courses for IGETC certification must be completed with grades of “C” or better. A grade of Credit or Pass may be used if the community college’s policy states it is equivalent to a grade of C or better. For IGETC certification procedures, see a counselor. Courses marked with an “*” have limits placed on transfer credits by UC or CSU. Courses listed in more than one area cannot be certified in more than one area, except for courses in AREA 6: Language Other Than English.

**AREA 1: English Communication**

CSU—Three courses required—one (1) course from each group

UC—Two courses required—one from Group a, and one from Group b.

Group a-English composition: English 1A

Group b-Critical thinking—English composition:

English 1B, 1C, Speech 2

Group c-Oral communication (CSU ONLY): Speech 1A, 3, 4, 20

**AREA 2: Mathematical Concepts and Quantitative Reasoning**

One course from the following:

Economics *5


Psychology *5

**AREA 3: Arts and Humanities**

At least three courses, with at least one from the Arts and one from the Humanities, 9 semester units.

**Arts:**

African American Studies 55


Art 101 thru 109, 116, 118, 122A, 123U, 123V, 123W, 123X, 123Y, 123Z

Asian Studies 11

Cinema 18, 23A, 23B

Dance 30, 32
Latin American and Latino/a Studies 14
Lesbian/Gay/Bisexual/Transgender Studies 20, 25, 55, 77
Photography 50A, 50B
Theater Arts 30, 31, 32

Humanities:
African American Studies 30, 35, 40, 60
American Civilization 11A, 11B
Asian American Studies 6, 10, 35
Asian Studies 12, 30
Cinema *20A, *20B, 21, 22
Classics 35
German *3, *3A, *3B, 4, 4A, 4B
Interdisciplinary Studies 4,14, 27A, 27B, 29, 30, 36, 37, 38, 42, 44, 46, 47
Italian 3A, 3B, 4A, 4B, 41
Latin American and Latino/a Studies 1
Philippine Studies 30
Philosophy 2, 4, 25A, 25C
Pilipino 39A, 39B
Women's Studies 10

AREA 4: Social and Behavioral Sciences
At least three (3) courses from at least two (2) disciplines or an interdisciplinary sequence. 9 semester units (12–15 qtr. units)

4A-Anthropology: ANTH 2, *3, *3AC, 4, 8, 11, 12, 15, 20, 25
4B-Economics: ECON 1, 3, 6, *10, 25, 30
4C-Ethnic Studies: ASAM 8, 20, 22, 27, 30, 35, 40, 42; BCST 104; HIST 9; IDST 40, 45; LALS 1, 9, 10; LBLS 100; LGBT 9, 50;
4D-Gender Studies: ASAM *35; HIST 45; LALS *9, LGBT 5, *9, 30, 50, 60; WOMN 25
4E-Geography: GEOG 4, 7
4G-Interdisciplinary: AMS 5; ASIA 1; BIO 31; CDEV 53, 67; GEOG 31; HLTH *10, *231, IDST 10D, 17, 28G, 30, 37; LALS 15; LBLS 15; PHST 20; SPCH 5; SUST 31
4H-Political Science: IDST 7, LALS 11, 13; POLS 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 12, 13, 18, 22, 35, 43, 45, *46, 47, 48
4I-Psychology: PSYC 1, 2, 10, 11, 21, 23, 25, 40
4J-Sociology: ADMJ 67, BCST 103; P E 13, SOC 1, 2, 3, 25, 30, 35

AREA 5: Physical and Biological Sciences
Two (2) courses, one Physical Science course and one Biological Science course: must include at least one Laboratory Activity, 7–9 semester units. (9-12 quarter units)

Physical Sciences
Astronomy 1, 17, 18, 19, 20
Chemistry 40, 101A, 101B, 103A, 110, 205, 208A, 208B, 212A, 212B
Geography 1
Geology 10, 11, 18, 30
Oceanography 1
Paleontology 1
Physical Science 11
Physics 2A, 2B, 4A, 4B, 4C, 4D, 10, 40, 41

Biological Sciences
Anatomy 14, 25
Anthropology 1
Astronomy 4
Botany 10
Ecology 10, 20
Genetics 10
Interdisciplinary Studies 9
Microbiology 10, 12
Psychology 1, 12
Zoology 10

Laboratory Activity
Anatomy 14, 25
Astronomy 16
Botany 10
Ecology 20
Genetics 11
Geology 1L
Geology 10L, 30L
Microbiology 12
Oceanography 1L
Paleontology 1
Zoology 10

AREA 6: Language Other Than English
(UC requirement ONLY)
Complete ONE of the following to demonstrate proficiency in a language other than English:

1. Two years of high school study in the same language with a grade “C” or better (grammar, vocabulary, reading and composition).
3. Satisfactory score in the SAT II: Subject Test in languages other than English.

If the test was taken before May 1995, the first score is the minimum; if the test was taken after May 1995, use the second score. Chinese With Listening: 500/520
French/French With Listening: 500/540
German/German With Listening: 500/510
Hebrew (Modern): 500/470  
Italian: 500/520  
Japanese With Listening: not offered before 1995/500  
Korean/Korean With Listening: not offered before 1995/500  
Latin: 500/530  
Spanish/Spanish With Listening: 500/520

4. Score of 3 or better on the AP Exams in languages other than English.

5. Score of 5 or higher on the International Baccalaureate Higher Level Exams in languages other than English.

6. Satisfactory completion of a proficiency test administered by a community college, university or other college in a language other than English.

7. Satisfactory completion with “C” grades or better, of two years of formal schooling at the sixth grade level or higher in an institution where the language of instruction is not English. Appropriate documentation of attendance at the secondary school must be presented to CCSF Admissions Office.

8. Score of 5, 6, or 7 on the international A level exam or grade of A, B, or C on the O level exam in a language other than English.

9. Competency verified by a faculty member associated with a California community college, if an appropriate achievement test is not available.

CSU Only: U.S. History, Constitution and American Ideals  
(Not part of IGETC; may be completed prior to transfer.)

Six (6) units, one course from Group 1 (US-2&3) and one course from Group 2 (US-1):

Group 1: Political Science 1;  
Group 2: Asian American Studies 20; History 1, 9, 12A, 12B, 17A, 17B, 41A, 41B; Labor and Community Studies 70, 70A, 70B; Latin American and Latino/a Studies 1

Note: Group 1 is Area 7A and Group 2 is Area 7B in the CCSF Banner computerized records.

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 individual California community colleges. A C-ID number next to a course signals that participating California colleges and universities have determined that courses offered by 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. Thus, if a schedule of classes or catalog lists a course bearing a C-ID number, for example COMM 110, students at that college can be assured that it will be accepted in lieu of a course bearing the C-ID COMM 110 designation at another community college. In other words, the C-ID designation can be used to identify comparable courses at different community colleges. However, students should always go to www.assist.org 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 check with a counselor to determine how C-ID designated courses fit into their educational plans for transfer.

Students may consult the ASSIST database at www.assist.org for specific information on C-ID course designations. Counselors can help students interpret or explain this information.

Below are CCSF courses that have been approved for C-ID numbers at the time of this catalog’s publication. Updated information is available at http://www.c-id.net/course_compare.html.

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<td>SPAN 200</td>
<td>SPAN 3</td>
</tr>
<tr>
<td>SPAN 200</td>
<td>SPAN 3A + 3B</td>
</tr>
<tr>
<td>SPAN 210</td>
<td>SPAN 6</td>
</tr>
<tr>
<td>SPAN 210</td>
<td>SPAN 6A + 6B</td>
</tr>
</tbody>
</table>
Degree and Certificate Curricula
City College of San Francisco offers degree, credit certificate, and non-credit certificate courses of study.

Degree Curricula
A degree curriculum requires completion of 60 or more semester units (normally two years of full-time work) in conformance with the requirements of a particular department of instruction. (Students who have not satisfied course prerequisites may need more than two years to complete a degree curriculum.) Students who satisfy these requirements receive the degree of Associate in Arts for Transfer (AA-T), Associate in Science for Transfer (AS-T), Associate in Arts (AA), or Associate in Science (AS). General requirements for these degrees are outlined in the Associate Degree Graduation Requirements section of this catalog; information on requirements for the degree majors is detailed in this Programs and Courses section. When choosing courses to satisfy "Additional requirements" listed for a curriculum, students should consult their program adviser or counselor.

Certificate Curricula — Credit
City College offers two types of credit certificates, Certificate of Achievement and Certificate of Accomplishment, which prepare students for entry-level employment or further study, add special knowledge and skills to existing occupational competence, or mark an accomplishment in a particular area.

A Certificate of Achievement is a sequence of courses usually consisting of 18 or more units of degree-applicable coursework that has been approved by the State Chancellor’s Office. Students who successfully petition for a Certificate of Achievement will have the name of the certificate appear on their transcript.

A Certificate of Accomplishment is a sequence of courses consisting of fewer than 18 units of degree-applicable coursework. Students who successfully petition for a Certificate of Accomplishment will not have the name of the certificate appear on their transcript.

Credit that students earn in a certificate curriculum may also be used toward satisfaction of the requirements for graduation from the College with an Associate Degree.

Certificate Curricula — Noncredit
City College offers two types of noncredit certificates, Certificate of Completion and Certificate of Competency, which prepare students for entry-level employment or further study. A Certificate of Completion is a sequence of courses designed to prepare students to progress in a career path or to undertake degree-applicable or non-degree applicable credit courses. A Certificate of Competency is a sequence of courses preparing students to demonstrate achievement in a set of competencies that prepares the student to progress in a career path or to undertake degree-applicable or non-degree applicable credit courses. Some noncredit certificate programs meet required guidelines for student financial assistance.

Course Information

Course Identifiers
Courses are identified by a subject and a number (for example, MATH 97) or by a subject and a letter (for example, ENGL W). In some instances course numbers are followed by letters to indicate that the course is one of a closely related series of courses more than one semester in length: for example, English 1A-1B (a two semester series) and Art 170A-170B-170C (a three semester series). In such a series of courses, each course is prerequisite to the succeeding part unless there is a statement to the contrary.

Units
The number or numbers in parentheses following the title of a course indicate its semester unit (s.u.) value. Note that the semester unit is not equal to a quarter unit (q.u.). (2 s.u. = 3 q.u.)

Method of Delivery
For credit courses, the number of weekly hours of lecture (lec), conference (conf), and/or laboratory (lab) are given. For example, “Lec-3” means that the class meets three hours each week (a college hour is 50 minutes long); “lab-3” means that three hours of laboratory work are required each week of the semester. Independent study (ind st) or work experience (work) courses list the average number of hours of work/study per week. Note that patterns of course delivery other than the semester-long pattern may be chosen by a department. Other patterns include, but are not limited to, one-half semester (about eight weeks), one-third semester (about 6 weeks), or the shortened summer session. The length and number of meetings for these different patterns is determined by the required number of contact hours needed to satisfy the semester-unit value of the course. In addition, some courses are designed to be offered on a basis other than full-semester. Total meeting hours for those courses will be listed, indicated by “total”.

Grading
Some courses may be taken on a pass/no pass or a letter grade basis. Others may be taken only on a pass/no pass basis. This is indicated by “P/NP available” and “P/NP only” respectively on the same line as the delivery pattern. In this symbolism “available” means the “P” (pass) or “NP” (no pass) grades are available for the course instead of the regular grades of “A” through “F” if the election to take the course for pass/no pass is made at registration or by the end of the first 30% of the term of offering for the course. If no notation occurs regarding pass/no pass, the course is a “letter grade only” course.

Prerequisites, Corequisites, and Advisories
Some courses may require students to have taken a course prior to enrollment (prerequisite), or may require courses to be taken simultaneously (corequisite). Others may have recommended, but not required, preparation (advisory). See page 452 for information about challenging prerequisites.

Repeatability
Some credit courses may be repeated even if a student has taken the course previously. Repeatability limits are typically expressed as a maximum number of units that a student can accumulate in the same course (original enrollment plus any repetitions). In some cases, the repetition limit is expressed as a total number of enrollments (original enrollment plus any repetitions). When a department offers a series of courses on the same topic, and a repetition limit applies across the series of courses, the limit is expressed in terms of a combination of units across the set of courses (e.g., Repeat: ASAM 61-62-63 combined, maximum 15 units).

Field Trips
Some courses may require a field trip; others have optional field trips. The instructor will specify details about any field trips in the course syllabus.

Transferability
A basic description of the course content generally concludes the course announcement. At the end of this description, the abbreviation CSU indicates that the course transfers for elective credit to any City College of San Francisco or any other City College with an Associate Degree.
California State University, and the abbreviation UC indicates that the course is acceptable for elective credit at all campuses of the University of California. Courses designated as “UC upon review” are independent studies or variable topics courses which may earn UC elective credit, but which must be evaluated by the UC campus at the time the student is admitted for transfer before credit can be granted.

Course History
If the course recently had a different CCSF course number or if an equivalent CCSF course exists, that information will be the last item in the announcement, for example “Formerly ENGL 5A” or “SPAN 2A-2B = SPAN 2.” If the course has been taken under its former number and a grade of “C” or better or of P has been earned, the newly numbered course may not be taken because the two are really the same. In addition, if two courses are listed as equivalent, only one of the two may be taken.

C-ID Number.
The Course Identification Numbering System (C-ID) is a statewide numbering system independent from the course numbers assigned by individual California community colleges. A C-ID number next to a course signals that participating California colleges and universities have determined that courses offered by 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. Thus, if the course description displays a C-ID number, for example COMM 110, students can be assured that it will be accepted in lieu of a course bearing the C-ID COMM 110 designation at another community college. In other words, the C-ID designation can be used to identify comparable courses at different community colleges. However, students should always go to www.asist.org to confirm how each college's course will be accepted at a particular four-year college or university for transfer credit. Updated information on C-ID course approvals is available at http://www.c-id.net/course_compare.html.

Schedule of Classes
Students should check the time schedules, published separately, for the times when courses are offered. The schedules also identify the locations at which the courses will be taught. The Time Schedule is available at the College Bookstore; the Office of Admissions and Records, Room 107, Conlan Hall; and the Registration Center, Room 104, Smith Hall. To see Time Schedule online, visit: http://www.ccsf.edu/Schedule

Administration of Justice

Administration of Justice

Announcement of Curricula

General Information
This Department offers curricula in two fields—Administration of Justice and Fire Science Technology. Each two-year curriculum is designed to prepare students for civil-service and related private sector employment and also satisfies College graduation requirements. The following is a description of the program.

Administration of Justice

Degree Curriculum
The curriculum in administration of justice is arranged to meet the needs of three groups of students: those who plan to seek employment with public and private agencies concerned with maintaining public safety, crime prevention, treatment, rehabilitation and research; those who are employed by a correctional or law-enforcement agency and desire to obtain training for promotion; and those who desire to obtain background in administration of justice in preparation for the study of policing, probation and parole, social welfare, law, and non-profit community corrections.

Admission. Enrollment is open to all interested students.

Course of Study. The two-year course of study includes instruction in the following: introduction to administration of justice, principles and procedures of the justice system, criminal identification, criminal law, organized crime and gangs, criminal investigation, physical evidence, narcotic investigation, probation and parole, juvenile procedures, and law enforcement field work. Beside instruction in administration of justice, the curriculum includes course work in general education so that students may satisfy the College graduation requirements in this area.

Credit for Preservice Training in Administration of Justice.
Administration of Justice majors who have completed a minimum of 12 semester units at City College, and who have also completed a preservice administration of justice-training program certified by the Commission on Peace Officers Standards and Training of the Department of Justice of the State of California, may petition the Administration of Justice Department for six semester units to be applied toward completion of the curriculum in administration of justice. A transcript or other acceptable evidence of completion of the preservice training program must be submitted with the petition.

Approval of Instruction. The curriculum is offered in cooperation with local agencies concerned with the administration of justice and is reviewed annually by an advisory committee composed of persons active in the field of law enforcement. In-service courses within the curriculum are certified by the Commission on Peace Officers Standards and Training of the Department of Justice of the State of California.

Employment. Students who complete the curriculum satisfactorily may be qualified to take civil-service examinations for employment with federal, state, county, and city agencies in capacities such as the following: investigator; forensic identification, highway patrol, correctional officer; juvenile counselor; police officer; or deputy sheriff. Graduates are also qualified for employment as private investigators and private security officers.

Administration of Justice Major (AS-T)
Associate in Science in Administration of Justice for Transfer. This course of study prepares students for transfer, particularly to CSU, to complete work for a bachelor's degree in criminal justice. Students will be able to describe the individual functions and components of the modern criminal justice system; use introductory concepts of legal research as it relates to discussing the content of statutory and case law; and explain the underlying cause of antisocial and criminal behavior. This program is appropriate for students considering law school or careers in law enforcement.
Learning Outcomes
Upon completion of the major, students will be able to:

- Meet requirements for transfer, especially to the CSU system, in Administration of Justice and related majors.
- Apply the theory, techniques, and knowledge of law enforcement to all aspects of the criminal justice system such as crime causation, criminal statutes, and elements of particular crimes.
- Evaluate various local, state, and federal law enforcement career options.
- Evaluate the legal aspects of criminal investigations, constitutional law, and case law.
- Apply laws and procedures for the collection and use of evidence.
- Identify ethical standards placed on law enforcement professionals and the ethical philosophy of the American justice system.

Degree Requirements. Students who wish to earn the Associate in Science in Administration of Justice for Transfer (AS-T) must complete 60 CSU transferable units with at least a 2.0 grade point average. This must include the units required for full completion of the IGETC or CSU GE curriculum and the 18-19 units for the major as specified below. Each course in the major must be completed with a grade of "C" or better. Courses used to meet the major requirement may also be used to meet IGETC or CSU GE requirements.

Courses Required for the Major in Administration of Justice

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADMJ 57 Introduction to Justice</td>
<td>3</td>
</tr>
<tr>
<td>ADMJ 52 Concepts of Criminal Law</td>
<td>3</td>
</tr>
<tr>
<td>Choose TWO of the Following Courses:</td>
<td></td>
</tr>
<tr>
<td>ADMJ 51 Juvenile Procedures</td>
<td>3</td>
</tr>
<tr>
<td>ADMJ 53 Legal Aspects of Evidence</td>
<td>3</td>
</tr>
<tr>
<td>ADMJ 54 Principles &amp; Procedures of the Justice System</td>
<td>3</td>
</tr>
<tr>
<td>ADMJ 62 Criminal Investigation</td>
<td>3</td>
</tr>
<tr>
<td>ADMJ 66 Forensic Evidence</td>
<td>3</td>
</tr>
</tbody>
</table>

Choose TWO of the Following Courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOC 1 Introductory Sociology</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 1 General Psychology</td>
<td>3</td>
</tr>
<tr>
<td>ECON 5 Introductory Statistics</td>
<td>3</td>
</tr>
<tr>
<td>or MATH 80 Probability and Statistics</td>
<td></td>
</tr>
<tr>
<td>or PSYC 5 Statistics for Behavioral Sciences</td>
<td>4</td>
</tr>
<tr>
<td>Total Units</td>
<td>18-19</td>
</tr>
</tbody>
</table>

Administration of Justice Major (AS)

The course of study is designed so that students may satisfy the requirements for graduation from the College. Students who satisfy the graduation requirements and complete 21 units receive the Associate in Science Degree in Administration of Justice.

Courses taken to fulfill requirements for the Associate in Science in Administration of Justice will not be consecutively applied toward course work requirements for a Certificate of Achievement in Forensic Identification, Probation and Parole, Juvenile Procedures, Criminal Investigation, Criminal and Constitutional Law, High School Pathway to the Administration of Justice Profession, Trauma Prevention and Recovery, and the Certificate of Accomplishment in Diversity and Social Justice.

Certificate Curricula

The certificate program is designed to meet the needs of students who want to obtain entry-level positions and/or promotional positions within law enforcement agencies in the public sector and employment opportunities within the private security sector. It also provides students who are currently employed in law enforcement an opportunity to increase their knowledge in the field of Administration of Justice and enhance their skills and abilities as police officers, correctional officers, probation and/or parole officers, investigators and
private security officers. This program also provides an opportunity for students returning to college after completing an Associate in Arts/Science or Baccalaureate degree in other fields to earn a certificate in Administration of Justice without completing the general education requirements for graduation from City College.

**Administration of Justice Certificate**

This certificate is available for persons who do not choose to complete the general education requirements for graduation. Fifteen (15) units of Administration of Justice courses are required, and at least 9 units must be completed at City College of San Francisco for this certificate.

A student may obtain the Certificate of Accomplishment by completing 15 units from each of the courses offered in the certificate program with a grade of “C” or higher while at City College. Pass/No Pass grades will not be accepted toward completion of a certificate program.

**Learning Outcomes**

Upon completion of this certificate, students will be able to:

- Analyze crime and contemporary law enforcement issues.
- Analyze relationships and interactions between citizens and the criminal justice system.
- Examine the pre-trial, trial, and post-trial elements of the criminal justice system to ensure constitutional and statutory requirements are maintained consistent with public safety standards.
- Develop and demonstrate the ability to apply the theory, techniques and knowledge gained in the total course work of the law enforcement curriculum.

**Courses Required for the Certificate of Accomplishment in Administration of Justice**

**Students must select a minimum of 15 units from the following electives:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADMJ 51 Juvenile Procedures</td>
<td>3</td>
</tr>
<tr>
<td>ADMJ 52 Concepts of Criminal Law</td>
<td>3</td>
</tr>
<tr>
<td>ADMJ 53 Legal Aspects of Evidence</td>
<td>3</td>
</tr>
<tr>
<td>ADMJ 54 Princ and Proc of the Justice Sys.</td>
<td>3</td>
</tr>
<tr>
<td>ADMJ 57 Intro to the Administ of Justice</td>
<td>3</td>
</tr>
<tr>
<td>ADMJ 59 Organized Crime</td>
<td>3</td>
</tr>
<tr>
<td>ADMJ 62 Criminal Investigation</td>
<td>3</td>
</tr>
<tr>
<td>ADMJ 63 Criminal Identification</td>
<td>3</td>
</tr>
<tr>
<td>ADMJ 64 Community Relations &amp; Policing</td>
<td>3</td>
</tr>
<tr>
<td>ADMJ 65 Narcotic Investigations</td>
<td>3</td>
</tr>
<tr>
<td>ADMJ 66 Forensic Evidence</td>
<td>3</td>
</tr>
<tr>
<td>ADMJ 67 Terrorism and Counterterrorism</td>
<td>3</td>
</tr>
<tr>
<td>ADMJ 70A Patrol Procedures</td>
<td>3</td>
</tr>
<tr>
<td>ADMJ 80 Parole and Probation</td>
<td>3</td>
</tr>
<tr>
<td>Total Units Required</td>
<td>15</td>
</tr>
</tbody>
</table>

**Community Policing Certificate**

*This program is pending state approval. Please refer to the online version of the Catalog.*

**Criminal and Constitutional Law Certificate**

*This program is pending state approval. Please refer to the online version of the Catalog.*

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**Forensic Identification Certificate**

This certificate program is designed to meet the needs of students who want to obtain entry-level positions and/or promotional position in law enforcement agencies within the public sector and employment within the private security sector. It also provides the student who is currently employed in law enforcement an opportunity to increase their knowledge in the field of forensic identification and enhance their skills and abilities as an investigator.

A student may obtain the Certificate of Accomplishment by completing each of the courses offered in the certificate program with a grade of “C” or higher while at City College. Pass/No Pass grades will not be accepted toward completion of a certificate program. All five core courses are required and at least 9 units must be completed at City College of San Francisco for this certificate. Courses taken to fulfill the requirement for the Certificate of Accomplishment in Forensic Identification cannot be applied toward coursework requirements for a Certificate of in Administration of Justice.

**Learning Outcomes**

Upon completion of this certificate, students will be able to:

- Interpret the scope and source of criminal law, its origin and development, and various constitutional safeguards and allocations of legislative authority between Federal and State governments as applied to the field of forensics.
- Discuss the interrelationships and role expectations among administration of justice agencies and the public involving crime and other contemporary law enforcement issues as applied to the field of forensics.
- Demonstrate problem-solving skills and the ability to work both independently and in groups that will correlate to the challenges within the discipline of Forensic Science as applied in the Criminal Justice System.
- Apply a knowledge base for investigative specialization in a wide range of disciplines and careers in forensics and law enforcement.

**Courses Required for the Certificate of Accomplishment in Forensic Identification**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADMJ 52 Concepts of Criminal Law</td>
<td>3</td>
</tr>
<tr>
<td>ADMJ 62 Criminal Investigation</td>
<td>3</td>
</tr>
<tr>
<td>ADMJ 63 Criminal Identification</td>
<td>3</td>
</tr>
<tr>
<td>ADMJ 66 Forensic Evidence</td>
<td>3</td>
</tr>
<tr>
<td>ADMJ 67 Terrorism and Counterterrorism</td>
<td>3</td>
</tr>
<tr>
<td>ADMJ 70A Patrol Procedures</td>
<td>3</td>
</tr>
<tr>
<td>ADMJ 80 Parole and Probation</td>
<td>3</td>
</tr>
<tr>
<td>Total Units Required</td>
<td>15</td>
</tr>
</tbody>
</table>

**Fire Science Technology**

**General Information**

The curriculum in Fire Science Technology is designed to provide training for three groups of students: those who plan to seek employment as members of city and county fire departments and other governmental agencies that involve fire prevention, fire investigation, fire suppression, and fire protection engineering; those who are employed in the fire service who want further technical training to prepare for promotion; and those who plan to seek private
employment as safety instructors in industry, insurance adjusters, fire-protection technicians, fire equipment salespeople, and fire-equipment installers.

Admission. Enrollment is open to all interested students.

Course of Study. The California Community College Association of Fire Technology Directors recommends that five courses be offered as a basis for all fire technology programs in the State of California. These courses are: introduction to fire protection, fire prevention, fire protection equipment and systems, building construction for fire protection, fire behavior and combustion. Principles of fire emergency services, safety and survival. These courses serve as the basis of the fire science technology program at City College of San Francisco along with a pre-hospital emergency care and Wildland fire control courses. This curriculum represents the base knowledge, the foundation, upon which a student can build, regardless of where he/she works in the fire protection field.

Fire Science Technology Major (AS)

Students completing the Fire Science Technology Major will be eligible for career positions such as Firefighter, Fire Prevention Specialist, Wildland Firefighter, Fire Investigator, Fire Engineer, Fire Hydraulics, 1st Responder, Emergency Medical Technician, and Life Safety Directors in High Rise Buildings.

Learning Outcomes

Upon completion of this major, students will be able to:

- Identify and comprehend minimum qualifications and entry-level skills for firefighter hiring.
- Demonstrate the ability to analyze, appraise and evaluate fire and emergency incidents and identify components of emergency management and firefighter safety.
- Identify and comprehend laws, regulations, codes and standards that influence fire department operations.
- Compare and contrast the proper and safe usage of fire apparatus, tools and equipment, fire suppression equipment, and medical equipment.
- Analyze building construction, fire behavior, and extinguishing systems used in fire suppression.

Students must complete six of the eight core courses at CCSF.

Courses Required for the Major in Fire Science Technology

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>F SC 50 Intro to Fire Science</td>
<td></td>
</tr>
<tr>
<td>or F SC 110 Basic Fire Academy*</td>
<td>3-7</td>
</tr>
<tr>
<td>F SC 52A Fire Protection Equip &amp; Sys</td>
<td>3</td>
</tr>
<tr>
<td>F SC 53 Bldg Constr for Fire Protection</td>
<td>3</td>
</tr>
<tr>
<td>F SC 55 Wildland Fire Control</td>
<td>3</td>
</tr>
<tr>
<td>F SC 57 Principles of Fire/Emergency Services; Safety and Survival</td>
<td>3</td>
</tr>
<tr>
<td>F SC 61A Fund of Fire Prevention</td>
<td>3</td>
</tr>
<tr>
<td>F SC 64 Fire Behavior &amp; Combustion</td>
<td>3</td>
</tr>
<tr>
<td>F SC 17 Public Safety - Emergency Medical Response</td>
<td>3</td>
</tr>
<tr>
<td>Elective course: Choose 3 units from the following*</td>
<td></td>
</tr>
<tr>
<td>Course</td>
<td>Units</td>
</tr>
<tr>
<td>F SC 51A Fire Tactics and Strategy</td>
<td>3</td>
</tr>
<tr>
<td>F SC 60 Fire Apparatus &amp; Equipment</td>
<td>3</td>
</tr>
<tr>
<td>F SC 62 Rescue Practices</td>
<td></td>
</tr>
<tr>
<td>F SC 70 Fire Investigation</td>
<td></td>
</tr>
<tr>
<td>F SC 105A-F Fire Protection Work Exp</td>
<td>1-3</td>
</tr>
<tr>
<td>F SC 111 Firefighter One Academy*</td>
<td>11</td>
</tr>
<tr>
<td>F SC 150 Fire Service Career Preparation</td>
<td>2</td>
</tr>
<tr>
<td>LBCS 94D Labor Relations in Workforce Education</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total Units</strong></td>
<td><strong>27-31</strong></td>
</tr>
</tbody>
</table>

* Students who take F SC 110 do not need to take an elective course.

Students who take EMT 100 do not need to take F SC 17/HLTH 17.

Certificate Curricula

The certificate programs are designed to meet the needs of students who want to obtain entry-level positions in the fire protection field whether in the public or the private sector. They also provide a course of study for the student who is currently employed in public fire suppression that leads to a rating of fire officer after completing the required courses which mirror the California State Fire Marshal’s course content. These programs also provide an opportunity for students returning to college after completing a degree in other fields to earn a certificate in fire protection or earn a rating of fire officer without completing the general education requirements for graduation from City College. Two certificate programs are available, a certificate in fire protection and a certificate as a fire officer which can also be applied for through the State Fire Marshal’s Office.

Requirements for the Certificate of Accomplishment or Achievement. A student may obtain the Certificate of Accomplishment or Achievement by completing each of the courses offered in the certificate program with a grade of “C” or higher while at City College. Pass/No Pass grades will not be accepted toward completion of a certificate program.

Firefighter 1 Academy Certificate

Includes the principles, procedures, and techniques of firefighting and rescue. Technical and manipulative skills and concepts of fire control, fire behavior, tactics and strategy, and emergency management will be reviewed and put into practice during this course. The student will be trained according to the National Fire Protection Association, Standard 1001. Students completing this certificate program will be qualified to test for employment with agencies and departments hiring entry level firefighters.

Learning Outcomes

Upon completion of this certificate, students will be able to:

- Identify, describe, and demonstrate the role of the Emergency First Responder in the Emergency Medical System, including the proper medical protocol treatment for traumatic, medical, and environmental emergencies.
- Identify fire department functions and operations, and the relationships of ordinances laws and regulations pertaining to the fire service.
- Identify the characteristics of fire, fire behavior, fire cause and origin, and the relationship to fire strategy and tactical operations in the Incident Command System.
- Identify and demonstrate the use of tools, equipment and appliances used in the fire service.
- Identify building construction types, building features, key building components, and types of interior finishes and materials used in the construction of buildings.
- Define and explain Hazardous Materials Operations Awareness concepts.
- Define and explain Confined Space Operations concepts.
- Demonstrate a base understanding of terminology and concepts of wildland fire, the use of the Incident Command System in wildland fires, and wildland fire safety.
- Distinguish the components of physical fitness and apply fundamental principles of each component as it relates to either firefighting or public safety performance conditioning.

Students must complete each course with a grade of “C” or higher. Where applicable, grades of Pass may be used. Students must complete 6 units of F SC 111 Firefighter One Academy prerequisites at City College of San Francisco.

**Courses Required for the Certificate of Achievement in Firefighter One Academy**

**First Semester**

<table>
<thead>
<tr>
<th>Core Courses</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>F SC 50 Intro to Fire Science</td>
<td>3</td>
</tr>
<tr>
<td>F SC 17 Public Safety-Emergency</td>
<td>3</td>
</tr>
<tr>
<td>Medical Response</td>
<td></td>
</tr>
<tr>
<td>PE 29 Firefighter and Public Safety Conditioning</td>
<td>2</td>
</tr>
<tr>
<td>F SC 115 Incident Command System 200</td>
<td>1</td>
</tr>
</tbody>
</table>

**Second Semester**

<table>
<thead>
<tr>
<th>Core Courses</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>F SC 111 Firefighter One Academy*</td>
<td>11</td>
</tr>
<tr>
<td>F SC 105A/B Fire Protection Work Experience</td>
<td>1</td>
</tr>
<tr>
<td>Total Units</td>
<td>21</td>
</tr>
</tbody>
</table>

In addition to satisfying course prerequisites, students must have documented clearance from a licensed physician to participate in intensive physical activity required of the F SC 111 Firefighter One Academy Program.

EMT 100 or EMT 101 and EMT 101A and EMT 101B or EMT Paramedic or National Registry Emergency Medical Technician (NREMT) or equivalent is acceptable for F SC 17 Public Safety First Responder.

*ADVISORY Preparation for F SC III: F SC 52A or F SC 53 or F SC 55 or F SC 57 or F SC 61A or F SC 64.

**Fire Officer Certificate**

This certification follows the course content of the California Fire Service Training and Education System’s (CFSTES) recommendations. Each course offered utilizes the training manuals published by this organization, each course is registered with the CFSTES, and the instructors are registered instructors with the CFSTES.

The certificate program is open to persons who are currently employed as firefighters or who want to become firefighters. Upon the completion of these courses, City College will award a certificate as Fire Officer. If one wants to apply for this rating through the State Fire Marshal’s Office, one has to follow the guidelines established by the SFM (this procedure is outlined during each course by the instructor).

A certificate is awarded upon completion of the required courses (20.5 units total). At least 12 of the units must be completed at CCSF in order to receive this certificate.

**Learning Outcomes**

Upon completion of this certificate, students will be able to:

- Describe the importance of leadership and management while supervising and managing an assigned company and station personnel to effectively meet the goals and objectives of the fire department.
- Identify the actions a fire officer can take to increase firefighter and civilian safety in the delivery of emergency services.
- Understand the relationship of how sound organizational management and preparation equates to effective emergency operations.

**Courses Required for the Certificate of Achievement in Fire Officer**

<table>
<thead>
<tr>
<th>Core Courses</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>F SC 74A Training Instructor IA</td>
<td>2</td>
</tr>
<tr>
<td>F SC 74B Training Instructor IB</td>
<td>2</td>
</tr>
<tr>
<td>F SC 84 Fire Mgmt 1</td>
<td>2</td>
</tr>
<tr>
<td>F SC 88A Fire Command IA</td>
<td>2</td>
</tr>
<tr>
<td>F SC 88B Fire Command IB</td>
<td>2</td>
</tr>
<tr>
<td>F SC 88C Fire Command IC</td>
<td>2</td>
</tr>
<tr>
<td>F SC 72 Fire Investigation IA</td>
<td>2</td>
</tr>
<tr>
<td>F SC 115 Incident Command System 200</td>
<td>1</td>
</tr>
<tr>
<td>F SC 120 Incident Command System 300</td>
<td>1.5</td>
</tr>
<tr>
<td><strong>Total Units</strong></td>
<td><strong>16.5</strong></td>
</tr>
</tbody>
</table>

**Fire Protection Certificate**

This program is for returning students who have a college degree in another field but who want a certificate in Fire Protection for employment purposes or for career advancement. It is also available for persons who do not want to complete the general education requirements for graduation. All five core courses are required and at least nine units must be completed at City College of San Francisco for this certificate in Fire Protection.

**Learning Outcomes**

Upon completion of this certificate, students will be able to:

- Identify minimum qualifications and entry-level skills for firefighter hiring.
- Demonstrate the ability to analyze, appraise and evaluate fire and emergency incidents and identify components of emergency management and fire fighter safety.
- Identify and comprehend laws, regulations, codes and standards that influence fire department operations.
- Compare and contrast the proper and safe usage of fire apparatus, tools and equipment, fire suppression equipment, and medical equipment.
- Analyze building construction, fire behavior, and extinguishing systems used in fire suppression.

**Courses Required for the Certificate of Accomplishment in Fire Protection**

<table>
<thead>
<tr>
<th>Core Courses</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>F SC 50 Intro to Fire Science</td>
<td>3</td>
</tr>
<tr>
<td>F SC 52A Fire Protect Equip &amp; Sys</td>
<td>3</td>
</tr>
<tr>
<td>FSC 64 Fire Behavior and Combustion</td>
<td>3</td>
</tr>
<tr>
<td>F SC 53 Bldg Constr for Fire Protection</td>
<td>3</td>
</tr>
<tr>
<td>F SC 61A Fire Prevention</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Units</strong></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>
Announcement of Courses

Administration of Justice

Credit, Degree Applicable Courses:

ADMJ 51. Juvenile Procedures (3)
   Lec-3
   Examines juvenile procedure within the Administration of Justice system analyzing societal responses to juvenile crime through historical records, crime trend data, rehabilitation models, the effectiveness of detention, and all facets of juvenile law enforcement. Emphasizes procedural change in Administration of Justice policy from punishment and detention to prevention and rehabilitation. CSU/C-ID AJ 220

ADMJ 52. Concepts of Criminal Law (3)
   Lec-3
   Principles of California Criminal Law, including laws of arrest, search and seizure, application sections of the Constitution of the United States and relevant cases as they apply to and affect contemporary law. An understanding of the Penal Code and other criminal statutes is required for a comprehensive understanding of the course. CSU/UC/C-ID AJ 120

ADMJ 53. Legal Aspects of Evidence (3)
   Lec-3
   A study of the forms which evidence can take in court, and the evolution of procedural safeguards that govern the admissibility of evidence, thereby ensuring due process of law and fair justice for all litigants. CSU/C-ID AJ 124

ADMJ 54. Principles and Procedures of the Justice System (3)
   Lec-3, field trips
   The course will provide the student with a comprehensive overview of the legal procedures, constitutional requirements followed by law enforcement, the courts and corrections in criminal cases. The criminal justice process from pre-arrest to appeal will be reviewed and studied. CSU

ADMJ 57. Introduction to the Administration of Justice (3)
   Lec-3
   A critical thinking exploration of historical and contemporary issues in criminal justice. This includes the study and analysis of the core principles underlying the criminal justice system, components of the American criminal justice system (police, courts, and corrections), criminal behavior theory, crime categories, policing models, and career opportunities. CSU/UC/C-ID AJ 110

ADMJ 59. Organized Crime (3)
   Lec-3
   Practical and theoretical investigation techniques involving organized crime to include the social and cultural characteristics of organized crime groups. Law enforcement responses to organized crime will be explored as a basis for understanding and mitigating organized crime groups. CSU

ADMJ 62. Criminal Investigation (3)
   Lec-3
   A theoretical and empirical approach to study of criminal investigation, focusing on specific challenges of criminal investigations within the San Francisco Bay Area. The student will study the principles of investigation, the investigation of specific offenses, the investigator in court, and the specialized scientific methods of crime detection. CSU/C-ID AJ 140

ADMJ 63. Criminal Identification (3)
   Lec-3
   The theory of and practices in the science of fingerprints, including classification, filing, comparisons, latent technology, preservation of evidence, court testimony, rolling prints, computer and the law as it pertains to criminal identification. Other aspects of personal identification and skeletal identification, portrait parle, composites, and basic camera procedures are also presented. CSU

ADMJ 64. The Evolution of Community Relations During the Community Policing Era (3)
   Lec-3
   Prereq: ADMJ 57
   An examination of the evolution of police-community relations as it relates to the current community-policing era. Interrelationships and leadership role expectations among police and the public. CSU

ADMJ 65. Narcotic Investigations (3)
   Lec-3

ADMJ 66. Forensic Evidence (3)
   Lec-3
   Advise: ADMJ 68 and ENGL 93 or placement in ENGL 96
   This course introduces students to forensic evidence. Topics include history and sub-disciplines of forensic science; duties of investigative personnel; and the scientific methods, analytical instruments, and crime scene techniques used to recognize, document, preserve, analyze, and correctly interpret physical evidence. CSU/C-ID AJ 150

ADMJ 67. Terrorism and Counterterrorism (3)
   Lec-3
   Field trips
   P/NP available
   This course introduces the issues of terrorism, terrorist tactics, terrorist ideology, and the terrorist threats to public safety as well as methods and techniques of countering terrorism and preparing for and dealing with its impacts. CSU/UC

ADMJ 68. Criminal Justice Report Writing (3)
   Lec-3
   P/NP available
   Prereq: ENGL 93 or placement in ENGL 96
   This course will introduce students to relevant paradigms and issues related to producing accurate and objective investigative police reports. Students will learn the criminal justice report writing process that includes accurate note taking during the interview and interrogation process and the completion of legally sufficient criminal justice system reports inclusive of police reports, presentencing reports, and/or probation or parole reports. This course requires intensive writing assignments and deadlines. CSU

ADMJ 70A. Patrol Procedures (3)
   Lec-3
   Not required of Administration of Justice majors employed in law enforcement work
   This course provides vocational application of the principles taught within the Administration of Justice curriculum. This course is designed to help prepare students for satisfactory completion of the
placement requirements for service within the San Francisco City College Campus Police Department and/or other law enforcement. CSU

ADMJ 70B-70C-70D. Police Department Field Work (3-3-3) Lec-3, work-6 P/NP available
Classes need not be taken in sequence.
Not required of Administration of Justice majors employed in law enforcement work
Field application of principles taught in previous courses in Administration of Justice. Individual experience and training in an Administration of Justice agency, or service in the Campus Police Department. The student must satisfy the placement requirements of the agency in which he plans to serve. CSU

ADMJ 71. Police Fieldwork (1-2-3) Work-5, 10, 15 Prereq: ADMJ 70A Repeat: max. 9 units
Field application of principles taught in previous course in Administration of Justice. Individual experience and training in the Campus Police Department and with the San Francisco Police Department provide valuable direct work experience to prepare police officers for career employment position. CSU

ADMJ 80. Introduction to Probation and Parole (3) Lec-3 The role probation and parole departments within the Administration of Justice system is analyzed, from historical origins to current methodology. Effectiveness of rehabilitation is explored. The administrative organization and management in probation and parole systems is examined, including recruitment, training, supervision, and case load assignment to officers. CSU

ADMJ 82. Criminal Justice Work Experience (3) Work-15 Prereq: ADMJ 57; ENGL 93 or placement in ENGL 96 Advise: ADMJ 51 or 52 or 64 Repeat: max. 6 units
Practice working in a local criminal justice agency under the supervision of employees currently working in the field. Development of professional attitudes; application of principles; exposure to methods and problems. Weekly seminars to evaluate and review progress. CSU

ADMJ 85. P.C. 832 Arrest and Control Certification (3) Lec-3, lab-10 (total hrs)
This course is mandated by State Commission on P.O.S.T. for all persons exercising Limited Peace Officer Powers as well as Institutional, Park Ranger and other Peace Officer positions. CSU

ADMJ 86. Basic Traffic Accident Investigation (2) Lec-40 (total hrs) P/NP available Prereq: Must be a current Law Enforcement Officer
This course develops skills and knowledge to properly investigate and document traffic accidents. It provides officers with the basic requirements for investigating a traffic accident and for completing a standard traffic accident report. CSU

ADMJ 87. Skid Mark Analysis (2) Lec-40 (total hrs) P/NP available Prereq: Must be a current Law Enforcement Officer
This course is devoted to the basics of Tire Mark Identification and Analysis. Course content will include: identification of the various types of tire marks, documentation and measurements, terms and definitions relating to tire mark investigations, case preparation and courtroom testimony, determination of the coefficient of friction and drag factor, and speed estimates using various equations. CSU

ADMJ 88. Law Enforcement and the Media (1) Lec-16 (total hrs) P/NP available Prereq: Must be a current Law Enforcement Officer
This course is designed to help police personnel understand the role of the Public Affairs/Public Information Office, policy regarding news media contacts, and learning how the role of community policing interfaces with the media. CSU

ADMJ 89. Continuing Professional Training (2) Lec-40 (total hrs) P/NP available Prereq: Must be a current Law Enforcement Officer
This course is designed to provide police personnel with mandated training in Legal Updates, Risk Management, Community Policing, First Aid and CPR, and Arrest and Control Techniques. CSU

ADMJ 90. Arrest/Search Warrant Service and Obtainment (2) Lec-40 (total hrs) P/NP available Prereq: Must be a current Law Enforcement Officer
The student will learn the circumstances where the obtainment of an arrest and/or search warrant is necessary for the proper seizure of suspect(s) and evidence. They will further learn the procedures for the obtainment of these warrants as well as the essential aspects of planning and executing these warrants. CSU

ADMJ 91. Rejuvenating the School Resource Officers (2) Lec-40 (total hrs) P/NP available Prereq: Must be a current Law Enforcement Officer
This course is designed to educate and provide School Resource Officers with: the history of the Juvenile Justice System, the policy and procedures of the diversion program(s), developing effective communications skills, rapid identification of resources/referral services for juveniles, practical exercises for creating effective school presentations, and a quick code guide familiarization with school crime codes. CSU

ADMJ 92. Instructor Development (2) Lec-40 (total hrs) P/NP available Prereq: Must be a current Law Enforcement Officer
The student will learn teaching techniques which include: personal introductions, listening skills, mechanics of speech delivery, effective use of educational aids, topic development, adult learning concepts, ethics, participant behaviors, educational presentations, basic course instructional systems, and integrating the workbook into the basic course. CSU

ADMJ 93. Technology Crime Investigation (1.5) Lec-24 (total hrs) P/NP available Prereq: Must be a current Law Enforcement Officer
This course provides knowledge and skills to investigate high technology crime. It includes the identification of various computer components, disk storage media, and other devices used in high tech crimes. Students will learn to apply State and Federal statutes. Hands-on training includes proper seizing and packaging of a microcomputer, various other components, and search warrant preparation and execution. CSU

ADMJ 94. Community Oriented Policing and Problem Solving (1.5) Lec-30 (total hrs) P/NP available Prereq: Must be a current Law Enforcement Officer
This course introduces active police officers and sergeants to the
methods and philosophy of Community Oriented Policing and Problem solving. It also familiarizes police personnel with the goals, objectives, duties, and responsibilities associated with Community Oriented Policing and Problem Solving (COPPS). CSU
ADMJ 95. Field Training Officer Course (2)
Lec-40 (total hrs) P/NP available
Prereq: Must be a current Law Enforcement Officer
This course will provide the student with an understanding of the key elements of successful field training programs, how such programs can be properly administered, and the contribution necessary for them to make the program work. CSU
ADMJ 96. Crisis Communication for First Responders (1)
Lec-16 (total hrs) P/NP available
Prereq: Must be a current Law Enforcement Officer
This course is designed to enhance the communications and crisis intervention skills of the patrol officer, provide him/her new communicative functions and intervention skills, and build officer confidence in the employment of such skills. CSU
ADMJ 97. Drug Abuse and Recognition (2)
Lec-36 (total hrs) P/NP available
Prereq: Must be a current Law Enforcement Officer
This course teaches the student how to identify the narcotics, and instructs, through a hands on preparation phase, how an addict prepares heroin for injection, and how cocaine hydrochloride is converted into cocaine base. CSU
ADMJ 98. Search Warrants and Arrests (1)
Lec-16 (total hrs) P/NP available
Prereq: Must be a current Law Enforcement Officer
This course will instruct police personnel in the proper procedures for obtaining search and arrests warrants. CSU
ADMJ 100. Emergency Vehicle Operation (1)
Lec-18 (total hrs)
Prereq: Must be a current Law Enforcement Officer
This two day Advanced Officer Course is designed to instruct and reinforce the participant's knowledge in the lawful requirements of operating an emergency vehicle during Code 3 and Pursuit conditions. CSU
ADMJ 101. Basic Police Academy (16)
Lec-25, lab-15 (25 wks)
Prereq: Pass the State P.O.S.T. (Commission on Peace Officer Standards and Training) reading and writing exam or be hired by a P.O.S.T approved agency; Department of Justice Clearance; Medical Verification; obtain clearance from a licensed Physician to participate in Intensive Physical Activity Commissure with a Police Academy. Principles, procedures, and techniques of law enforcement; criminal law, patrol procedures, investigative procedures, writing law enforcement reports, defensive and offensive tactics, use of weapons, community relations, police vehicle operations, traffic enforcement, investigation of accidents, first aid and CPR; and the academic and physical skill training and assessment required by the state to meet the minimum standards to be eligible for employment as a peace officer in California. CSU
ADMJ 51, 52, 53, 54, 57, 70A, 70B, 70C, and 70D will not be accepted in lieu of those subjects taught in ADMJ 101.
ADMJ 102. Bicycle Patrol (1.5)
Lec-24 (total hrs) P/NP available
Prereq: Must be a current Law Enforcement Officer
This course will instruct police personnel in the proper procedures for riding a bicycle safely while on patrol. CSU
ADMJ 103. Investigative Techniques for Patrol (1)
Lec-10, lab-6 (total hrs) P/NP available
Prereq: Must be a current Law Enforcement Officer
Law enforcement officers examine and analyze critical investigative techniques and develop knowledge of strategic law enforcement skills in the documentation of crime facts. CSU
ADMJ 104. Rifle Marksmanship (2)
Lec-14, lab-26 (total hrs) P/NP available
Prereq: Must be a current Law Enforcement Officer
Sworn police officers will develop and execute basic hyper-marksmanship tactics and concepts. CSU
ADMJ 105. Stress in the Police Workplace (1)
Lec-16 (total hrs) P/NP available
Prereq: Must be a current Law Enforcement Officer
Police officers identify, examine and analyze psychological, social and behavioral factors that have historically contributed to law enforcement stress; evaluate options and formulate strategies for managing and reducing stress in the workplace. CSU
ADMJ 106. Haz Mat Police First Responder (2)
Lec-22, lab-7 (total hrs) P/NP available
Prereq: Must be a current Law Enforcement Officer
Police first responder management of hazardous material, recognition of hazardous materials, hazard assessment and command action, tactics, strategies and effective countermeasures to hazardous incidents. CSU
ADMJ 107. NBC Police Haz Mat First Responder (2)
Lec-8, lab-1 (total hrs) P/NP available
Prereq: Must be a current Law Enforcement Officer
Overview of biological, chemical and nuclear weapons and their use in acts of terrorism; law enforcement tactical and strategic countermeasures for hazardous material releases, decontamination strategies, incident and mass casualty management and resource utilization. CSU
ADMJ 108. Arrest and Control Training (1)
Lec-16, lab-8 (total hrs) P/NP only
Prereq: Must be a current Law Enforcement Officer
Develop knowledge and understanding of the critical force continuum; identify and process critical force applications, skills and decision making; Discuss, analyze and develop skills for transporting prisoners safely and humanely. CSU
ADMJ 109. Booking and Detention (1)
Lec-8 (total hrs) P/NP only
Prereq: Must be a current Law Enforcement Officer
Develop knowledge and understanding of guidelines and procedures pursuant to Booking and detention of prisoners at police district temporary holding facilities. CSU
ADMJ 110. Basic Investigations (4)
Lec-74 (total hrs) P/NP only
Prereq: Law Enforcement Officer as full-time follow-up investigator
This eighty (80) hour Advanced Officer Course is designed to formulate and synthesize the participant's knowledge in follow-up
investigations through the use of adult experience-based learning techniques. CSU

ADMJ 111. Domestic Violence Investigation (2)
Lec-40 (total hrs)  P/NP only
Prereq.: Must be a current law enforcement officer
This course is designed to develop and reinforce those skills necessary in conducting successful domestic violence investigations. CSU

ADMJ 114. DUI Recognition Update (1)
Lec-16 (total hrs)  P/NP only
Prereq.: Must be a current law enforcement officer
This course is designed to provide current law enforcement officers with the most current information on legal aspects of DUI, pre-arrest screening (FST’s), blood alcohol testing administrative per-se, and preparing police reports. Emphasis is placed on the experiential aspects of an investigation of a DUI offense, from initial detection through courtroom testimony. CSU

ADMJ 115. Officer Safety/Field Tactics (2)
Lec-32 (total hrs)  P/NP only
Prereq.: Must be a current law enforcement officer
The focus of this course is to enhance current law enforcement officer shooting skills in life-threatening situations as well as their skills in handgun manipulations. The course consists of handgun training scenarios, searching techniques and participation in two field training exercises involving critical incidents. Live fire at the range and simulations during scenarios are employed to duplicate real life situations. CSU

ADMJ 145. Introduction to Homeland Security (3)
Lec-3
The course introduces the students to the fundamentals of Homeland Security. Examines the history and events leading up to the creation of the Department of Homeland Security. The interoperation between local, state, federal and non-governmental organizations regarding mitigation, preparation, prevention, response and recovery in an all-hazards environment. CSU
ADMJ 145=F SC 145

ADMJ 150. Public Safety Dispatch Course I (3)
Lec-3
Prereq.: ENGL 93 or 94 or placement in ENGL 96
Students will develop knowledge and skills in communications and understand the role and function of the public safety dispatcher and develop an understanding of the Criminal Justice System. CSU

ADMJ 151. Public Safety Dispatch Course II (3)
Lec-3
Prereq.: ENGL 94 or placement in ENGL 96
Students will develop knowledge of the public safety dispatcher in handling criminal calls for service, especially child abuse, hate crimes, domestic violence and elder abuse. CSU

ADMJ 152. Public Safety Dispatch Course III (3)
Lec-3
Prereq.: ENGL 94 or placement in ENGL 96
Students will develop knowledge and skills in understanding the critical role the public safety dispatcher plays within the emergency system. CSU

### Fire Science

#### Credit, Degree Applicable Courses:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Pre-requisites</th>
</tr>
</thead>
<tbody>
<tr>
<td>F SC 17</td>
<td>Public Safety - Emergency Medical Response</td>
<td>3</td>
<td>P/NP available</td>
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<td></td>
<td>One of four Pre-requisites for CCSF’s Fire Academy. At the conclusion of this course students</td>
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<td>will be able to: recognize a medical emergency, activate the Emergency Medical System, provide</td>
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<td>basic life support until Advanced Life Support arrives. This course meets National Highway</td>
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<td>Traffic Safety guidelines for Emergency Medical Responder 2009. CSU</td>
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<td>F SC 50</td>
<td>Introduction to Fire Science</td>
<td>3</td>
<td>P/NP available</td>
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<td>An introduction to the fire service, this course examines fire technology, department</td>
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<td>organizational structures, Incident Command System, fire protection systems and equipment,</td>
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<td>and provides an overview of careers in fire investigation, fire prevention, and fire</td>
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<td>suppression. The class meets the needs for Fire Fighter I and II certification of the National</td>
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<td>Fire Protection Associations (NFPA®) Standard 1001. CSU</td>
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<td>F SC 51A</td>
<td>Fire Tactics and Strategy</td>
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<td>P/NP available</td>
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<td>This course is an elective course in the major in Fire Science, and is for students pursuing</td>
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<td>a career in the Fire Service to obtain a better understanding of responding to an emergency.</td>
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<td>This course also prepares those who hope to improve their firefighting skills and prepare for</td>
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<td>promotion. CSU</td>
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<td>F SC 52A</td>
<td>Fire Protection Equipment and Systems</td>
<td>3</td>
<td>P/NP available</td>
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<td>A study of automatic sprinkler systems, standpipe systems, fire detection devices and systems,</td>
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<td>manual fire suppression equipment, water supplies, extinguishing agents, pumps used in fire</td>
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<td>protection, smoke management systems and special extinguishing systems. CSU</td>
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<td>F SC 53</td>
<td>Building Construction for Fire Protection</td>
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<td>P/NP available</td>
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<td>Components of building construction that relate to fire safety. Key factors of construction and</td>
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<td>design of structures when inspecting buildings, preplanning fire operations, and operating at</td>
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<td>fires. Development and evolution of building and fire codes in relationship to fires in</td>
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<td>residential, commercial, and industrial occupancies. CSU</td>
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<td>F SC 55</td>
<td>Wildland Fire Control</td>
<td>3</td>
<td>P/NP available</td>
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<td>Wildland fire behavior, fireline safety, fire prevention, fire extinguishment methods, initial</td>
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<td>attack strategy and tactics, incident command system, fireground communications, use of</td>
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<td>engine companies, use of aircraft, use of hand crews and bulldozers, wildland/urban firefighting</td>
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<td>strategies and tactics, and firefighting situations. CSU</td>
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<tr>
<td>F SC 57</td>
<td>Principles of Fire and Emergency Services; Safety and Survival</td>
<td>3</td>
<td>P/NP available</td>
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<tr>
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<td>This course introduces the basics concepts of occupational health and safety as it relates to</td>
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<td>emergency service organizations. Topics include risk evaluation and control procedures for</td>
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<td>emergency and non-emergency situations. The course curriculum will be guided by NFPA standards,</td>
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<td>such as NFPA 1500, Fire Department Occupational Health and Safety Programs. CSU</td>
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</tbody>
</table>
F SC 60. Fire Apparatus and Equipment (3)
Lec-3
History, construction and operation of pumping engines, aerial ladders, aerial platforms, specialized equipment, driving techniques, driving laws, apparatus maintenance; orientation and use of fire department equipment as it relates to firefighting. CSU

F SC 61A. Introduction to Fire Prevention (3)
Lec-3, field trips P/NP available
This course provides fundamental information regarding the history and philosophy of fire prevention, organization and operation of a fire prevention bureau, use of fire codes, identification and correction of fire hazards, and the relationships of fire prevention with built-in fire protection systems, fire investigation, and fire and life-safety education. CSU

F SC 62. Rescue Practices (3)
Lec-3, field trips P/NP available
Technical rescue practices of the fire service - vehicle extrication, confined space, trench rescue, high & low angle rescue, building collapse scenarios, fire ground rescue operations, and aquatic response emergencies. Examines current tools and technologies, role of fire service heavy rescue, operational issues confronting basic level rescue providers. CSU

F SC 64. Fire Behavior and Combustion (3)
Lec-3
Theory and fundamentals of how and why fires start, spread, and are controlled; in-depth study of fire chemistry and physics, characteristics of materials, extinguishing agents, and fire control techniques. CSU

F SC 69. Fire Prevention for the Company Officer, Fire Prevention I (2)
Lec-40 (total hrs), field trips P/NP available
Prereq.: Completion of a CA State-certified Fire Academy Fire prevention fundamentals for developing fire prevention techniques at the company officer level; the student will learn: basic fire code, construction, occupancy types, fire and life safety; conducting inspections, recording inspection reports, and communicating deficiencies and violations to obtain proper correction or mitigation. This course is intended for working firefighters. CSU

F SC 70. Fire Investigation (3)
Lec-3
Study of the various components of fire investigation: causes of fire (accidental, suspicious and incendiary); types of fires, chemistry/physics of fire; related laws; introduction to arson and incendiarism, recognition and preservation of evidence; interviewing witnesses and suspects; court procedures and giving testimony; introduction to terrorist tactics. CSU

F SC 72. Fire Investigation 1A (2)
Lec-2 P/NP available
A standard State Board of Fire Services accredited course; one of eight classes required for State Fire Officer 1 certification. An introduction and basic overview of fire scene investigation. The focus of this course is to provide information on fire scene indicators and to introduce fire personnel to concepts of investigation. This course meets Fire Investigator I certification from the California State Fire Marshall's office. CSU

F SC 73. Fire Investigation 1B: Techniques of Fire Investigation (2)
Lec-7 (5 wks), field trips P/NP available
Instruct public sector and private sector personnel on the correct techniques applicable to the investigation of a fire scene. Training will include topics including motives of fire setters, scene safety for investigators, properly documenting and handling evidence at the fire scene, interviewing and interrogation, processing the scene where a fatality or serious injury has occurred, properly using resource information and building plans. Course meets the partial requirements for Fire Investigator I and has been accredited by the State Board of Fire Services. CSU

F SC 74A. Training Instructor 1A (2)
Lec-2 P/NP available
Cognitive (lecture) instructional techniques for training firefighter's in career education; selecting, adapting, organizing, and using instructional materials appropriate for teaching cognitive lessons; criteria and methods to evaluate teaching and learning efficiency; and an opportunity to apply major principles of learning through teaching demonstrations. CSU

F SC 74B. Training Instructor 1B (2)
Lec-2 P/NP available
Psychomotor (hands-on) lecture techniques for training Firefighter's using the latest methods in career education; selecting, adapting, organizing, and using instructional materials appropriate for teaching psychomotor lessons; criteria and methods to evaluate teaching and learning efficiency; and apply major principles of learning through teaching demonstrations. CSU

F SC 74C. Training Instructor 1C (2)
Lec-40 (total hrs) P/NP available
Advis: F SC 74A and F SC 74B
Techniques for developing cognitive and psychomotor instructional training for firefighters using the latest methods in career education; researching, selecting, creating, organizing, and using instructional materials to construct lesson plans; criteria and methods to evaluate teaching and learning effectiveness; and application of major principles of learning through teaching demonstrations. CSU

F SC 84. Fire Management 1 (2)
Lec-2 P/NP available
A standard State Board of Fire Services accredited course; one of eight classes required for State Fire Officer 1 certification. Preparation or enhancement of the first line supervisor's ability to supervise subordinates. Introduction to key management concepts and practices utilized in the California Fire Service. Includes decision making, time management, leadership styles, personnel evaluations, and counseling guidelines. CSU

F SC 88A. Fire Command 1A (2)
Lec-2 P/NP available
First of a two-part series and a standard State Board of Fire Services accredited course; one of eight classes required for State Fire Officer 1 certification. The course provides the student with an introduction to Fire Ground Command Operations including elements of Fire Behavior, Fire Ground Management and use of Fire Ground Resources. The course uses basic I.C.S. techniques and is designed to give the new Fire Officer an understanding of overall fire ground operations. CSU

F SC 88B. Fire Command 1B (2)
Lec-2 P/NP available
Second of a two-part series and a standard State Board of Fire Services accredited course, one of eight classes required for State Fire Officer 1 certification. The course provides the student with an overall concept
for Company Operations. The course uses basic I.C.S. techniques and is designed to give the new Fire Officer an overall introduction to safety and handling of emergency incidents. CSU

F SC 88C. Fire Command 1C (2)  
Lec-2, field trips  P/NP available  
Prereq.: F SC 88A, 88B, and 115 within the past year  
F SC 88C (Fire Command 1C) trains students utilizing case studies and simulations in leadership principles, fire behavior, fire prediction systems, Incident Action Planning, communications, wildland strategy and tactics in Urban Interface Fire Fighting (I-Zone). CSU

F SC 105A-E. Fire Training Work Experience (1-2)  
Work-5–10  P/NP available  
Prereq.: F SC 50  
Repeat: F SC 105 A, B, C, D, and E combined, maximum credit: 7 units  
Off-campus work experience with the San Francisco or South San Francisco Fire department. Student job performance will be evaluated by an on-site supervisor in the following soft skills; judgment, initiative, cooperation, dependability, punctuality, competence, and ability to learn. Meets California State Fire Training volunteer time requirement for Firefighter 1. CSU  
F SC 105A-B. Fire Training Work Experience (1)  
Work-5  
F SC 105C-D-E. Fire Training Work Experience (2)  
Work-10  
F SC 106. High Rise Fire Safety Director (1.5)  
Lec-1.5  P/NP available  
Advise: ESL 150 or placement in ENGL 92 or ESL 160  
Provides basic knowledge and skills in the preparation of facility emergency plans; fire prevention and protection; life safety systems; evacuation and relocation procedures; earthquake preparedness; management of various emergencies and coordinating with emergency responders. This course is for those falling under jurisdictions of the California Health and Safety Code. CSU  
F SC 106 = JRNY 106

F SC 110. Basic Fire Academy (7)  
Lec-4, lab-9 (16 wks)  
Prereq.: Pass the Civil Service Examination for H-2 Firefighter; pass the Physical Agility Examination; pass the SFFD Background History Investigation; pass the Medical Verification Examination given by the SFFD Physician  
This intensive 16 week course includes principles, procedures and techniques of fire fighting. Students will learn technical and manipulative skills necessary in basic concepts of fire control, fire behavior and tactics and strategy. Students will learn laws and regulations affecting the fire service, use of fire service tools and equipment, apparatus, hose, ladders, breathing apparatus, ropes, and medical skills and equipment for EMT certification. Meets state fire marshal requirements for Firefighter 1 certification. CSU

F SC 111. Firefighter One Academy (11)  
Lec-8, lab-9, field trips  P/NP available  
Prereq.: F SC 50, F SC 115, F SC 17, PE 29, and clearance from licensed physician  
Coreq.: F SC 105A or 105B  
Advise: PE 50C, and F SC 52A or 53 or 55 or 57 or 61A or 64  
Includes the principles, procedures, and techniques of firefighting. Technical and manipulative skills and concepts of fire control, fire behavior, and tactics and strategy will be reviewed and put into practice during this course. The student will be trained according to the National Fire Protection Association, Standard 1001. CSU

F SC 112. Refresher Firefighter Academy (1)  
Lec-5, lab-35 (total hrs), field trips  P/NP available  
Prereq.: F SC 111  
Includes the operational procedures and techniques of using firefighting equipment. Technical and manipulative skills required in fireground operations and various emergency scenarios will be reviewed and put into practice during this course. A classroom component will address firefighter safety and the reinforcement of safe practices. CSU

F SC 115. Incident Command System 200 (1)  
Lec-16 (total hrs)  P/NP available  
Course consists of modules 2 through 6 and has been determined by the National Wildfire Coordination Group (NWCG) as meeting the training needs of wildland fire personnel for ICS. Basic ICS introduces principles associated with the ICS. It covers organization, facilities, resource terminology and the common responsibilities or general instructions associated with incident or event assignment. CSU

F SC 120. Incident Command System 300 (1.5)  
Lec-24 (total hrs), field trips  P/NP available  
Prereq.: F SC 115  
This course focuses on the Incident Command System for supervisors in growing emergency incidents. This course builds on ICS 100 and 200, and provides more descriptive detail of the organization, structure, responsibilities, duties and terminology and how these essential principles are used in event and incident planning. CSU

F SC 125. Incident Command System 400 (1.5)  
Lec-24 (total hrs), field trips  P/NP available  
Prereq.: F SC 120  
Advanced Incend Command System I-400 provides more description and detail of the command and general staff positions and introduces major incident management utilizing unified and area command management concepts. Numerous classroom exercises developing an Incident Action Plan will be developed by the students using unified/area command techniques. CSU

F SC 140. Weapons of Mass Destruction, First Responder (1)  
Lec-16 (total hrs), field trips  P/NP available  
Training for First Responders in the recognition, identification, notification and self-protection knowledge required to safely become aware of and activate the emergency response system in the event of a weapons of mass destruction incident. Also, training to operate in a support zone safely assisting emergency services personnel to mitigate the incident. CSU

F SC 145. Introduction to Homeland Security (3)  
Lec-3  
The course introduces the students to the fundamentals of Homeland Security. Examines the history and events leading up to the creation of the Department of Homeland Security. The interoperation between local, state, federal and non-governmental organizations regarding mitigation, preparation, prevention, response and recovery in an all-hazards environment. CSU  
F SC 145 = ADMJ 145
African American Studies

Office: Science 222
Phone Number: (415) 239-3510
Web Site: www.ccsf.edu/african

General Information

African American Studies Department (AAS) offers courses in a number of areas. These courses enable students to learn and comprehend the history, culture, and traditions of African and/or African descended people. We are committed to providing students with courses that will enhance their academic skills and contribute to their successful matriculation. The African American Studies Department is rooted in the historical, cultural, and intellectual traditions of the African/African American experience, in time and space, is a legitimate subject of intellectual inquiry and academic endeavor.

Learning Outcomes

Upon completion of courses in African American Studies, students will be able to:

- Identify, describe, and analyze the broad patterns and trajectories in African and African American history and culture.
- Identify, describe, and analyze the place in, and role played by, Africans in world history, global economics, international politics, and in world culture.
- Identify, describe, and analyze the importance of the African American dimension, political, social, economic, legal, and cultural, in United States history.
- Identify, describe, and analyze the ways in which the study of African and African American history has contributed to a broader and deeper comprehension and analysis in our intellectual grasp of the structures of domination throughout human history, including systems and practices of national/colonial, economic/class/ caste, sexual/gender, and racial/ethnic domination.

Announcement of Courses

Credit, Degree Applicable Courses:

AFAM 30. African American Consciousness (3)
Lec-3, field trips P/NP available
A historical overview of the development of Black psychology, the relationship between values and beliefs in developing a healthy Black identity in childhood, adolescence, adulthood, and old-age; an analysis of cultural, educational, economic, social, and political influences that impact on Black family life. CSU/UC

AFAM 31. The African American Athlete (3)
Lec-3 P/NP available
An in-depth look at the challenges that were and are faced by African American athletes in the U.S. CSU

AFAM 35. African-American Religion (3)
Lec-3
An examination of the religious experience of African-Americans with emphasis on the evolution of Afro-Christianity beginnings of the African-American church. It will examine African Traditional Religion and Islam. The course will also cover the role of African American religion during slavery up to the Civil Rights Movement to the present day. CSU/UC

AFAM 40. The Black Experience in California: 1500 to the Present (3)
Lec-3, field trips
The role of Africans in the creation of California as a geopolitical and cultural entity; includes use of primary source materials and personal family histories. CSU/UC

AFAM 55. From Funk to Hip Hop (3)
Lec-3 P/NP available
African American beliefs and cultural outlook as reflected through the aesthetics and politics of black popular music from the Black Revolution of the 1960s, up to and including Hip-Hop. CSU/UC

AFAM 60. African American Women in the United States (3)
Lec-3
Examines and comparatively analyzes African American women in the U.S. with particular emphasis on the struggle for rights as African people. Explores the contributions, strategies for success and political activism of African American women from 1619 to the present. CSU/UC

ART 107. African American Art History (3)
Lec-3, field trips
A brief survey of the art of West African civilizations and art history of African Americans from the colonial to contemporary time. All art will be discussed from both a critical and historical perspective, with regard to formal visual elements of style and the societies, values and ideas that gave birth to African American art. CSU/UC

BCST 104. Race and Media (3)
Lec-3, field trips
ADVICE: ENGL 93 OR 94 OR PLACEMENT IN ENGL 96
Historical study of the images of African-Americans, Asians, Hispanics, and other racial groups as projected through mass media. This includes print, film, radio, television, music, cable, Internet and emerging media. Socio-historical-legal analysis of ways in which affected groups have responded to these images. CSU/UC

ECON 30. Economics of the African American Community (3)
Lec-3 P/NP available
An introduction to the principles of Black political economy. Black employment, employment discrimination, Black capitalism, the Black underclass, homelessness, and community economic development. Examination of the empirical link between race, class and income distribution. CSU/UC

ENGL 36. African American Literature—A Survey (3)
Lec-3 P/NP available
Prereq.: ENGL 96 or Placement in ENGL 1A
Reading and analysis of formal and informal literary expressions of African Americans, from slavery to the present. CSU/UC
to modern literature written in vehicular languages, languages of the colonizers. Analysis of successive attitudes of the Western world toward the Black race as related by African writers from 1890 to 1960, the most important historical period in African literature south of the Sahara. CSU/UC

MUS 8A. Beginning Jazz and Other Popular Piano (1)
Lec-3, field trips P/NP available
ADVICE: MUS 9A OR DEMONSTRATION OF EXIT SKILLS
Beginning study and exploration of jazz piano technique in myriad forms through the application of jazz theory, blues, Afro-Cuban, Brazilian and other popular styles. CSU/UC

MUS 8B. Intermediate Jazz and Other Popular Piano (1)
Lec-3, field trips P/NP available
PREREQ.: MUS 8A OR DEMONSTRATION OF EXIT SKILLS
ADVICE: MUS 9A OR DEMONSTRATION OF EXIT SKILLS
An intermediate study of basic jazz, blues, Afro-Cuban, Brazilian and other popular piano techniques. CSU/UC

MUS 21. Traditional African Music (3)
Lec-3, field trips P/NP available
A survey of the function of traditional music in Africa and how it is organized as an integral part of everyday activity. Emphasis on practical application. CSU/UC

MUS 23. Jazz History: Musical Traditions of the African American (3)
Lec-3, field trips P/NP available
Lectures, discussions, assigned reading and listening designed to explore the musical heritage of the African American, including spirituals, work songs, blues, jazz, gospel, opera, and symphony. Interaction of these with traditional American and European music. CSU/UC

MUS 26. Music in American Culture (3)
Lec-3, field trips P/NP available
A survey of music generated by America's diverse populations including Latino, African American, Hawaiian, Native American, Cajun, and Puerto Rican. CSU/UC

MUS 41. African Drumming Ensemble (1)
Lab-3, field trips P/NP available
Repeat: max. 4 units
The content of this course varies. Students may re-enroll without repeating subject matter.
African drumming studies and performance of music integral to everyday life in Africa. A review of the function of traditional music in Africa. CSU/UC

DANC 130A-130B-130C. Jazz Dance (1-1-1)
Lab-2 P/NP available
Repeat: Combination max. 4 enrollments
Beginning, intermediate, and advanced jazz dance techniques, patterns, routines, choreography, and improvisation. CSU/UC

DANC 132A-132B-132C. African-Haitian Dance (1-1-1)
Conf-1, lab-1 P/NP available
Repeat: Combination max. 4 enrollments
Beginning, intermediate, and advanced study of African-Haitian dance as a vehicle to understand and appreciate the impact and manifestation of the African culture in the Caribbean and North America. CSU/UC
Aircraft Maintenance Technology

Office: Airport
Phone Number: (415) 239-3901
Web Site: www.ccsf.edu/aeronaut

Announcement of Curricula

General Information
City College of San Francisco offers two years of specialized training for students desiring preparation for employment as aircraft technicians maintaining powerplants, airframes, or avionics equipment.

Learning Outcomes

Employment. Students who successfully complete the degree or certificate curricula are qualified for employment in various positions, including those in the following fields:

- Powerplant Maintenance—Entry positions as accessory mechanic, general powerplant mechanic, maintenance-crew member, ramp service-crew member, and hangar-crew member. Positions to which graduates may advance after obtaining experience and further training include those of aircraft powerplant technician (licensed), supervisor, and inspector.

- Airframe Maintenance—Entry positions as general aircraft-overhaul mechanic, accessory mechanic, electric-shop mechanic, general cabin-equipment mechanic, maintenance-crew member, ramp-service crew member, and hangar-crew member. Positions to which graduates may advance after obtaining experience and further training include those of airframe technician (licensed), supervisor and inspector.

Avionics Maintenance—Entry positions as avionics technician, radio/electric line mechanic. Positions to which graduates may advance after obtaining experience and further training include those of lead systems specialist, supervisor and inspector.

Federal Certification. The Federal Aviation Administration permits those who hold the Associate of Science (or the Certificate of Completion) in Aircraft Powerplant Maintenance Technology to take the examination for the F.A.A. Powerplant Certificate. The Federal Aviation Administration permits those who hold the Associate of Science (or Certificate of Completion) in Airframe Maintenance Technology to take the examination for the F.A.A. Airframe Certificate.

Those who satisfactorily complete the Option in Avionics-Maintenance Technology in this curriculum and who hold the Certificate of Completion are qualified to take the Federal Communications Commission (F.C.C.) examination and meet job entry requirements of the avionics-maintenance field.

Degree Curriculum
The Degree Curriculum in Aircraft Maintenance Technology offers three programs of study (majors): Aircraft Powerplant Maintenance Technology, Airframe-Maintenance Technology, and Avionics-Maintenance Technology. Students who complete all courses required for the major and satisfy general College graduation requirements will receive the Associate in Science Degree. For information, call the Aircraft Maintenance Technology Department at 239-3901.

To enroll:

1. File with the Office of Admissions and Records an application for admission to City College.
2. Complete the CCSF Matriculation process: Placement testing (in Math and English/ESL), Orientation, Counseling

Communication and Computation Skills. Federal Aviation Administration (F.A.A.) regulations require that a student be able to read, speak, and understand English and perform basic computation. It is highly recommended that applicants, prior to enrolling in the Aircraft Maintenance Technology program, 1.) complete ESL 160 or English 92 with a C or higher, or placement in ENGL 93; or ESL 170; 2.) complete Math E1 or E3 or Business Math G, H or J, or be eligible for Math 40 (Elementary Algebra) through CCSF placement testing.

Previous Aircraft Job-Related or Educational Experience. In limited cases, and with Aircraft Maintenance Technology Department approval, previous aircraft job-related experience and training may substitute for certain course requirements. Previous job-related experience and training must be documented according to F.A.A. regulations. This experience will not guarantee a waiver to any requirements in the Department, but will usually provide the student with a greater chance of success in both training and placement in the industry.

Special Regulations and Policies. The Aircraft Maintenance Technology Program is regulated by the Federal Aviation Administration. As a result, all students will be issued a "Department of Aircraft Maintenance Technology Student Handbook." Contained in the handbook are special regulations regarding attendance, performance levels, conditions of academic probation and dismissal from the program. Also included are notices concerning personal safety equipment, hand tools and supplies which the student will be responsible to purchase.

Transfer to San Jose State University. Although students in the Aircraft Maintenance Program generally enter industry upon graduation, for those students who may prefer to earn the Bachelor’s degree, San Jose State University offers graduates this opportunity. Those stu-
students who intend to transfer should consult a counselor at City College of San Francisco.

## Aircraft Maintenance Technology

### Aircraft Powerplant Maintenance Technology Major (AS)

This major is for potential AMT technicians that are interested in receiving training in aircraft powerplant maintenance. The Aircraft Powerplant Maintenance Training received at the CCSF Aeronautics Department is certified by the FAA, CFR Part 147. Some of the subject areas that are covered in the Powerplant Maintenance Training include topics such as Reciprocating Engine Overhaul, Turbine Theory and Operation, Systems such as Fuel Systems, Lubrication Systems, Ignition and Starting Systems, Troubleshooting and inspections as well as testing engines for proper operation. Students will learn the proper nomenclature of aircraft powerplant parts and components. Upon successfully completing and passing (with at least a 70% score) in all required subject areas associated with the Powerplant Maintenance Training as well as completing and passing the General courses, the student will then qualify to take their Federal Aviation Administration exams. Once the graduating student passes all of the required FAA exams, they are qualified to work in the Aviation Industry as a FAA Certified Powerplant Technician.

### Learning Outcomes

Upon completion of this major, students will be able to:

- Analyze and differentiate the various aircraft parts, components, and troubleshoot the related systems.
- Use shop safety practices related to aviation maintenance.
- Analyze and perform inspections that will determine the airworthiness of aircraft systems and components.
- Identify and demonstrate proper maintenance procedures as per specified references provided.
- Calculate the volume, area, power development and cubic displacement of an aircraft reciprocating engine.
- Summarize and demonstrate the techniques utilized in overhauling an aircraft reciprocating engine.

Students must complete each course with a grade of “C” or higher.

### Courses Required for the Major in Aircraft Powerplant Maintenance Technology

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>First Semester</strong></td>
<td></td>
</tr>
<tr>
<td>AIRC 101 Introduction to Aircraft Maintenance</td>
<td>8</td>
</tr>
<tr>
<td>AIRC 102 Basic Electricity &amp; Electrical Systems</td>
<td>8</td>
</tr>
<tr>
<td><strong>Second Semester</strong></td>
<td></td>
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<tr>
<td>AIRC 103 Powerplant Theory &amp; Maint</td>
<td>8</td>
</tr>
<tr>
<td>AIRC 104 Propul Powerplant Sys</td>
<td>8</td>
</tr>
<tr>
<td>Additional graduation requirements</td>
<td></td>
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<tr>
<td><strong>Third Semester</strong></td>
<td></td>
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<tr>
<td>AIRC 105 Powerplant Comp</td>
<td>8</td>
</tr>
<tr>
<td>AIRC 106 Aircraft Metal Struct</td>
<td>8</td>
</tr>
<tr>
<td>AIRC 116 Aircraft Material Process</td>
<td>1</td>
</tr>
<tr>
<td>Additional graduation requirements</td>
<td></td>
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<tr>
<td><strong>Fourth Semester</strong></td>
<td></td>
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<tr>
<td>AIRC 107 Hydr, Pneum &amp; Cabin</td>
<td>8</td>
</tr>
<tr>
<td>AIRC 108 Rigging &amp; Electr Sys</td>
<td>8</td>
</tr>
<tr>
<td>AIRC 115 Aircraft Mat Proc</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total Units</strong></td>
<td>66</td>
</tr>
</tbody>
</table>

### Avionics-Maintenance Technology Major (AS)

This major is for potential technicians that are interested in receiving training in Avionics maintenance. Upon successfully completing and passing (with at least a 70% score) in all required subject areas (associated with the Avionics Maintenance Training) as well as passing the required General course, the student will then qualify to receive the Avionic Completion Certificate.

In the aviation industry, tasks involved in maintaining avionic equipment encompass the installation, inspection, testing, adjusting, or repair avionics equipment, such as radar, radio, navigation, and missile control systems in aircraft or space.
Learning Outcomes
Upon completion of the major, students will be able to:

- Inspect, check, and troubleshoot autopilot, servos and approach coupling systems.
- Inspect, check, and service aircraft electronic communication systems.
- Inspect, check, and service aircraft navigation systems.
- Inspect, check, and service aircraft radar beacon transponder.
- Inspect and repair antenna and electronic equipment installations.
- Inspect and repair flight management computers.

Students must complete each course with a grade of “C” or higher.

Courses Required for the Major in Avionics-Maintenance Technology

<table>
<thead>
<tr>
<th>Course Required for the Certificate of Achievement in Aircraft Powerplant Maintenance Technology</th>
</tr>
</thead>
<tbody>
<tr>
<td>Course</td>
</tr>
<tr>
<td>AIRC 101 Intro to Aircraft Maintenance</td>
</tr>
<tr>
<td>AIRC 102 Basic Electrical Systems</td>
</tr>
<tr>
<td>AIRC 103 Powerplant Theory &amp; Maintenance</td>
</tr>
<tr>
<td>AIRC 104 Propul Powerplant Sys</td>
</tr>
<tr>
<td>AIRC 105 Powerplant Comp</td>
</tr>
<tr>
<td>AIRC 116 Aircraft Material Process</td>
</tr>
<tr>
<td>Total Units</td>
</tr>
</tbody>
</table>

Airframe-Maintenance Technology Certificate

Requirements for the Certificate of Achievement. Students may obtain the Certificate of Achievement in Airframe-Maintenance Technology by receiving a final grade of “C” or higher in all of the following courses.

Learning Outcomes
Upon completion of this certificate, students will be able to:

- Analyze and differentiate the various airframe parts, components, and troubleshoot the related systems.
- Perform airframe conformity and airworthiness inspections of airframe systems and components.
- Identify and select hydraulic fluids.
- Identify and demonstrate proper maintenance procedures as per specified references provided.
- Inspect, check and service landing gear position indicating and warning systems.
- Inspect and repair sheet metal structures.

Courses Required for the Certificate of Achievement in Airframe-Maintenance Technology

| Course                                      | Units |
|-----------------------------------------------|
| AIRC 101 Intro to Aircraft Maintenance        | 8     |
| AIRC 102 Basic Elect Sys                      | 8     |
| AIRC 106 Aircraft Metal Struct                | 8     |
| AIRC 107 Hydr, Pneum & Cabin Sys              | 8     |
| AIRC 108 Rigging & Elect Sys                  | 8     |
| AIRC 115 Aircraft Mat Proc                    | 1     |
| Total Units                                   | 41    |

Avionics-Maintenance Technology Certificate

Requirements for the Certificate of Accomplishment. Students may obtain the Certificate of Accomplishment in Avionics-Maintenance Technology by completing the following requirements with a final grade of “C” or higher in each course.

The Avionics certificate is for potential technicians that are interested in receiving training in Avionics maintenance. Upon successfully completing and passing (with at least a 70% score) in all required courses (associated with the Avionics Maintenance Training) the student will then qualify to receive the Avionics Certificate of Accomplishment.

In the aviation industry, tasks involved in maintaining avionic equipment encompass the installation, inspection, testing, adjusting, or repair avionic equipment, such as radar, radio, navigation, and missile control systems in aircraft or space. The Avionics Certificate will allow the Maintenance Technician to work locally, nationally and internationally in the field of aviation.
Learning Outcomes
Upon completion of the Certificate, students will be able to:

- Inspect, check, and troubleshoot autopilot, servos and approach coupling systems.
- Inspect, check, and service aircraft electronic communication systems.
- Inspect, check, and service aircraft navigation systems.
- Inspect, check, and service aircraft radar beacon transponder.
- Inspect and repair antenna and electronic equipment installations.
- Inspect and repair flight management computers.

Students must complete each course with a grade of “C” or higher.

Courses Required for the Certificate of Accomplishment in Avionics-Maintenance Technology

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AIRC 113 Avionics Comm Navig</td>
<td>7</td>
</tr>
</tbody>
</table>

Total Units 7

Announcement of Courses

Credit, Degree Applicable Courses:

AIRC 101. Introduction to Aircraft Maintenance (8)
Lec-5, lab-10, field trips
Introduction to the general section of the aircraft maintenance technician program. Orientation to the aircraft industry. Many aspects pertaining to aircraft maintenance will be covered. CSU

AIRC 102. Basic Electricity and Electrical Systems (8)
Lec-5, lab-10, field trips
An introduction to the principles of electricity applicable to the responsibilities of the aircraft technician in maintaining F.A.A. airworthiness standards. Short review of basic mathematics within the scope of aircraft applied technology. Introduction to aircraft structural materials, heat treating, aircraft hardware, and weight and balance control are also surveyed. CSU

AIRC 103. Powerplant Theory and Maintenance (8)
Lec-5, lab-10, field trips
Advisement: AIRC 101 and 102
Procedures of powerplant maintenance with reciprocating engines. Construction of and overhaul techniques of powerplant to F.A.A. requirements. The use of tools and equipment to maintain airworthy standards of repair to powerplants. CSU

AIRC 104. Propulsion Powerplant Systems (8)
Lec-5, lab-10, field trips
Complete coverage of the powerplant electrical system, including the ignition system used for all propulsion powerplants. The maintenance of fire detection and protection systems and the internal and external powerplant lubricating system. Procedures of powerplant maintenance with turbine engines and propulsion units. Construction of the overhaul techniques of powerplants to F.A.A. requirements. CSU

AIRC 105. Powerplant Components and Propellers (8)
Lec-5, lab-10
Theoretical and practical approach to fuel system control and the maintenance of each system component. The theory applied to propulsion and the practical application of propeller maintenance to Federal Aviation Administration standards. CSU

AIRC 106. Aircraft Metal Structures (8)
Lec-5, lab-10, field trips
Advisement: AIRC 101 and 102
The technological approach towards the complex airframe structures and the stresses absorbed by the skin coverings. Emphasis on construction and maintenance of these metal structures. Applied methods of airworthy repairs, including the forming processes, the bonding surfaces, plastic and honeycomb repairs, the fusing of metals and its limitations, fire detection, and ice detection systems. Emphasis on the proper use of tools and equipment needed for approved repairs to metal structures. CSU

Lec-5, lab-10
This course acquaints students to the theoretical and practical experiences needed in aircraft hydraulic, pneumatic, landing gear, fire, ice and rain control systems. CSU

AIRC 108. Rigging and Electrical Systems (8)
Lec-5, lab-10, field trips
F.A.A. requirements applied to techniques of rigging aircraft, controls, and control surfaces. A short introduction to the wood structures and fabric covering along with the maintenance techniques. Applied theory of finishes and their effects on flight conditions. Maintenance techniques in electrical wiring, control switches, indicators, and protective devices. Troubleshooting and repairing of alternating-current electrical systems. CSU

AIRC 109. Materials Laboratory (4)
Lec-4, lab-2, field trips
Complete coverage of hand tools, FARs, aerodynamics, electrical systems, overhaul techniques of powerplants to F.A.A. requirements, hydraulics, sheet metal, and rigging and assembly, woodworking and finishing, and weight and balance

AIRC 110A. Introduction to Aviation (2)
Lec-3, field trips
Intended to be taken with AIRC 110B.
A broad exposure to the extensive field of aviation. The history and present wide scope of aviation is presented and related to the effects on our everyday lives. A better understanding of aviation and aerospace science is developed and will serve students in adapting to and shaping a better tomorrow. Airplane systems, aerodynamics, careers, and the future of aviation. CSU

AIRC 110B. Flight Science (3)
Lec-3, field trips
(Designed to achieve the equivalent of the F.A.A. Private Pilot Ground School, this class will enable the student to take the F.A.A. private pilot written examination. Flight instruction is not intended as part of this course. Such training may be obtained at F.A.A. approved flight schools at nearby airports.) Aviation weather flight computers, navigation, radio navigation, air-traffic control, Federal Aviation Regulations, weight and balance, use of the Airman’s Information Manual and cross-country flight planning. CSU

AIRC 111. Avionics Communication and Navigation Systems (7)
Lec-5, lab-6, field trips
A study of large aircraft communications and navigation systems: air-to-ground and closed circuit communications; navigation systems providing guidance information and data for automated steering. Analysis of systems operation, fundamental troubleshooting and maintenance techniques as applied to large jet aircraft. CSU
American Sign Language
Office: Art 202
Phone number: (415) 239-3223
Web Site: www.ccsf.edu/forlang

Learning Outcomes
Upon completion of this discipline, students will be able to:

- Understand the main points of standard signing on familiar matters encountered in work, school, leisure, etc.
- Understand and respond to signed dialog which consist mainly of high-frequency everyday language.
- Understand and respond to most situations likely to arise while interacting with people using American Sign Language (ASL).

Announcement of Courses
Credit, Degree Applicable Courses:
AMSL 1A-1B. Elementary American Sign Language (3-3)
Lec-3
P/NP available
Prereq: For AMSL 1B: AMSL 1A or demonstration of AMSL 1A exit skills
Everyday communication emphasizing vocabulary and syntax; finger spelling to enable students to communicate with the deaf in a culturally appropriate manner on an elementary conversational level. CSU/UC

American Studies
Office: Batmale 656
Phone number: (415) 239-3330
Web Site: www.ccsf.edu/socialsci

Learning Outcomes
Upon completion of courses in American Studies, students will be able to:

- Evaluate the basic perspectives of social science disciplines, particularly the concepts of power, through their application to American cultural artifacts and socio-political texts.
- Integrate basic social sciences approaches and methodologies and their application to course topics.
- Distinguish the functions of different forms of artistic and literary expression in American social, cultural and political forces, issues and ideas.
- Demonstrate an ability to discuss major historic, literary, artistic, and social movements in the United States.
- Evaluate information in primary sources.

Announcement of Courses
Credit, Degree Applicable Courses:
AMC 11A-11B. American Civilization (3-3)
Lec-3
(AMC 11A IS NOT PREREQUISITE TO 11B)
Lectures and discussions exploring the principal historical, literary, artistic, and social movements in America; illustrated with slides, recordings, and films. CSU/UC

AMC 5. Comics, Power and Society (3)
Lec-3, field trips
P/NP available
An introductory social science course using graphic literature, comic books and related media illustrating central social science concepts. The course examines power, powerlessness, and superpower. The history, content and impact of comic books, editorial cartoons, and animation on American society are examined as artistic forms of expression and as representations of social and political issues. CSU/UC

Anthropology
Office: Batmale 354
Phone number: (415) 239-3433
Web Site: www.ccsf.edu/behavior

Anthropology Major (AA-T)
Associate in Arts in Anthropology for Transfer. The program is designed to prepare students who wish to transfer to pursue studies in anthropology. It is STRONGLY advised that potential majors meet with the Behavioral Sciences Chair to discuss educational goals, course options and transfer issues.

Learning Outcomes
Upon completion of this degree, students will be able to:

- Contrast the major contemporary theoretical perspectives in the four major subfields
- Critically analyze and interpret anthropological data
- Apply the methods of cross-cultural comparison and the concept of cultural relativism to past and present cultures

Degree Requirements: Students who wish to earn the Associate in Arts in Anthropology for Transfer (AA-T) must complete 60 CSU transferable units with at least a 2.0 grade point average. This must include the units required for full completion of the IGETC or CSU GE curriculum and the 18 units for the major as specified below. Each course in the major must be completed with a grade of “C” or better. Courses used to meet the major requirement may also be used to meet IGETC or CSU GE requirements.

Courses Required for the Major in Anthropology

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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<tr>
<td>ANTH 1 Biological Anthropology</td>
<td>3</td>
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<tr>
<td>ANTH 2 Archaeology and Prehistory</td>
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</tbody>
</table>
ANNOUNCEMENT OF COURSES

CREDIT, DEGREE APPLICABLE COURSES:

ANTH 1. Biological Anthropology (3)
Lec-3 P/NP available
The biological nature of humans and the changes that have occurred from prehistoric times to the present. The place of humans in nature, vertebrate and primate evolution, fossil evidence for human antiquity, individual and population genetics, mechanisms of evolution, and human variation. CSU/UC

ANTH 2. Archaeology and Prehistory (3)
Lec-3 P/NP Available
Survey of the contemporary archaeological methods of excavation, analysis, and interpretation. Focus on various theoretical approaches used to explain past human behavior. Thematic discussion of the major events in the prehistory of humankind from our earliest origins to the appearance of agriculture and settled communities. CSU/UC

ANTH 3. Introduction to Social and Cultural Anthropology (3)
Lec-3 P/NP available
The structure and dynamics of cultures as seen in their religions, marriage practices, gender roles, kinship, social classes, languages, laws and political organization. Examples taken from tribal, peasant, and urban situations in many areas of the world. CSU/UC

ANTH 3AC. Introduction to Cultural Anthropology: Focus on American Cultures (3)
Lec-3 P/NP available
Introduces basic concepts of cultural anthropology through the study of cultures from at least three of the five following groups: African American, Asian/Pacific Islander, Chicano/Latino, Native American, and European American (as per the requirements of the UC American Cultures Program). Ethnography, history, literature, films and music are integrated in an interdisciplinary approach to cultural studies. CSU/UC

ANTH 4. Introduction to Linguistic Anthropology (3)
Lec-3 P/NP available
The study of language: its general nature, its cognitive, biological, and social bases. Languages as they reflect the separate cultural realities of different societies. CSU/UC

ANTH 5. Philippine Culture and Society (3)
Lec-3 P/NP available
A cross-cultural exploration of supernatural belief systems focusing on small scale cultures; the history and methods of the anthropology of religion; the dynamics of myth, superstition, possession, trance, magic, totem, taboo, cults, and sects. CSU/UC

ANTH 8. Magic, Witchcraft, and Religion (3)
Lec-3 P/NP available
A cross-cultural exploration of supernatural belief systems focusing on small scale cultures; the history and methods of the anthropology of religion; the dynamics of myth, superstition, possession, trance, magic, totem, taboo, cults, and sects. CSU/UC

ANTH 10. Latin American Cultures and Societies (3)
Lec-3 P/NP available
Comprehensive and critical analysis of the cultures and traditions of the peoples of Latin America. Critical in-depth study of contemporary society and political systems, inter-ethnic relations, traditional medical and healing methodologies, religion and sorcery. Analysis of the development of Latin American cultures and the impact of civilization on its peoples. Emphasis on the way of life in Latin American cities, barrios, and villages. CSU/UC

ANTH 11. North American Indian Cultures (3)
Lec-3 P/NP available
The native people of North America are described in terms of pre-contact adaptation to the natural environment. Spiritual knowledge, family life, native medicine and native languages are studied in the context of traditional and contemporary cultures. Issues of political power, sovereignty and identity are explored using Native guest speakers and Native literature. CSU/UC

ANTH 12. North American Indian Cultures (3)
Lec-3 P/NP available
The development of Philippine culture and the impact of Western civilization on the people; emphasis on the ways of life in Philippine cities and barrios. Tribal cultures. CSU/UC

ANTH 15. Philippine Culture and Society (3)
Lec-3 P/NP available
The development of Philippine culture and the impact of Western civilization on the people; emphasis on the ways of life in Philippine cities and barrios. Tribal cultures. CSU/UC

ANTH 20. LGBT Anthropology (3)
Lec-3 P/NP available
The roles and statuses of homosexuals and other sexual minorities in world cultures, with examples from Native America, the Middle East, Africa, South America, Asia, and Europe. Aspects of culture that affect the lives of sexual minorities, including economics, religion, kinship, marriage, and gender roles, will be examined. CSU/UC

ANTH 21. Archaeology of the Bay Area (Prehistoric) (1)
Lec-1, field trips P/NP available
Examination of the archaeological record created by the native American people who first populated the San Francisco Bay Area. Cultural remains and artifacts recently excavated at the Presidio, Mission Dolores, the Financial District, south of Market, and other sites will be considered to ascertain how these people lived, worked and interacted. CSU
ANNOUNCEMENT OF CURRICULA

APPRENTICESHIP

General Information

Apprenticeship is a workforce training concept, which is designed to prepare individuals, generally high school graduates, and produce highly qualified and well trained workers who have solid knowledge as well as specific, technical job skills for occupations in the skilled trades and crafts.

The City College of San Francisco, in cooperation with the California Division of Apprenticeship Standards and local joint apprenticeship Committees, offers “related training” apprenticeship programs in designated trades or occupations. Apprenticeship on-the-job training is not offered by the College. Most apprenticeship programs are three to five years in length, similar to a four year bachelor’s degree program.

Upon completion of an apprenticeship program, the State of California Department of Industrial Relations California Apprenticeship Council awards a Certificate of Completion of Apprenticeship in the trade.

Learning Outcomes

Upon completion, students will be able to:

- Identify, describe, and demonstrate safety practices related to their specific work requirements in compliance with CAL OSHA and EPA Regulations.
- Explain, demonstrate, and utilize the basic elements of industrial machinery and basic tools related to their trade.
- Analyze, interpret, and apply concepts, measurements and codes related to their trade.
- Apply problem-solving and analytical thinking skills in the maintenance, operation, testing, troubleshooting and repairs of equipment related to their trade.
- Understand green technologies language according to (MITC)-the Minimum Industry Training Criteria, as it relates to their Trade.

Announcement of Courses

Noncredit Courses:

APPR 9710. Meat Cutting Apprenticeship (72 hrs)
Training required for entry level employment as a journey person in the meat cutting trade. Includes: history, knives, tools equipment, sanitation, mathematics, weights, measures, USDA grades, breakdown of beef, veal, pork, lamb, variety meats, poultry, fish, sausage making, storage and merchandising.

APPR 9713. Plastering Apprenticeship (72 hrs)
Study of and practice in the trade of plastering as required by the apprenticeship program established by the local joint apprentice program established by the local joint apprenticeship committee and approved by the Division of Apprenticeship Standards Department of Industrial Relations, State of California. Related instruction includes: safety, mathematics, hand tools, equipment, materials, mixing, applying plaster, blueprint reading, bases, fireproofing, problems, and repairs, exterior insulation finish systems (EIFS) and finishes. Seventy-two (72) hours per semester, 576 Hours of related and supplemental instruction for this four (4) year apprenticeship.

APPR 9714. Plumber Apprentice (108–162 hrs)
The practice and study of skills and knowledge required for entry level employment as a journeyperson in the plumbing industry. Instruction includes occupational hazards, safety, first aid, CPR, blueprint reading, use of basic drawings, common cutting and welding practices, gas and arc welding, soldering, brazing, residential plumbing repairs and installations, troubleshooting residential plumbing problems and recommended industrial practices.

APPR 9715. Refrigeration/Air Conditioning Apprenticeship (108–162 hrs)
Preparation for entry-level employment in refrigeration and air conditioning. The performance skills are designated in the program standards established by the joint apprenticeship committee and approved by the Division of Apprenticeship Standards, Department of Industrial Relations, State of California.

APPR 9716. Roofing/Waterproofing Apprenticeship (54 hrs)
Apprentices will apply a variety of materials including hot and cold applied built-up roofing and waterproofing, asphalt shingles, roofing such as tile and single ply roofing materials including EPDM, PVC, Hypalon and Modified Bitumen.

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Persons interested in seeking apprentice status and enrollment in apprenticeship “related training” classes listed in the catalog should contact the State of California Department of Industrial Relations, Division of Apprenticeship Standards of the local sponsoring joint apprenticeship committee.

For further information, please call the CCSF Apprenticeship Program at (415) 550-4453.

APPRENTICESHIP

Office: Evans
Phone Number: (415) 550-4453
Web Site: www.ccsf.edu/Campuses/Evans/Apprenticeship

ANNOUNCEMENT OF COURSES

Noncredit Courses:

APPR 9710. Meat Cutting Apprenticeship (72 hrs)
Training required for entry level employment as a journey person in the meat cutting trade. Includes: history, knives, tools equipment, sanitation, mathematics, weights, measures, USDA grades, breakdown of beef, veal, pork, lamb, variety meats, poultry, fish, sausage making, storage and merchandising.

APPR 9713. Plastering Apprenticeship (72 hrs)
Study of and practice in the trade of plastering as required by the apprenticeship program established by the local joint apprentice program established by the local joint apprenticeship committee and approved by the Division of Apprenticeship Standards Department of Industrial Relations, State of California. Related instruction includes: safety, mathematics, hand tools, equipment, materials, mixing, applying plaster, blueprint reading, bases, fireproofing, problems, and repairs, exterior insulation finish systems (EIFS) and finishes. Seventy-two (72) hours per semester, 576 Hours of related and supplemental instruction for this four (4) year apprenticeship.

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For further information, please call the CCSF Apprenticeship Program at (415) 550-4453.
APPR 9720. Stationary Engineer Apprentice (108 hrs)
Training required for employment as a journeyperson in the stationary engineer trade. Includes safety, trade practices, gas and arc welding, first aid, CPR, fundamentals of conditioning air, heat transfer, air conditioning systems, plans, hydraulics, pneumatics, buildings, machines, electrical and sheet metal, boilers, mathematics grade, calculations, hand tools, power tools and equipment.

APPR 9721. Steamfitting Apprenticeship (108-162 hrs)
Preparation for entry-level employment as a journeyperson in steamfitting. Performance skills are designated in the program standards established by the joint apprenticeship committee and approved by the Division of Apprenticeship Standards, Department of Industrial Relations, State of California.

Journeyperson

Credit, Degree Applicable Courses:
Stationary Engineers
JRNY 106. High Rise Fire Safety Director (1.5)
Lec-3 (9 wks) P/NP available
ADVISE: ESL 150 and HIGH SCHOOL DIPLOMA OR GED
Provides basic knowledge and skills in the preparation of facility emergency plans; fire prevention and protection; life safety systems; evacuation and relocation procedures; earthquake preparedness; management of various emergencies and coordinating with emergency responders. CSU
JRNY 106 = F SC 106

Noncredit Courses:
Stationary Engineers
JRNY 9701. Air Conditioning - Refrigeration I (54 hrs)
Introduction to the craft of air conditioning and refrigeration maintenance as practiced by journeypersons in the trade. Hands-on use of electrical instruments, hand, heat, and power tools.

JRNY 9702. Air Conditioning - Refrigeration II (54 hrs)
Prereq.: JRNY 9701
Continuation of the craft of refrigeration and air conditioning maintenance as practiced by journeypersons in the trade. Hands-on use of electrical instruments, hand, heat, and power tools.

JRNY 9704. Backflow Prevention and Cross-Connection Control (54 hrs)
Introduction to the theory, fundamentals of operation, test equipment used and techniques recommended for testing and maintenance of backflow prevention assemblies.

JRNY 9705. Boiler Operation and Maintenance (54 hrs)
An intensive course designed to introduce the basic properties of physics relative to the operation of steam and hot water boilers. Basic theory review and discussion of maintenance troubleshooting skills. Scheduled to various central plants.

JRNY 9706. Blueprint Reading (54 hrs)
Nearly every aspect of the Stationary Engineer Trade has some type of drawing or blueprint associated with it. Gaining a basic understanding of how these drawings relate the process of design and construction to the finished product will enhance the students on the job performance and facilitate a better understanding of the equipment they work on.

JRNY 9707. Computers I (54 hrs)
Students are introduced to the tools and functions of the most recent versions of Windows Operating Systems. Students are taught how to organize and navigate the Windows platform for an efficient application of the system. They will be taught application of word processing software program found in the Microsoft Office Suite. This includes the function of toolbars and keyboard as well as application of word processing for business purposes.

JRNY 9708. Computers II (54 hrs)
Prereq.: JRNY 9707
Students will be taught the software programs found in the Microsoft Office Suite as they relate to building systems. They will learn how to collect and enter building data into Microsoft Access. They will learn how to create queries and macro functions, developing charts and graphs on Microsoft Excel and to create a PowerPoint presentation.

JRNY 9709. CFC Training/Testing (8 hrs)
Preparation for the CFC Exam.

JRNY 9710. Controls I (54 hrs)
Designed to develop an understanding and recognition of various types of commercial and industrial control systems while achieving the skills needed to analyze wiring and ladder diagrams and concepts. This course will assist the development of the Engineer’s skills necessary to effectively troubleshoot electrical and pneumatic problems commonly found in facilities.

JRNY 9711. Controls II (54 hrs)
Prereq.: JRNY 9710
Continuation of JRNY 9710. This course will broaden the Engineer’s capability to understand and recognize various types of commercial and industrial control systems as they continue to apply the skills needed to analyze wiring and ladder diagrams and concepts. Development of the Engineer’s skills necessary to effectively troubleshoot electrical and pneumatic problems commonly found in facilities.

JRNY 9712. Direct Digital Controls (54 hrs)
This course will provide stationary engineers with an introduction to the new field of digital electronics for controlling the functions of a buildings HVAC systems, electronic access and fire alarm systems. Hands-on diagnostics of systems.

JRNY 9713. Electricity I (54 hrs)
Designed to develop an understanding and recognition of various types of electrical circuits, diagrams and concepts while developing a broad scope of the skills needed for troubleshooting electrical problems. Electricity will be studied with an emphasis on control theory and application.

JRNY 9714. Electricity II (54 hrs)
Prereq.: JRNY 9713
Continuation of developing an understanding and recognition of various types of electrical circuits, diagrams and concepts while developing a broad scope of the skills needed for troubleshooting electrical problems. Electricity will be studied with an emphasis on control theory and application.
JRNY 9715. Hazardous Materials (56 hrs)
In-depth instruction in a variety of "Hazmat" related topics, including: industrial hygiene, toxicology, use of respirators, radiation, emergency entry/egress procedures, and decontamination to name a few. A combination of classroom instruction and simulated "hands-on" exercises to familiarize Engineers with all aspects of proper handling of hazardous materials.

JRNY 9716. Hazardous Materials Refresher (8 hrs)
Provides Stationary Engineers with updates in all aspects of the 40-hour training curriculum. Provided on an annual basis, the course serves as a forum to review basic competencies and allows for any new or changes in regulations, equipment and procedures to be addressed.

JRNY 9719. HVAC Testing and Balancing (54 hrs)
This course introduces the Stationary Engineer to the effective use of instruments, reports and procedures for test and balance of HVAC systems. Both the air-side and hydronic-side of the system is studied. A sample test and balance report will be prepared by students in this course.

JRNY 9720. Indoor Air Quality (75 hrs)
Designed to assist the journey-level or advanced apprentice stationary engineer to prevent and mitigate (relieve or alleviate) indoor air quality problems. Today's facilities are operated using complex mechanical systems that interact to produce a comfortable and productive work environment. Through the operation and maintenance of these systems an related training, stationary engineers acquire a broad base of practical and theoretical knowledge that leads to complete understanding of system operations.

JRNY 9721. Energy Conservation (75 hrs)
This course will be presented in a step-by-step method to allow engineers to become part of the learning process as a progression of on-the-job energy conservation activities are incorporated into this course.

JRNY 9722. Pneumatic Controls (12 hrs)
This course is designed as a lecture/demonstration session with the opportunity for engineers to practice the use of pneumatic controls on two training units. These training units are models of the types of HVAC control systems a Stationary Engineer would expect to see in the trade.

JRNY 9725. Supervision (54 hrs)
This series of comprehensive seminars is designed for Chief Engineers and those aspiring to be Chief Engineers. Topics cover the organizational, communication and technical skills critical to achieving success in this capacity.

JRNY 9728. Technical Math I (54 hrs)
Basic arithmetic, measurement and approximate numbers, operations with signed numbers, introduction to algebra, interpretation of graphs, and an introduction to plane and solid geometry.

JRNY 9729. Technical Math II (54 hrs)
PREREQ: JRNY 9728
Introduction to trigonometry, vectors (resolution and addition), exponents and roots, radicals and logarithms, and an introduction to mechanics (force, work, energy, power).

JRNY 9734. Welding (54 hrs)
Theory, fundamentals of operation, equipment used and techniques recommended for oxygen/acetylene (OAW) and shielded metal arc welding (SMAW). General shop safety practices. Print reading and the interpretation of the American Welding Society welding symbols.

JRNY 9735. Locksmithing (54 hrs)
This course will provide Stationary Engineers with the basic locksmithing skills and confidence to undertake and perform duties as a locksmith. These skills will equip them with a foundation from which to expand their knowledge in this field, permitting them to save their employer time and money.

JRNY 9742. Electricity for the Stationary Engineer (54 hrs)
Students are taught topics in electricity as it is used in a modern facility. Students are introduced to electrical theory, terminology, safety, tools, and circuitry. Course will cover electrical distribution systems in a commercial building from utility service to loads on branch circuits, motors and motor controls.

JRNY 9743. Building Systems (54 hrs)
Students are introduced to the basic operations and functions of the mechanical and electrical systems, which are commonly found in a commercial building. Students are prepared for further, more intensive, study into the more particular trade skills required to operate a building as a professional Stationary Engineer.

JRNY 9744. Critical Facilities Fundamentals (54 hrs)
Students are introduced to operations in technologically advanced data, telecommunication and other critical centers. Students learn to operate and maintain electrical distribution systems, generators, uninterruptible power supply (UPS), HVAC in raised floor environments, building automation systems, energy management and specialized fire/life safety systems.

Plumbing

Noncredit Courses:
JRNY 9736. Backflow Valve Repair (54 hrs)
A study in all areas of training and instruction in the field of backflow, cross connection, backflow prevention, backflow testing and backflow repair.

JRNY 9737. Welding/Plumbing and Pipefitting (108 hrs)
A study in all areas of arc welding and cutting for journeyperson training and refresher course.

JRNY 9738. Basic Trade Related Electricity (54 hrs)
A study in all areas of basic trade related electricity for journeyperson training and refresher course.

JRNY 9739. Backflow Certification (54 hrs)
A study in all areas of training and instruction in the field of backflow, cross connection, backflow prevention, backflow testing and backflow certification.

JRNY 9740. AutoCAD 2000 (108 hrs)
A study in all areas of training and instruction in computer aided drafting and the CAD environment. The emphasis is placed upon two-dimensional drawing, including an overview of hardware, and basic personal computer operation within the windows operating system.
Architecture
Office: Batmale 244
Phone Number: (415) 452-5293
Web Site: www.ccsf.edu/arch

Announcement of Curricula

Learning Outcomes

Architecture and Interior Architecture students will develop an understanding of design as a model for creative inquiry, using necessary resources from history, technology, the humanities and contemporary culture issues in response to the fundamental principle that design’s relevance is based on its ability to engage society’s concerns.

Construction Management students will learn the basic effective management techniques related to the planning, design, and construction of a project from inception to completion for the purpose of controlling time, cost and quality.

The requirements for an Associates degree from CCSF and requirements for transferring to a baccalaureate program in another college or university are different. Students who are seeking to attain an Associates of Science in Architecture, Interior Design or Construction Management should follow the major requirements listed below.

Students who are seeking to transfer to another university or college to attain a 4 or 5 year degree are strongly encouraged to consult with an advisor within your program of study.

Laptop Recommendation: The Department of Architecture strongly recommends that all students planning to transfer to a 4 or 5 year university program in Architecture or Interior Design purchase a portable computer for use in certain design and graphic courses. The use of computers in most architecture and design schools has become an essential tool in lab-based design education and would benefit your education immensely. Please inquire with the department what kind of laptop computer would be helpful and when you could consider obtaining it.

Architecture Major (AS)

This program will prepare students in areas of design, technology, digital skills, drawing, delineation and rendering, structures, history and professional practice.

Students who wish to transfer to a 4 or 5 year degree program should understand that each transfer institution has its own set of transfer requirements. Those different requirements can be found on the individual transfer institution's websites. Students are strongly urged to speak with architecture program faculty if they need assistance on understanding transfer requirements.

Graduates of the Associates Degree in Architecture may choose to enter directly into the marketplace and would be qualified in various capacities in the fields of architecture, construction industry and related fields. Positions such as architectural technician, construction detailer, building materials salesperson or manufacturer’s representative are examples of possible employment a graduate may pursue with this course of study.

Learning Outcomes

Upon completion of this degree, students will be able to:

- Create architectural solutions to a set of project requirements.
- Develop architectural graphics using digital and analog tools that communicate design intentions and document construction requirements.
- Compare exemplary historical examples of architecture as impacted by social, political, economic, and environmental factors.
- Explain the duties and responsibilities of stakeholders within the legal and regulatory environments.
- Identify building and material systems that are responsive to the major requirements of a project.

Courses Required for the Major in Architecture

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<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>First Semester (fall)</td>
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<tr>
<td>ARCH 20 Architectural Graphics I</td>
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<tr>
<td>ARCH 29A Freehand Drawing</td>
<td>1</td>
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<tr>
<td>ARCH 100 Introduction to Architecture and Design</td>
<td>2</td>
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<tr>
<td>PHYC 10 Conceptual Physics</td>
<td>3</td>
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<tr>
<td>MATH 55 Geometry</td>
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<td>Second Semester (spring)</td>
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<tr>
<td>ARCH 22A Delineation &amp; Rendering</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 101 Architecture Design Studio I</td>
<td>3</td>
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<td>Additional graduation requirements</td>
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<td>Third Semester (fall)</td>
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<tr>
<td>ARCH 120 Fundamentals of Building Construction</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 50 Construction Drawings</td>
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<td>ARCH 102 Architecture Design Studio II</td>
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<td>Fourth Semester (spring)</td>
<td></td>
</tr>
<tr>
<td>ARCH 127 Fundamentals of Building Structures</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 31B (spring only) History of Architecture</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 214 Architectural CADD or BIM 120 Revit Architecture I</td>
<td>3</td>
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<tr>
<td>ARCH 160 (spring only) Professional Practice</td>
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<td>Additional graduation requirements</td>
<td></td>
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<tr>
<td>Total Units</td>
<td>40</td>
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</tbody>
</table>

Interior Design Major (AS)

This program will prepare students in areas of design, technology, digital skills, drawing, delineation and rendering, structures, history and professional practice.

Students who wish to transfer to a 4 year degree program should understand that each transfer institution has its own set of transfer requirements. Those different requirements can be found on the individual transfer institution's websites. Students are strongly urged to speak with architecture program faculty if they need assistance on understanding transfer requirements.

JRN 9741. QuickPen Pipe Designer 3D (108 hrs)
field trip
Prereq: JRN 9740
A study in all areas of training and instruction in computer-aided drafting and the three-dimensional CAD environment. The emphasis is placed upon three-dimensional drawing, including a realistic understanding of a three-dimensional environment and how to integrate 3D drawings into a two-dimensional environment.
The A.S. degree in Interior Design has strong emphasis on both Architecture and Art. The program will prepare them in areas of design, technology, digital skills, drawing, delineation and rendering, structures, history, professional practice, art history, and graphic design. Entry positions for which graduates who have received the degree of Associate in Science in Interior Design may qualify for employment positions that may include those of drafts-person; delineator; salesperson; furniture designer; and assistant in coordination of employment positions that may include those of drafter; salesperson; furniture designer; and assistant in coordination of colors, fabric, furniture, lighting systems, and exhibits.

Learning Outcomes

Upon completion of this degree, students will be able to:

- Create interior solutions to a set of project requirements including material and color selection.
- Develop interior graphics using digital and analog tools that communicate design intentions and document construction requirements.
- Analyze the historical periods and movements of Interior Design.
- Explain the duties and responsibilities of stakeholders within the legal and regulatory environments.
- Understand technical building and material systems and their interface with interior spaces.

**Courses Required for the Major in Interior Design**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>First Semester (Fall)</strong></td>
<td></td>
</tr>
<tr>
<td>ARCH 100 Introduction to Architecture and Design</td>
<td>2</td>
</tr>
<tr>
<td>ARCH 20 Architectural Graphics I</td>
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<tr>
<td>ARCH 29A Freehand Drawing I</td>
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<tr>
<td><strong>Second Semester (Spring)</strong></td>
<td></td>
</tr>
<tr>
<td>ARCH 29B Freehand Drawing II</td>
<td>1</td>
</tr>
<tr>
<td>ARCH 22A Delineation &amp; Rendering</td>
<td>3</td>
</tr>
<tr>
<td>DSGN 150 Color in Design</td>
<td>3</td>
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<tr>
<td>or ART 126 Color</td>
<td></td>
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<td>Additional graduation requirements</td>
<td></td>
</tr>
<tr>
<td><strong>Third Semester (Fall)</strong></td>
<td></td>
</tr>
<tr>
<td>ARCH 101 Architecture Design Studio I</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 214 Architectural CADD or BIM 120 Revit Architecture I</td>
<td>3</td>
</tr>
<tr>
<td>ART 170A Beginning Sculpture</td>
<td>3</td>
</tr>
<tr>
<td>INTD 124 Interior Bldg Materials &amp; Systems or ARCH 120 Fundamentals of Building Construction</td>
<td>3</td>
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<tr>
<td>Additional graduation requirements</td>
<td></td>
</tr>
<tr>
<td><strong>Fourth Semester (Spring)</strong></td>
<td></td>
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<tr>
<td>INTD 138 Global History of Interior Design</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 160 (spring only) Professional Practice</td>
<td>3</td>
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<td>Additional graduation requirements</td>
<td></td>
</tr>
<tr>
<td><strong>Total Units</strong></td>
<td>31</td>
</tr>
</tbody>
</table>

**Construction Management Major (AS)**

The Associate in Science Degree Program prepares students to enter the Construction Management Profession in responsible positions. This program is comprehensive and provides students with the practical knowledge and skills required to be effective in professional environment.

Learning Outcomes

Upon completion of this program, the student will be able to:

- Estimate, organize and manage construction project resources through the use of cost estimates and schedules.
- Manage and control construction work activities utilizing project control methodologies and quality control and assurance techniques.
- Analyze and interpret construction documents.
- Assess the role of material selection and structures in the field of construction management.
- Assess the contractual and regulatory considerations and restraints associated with the administration of a construction project.
- Manage a construction project utilizing computer software.
- Assess effective methods of communication in a professional work environment.
- Design and develop a work-plan containing specific work duties in which to apply objectives at the work site.

The California State Contractors License Board gives students who graduate with this degree credit for one and a half of the four years of practical experience required of applicants for the State building contractor's license. Upon graduation from the Construction Management Program, students are qualified to enter the profession through a wide variety of employers such as Construction Managers, General Contractors, Sub-Contractors, as well as Architectural and Engineering offices. Opportunities upon entry into the Profession are varied and include: estimating and cost control, scheduling and planning, document control, quality assurance and inspection.

**Courses Required for the Major in Construction Management**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>First Semester (Fall)</strong></td>
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<tr>
<td>CM 100 Fundamentals of Construction Management</td>
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<tr>
<td>ARCH 120 Fundamentals of Building Construction</td>
<td>3</td>
</tr>
<tr>
<td>MABS 60 Intro to Computer Appl. for Business</td>
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<td>Additional Graduation Requirements</td>
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<tr>
<td><strong>Second Semester (Spring)</strong></td>
<td></td>
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<tr>
<td>CM 110 Construction Graphics</td>
<td>3</td>
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<tr>
<td>ARCH 127 Fundamentals of Building Structures</td>
<td>3</td>
</tr>
<tr>
<td>CM 248 Construction Project Administration</td>
<td>3</td>
</tr>
<tr>
<td>SPCH 6 Workplace Communication or SUPV 234 Communication for Bus Management or BSEN 74 Business Correspondence</td>
<td>3</td>
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<tr>
<td>Additional Graduation Requirements</td>
<td></td>
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<tr>
<td><strong>Third Semester (Fall)</strong></td>
<td></td>
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<tr>
<td>CM 240 Construction Cost Estimating</td>
<td>3</td>
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<tr>
<td>ARCH 240 Fundamentals of the International Building Code</td>
<td>3</td>
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<td>BIM 120 Revit Architecture I</td>
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<tr>
<td><strong>Fourth Semester (Spring)</strong></td>
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<tr>
<td>CM 244 Construction Scheduling</td>
<td>3</td>
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<td>ARCH 160 Professional Practice</td>
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<tr>
<td>CRER 62 Successful Job Search Techniques (Required for placement in summer internship position)</td>
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<td>Additional Graduation Requirements</td>
<td></td>
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</tbody>
</table>
Fifth Semester (Summer)
CRER 63 Career Counseling for Work Experience
(Concurrent work in internship position required) . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . .
Announcement of Courses

Architecture

Credit, Degree Applicable Courses:
ARCH 18B. Residential Interior Design (3)
Lec-3, field trips
A study of the selection and use of fiber and decorative fabrics for interior design purposes; space design, floor plans, elevations and renderings; works of past and present architects and designers; lighting and color theory, color schemes and interaction of color, and color predictions for interior design. In-class work in effectively combining fabrics, wall coverings, floor treatments, pattern and color mixing. Study of presentations and portfolios for the student and the professional. Emphasis is on creativity in total interior design coordination and problem-solving. CSU

ARCH 20. Architectural Graphics I (3)
Lec-2, lab-4 P/NP Available
Introduction to techniques, conventions, meanings, and purposes related to drawing and drafting conventions as used in architecture and interior design. Fundamental graphic principles, concepts, and strategies are examined through hand and digital production. CSU

ARCH 22A. Delineation and Rendering (3)
Lec-2, lab-4, field trips
Prereq.: ARCH 20; Completion/concurrent enrollment in ARCH 29A
Basic drawing techniques in graphic communication. Two and three-dimensional representations with various media expressing architectural ideas and concepts. CSU/UC

ARCH 29A. Freehand Drawing I (1)
Lec-1, lab-1
Instruction to freehand drawing skills as a method of observation and visual communication in Architecture and Interior Design. The use of drawing in seeing and expressing shape, form, value, texture and proportion. Techniques include contour line, tonal drawing, and linear perspective. CSU/UC

ARCH 29B. Freehand Drawing II (1)
Lec-1, lab-1 P/NP available
Prereq.: ARCH 29A
Continuing development of skills in freehand drawing methods, with more complex subject matter and the use of color media. Focus is on the drawing from observation of buildings and architectural space. CSU/UC

ARCH 31A. History of Architecture (3)
Lec-3
A survey of the history of architecture of the western world from ancient Egypt through the end of the Middle Ages. CSU/UC

ARCH 31B. History of Architecture (3)
P/NP available
A survey of the history of architecture from the early Renaissance to the present times. CSU/UC

ARCH 32. Bay Region Architectural History (3)
P/NP available
A survey of Bay Region building modes from pre-Hispanic days to the present; the inception and growth of towns and cities, and the influences that have shaped their urban forms and their architecture, with an introduction to contributing architects and planners, reflecting the growth and significance of their professions in the late nineteenth and twentieth centuries. CSU/UC

ARCH 50. Construction Drawings (3)
Lec-2, lab-4, field trips P/NP available
Prereq.: ARCH 20 or ET 104 or 1 yr of H5 drafting
Study of construction documents with an emphasis on light wood frame construction and ecological sustainability. Building and framing systems, detailing, site issues, codes and regulations, research and professional publications in architecture and construction disciplines through creation of a simple set of construction documents. CSU

ARCH 99. Materials and Fabrication Shop (1)
Lab-3 P/NP Available
A project-oriented, hands-on course to introduce students to the practices and methodologies used in fabricating architectural models or execution of three-dimensional designs using wood, metals and plastics. Students learn shop and cleanup procedures, safety procedures, and proper use of equipment and tools. CSU

ARCH 100. Introduction to Architecture and Design (2)
Lec-2, field trips P/NP Available
This course introduces students to the fundamental principles related to design of physical environments. Students will be introduced to an overview of the architecture and interior design fields, along with fundamental concepts and considerations inherent within them. CSU/UC

ARCH 101. Architecture Design Studio I (3)
Lec-2, lab-4, field trips
Introduction to architectural concepts and principles through 2-D and 3-D design projects. Focus is on issues, requirements and objectives related to visual perception of form and space, architectural meaning, spatial experiences, and the human condition. CSU/UC

ARCH 102. Architecture Design Studio II (3)
Lec-2, lab-4, field trips P/NP Available
Prereq.: ARCH 101
A second design studio course in a sequence that expands upon fundamental architectural principles and concepts within Architecture and Design. Students explore topics related to design process, site, program, place, order, space within simple architectural problems. CSU/UC

ARCH 103. Architecture Design Studio III (3)
Lec-2, lab-4, field trips
Prereq.: ARCH 102
A third semester design studio course in a sequence that expands upon fundamental architectural principles and concepts within Architecture and Design. Students focus on urban analysis and design process, program, site and place in response to increasingly complex project requirements. CSU/UC

ARCH 120. Fundamentals of Building Construction (3)
Lec-3, field trips P/NP Available
Comprehensive survey of all major building materials and systems of assembly in architecture and construction. Topics include wood, masonry, concrete, steel, glass, foundations, roofing, walls, frames, doors and windows as well as considerations of sustainability in the construction process. CSU

Formerly ARCH 23
ARCH 120A. Concrete in Residential Construction (0.5)
Lec-6, lab-12 (total hrs), field trips P/NP Available
Introduction to the materials, tools, and equipment used for concrete work in residential construction. Hands-on class on how to mix, pour and work with concrete, with instruction in the safe usage of hand and power tools. CSU
ARCH 120A = CNST 120A

ARCH 120B. Rough Carpentry in Residential Construction (0.5)
Lec-6, lab-12 (total hrs), field trips P/NP Available
The basics of wood framing in residential construction for novices and trades people seeking cross over skills. A hands-on class that will demonstrate proper handling of tools and the appropriate use of fasteners in rough carpentry and the construction of small projects. CSU
ARCH 120B = CNST 120B

ARCH 120C. Finish Carpentry in Residential Construction (0.5)
Lec-6, lab-12 (total hrs), field trips P/NP Available
Basic knowledge and skills in finish carpentry in residential construction. Identification of tools, building materials, and techniques required for finish carpentry. Demonstrate safe construction practices. Several projects requiring the planning and organizing of work, and the use of measuring, hand and power tools. CSU
ARCH 120C = CNST 120C

ARCH 120D. Masonry and Tile in Residential Construction (0.5)
Lec-6, lab-12 (total hrs), field trips P/NP Available
The basic skills for applying masonry and tile in residential construction, including practicing proper use of tools, materials, and techniques. Hands-on completion of several projects requiring planning and organizing is expected. CSU
ARCH 120D = CNST 120D

ARCH 120E. Plumbing in Residential Construction (0.5)
Lec-6, lab-12 (total hrs), field trips P/NP Available
This is a hands-on class on the materials and tools used for installing a plumbing system in residential construction; piping for hot and cold water, waste, vent systems, plumbing fixtures and the completion of one or more small projects. CSU
ARCH 120E = CNST 120E

ARCH 120F. Electrical in Residential Construction (0.5)
Lec-6, lab-12 (total hrs), field trips P/NP Available
Introduction to the basic skills for electrical work in residential construction, including safety practices. Students will complete several small projects such as the rewiring of outlets, repair and replacement of light fixtures and the identification of circuits and connections found in residential construction. CSU
ARCH 120F = CNST 120F

ARCH 127. Fundamentals of Building Structures (3)
Lec-3, field trips P/NP Available
Awareness of architectural structural concepts; fundamental aspects and principles of basic structural forms, loads and materials. Reveal and discuss the multi-discipline nature of structural systems in the built environment (including sustainability and the environment) within the architectural and construction fields. CSU
Formerly ARCH 27

ARCH 134. History and Theory of Modern Architecture (3)
Lec-3 P/NP Available
This course studies architecture of modern times, with a focus on the critical social, cultural, and physical conditions and personalities influencing the development and design of buildings from around the world in the 20th and 21st centuries, with an emphasis on the last 50 years. CSU/UC
Formerly ARCH 34

ARCH 160. Professional Practice (3)
Lec-3, field trips P/NP Available
An overview of the professional practice of architecture, interior design, construction management and building construction from design through construction. Topics include licensing and training requirements; project delivery methods and contracts; business considerations; the influence of such factors as ethics, sustainability, economics, and legal regulations on the design and construction process. CSU

ARCH 214. Architectural Computer Aided Drawing I (3)
Lec-2, lab-4, field trips
Prereq.: ARCH 20
As an introduction to the AutoCAD software, the course starts from the basic understanding of the software interface to two dimensional line drawings, and three dimensional solid modeling with an emphasis of architecture. Included is the use of collaborative drawing using XREF and management of a drawing layering system. CSU
Formerly ARCH 52A

ARCH 240. Fundamentals of the International Building Code (3)
Lec-3 P/NP available
A comprehensive introduction to the fundamentals of the International Building Code (IBC) that is adopted and used throughout most jurisdictions of the United States to regulate the use, design, construction, and maintenance of buildings. CSU

Building Information Modeling

Credit, Degree Applicable Courses:
BIM 120. Revit Architecture I (3)
Lec-2, lab-3.5 P/NP Available
Advisory: ARCH 120
An introduction to Building Information Modeling (BIM) and Revit Architecture software. Automation of bidding design and documentation process, interface and command access, coordination of data, and views for annotations and printing. No previous CADD experience required. CSU

BIM 121. Revit Architecture II (3)
Lec-2, lab-3.5 P/NP Available
Prereq.: BIM 120 or Demonstrations of Exit Skills
Advisory: ARCH 120

Construction Management

Credit, Degree Applicable Courses:
CM 100. Fundamentals of Construction Management (3)
Lec-3, field trips P/NP available
Introduction to the basic concepts of construction project management including: the building design and construction process; project participants, their roles and responsibilities. Areas of focus to include...
the application of the principles of contracts in relation to construction projects, estimating, scheduling and project control. CSU

CM 110. Construction Graphics (3)
Lec-2, lab-4  P/NP available
Introduction to basic graphics, communication skills and knowledge required by the construction management professional, with a focus on the development of freehand drawing techniques. Analysis of drawings in the civil, architectural, structural, mechanical, and electrical fields and their relationship to construction planning and estimating. CSU

CM 240. Construction Cost Estimating (3)
Lec-3, field trips  P/NP available
PREREQ: CM 110 OR DEMONSTRATION OF CM 110 EXIT SKILLS
A study of the fundamental approaches to estimating the cost of building construction projects. Topics discussed include: types of construction estimates; the material takeoff process; the use of computers in estimating; total project estimating including direct costs, indirect costs, contingency and profit. CSU

CM 244. Construction Scheduling (3)
Lec-3, field trips  P/NP available
PREREQ: CM 240 OR DEMONSTRATION OF CM 240 EXIT SKILLS
Study of the basic concepts of construction scheduling; scheduling techniques with a focus on Critical Path Methods; CPM schedule planning, scheduling, updating and analysis. Manual procedures in scheduling are followed by computer applications. CSU

CM 248. Construction Project Administration (3)
Lec-3, field trips  P/NP available
ADVICE: CM 100
Principles and practical applications of construction project administration with an emphasis on construction-phase services. Topics include: an overview of project administration throughout the phases of a construction project; the contractual and regulatory environment of construction projects; the development of a project procedures manual; computer-based project administration. CSU

Noncredit Courses:
CM 1000. Construction Management for Contractors (26 hrs)
Overview of the construction project management considerations in the operation of building contractor businesses. Discussion of business considerations such as insurance, bonds, accounting, risk management and marketing. Discussion of construction management basics such as estimating, scheduling and project management. Introduction to Building Information Modeling (BIM), Green Building technologies and ethics.

Interior Design

Credit, Degree Applicable Courses:
INTD 100. Introduction to Residential Interior Design (4)
Lec-2, lab-4, field trips
Introduction to residential interior design concepts and principles through two-dimensional and three-dimensional design projects. Students explore topics related to design process, color, material finishes, and spatial composition as these relate to the profession. CSU

INTD 102. Interior Design Studio I (4)
Lec-2, lab-4, field trips  P/NP Available
PREREQ: ARCH 100
ADVICE: ARCH 100
Relate design fundamentals to space and form of commercial and institutional interior environments. Topics include color, space, form, light, sustainability, material, furniture selection, windows, floors, and accessories as these relate to the profession. CSU

INTD 124. Interior Building Materials and Systems (3)
Lec-3, field trips  P/NP available
A comprehensive examination of Interior Materials and Construction Systems with a focus on their interface with building systems such as electrical, mechanical, and structural systems. CSU

INTD 138. Global History of Interior Design (3)
Lec-3, field trips  P/NP available
The history of Interior Design ranging from ancient times to the 21st Century including Western, Asian, Middle Eastern, African and Latin American cultures. The course will focus on historical periods and their influences on the design of interior spaces. CSU

Art

Office: Visual Arts 118
Phone Number: (415) 239-3157
Web Site: www.ccsf.edu/Art

General Information
The Art Department offers students a comprehensive lower division program in the areas of Art History and Fine Art/Studio Arts. Centered upon visual literacy, design and drawing curriculum, the Art Department prepares students for transfer to upper division courses or for direct entry into art careers. Most of our courses are accepted for credit at the University of California and California State University. Students intending to transfer and major in Fine Art/Studio Arts are advised to enroll in two art history courses, along with general education and studio courses. Students intending to transfer and major in Art History are advised to enroll in one studio course, along with general education and art history courses.

Studio Arts Major (AA-T)

Associate in Arts in Studio Arts for Transfer. The AA-T in Studio Arts offers students a comprehensive lower division program in the fine arts, revolving around a core curriculum. The AA-T prepares students for transfer to upper division Fine Art or Studio Arts programs at four-year colleges and universities, particularly California State University campuses.

Learning Outcomes
Upon completion of this degree the student will be able to:

- Engage in a visual literacy that is based upon the understanding of the elements of design and the general awareness of historical and contemporary artistic cultures and trends.
- Critically evaluate artwork by identifying design elements and using discipline specific terminology and skills.
- Develop a series of projects that demonstrate critical analysis, creative thinking, technical skill in a variety of media, as well as the exploration of content and personal approach.
- Recognize opportunities of problem solving in the processes of creation.

**Degree Requirements.** Students who wish to earn the Associate in Arts in Studio Arts for Transfer (AA-T) must complete 60 CSU transferable units with at least a 2.0 grade point average. This must include the units required for full completion of the IGETC or CSU GE curriculum and the 24 units for the major as specified below. Each course in the major must be completed with a grade of “C” or better. Courses used to meet the major requirement may also be used to meet IGETC or CSU GE requirements.

**Courses Required for the Major in Studio Arts**

<table>
<thead>
<tr>
<th>Core Courses</th>
<th>Units</th>
</tr>
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<tbody>
<tr>
<td>ART 102 Western Art History</td>
<td>3</td>
</tr>
<tr>
<td>ART 103 History of Modern Art</td>
<td>3</td>
</tr>
<tr>
<td>ART 125A Basic Design</td>
<td>3</td>
</tr>
<tr>
<td>ART 125B Advanced Design/3D Design</td>
<td>3</td>
</tr>
<tr>
<td>ART 130A Basic Drawing</td>
<td>3</td>
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</tbody>
</table>

**Studio Arts Electives (9 units)**

Select three courses for a total of 9 units. Each course must be from a different area listed below:

**Area 1: Color**

ART 126 Color ........................................... 3

**Area 2: Drawing**

ART 130B Intermediate Drawing
or ART 132A Beginning Figure Drawing ............... 3

**Area 3: Painting**

ART 140A Beginning Painting .......................... 3

**Area 4: Printmaking**

ART 150A Fine Art Printmaking ........................ 3

**Area 5: Ceramics**

ART 160A Beginning Ceramics ........................... 3

**Area 6: Sculpture**

ART 170A Beginning Sculpture .......................... 3

**Area 7: Metal Arts**

ART 180A Beginning Metal Arts ........................ 3

**Area 8: Other Media**

ART 136A Introduction to Illustration
or ART 145A Introduction to Watercolor Painting ..... 3

**Area 9: Second Level Courses:**

ART 140B Intermediate Painting
or ART 150B Fine Art Intaglio Printmaking
or ART 160B Intermediate Ceramics
or ART 170B Intermediate Sculpture .................... 3

**Total ..................................................** 24

**Announcement of Courses**

The majority of advanced classes in the Art Department require that prerequisites be completed before taking those classes. Students who have not completed those prerequisites must demonstrate the exit skills required upon completion of the prerequisite(s). (See specific courses for prerequisite requirements.)

Most Art Studio courses listed will require a laboratory fee.

**Art History Courses**

The Art History Curriculum offers a wide selection of courses which apply critical thinking and analytical skills to an understanding of visual arts from around the world. The course selection includes: Art 101 through 118, of which several are offered online, and Selected Topics Courses (121, 122, and 123) that offer a more in-depth study of art at the Legion of Honor and the De Young Fine Arts Museums of San Francisco. All Art History courses may be taken in any sequence. College-level reading and writing skills are advised.

**Credit, Degree Applicable Courses:**

**ART 101. Western Art History (3)**

Lec-3, field trips
Survey of Western Art from 35,000 B.C.E. to 500 C.E.: Paleolithic art through the Early Medieval period. Art will be discussed from critical and historical perspectives, with regard to formal visual elements of style and the social context of the societies, values, and ideas that gave birth to Western art. CSU/UC

**ART 102. Western Art History (3)**

Lec-3, field trips
Survey of Western Art from the sixth to the eighteenth centuries: Byzantine and Medieval to the Romantic periods. Art will be discussed from critical and historical perspective, with regard to formal visual elements of style and the social context of the societies, values, and ideas that determined the course of Western art. CSU/UC

**ART 103. History of Modern Art (3)**

Lec-3, field trips
The origins and developments of Modern Art in Europe and America from the French Revolution through World War II. Art will be analyzed from both critical and historical perspectives. Formal visual elements of style, social and cultural context, values ideas, and thematic characteristics of modern art will be discussed, analyzed and evaluated. CSU/UC

**ART 104. Asian Art History (3)**

Lec-3, field trips
A survey of the artistic heritages of Asia, from Iran in the west to south-eastern regions of Indonesia, spanning five millennia of Asian art history. Art 104 explores the themes and beliefs which give unity to the art of this part of the world, as well as the diverse cultural characteristics which led to the development of national styles. CSU/UC

**ART 105. Ancient Art and Architecture of Latin America (3)**

Lec-3, field trips
P/NP available
A survey of the artistic heritage of Pre-Columbian Mexico, Central and South America. Art 105 explores the themes and beliefs which gave unity to the art of this part of the world as well as the diverse cultural characteristics which led to the development of regional styles. CSU/UC

**ART 106. Latin American Art History (3)**

Lec-3, field trips
P/NP available
A survey of the artistic heritage of Latin America from the sixteenth century AD to the present. All art will be discussed from a critical and historical perspective, with regard to formal visual elements of style and the societies, values, and ideas that gave birth to Latin American art. CSU/UC
ART 107. African American Art History (3)
Lec-3, field trips
A survey of the artistic heritage of West African civilizations and of African Americans from the colonial to contemporary time. All art will be discussed from both a critical and historical perspective, with regard to formal visual elements of style and the societies, values and ideas that gave birth to African American art. CSU/UC

ART 108. Women through Art History (3)
Lec-3, field trips
A survey of women in art, investigating their place in society as artists, patrons, and subjects in art. The course will introduce women from both European and non-European cultures, from pre-history to the present. All art will be discussed from both a critical and historical perspective, with regard to social context and formal visual elements. CSU/UC

ART 109. History of Contemporary Art (3)
Lec-3, field trips
Contemporary art from 1945 to the present. Students will analyze late modern and postmodern developments in art in relation to their historical contexts. The course will also investigate the unusual challenges contemporary art forms and concepts present to the traditional methods and practices of art history. CSU/UC

ART 116. Art of the Western World (3)
Lec-3, field trips  P/NP available
A telecourse introduction to art history from the Classical Greek period to the Modern twentieth century. Art will be discussed in its social context and for formal visual elements. The course introduces the societies, values, and ideas that gave birth to Western art, discusses the changing goals of artists and patrons, traces art’s relation to power, religion, culture, and the art of the past, and suggests how art defines or contradicts its time. Refer to the Telelesson Schedule for viewing dates and times. CSU/UC

ART 118. American Art (3)
Lec-3, field trips  P/NP available
The history of American art from colonial times to the present. Painting, sculpture, architecture, and crafts will be examined within their historical, political, and sociocultural background. Students learn to identify works by pivotal artists, recognize techniques and formal visual elements, and critically analyze artwork within its contextual framework. CSU/UC

ART 121-122-123. Selected Topics in Art (1-3-3)
Lec-1, 3, 3  P/NP available
An in-depth investigation of selected topics in art. These courses were developed in conjunction with the permanent and special exhibitions at the Legion of Honor and De Young Memorial Museums of Art. The content of this course varies. Students may re-enroll without repeating subject matter. Specific times and topics will be announced in the Class Schedule, in classes and through campus media. CSU/UC

ART 122A. Russian Art at the Legion
ART 123Q. Baroque Masters of Light
ART 123S. Greek and Thracian Art
ART 123T. British Art at the Legion
ART 123U. 18th c. French Art at the Legion
ART 123V. Renaissance Art at the Legion
ART 123W. 19th Century Painting at the Legion
ART 123X. Baroque Art at the Legion
ART 123Y. 19th c. Realism and Courbet
ART 123Z. Eternal Egypt at the Legion

Fine Arts Courses

The Fine Art/Studio Arts Curriculum provides students with a comprehensive range of instruction in the methods of producing two and three-dimensional artwork. Basic Design: Art 125A and Basic Drawing: Art 130A serve as prerequisites for Intermediate and Museum Drawing courses as well as Figure Drawing, Illustration, Mixed Media, Painting, and Printmaking courses. All studio classes should be taken sequentially in order for students to acquire the skills necessary for their success in intermediate and advanced course work.

Enrollment Limitations on Physical Education and Visual or Performing Arts Courses

Per title 5 Section 55041, effective Fall 2013, students may not enroll more than four times in “active participatory courses that are related in content” in the areas of physical education or visual and performing arts, which includes art, dance, music, and theatre. This limitation applies even if a student receives a substandard grade or “W” during one or more of the enrollments in such a course or if the students petition for repetition due to extenuating circumstances.

Art courses that are related in content are grouped together in “families” of courses below. The families are indicated by their headings, e.g., Design, Basic Drawing, etc. For the most up-to-date listing of courses and families, refer to the online catalog, www.ccsf.edu/catalog.

Design

ART 125A. Basic Design (3)
Lec-2, lab-4, field trips
ADVICE: COMPLETION/CONCURRENT ENROLLMENT IN ART 130A
An introduction to the basic components of two-dimensional design: subject, form, content, with a focus on their dynamic interrelation. Through observation, analysis, discussion of traditional and contemporary approaches in fine and commercial arts, students learn to apply the elements and principles of visual organization to creative projects using various media. CSU/UC/C-ID ARTS 100

ART 125B. Advanced Design 3D(3)
Lec-2, lab-4, field trips
PREREQ.: ART 125A
ADVICE: ART 130A
An introduction to the basic elements of three-dimensional form and design, including concepts and language fundamental to all art making. This course covers the structural and visual elements of three-dimensional design and is geared to assist majors: Fine & Applied Arts, Photography, Theater Arts, Fashion, Interior Design, and Architecture. CSU/UC

ART 126. Color (3)
Lec-2, lab-4, field trips
A comprehensive course in the study of color, its sources, properties, theories and applications in additive and subtractive media. Develops conceptual and practical skills for effective visual communication utilizing color. Color mixing, color interaction, color harmonies, optical, spatial, psychological, subjective, cultural, historical uses of color are explored through creative projects. CSU/UC

Drawing

ART 130A. Basic Drawing (3)
Lec-2, lab-4, field trips
ADVICE: COMPLETION/CONCURRENT ENROLLMENT IN ART 125A
A course in the theory and practice of drawing using a variety of media and subject matter. The student will develop drawing skills through the use of line, plane, tone, shape, form, volume, chiaroscuro and perspec
APPRAISAL. Group and individual instruction related to progressive assignments will encourage subjective and analytical development. CSU/UC

ART 130B. Intermediate Drawing (3)
Lec-2, lab-4, field trips
Prereq.: ART 130 A
Continued development of drawing skills with projects of greater complexity. This also includes additional approaches to drawing, composition, and varied drawing materials. This course is a member of the drawing family of courses. CSU/UC

ART 131A. Museum Drawing (3)
Lec-2, lab-4, field trips
Prereq.: ART 130 A
The Legion of Honor Museum will initially act as the studio/atelier for the continuance of the tradition of museum drawing: development of skills and expansion of abilities in the creation of unique drawings through classroom and museum instruction. CSU

ART 131B. Advanced Museum Drawing (3)
Lec-2, lab-4, field trips
Prereq.: ART 130 A AND 131 A
Builds upon skills and techniques already acquired in ART 131 A. Development of original sketches and compositions based on major works in the Legion of Honor Museum. CSU

Figure Drawing

ART 132A. Beginning Figure Drawing (3)
Lec-2, lab-4, field trips
Prereq.: ART 125 A AND 130 A
ART 132A IS STRONGLY RECOMMENDED FOR ALL ART MAJORS.
An introduction to the drawing of the nude human figure. Analysis of basic forms, structure, proportion, symmetry, balance, and rhythm. Introductory anatomy. CSU/UC

ART 132B. Advanced Figure Drawing (3)
Lec-2, lab-4, field trips
Prereq.: ART 125 A, 130 A, AND 132 A
This course integrates a more in-depth study of human anatomy with the analysis and use of form, structure, proportion, symmetry, balance, and rhythm in order for students to develop resolved compositions involving the nude human figure. CSU/UC

Illustration

ART 136A. Introduction to Illustration (3)
Lec-2, lab-4, field trips
Prereq.: ART 125 A AND 130 A
Introduction to the professional field of illustration. Instruction will focus on principal areas within the field (Editorial, Advertising, Fashion and Scientific), its history, career aspects, and current trends. Students will explore and apply a variety of media and illustration techniques, while developing critical thinking, research, and problem-solving skills. CSU

ART 136B. Illustration in Color (3)
Lec-2, lab-4, field trips
Prereq.: ART 136 A
Further exploration of visual communication strategies as they relate to the field of illustration. Experimenting with wet and dry media, use of research, techniques and professional presentation in the development of personal style. Focus on professional problem-solving approach in the following areas: book illustration, graphic narrative, caricature, and character design. CSU

ART 136C. Advanced Illustration (3)
Lec-2, lab-4, field trips
Prereq.: ART 136 B
Development of professional portfolio, comprehensive layout, and the use of type in illustration; digital imaging techniques and artwork preparation for reproduction; emphasis on advanced development of personal style through an examination of content, materials and techniques, as well as further development of vocabulary and presentation skills for effective visual communication. CSU

ART 137. Illustration as Visual Narrative (3)
Lec-2, lab-4, field trips
Prereq.: ART 130 A, ART 125 A
An introduction to a variety of narrative structures in illustration, including comic book art, sequential art, editorial and children book illustration. Students will learn character design and storyboarding methods in various media, obtain problem-solving and essential technical skills, and explore process of visual storytelling, from preliminary sketches to final illustrations. CSU

Painting

ART 140A. Beginning Painting (3)
Lec-2, lab-4, field trips
Prereq.: ART 125 A AND 130 A
Studio course in the technical and conceptual basics of painting in oils and/or acrylics. Through hands-on practice, lectures and critiques the student learns the methods, techniques, concepts and perceptual skills of painting. The student is instructed in historical and contemporary approaches to the discipline. CSU/UC

ART 140B. Intermediate Painting (3)
Lec-2, lab-4, field trips
Prereq.: ART 140 A
The focus of Art 140B is twofold: to widen and deepen the skills, techniques, methods, and processes learned in 140A, while applying them to more complex painting assignments, which emphasize personally-expressive themes and content. New materials, techniques, and processes are incorporated into the course as well. CSU/UC

ART 140C. Advanced Painting (3)
Lec-2, lab-4, field trips
Prereq.: ART 140 B
Focus is on the formulation of a self-directed creative process that builds upon the skills, methods, and concepts of Intermediate Painting. Advanced painting techniques, materials, themes, concepts and critical skills are emphasized. Ideas are developed into finished works through long-term and series projects. CSU/UC

ART 140D. Painting Mastery (3)
Lec-2, lab-4, field trips
Prereq.: ART 140 C
Advanced-level class building on the skills, concepts, issues addressed in ART 140C; create self-directed unified body of work/portfolio in preparation for transferring to upper division University, art school, or professional activities; refine analytical skills and technical expertise via deeper exploration of contemporary art and painting issues. CSU/UC

Watercolor

ART 145A. Introduction to Watercolor Painting (3)
Lec-2, lab-4
Prereq.: ART 125 A AND 130 A.
Introduction to the basic characteristics of watercolor: its physicality,
tools, techniques, and history. Students will explore methods and techniques in order to develop an understanding of the medium. Emphasis will be placed on aptitude, artistic growth, and technical, perceptual, and conceptual skills to produce and analyze watercolor paintings. CSU/UC

ART 145B. Intermediate Watercolor (3)
Lec-2, lab-4
Prereq.: ART 145A
Further examination of watercolor painting characteristics. Students will explore methods and techniques in order to develop a deeper sensitivity to the medium. Focus on extending one’s knowledge of color and technique. Emphasis on combining traditional and experimental approaches and the development of a personal style and subject matter. CSU/UC

ART 145C. Advanced Watercolor/Water Media (3)
Lec-2, lab-4
Prereq.: ART 145B
Students will focus on developing a cohesive body of watercolor and water media paintings. Introduction to water media, which includes acrylic, ink, gouache, and fluid acrylics. Emphasis will be placed on advanced development of a personal language and style in which materials and techniques play an essential role. CSU/UC

ART 145D. Watercolor Mastery (3)
Lec-2, lab-4
Prereq.: ART 145C
Advanced-level watercolor/water media class focusing on production of self-directed unified body of artwork in order to successfully transfer to a university, art school, or professional practice. Emphasis on creating artwork that connects media, style, content, culture, and meaning; and refinement of critical thinking, presentation, and technical skills. CSU

Chinese Brush Painting
ART 146A. Beginning Chinese Brush Painting (3)
Lec-2, lab-4, field trips
Orientation on the three classic elements of Chinese art (brush painting, calligraphy and seal engraving) with emphasis on Chinese masterpieces both ancient and contemporary, focusing on the concepts of style, line, composition, perspective and stroke. CSU/UC

ART 146B. Advanced Chinese Brush Painting (3)
Lec-2, lab-4, field trips
An advanced Chinese brush painting course that focuses on the development of a body of work using varied classical and contemporary techniques. Emphasis is on the student’s aesthetic and creative success in producing a portfolio of work for transfer and professional opportunities as well as the student’s appreciation of Chinese art and culture. CSU/UC

Fine Arts Printmaking
ART 150A. Fine Arts Printmaking (3)
Lec-2, lab-4, field trips
Prereq.: ART 130A
An introduction to the basics of intaglio and relief printmaking with an emphasis on both contemporary and traditional aspects of the medium. Various plate making and printing techniques will be explored as students develop their aesthetic skills and creative ideas. CSU/UC

ART 150B. Fine Art Intaglio Printmaking (3)
Lec-2, lab-4, field trips
Prereq.: ART 150A
This is an intermediate and advanced level intaglio printmaking course which incorporates traditional and contemporary intaglio techniques to help students create more complex and innovative work. An emphasis is on color and multiple plate projects which build on skills in etching, drypoint, mezzotint, collagraph and photo processes. CSU/UC

ART 150C. Fine Art Relief Printmaking (3)
Lec-2, lab-4, field trips
Prereq.: ART 150A
The ART 150 series may be taken concurrently and/or out of sequence. This is an intermediate and advanced relief printmaking course which incorporates traditional and relief techniques to help students create more complex and innovative work. An emphasis is on color and multiple plate projects. CSU/UC

ART 150D. Advanced Fine Arts Printmaking (3)
Lec-2, lab-4, field trips
Prereq.: ART 150B AND ART 150C
An advanced fine arts printmaking course which focuses on the development of a body of work using complex intaglio and/or relief printmaking techniques. Emphasis is on the student’s aesthetic and creative success in producing a portfolio of work for transfer as well as professional and vocational opportunities in printmaking. CSU/UC

Monoprinting
ART 151A. Beginning Monoprint (3)
Lec-2, lab-4, field trips
Prereq.: ART 150A AND 150C
Introduction to a wide variety of contemporary monoprint techniques. Through lecture, demonstration, studio practices, and critiques, students develop the skills and concepts necessary for basic work in this exciting area. Monoprint is a cross over discipline that combines skills of drawing and painting with printmaking. Introduction to historical traditions and contemporary issues of the field. CSU/UC

ART 151B. Intermediate Monoprinting (3)
Lec-2, lab-4, field trips
Prereq.: ART 151A
Intermediate Monoprinting will focus on more complex monoprint techniques. The emphasis of this course stresses the development of individual artistic growth building on material covered in 151A (Beginning Monoprinting). Students will plan and execute long term thematic, mixed media, and self directed projects. Contemporary issues and approaches will be explored through lecture and demonstration. Lecture demonstrations will be followed up with individualized attention so students can strengthen personal weak related to the techniques and concepts of monoprinting in the studio laboratory situation. CSU/UC

ART 151C. Advanced Monoprinting (3)
Lec-2, lab-4, field trips
Prereq.: ART 151B
The emphasis of Advanced Monoprinting is the further development of the student's creative process to execute long term thematic, mixed media and self-directed projects. Students utilize materials, processes, and methods of beginning, intermediate and advanced monoprinting, while focusing on a body of interrelated monoprints that explore their personal creativity through experimental means. Students prepare a portfolio of work that is suitable for advanced study, transfer, and/or career opportunities. CSU/UC

Mixed Media
ART 156. Mixed Media: Works on Paper (3)
Lec-2, lab-4, field trips
Prereq.: ART 125A AND 130A
This course selectively and aesthetically combines various media and techniques of drawing, painting, photography, printing and collage
into two and three-dimensional works. Through structured studio experience, lectures and critiques, the student will develop the requisite skills and techniques as well as the conceptual basis of this contemporary art form. Underlying the instruction is a historical component which emphasizes modern and contemporary art to broaden the student's interest and awareness of contemporary trends. CSU/UC

Ceramics

ART 160A. Beginning Ceramics (3)
Lec-2, lab-4, field trips
Introduction to developing ceramic forms. Basic methods of forming through the use of the potter's wheel, hand-construction, glaze application, and kiln-firing processes. Historical uses of clay and its relationship to the development of civilizations and industry. Technical development and exploration of clay as a means for aesthetic growth. CSU/UC

ART 160B. Intermediate Ceramics (3)
Lec-2, lab-4, field trips
Prereq.: ART 160A
Emphasis on wheel-throwing and hand-building skills, and on surface techniques. Introduction to non-technical glaze experimentation. Further development of aesthetics. CSU/UC

ART 160C. Advanced Ceramics (3)
Lec-2, lab-4, field trips
Prereq.: ART 160B
Advanced ceramic forming methods using the wheel, extruder and hand-construction techniques, glaze formulation, advanced glaze application and kiln-firing processes. Lectures on the historical and contemporary uses of clay. Emphasis on advanced technical and conceptual development. CSU/UC

ART 162A. Ceramic Sculpture I (3)
Lec-2, lab-4, field trips
Prereq.: ART 160A and 160B
Introduction to the basic techniques and concepts of making sculpture with ceramic materials. Emphasis on the development of concepts and content in the execution of ceramic sculpture. Utilization of plaster mold-making and slab casting, basic handbuilding, wheel-throwing, and mold work as applied to sculpture. Exploration of additive and subtractive processes, press molds, surface development and formulation of glazes pertaining to sculpture. Emphasis on technical development and exploration of clay as a means for aesthetic growth. CSU/UC

ART 162B. Ceramic Sculpture II (3)
Lec-2, lab-4, field trips
Prereq.: ART 160A, 160B, and 162A
A continuing exploration of concepts and techniques in making sculpture with ceramic materials. Conceptualizing and creating in three dimensions. Hand building, wheel-throwing, and mold work as applied to ceramic sculpture. Continued emphasis on the development of concepts and content in the execution of the ceramic sculpture. Utilization of plaster mold-making and slab casting, basic hand building, wheel-throwing, and mold work as applied to sculpture. Surface development and formulation of glazes pertaining to sculpture. Emphasis on exploration of clay as a means for aesthetic growth. CSU/UC

Sculpture

ART 170A. Beginning Sculpture (3)
Lec-2, lab-4
Introduction to the basic elements of three-dimensional form and historical evolution of sculpture. Students will learn basic modeling in clay, mold making and beginning woodworking techniques. Emphasis will be placed on building technical skills, expression and artistic growth. CSU/UC

ART 170B. Intermediate Sculpture (3)
Lec-2, lab-4, field trips
Prereq.: ART 170A
Introduction to advanced techniques and processes of sculpture such as: basic metal fabrication, stone or woodcarving. Advanced topics such as site-specific sculpture or installation will also be explored. Emphasis will be placed on building technical skills, individual expression and conceptual growth. CSU/UC

ART 170C. Advanced Sculpture (3)
Lec-2, lab-4, field trips
Prereq.: ART 170A and 170B
Focuses on advanced techniques, practices and concepts specific to sculpture. Course is designed to cultivate individual conceptual development. Students produce artworks in a variety of materials, advanced fabrication techniques, and make aesthetic choices based on individual interest informed by research. Emphasis is placed on interplay between concept, material and context. CSU/UC

Metal Arts and Jewelry

ART 180A. Beginning Jewelry/Metal Arts (3)
Lec-2, lab-4, field trips
An introduction to basic fabricating processes and ideas, including use of tools and materials, soldering, cold connections, forming, stone setting, and basic 3-D design principles. Emphasis is placed on gaining technical skill, knowledge of safe practices, personal expression, and evolution of aesthetic sense. CSU

ART 180B. Intermediate Jewelry/Metal Arts (3)
Lec-2, lab-4, field trips
Prereq.: ART 180A
Building on previous experience, intermediate students will explore more advanced jewelry and metalsmithing techniques including faceted stone setting, angle raising, kinetic junctions, and forging. Emphasis is placed on refining technical skill, development of tool use, knowledge of safe practices, personal expression, and refinement of aesthetic sense. CSU

ART 180C. Advanced Jewelry/Metal Arts (3)
Lec-2, lab-4, field trips
Prereq.: ART 180B
Advanced students are provided with an opportunity to focus exploration on subjects of interest to the student. Subjects can include historic, contemporary, one of a kind, or production jewelry/metal arts. The students will be highly self motivated and directed, ready to develop their work, concepts, and design capabilities. CSU

ART 180D. Exhibition Preparation for Jewelry/Metal Arts (3)
Lec-2, lab-4
Prereq.: ART 180C
The self directed, advanced Metal Arts student will develop and execute a successful exhibition of their work. The student will experience all aspects of an exhibition; funding, securing a venue, the exhibition proposal, making work, professionally documenting work, advertising the exhibition, installing work, monitoring and closing the exhibition. CSU

Lost Wax Casting

ART 181A. Beginning Casting for Metal Arts (3)
Lec-2, lab-4
An introduction to basic casting techniques including direct and lost wax methods use of the centrifugal and vacuum casting machine,
Asian American Studies

Office: Batmale 358
Phone Number: (415) 239-3865
Web Site: www.ccsf.edu/asam

Learning Outcomes
Upon completion of courses in Asian American Studies, students will be able to:

- Critically evaluate the ways Asians Americans act and ways others have acted in response to their experience in the United States including conditioning, culture, and subgroups within the Asian American Community, by applying the theories and methodologies of social and behavioral science inquiry used in Asian American Studies.

- Analyze the Asian American experience in United States history and government; examine the importance of inclusion and participation in civic duties and responsibilities based on historical and political precedent.

- Exhibit an aesthetic understanding of the ways in which Asian Americans have created fine and performing arts, linguistic expression, philosophical reasoning, analytical or creative writing.

- Analyze the intersections of race, class, ethnicity, gender, sexuality, sexual orientation within the Asian American experience in the United States.

Announcement of Courses
Credit, Degree Applicable Courses:

ASAM 6. Asian American Issues Through Literature (3)
Lec-3, field trips  P/NP available
This course will examine long term and emergent issues in different genres of Asian American literature. Themes such as dislocation and displacement, nation, home, race, gender, and sexuality will be considered. CSU/UC

ASAM 8. Filipino American Community (3)
Lec-3  P/NP available
Examination of the experiences, histories, and contributions of Filipina/o Americans, past and present. Includes study of U.S. history and government through the experience of immigrants from the Philippines. Topics include U.S. colonial and neocolonial history in the Philippines, immigration experiences, economic and educational opportunities, family, community, political and social history. CSU/UC

ASAM 10. Asian American Popular Culture (3)
Lec-3, field trips  P/NP available
This course will consider the ways Asian Americans have turned to a wide range of cultural productions such as music, performance arts, visual culture, film, digital/internet cultures and transnational productions to contest and reconstruct ethnic and racial identity in the United States. CSU/UC

ASAM 20. Asian American Experience: 1820 to Present (3)
Lec-3, field trips  P/NP available
Examination of United States history and government through the experience of immigrant groups from China, Japan, Korea, the Philippines, and India. Topics include immigration experiences, economic opportunities, culture, family, community, political and social history. A local field trip may be required. CSU/UC

ASAM 22. Community Issues & Leadership (3)
Lec-3, field trips  P/NP available
This course provides an overview of contemporary Asian Pacific American (APA) community identity, leadership, organization, history, needs, concerns, civic participation and public policy. Required field trips will visit key APA organizations and leaders. CSU/UC

ASAM 27. Asian American Race Relations (3)
Lec-3, field trips  P/NP available
Understanding of race relations between Asian Americans and other ethnic groups including African Americans and European Americans including theories of race and interaction; and considerations such as class, economics, and social inequities. CSU/UC

ASAM 30. Asian American Issues Through Film (3)
Lec-3, field trips  P/NP available
This course will explore both historical and contemporary themes in Asian American film. Beginning chronologically with early representations of race, gender and sexuality, the course will move towards new representations in films made by and about Asian Americans. This course will survey a broad range of films, including narrative, documentary, and diasporic cinema. CSU/UC
ASAM 35. Asian American Women (3)
Lec-3 P/NP available
Examination of the experiences, histories, and contributions of Asian American women, using a multi-disciplinary approach that includes history, sociology, political science, and the arts. Includes analysis of racism, sexism, classism, homophobia, immigration, labor, sexualities and culture in the lives of Asian American women, past and present. CSU/UC

ASAM 40. The Chinese American Community (3)
Lec-3 P/NP available
(No knowledge of Chinese required)
Description and analysis of the Chinese American community from a sociological point of view. The historical background, family and district organizations, power structure, immigrants, cultural pattern and conflicts, and the socioeconomic problems of the Chinese American community. CSU/UC

ASAM 42. Southeast Asian Community in the U.S. (3)
Lec-3 P/NP available
This course will explore Southeast Asian communities in the United States after 1975 through the engagement of a variety of sources to investigate community settlement patterns, gender relations, generation, labor and transnational practices. CSU/UC

ASAM 61-62-63. Asian American Community Field Study (1-2-3)
Conf-1, work-5,10,15 P/NP available
Repeat: ASAM 61, 62, 63 combined, maximum credit: 15 units
Community work experience in a project in Asian American Studies subject to the approval and under the supervision of an Asian American Studies instructor. CSU

ASAM 65. Individual Study in Asian American Studies (3)
Ind st-15 P/NP available
Supervised individual or group study on topics and issues in Asian American Studies subject to the approval and under the supervision of an Asian American Studies instructor. CSU (UC upon review)

Asian Studies
Office: Batmale 373
Phone Number: (415) 239-3089
Web Site: www.ccsf.edu/asianst

General Information
The Asian Studies Department has a flexible interdisciplinary program designed to assist students who are interested in acquiring knowledge and interests in Asian culture and language. The diverse faculty members offer a rich and supportive small class environment that encourages critical thinking and participatory involvement in Asian subjects. Most of its courses are UC and CSU transferable which prepare students for continuing in degree programs in the DC and the CSU systems.

Learning Outcomes
Upon completion of the course within the program, students should be able to:

- Recognize and explain in Asian cultural values, politics, and social changes.
- Compare and contrast similarities and differences between Western and Asian cultures
- Differentiate varies career path relating to Asian studies
- Explain and recognize psychology of Asian, thoughts and physical movement that incorporates meditation into motion

Announcement of Courses
Credit, Degree Applicable Courses:
ASIA 1. Modern Pacific Asia: An Introduction (3)
Lec-3, field trips P/NP available
Development of history, economics, politics, and cultures of the Pacific Basin region since the 16th century. Analysis of the emergence of the modern Pacific Asia from the 19th century onward as a principal political and economic center of the upcoming century. CSU/UC

ASIA 11. East Asian Calligraphy: An Introduction (3)
Lec-3, field trips P/NP available
Examination of the historical development and cultural aspects of the East Asian (China, Japan, Korea) calligraphy, with emphasis on Chinese Hanzi but also including Japanese Kana syllabaries and Korean Hangul characters; critical analysis of their relationship with East Asian philosophy, religion, literature, and art. CSU/UC

ASIA 12. East Asian Literature in Film: Early Modern & Modern Era (3)
Lec-3 P/NP available
Introduction to East Asian (China, Japan, Korean) literature from the early Modern (15th-18th century) to the Modern Era (19th-20th century) through the media of film. Critical analysis of how literature reflects cultural values and social changes. No knowledge of Chinese, Japanese, or Korean required. CSU/UC

ASIA 20. Law Enforcement in Asian Communities (3)
Lec-3 P/NP available
Prereq.: ENGL 93 or ESL 160; or placement in ENGL 96 or ESL 170
This course introduces students to relevant issues in the histories, cultures, and philosophies in Asia which affect law enforcement in Asia and the United States. Law enforcement procedures are examined in light of the unique history and culture of Asian populations. CSU

ASIA 30. Manga and Animé (3)
Lec-3, field trips P/NP available
An overview of the history and styles of Japanese comics (manga) and animation (animé), and the role they play in Japanese, American, and world cultures both as artistic forms of expression and as representations of social and political issues. CSU/UC

ASIA 176. Business/Culture: Vietnam (3)
Lec-3, field trips P/NP available
A course exploring Vietnamese culture and its impact on business. Subjects include history, aesthetics, communication and social structures and customs. This course will create a context for doing business in Southeast Asia. CSU
ASIA 176 = INTR 176

ART 104. Asian Art History (3)
Lec-3, field trips
A survey of the artistic heritages of Asia, from Iran in the east to the south-eastern regions of Indonesia, spanning five millennia of Asian art history. Art 104 explores the themes and beliefs which give unity to the
art of this part of the world, as well as the diverse cultural characteristics which led to the development of national styles. CSU/UC

ART 146A. Beginning Chinese Brush Painting (3)
Lec-2, lab-4, field trips
Repeat: max. 6 units
Orientation on the three classic elements of Chinese art (brush painting, calligraphy and seal engraving) with emphasis on Chinese masterpieces both ancient and contemporary, focusing on the concepts of style, line, composition, perspective and stroke. CSU/UC

ART 146B. Advanced Chinese Brush Painting (3)
Lec-2, lab-4, field trips
Repeat: max. 6 units
Continuation of ART 146A with emphasis on artistic development. Investigation of methods of traditional and contemporary Chinese art. Paintings of various subject matter including complex landscapes, flowers, birds, animals and figures. Free brush strokes and meticulous styles. Lectures and demonstrations will be offered with slides and videos. Individual expression will be encouraged by modeling after a series of masterpieces and original works. Group and individual critiques. Outdoor painting and museum visits. CSU/UC

Chinese Language Courses: See Chinese in this section of the catalog.

CHIN 39. Major Achievements of Chinese Thought and Culture (3)
Lec-3
ADVISORY: ELIGIBLE FOR ENGL 1A
No knowledge of Chinese required. Not recommended for students who are enrolled in or have completed CHIN 49.
A consideration of the humanistic traditions of China, the most recent archaeological discoveries, and their relation to those of other countries in East Asia. CSU/UC

HLTH 50. Tai Chi for Health (3)
Lec-2.5, lab-1.5, field trips
P/NP available
Tai Chi Chuan is a form of thought and physical movement that incorporates meditation into motion. Emphasis on the philosophical and practical application of Tai Chi thought as it applies to human health and life. Practice of basic Tai Chi Chuan forms (Yang Style). CSU/UC

HIST 33. History of South Asia (3)
Lec-3
P/NP available
A survey of the history of India, Ceylon, and Pakistan, with emphasis on the development of modern India and its role in international affairs. CSU/UC

HIST 34. The History of Japan (3)
Lec-3
P/NP available
A survey of the history of Japan, with emphasis on the more important political, economic, social, artistic, and cultural aspects of Japanese life as well as on the development of modern Japan and its role in world affairs. CSU/UC

HIST 35A-35B. History of China (3-3)
Lec-3
P/NP available
HIST 35A is not prerequisite to 35B
HIST 35A.
Historical, social, political, intellectual, cultural, artistic, and economic development of China from ancient times to approximately 1900. CSU/UC

HIST 35B.
Historical, social, political, intellectual, cultural, artistic, and economic developments in twentieth century China. CSU/UC

HIST 36. History of Southeast Asia (3)
Lec-3
P/NP available
A survey of the history of Southeast Asia, with emphasis on the role of the United States in Southeast Asia. CSU/UC

HIST 44. Comparative History of Overseas Chinese (3)
Lec-3
P/NP available
The history and social organization of overseas Chinese communities in Southeast Asia, Latin America, and North America from the Eastern Han Dynasty to the present. CSU/UC

IDST 27A-27B-27C. Asian Humanities (3-3-1)
IDST 27A is NOT PREREQUISITE TO 27B
No knowledge of foreign languages required

IDST 27A-27B. Asian Humanities (3-3)
Lec-3
P/NP available
ADVISORY: ENGL 93 OR 94 OR PLACEMENT IN ENGL 96
A team-taught survey of Asian civilizations, especially Arabic-Islamic, Indian, Chinese, and Japanese cultures. Emphasis on literature, philosophy, religion, and the arts. Explanation, through an interdisciplinary and cross-cultural approach, of the differences and underlying unity of Asian cultures and a comparison with their Western counterparts. Use of the best available English translations of Asian literature along with slides, films, recordings, and field trips. CSU/UC

IDST 27C. Asian Humanities (1)
Ind st-5
P/NP available
ADVISORY: IDST 27A OR 27B
An independent study/research course under direction of one or more instructors, focusing on a specific area of study. CSU (UC upon review)

IDST 28. Current Topics and Issues in the Pacific Rim (3)
Lec-3, field trips
P/NP available
Emphasis on current affairs and issues in any of the Pacific rim countries. CSU/UC

IDST 37. Racial and Ethnic Groups in the United States - A Comparative Survey (3)
Lec-3
P/NP available
An interdisciplinary survey of the history, culture, concerns, and conditions of American ethnic and racial groups in the United States. Includes multicultural literacies, immigration experiences, economic opportunities, political and social histories, and social justice movements. CSU/UC

Japanese Language Courses: See Japanese in this section of the catalog.

JAPA 39. Japanese Culture and Civilization (3)
Lec-3
ADVISORY: ELIGIBLE FOR ENGL 1A
No knowledge of Japanese required. Not recommended for students who are enrolled in or have completed JAPA 49.
A consideration of the major achievements of Japanese culture as reflected in language, literature, art, religion and daily life. CSU/UC

MUS 24. Music of East Asia (3)
Lec-3, field trips
P/NP available
A cross-cultural, comparative survey of both historical and recent developments in the music of China, Japan, and Korea, including the relationship of Eastern music to other aspects of East Asian cultures—philosophy, religion, theater, and dance. CSU/UC
Astronomy
Office: Science 400
Phone Number: (415) 239-3242
Web Site: www.ccsf.edu/astro

General Information
The Astronomy Department offers classes of students who wish to satisfy the Natural Sciences requirement for the associate degree. For students intending to transfer to a four-year university that has a laboratory science requirement, 1-unit laboratory classes are offered that may be taken concurrently with or after completion of a lecture course. A complete range of topical courses is provided for students interested in astronomy or astrophysics as a career. For further information, contact the department chairperson at (415) 452-5666.

Learning Outcomes
Upon completion of courses in Astronomy, students will be able to*:
- Establish that the Universe and its components are knowable, and that we are coming to know them through observations, experiments and theory (the nature of progress in astronomy)
- Assert that physical laws and processes are universal in scope.
- Apply the scientific method.
- Comprehend with a cosmic perspective, including analyzing the nature, scope, and evolution of the Universe, and where the Earth, Solar System, and Milky Way Galaxy fit in.
- Compare and contrast the structure, properties, and evolution of astronomical objects that may include clusters of galaxies, galaxies, stars, stellar remnants, planetary systems and biological life.


Announcement of Courses
Credit, Degree Applicable Courses
ASTR 1. Cosmic Evolution (3)
Lec-3
Origin, evolution, and final state of our physical universe. Formation, evolution, and properties of our galaxy and other galaxies, the sun and other stars, and our solar system. Extrasolar planets and the possibility of life elsewhere in the universe. Emphasis is on the development of the cosmos and its components. CSU/UC

ASTR 4. Life in the Universe (3)
Lec-3, field trips
Biological perspective on areas of current space research that seeks to unify topics such as understanding the origin of life on Earth, studying environments in which life exists, and identifying environments which might support extraterrestrial life in the Solar System and beyond. CSU/UC

ASTR 14. Exploring the Universe (3)
Lec-3
(Designed for students who have not completed ASTR 1, 17, 18, 19, or 20 with a final grade of “C” or higher)
A non-math course stressing the observational universe as seen through the use of telescopes, space probes, theoretical and computer modeling, and other aids. The great ideas of ancient and modern astronomy. Fundamental ideas in the physical sciences appropriate to understanding the structure of the universe and the origin of life. CSU

ASTR 16. Observational Astronomy (1)
Lab-3, field trips
Prereq.: Completion of or concurrent enrollment in ASTR 1, 14, or 17 or 14 or 19
Through direct investigation, students will learn the motion and appearance of the night sky, investigate astronomical objects such as stars, planets, and nebulae, and become familiar with modern observational tools and techniques. CSU/UC

ASTR 17. Solar System (3)
Lec-3
An introduction to the modern study of planetary astronomy and the possibilities of extraterrestrial life. Emphasis on the characteristics of the Solar System’s planets, analysis of their life-support possibilities. Examination of planetary system’s origins and characteristics. Modern methods of planetary exploration and analysis of the challenges of interplanetary and interstellar travel and communication. CSU/UC

ASTR 18. Stars (3)
Lec-3
An introduction to the modern study of the characteristics and evolution of stars and stellar systems. Observations and theories regarding stars as the primary producers of energy in the universe and of the chemical elements necessary for life. Properties of the final states of stars: supernovae, white dwarfs, neutron stars, black holes, and gamma-ray bursts. Understanding the effects of stellar evolution on galaxies and cosmology. CSU/UC

ASTR 19. Galaxies and the Universe (3)
Lec-3
Introduction to cosmology and extragalactic astronomy, with a focus on basic questions of existence: where do we come from and what is our fate? Universe origin, evolution and fate, Big Bang cosmology, expansion and acceleration of the universe, large scale structure, dark matter, properties and phenomena of galaxies and active galactic nuclei. CSU/UC

ASTR 20. Introduction to Astrophysics (4)
Lec-3, conf-1
Prereq.: ASTR 1, 14, or 16
Designed for students who desire an astronomy course more advanced than the general survey course. Emphasis is on the current state of theoretical astrophysics and research astronomy. An opportunity for students to pursue independent research projects or to develop teaching aids for astronomy. The college planetarium and observatory,
including the Celestron 14-inch telescope, a CCD camera, and fiber-optic spectrograph are available for the student. CSU/UC

Automotive/Motorcycle, Construction, and Building Maintenance

Office: 1400 Evans
Phone Number: (415) 550-4409
Web Site: www.ccsf.edu/autotech

Announcement of Curricula

City College offers credit for two years of pre-apprentice training for students seeking employment in the automotive industry. Students may apply the earned credit toward the Associate in Science degree.

Employment. Successful completion of training in this program prepares students for entry employment in the areas of automotive-mechanic and body person apprenticeship. Training will be considered in determining level of entry into apprenticeship.

Admission. Applicants for admission must complete an application form which may be obtained from the automotive-technology adviser at 1400 Evans Avenue training center. All applications are reviewed and evaluated, and the results are forwarded to each applicant. To be accepted into the program, students must fulfill the following prerequisites:

1. Completion of ESL 150 or placement in ENGL 92 or ESL 160
   AND
2. Completion of MATH E1 or E3 or BSMA G, H or J, OR placement in MATH 40

Recommended High School Preparation. Preparation is recommended in auto shop, electricity, machine shop, mechanical drawing, and welding.

Counseling. The automotive-technology adviser consults individually with students in order to help each student select a program best suited to the student's interests and abilities.

General Education. Instruction in general education is included so that students may satisfy the College graduation requirements in this area.

Associate in Science Degree. Students who wish to earn an Associate in Science degree must complete the general-education requirements for graduation from the College and additional electives. Students who satisfy these requirements and complete either of the options in the Curriculum receive the degree of Associate in Science in Automotive Technology. Such students are advised to consult with a College counselor.

Automotive Technology

Automotive Mechanics Major (AS)

This Automotive Technician Associate in Science Degree prepares students to enter the automotive maintenance field with all the necessary skills to perform entry level work as well as have a thorough understanding of theory so they will be qualified to participate in advanced training at the dealer level. This program complies with our national Automotive Service Excellence (ASE) certification through the accreditation body: National Automotive Teachers Education Foundation (NATEF), through which we are required to maintain certification every five years.

Associate in Science Degree. The AS Degree may be obtained by completion of the required program plus general education requirements and sufficient electives to meet a 60 unit total.

Learning Outcomes

Upon completion of this major, students will be able to:

- Distinguish, classify, and summarize automotive systems, functions, and their interrelation.
- Identify and use basic hand, power, lifting tools and equipment.
- Analyze wiring diagrams, use of diagnostic and electrical equipment, troubleshoot computer circuits and systems.
- Analyze brake, suspension and alignment systems, perform needed repairs, diagnose, inspect, and repair brake systems.
- Identify transmission components, operating systems, clutch manual and automatic transmissions; diagnose, inspect and repair components; understand and use specialized tools and equipment.
- Diagnose, inspect and repair engine components, perform scheduled maintenance repairs, identify parts, utilize service repair information, record engine measurements.
- Diagnose no start drivability and ignition problems, perform fuel system tests and assess onboard diagnostic system failures using appropriate test equipment.

Courses Required for the Major in Automotive Mechanics

<table>
<thead>
<tr>
<th>Courses</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>First Semester</td>
<td></td>
</tr>
<tr>
<td>AUTO 50 Intro to Automotive Mechanics ..................</td>
<td>8</td>
</tr>
<tr>
<td>AUTO 51 Automotive Electrical ................................</td>
<td>8</td>
</tr>
<tr>
<td>AUTO 52 Brakes, Suspension and Alignment ...............</td>
<td>8</td>
</tr>
<tr>
<td>Electives (choose 1)</td>
<td></td>
</tr>
<tr>
<td>AUTO 53 Automatic and Manual Transmission ..............</td>
<td>8</td>
</tr>
<tr>
<td>AUTO 54 Engine Repair .....................................</td>
<td>8</td>
</tr>
<tr>
<td>AUTO 55 Engine Performance and Drivability .............</td>
<td>8</td>
</tr>
<tr>
<td>Total Units</td>
<td>32</td>
</tr>
</tbody>
</table>

Automotive Alternative Fuel Technology Certificate

This certificate is for learners achieving training in the function, diagnosis and maintenance of alternative fuel vehicles. This certificate includes instruction in basic automotive systems (AUTO 50), a thorough understanding of automotive electrical systems (AUTO 51), and an in depth study of alternative fuel vehicles, appropriate niche transportation for all situations, system operation, inspection, diagnosis and repair (AUTO 57). Students completing this certificate program will be qualified for employment in the service and repair of existing and emerging technology alternative fuel vehicles.

Learning Outcomes

Upon completion of this certificate, students will be able to:

- Distinguish, classify and summarize automotive systems, functions, and their interrelation.
- Demonstrate safe shop practices and the use of diagnostic equipment.
- Describe the function of vehicle electrical, gaseous, hybrid, and fuel cell, systems and components.
- Identify, troubleshoot, analyze, diagnose, and repair existing and emerging alternative fuel vehicles.
- Compare and contrast innovative fuel systems.

Students must complete each course with a grade of “C” or higher.
Students may apply for certificate having completed course work or equivalent standards within the past 5 years.

Courses Required for the Certificate of Achievement in Automotive Alternative Fuel Technology

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUTO 50 Introduction to Automotive Technology</td>
<td>8</td>
</tr>
<tr>
<td>AUTO 51 Automotive Electrical</td>
<td>8</td>
</tr>
<tr>
<td>AUTO 57 Alternative Fuel Vehicles</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Units</strong></td>
<td><strong>19</strong></td>
</tr>
</tbody>
</table>

Automotive Engine Performance and Drivability Certificate

This certificate is for learners achieving advanced training in engine performance and drivability in preparation for the ASE A-8 and L-1 Engine Performance national certification. This certificate includes instruction in basic automotive systems (AUTO 50), a thorough understanding of automotive electrical systems (AUTO 51), and advanced electrical and diagnostic theory, practice and the use of appropriate instrumentation (AUTO 55). Students completing this certificate program will be qualified for employment in the service and repair of the automobile and similar vehicles.

Learning Outcomes

Upon completion of this certificate, students will be able to:

- Distinguish, classify and summarize automotive systems, functions, and their interrelation
- Demonstrate safe shop practices and the use of diagnostic equipment
- Describe the function of vehicle electrical systems and components
- Troubleshoot, analyze, diagnose, and repair drivability problems

Students must complete each course with a grade of “C” or higher.

Students may apply for certificate having completed course work or equivalent standards within the past 5 years.

Courses Required for the Certificate of Achievement in Automotive Engine Performance and Drivability

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUTO 50 Introduction to Automotive Technology</td>
<td>8</td>
</tr>
<tr>
<td>AUTO 51 Automotive Electrical</td>
<td>8</td>
</tr>
<tr>
<td>AUTO 55 Engine Performance/Drivability</td>
<td>8</td>
</tr>
<tr>
<td><strong>Total Units</strong></td>
<td><strong>24</strong></td>
</tr>
</tbody>
</table>

Brake and Suspension Specialist Certificate

This certificate is for learners achieving training in automotive braking systems in preparation for the ASE A-5 Brakes national certification. This certificate includes instruction in basic automotive systems (AUTO 50), a thorough understanding of brake systems including mechanical operation, preventive maintenance and repair of vehicle systems, including ABS (anti-lock brake systems); inspect, remove, repair and replace suspension system components and perform four wheel alignment (AUTO 52). Students completing this certificate will be qualified for employment in the service and repair of automobile and similar vehicles.

Learning Outcomes

Upon completion of this certificate, students will be able to:

- Distinguish, classify, and summarize automotive systems, functions and their interrelation.
- Demonstrate safe shop practices and the use of diagnostic and repair equipment.
- Diagnose, inspect, and repair brake systems, resurface drums and rotors, identify steering and suspension system operations and repairs.
- Perform four wheel alignment procedures and appropriate diagnosis and repair of suspension systems.

Students must complete each course with a grade of “C” or higher.

Students may apply for certificate having completed course work or equivalent standards within the past 5 years.

Courses Required for the Certificate of Accomplishment in Brake and Suspension Specialist

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUTO 50 Intro to Automotive Mechanics</td>
<td>8</td>
</tr>
<tr>
<td>AUTO 52 Brakes, Suspension, Alignment</td>
<td>8</td>
</tr>
<tr>
<td><strong>Total Units</strong></td>
<td><strong>16</strong></td>
</tr>
</tbody>
</table>

Engine Repair Specialist Certificate

This certificate is for learners achieving training in automotive engine systems in preparation for the ASE (Automotive Service Excellence) A-1 Engine Repair, national certification. This certification includes instruction in basic automotive systems (AUTO 50), a thorough analysis of engine problems and repair procedures including lubrication, cooling and exhaust systems, precision measurement, tear down and rebuilding of engines (AUTO54).

Learning Outcomes

Upon completion of this certificate, students will be able to:

- Distinguish, classify, and summarize automotive systems, functions and their interrelation.
- Demonstrate safe shop practices and the use of diagnostic and repair equipment.
- Diagnose and repair common engine problems, measure, remove and replace components, access appropriate service data, perform block, head, and valve train conditioning.
- Perform proper engine start-up, break in, and tune-up procedures.

Students must complete each course with a grade of “C” or higher.

Students may apply for certificate having completed course work or equivalent standards within the past 5 years.

Courses Required for the Certificate of Accomplishment in Engine Repair Specialist

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUTO 50 Intro to Automotive Mechanics</td>
<td>8</td>
</tr>
<tr>
<td>AUTO 54 Engine Repair</td>
<td>8</td>
</tr>
<tr>
<td><strong>Total Units</strong></td>
<td><strong>16</strong></td>
</tr>
</tbody>
</table>

General Automotive Technician Certificate

This certificate is for learners achieving training in the classification of General Automotive Technician and prepares for the ASE (Automotive Service Excellence) A-6 Electrical/Electronic Systems, national certification. This certification includes instruction in basic automotive systems (AUTO 50), a thorough understanding of electrical theory, battery, starting, charging, lighting, instrumentation, and wiring systems, including the use of diagnostic meters, oscilloscopes, scan tools, and engine analyzers.

Learning Outcomes

Upon completion of this certificate, students will be able to:

- Distinguish, classify, and summarize automotive systems, functions, and their interrelation.
• Demonstrate safe shop practices and the use of diagnostic and repair equipment.
• Examine and describe electrical theory, starting, charging, wiring and on board diagnostic functions and their application to automotive systems.
• Perform and evaluate electrical system tests using appropriate diagnostic equipment.

Students must complete each course with a grade of “C” or higher.

Students may apply for certificate having completed course work or equivalent standards within the past 5 years.

Courses Required for the Certificate of Accomplishment in General Automotive Technician

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUTO 50 Intro to Automotive Mechanics</td>
<td>8</td>
</tr>
<tr>
<td>AUTO 51 Automotive Electrical</td>
<td>8</td>
</tr>
<tr>
<td><strong>Total Units</strong></td>
<td><strong>16</strong></td>
</tr>
</tbody>
</table>

Transmission Specialist Certificate

This certificate validates training in automatic and manual transmissions in preparation for the ASE (Automotive Service Excellence) national certification examination. This certificate includes instruction in basic automotive systems (AUTO 50), a thorough understanding of automatic and manual transmissions, clutches, drive shafts, axles, differentials, and electronic sensing devices, including tear down and rebuilding (AUTO 53). Students completing this certificate program will be qualified for employment in the service and repair of the automobile and similar vehicles.

Learning Outcomes

Upon completion of this certificate, students will be able to:

• Distinguish, classify and summarize automotive systems, functions, and their interrelation.
• Demonstrate safe shop practices and the use of diagnostic equipment.
• Describe the function and operation of automatic and manual transmissions and associated assemblies.
• Troubleshoot, analyze, diagnose, tear down, and repair transmission systems.

Students may apply for certificate having completed course work or equivalent standards within the past 7 years.

Courses Required for the Certificate of Accomplishment in Transmission Specialist

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUTO 50 Intro to Automotive Mechanics</td>
<td>8</td>
</tr>
<tr>
<td>AUTO 53 Automatic and Manual Transmissions</td>
<td>8</td>
</tr>
<tr>
<td><strong>Total Units</strong></td>
<td><strong>16</strong></td>
</tr>
</tbody>
</table>

Auto Body Technology

Auto Body Damage Analysis and Estimating Certificate

This certificate is for learners achieving advanced training in auto body dent and damage repair, auto body frame straightening and repair, auto body plastic repair and refinishing, and study in the nomenclature and inter-relationships of automotive parts, systems and functions in preparation for ASE (Automotive Service Excellence) certification test B6. This certificate includes instruction in automotive parts, systems, and functions (AUTO 50), the assessment and demonstration of straightening and aligning techniques and repair (AUTO 204), the evaluation, demonstration, and analysis of minor body and fender damage and the sequential procedures involved in their repair (AUTO 200), the demonstration of the techniques of repairing, replacing and refinishing of body platics, glass, and fiberglass (AUTO 206)

Learning Outcomes

Upon completion of this certificate, students will be able to:

• Analyze and differentiate the various parts, components, and systems of the automobile.
• Use shop safety practices related to auto body repair, welding, and frame straightening.
• Analyze and perform frame straightness and alignment and demonstrate integration with steering and suspension systems.
• Identify and demonstrate appropriate plastic, glass, and fiberglass removal, installation, and repair.
• Calculate repair costs and estimates.
• Summarize and demonstrate the techniques involved in auto body dent and damage repair.

Students must complete each course with a grade of “C” or higher.

Students may apply for a certificate having completed course work or equivalent standards within the past 5 years.

Courses Required for the Certificate of Accomplishment in Auto Body Damage Analysis and Estimating

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUTO 50 Intro to Automotive Mechanics</td>
<td>8</td>
</tr>
<tr>
<td>AUTO 200 Dent and Damage Repair</td>
<td>2</td>
</tr>
<tr>
<td>AUTO 204 Auto Body Frame Straightening &amp; Repair</td>
<td>2</td>
</tr>
<tr>
<td>AUTO 206 Auto Body Plastic Repair &amp; Refinishing</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Units</strong></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

Auto Body Painting and Refinishing Certificate

This certificate is for learners achieving advanced training in auto body painting and refinishing, dent and damage repair, plastics and composite material repair and refinishing, and custom painting in preparation for ASE (Automotive Service Excellence) certification test B2. This certificate includes instruction in the basics of dent and damage repair (AUTO 200), the understanding and skills of painting and refinishing, (AUTO 203), the understanding and practice of the repair of plastics and composite materials, (AUTO 206), and the theory and practice of custom painting including air brushing (MOTO 63).

Learning Outcomes

Upon completion of this certificate, students will be able to:

• Analyze minor body and fender damage and the sequential procedures involved in proper metal damage.
• Analyze and apply the understanding of the materials, equipment, techniques and processes in the successful application of polyurethane and water based chemicals.
• Use shop safety practices related to auto body repair and painting.
• Demonstrate how to use different painting tools and equipment including how to disassemble, assemble, and clean paint guns.
• Demonstrate how to wet sand to remove minor paint imperfections as well as hand and machine compounding processes.
• Demonstrate the use of computer color matching systems and the use of tinting solid and metallic colors.
• Evaluate and repair plastic part damage and paint plastic surfaces.
- Calculate repair costs and estimates.
- Create and apply graphic designs using masking and air brush techniques.

Students must complete each course with a grade of "C" or higher. Students may apply for a certificate having completed course work or equivalent standards within the past 5 years.

**Courses Required for the Certificate of Accomplishment in Auto Body Structural Analysis and Damage Repair**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUTO 200 Dent and Damage Repair</td>
<td>2</td>
</tr>
<tr>
<td>AUTO 202 Welded Panel Replacement and Repair</td>
<td>2</td>
</tr>
<tr>
<td>AUTO 204 Auto Body Frame Straightening and Repair</td>
<td>2</td>
</tr>
<tr>
<td>AUTO 205 Auto Welding</td>
<td>3</td>
</tr>
<tr>
<td>Total Units</td>
<td>9</td>
</tr>
</tbody>
</table>

**Non-Structural Analysis and Damage Repair Certificate**

This certificate is for learners achieving advanced training in non-structural analysis and damage repair in preparation for ASE (Automotive Service Excellence) certification test 83. This certificate includes instruction in the basics of dent and damage repair (AUTO 200), the understanding and skills of bolted panel replacement and repair, (AUTO 201), the understanding and skills of automotive welding, (AUTO 205), and the theory and practice of auto body plastic welding and refinishing (AUTO 206).

**Learning Outcomes**

Upon completion of this certificate, students will be able to:
- Analyze minor body and fender damage and perform the sequential procedures involved in proper metal repair.
- Use shop safety practices related to auto body non-structural repair.
- Select the proper tools, equipment, and techniques for removing, repairing, and replacing bolted panels.
- Evaluate and select the proper welding equipment and perform techniques for appropriate body metal repairs.
- Evaluate, repair, and paint damaged plastic, composite parts, and surfaces.
- Calculate repair costs and estimates.

Students must complete each course with a grade of "C" or higher. Students may apply for a certificate having completed course work or equivalent standards within the past 5 years.

**Courses Required for the Certificate of Accomplishment in Non-Structural Analysis and Damage Repair**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUTO 200 Dent and Damage Repair</td>
<td>2</td>
</tr>
<tr>
<td>AUTO 201 Bolted Panel Replacement and Repair</td>
<td>2</td>
</tr>
<tr>
<td>AUTO 205 Auto Body Welding</td>
<td>2</td>
</tr>
<tr>
<td>AUTO 206 Plastic Repair and Refinishing</td>
<td>2</td>
</tr>
<tr>
<td>Total Units</td>
<td>8</td>
</tr>
</tbody>
</table>

**Motorcycle Technology**

**Motorcycle Technician Major (AS)**

This Motorcycle Technician Associate in Science Degree prepares students to enter the motorcycle maintenance field with all the necessary skills to perform entry-level work as well as to have a thorough understanding of theory so they will be qualified to participate in advanced training at the dealer or manufacturer. Degree holders are expected to be first in line for jobs as service managers and manufacturer's representatives.

**Associate in Science Degree.** The AS Degree may be obtained by completion of the required program plus general education requirements and sufficient electives to meet a 60 unit total.

**Learning Outcomes**

Upon completion of this major, students will be able to:
- Describe the history, culture, and esthetics of the motorcycle, including social, political, and economic issues.
- Examine laboratory systems, hand and shop and measuring tools and their usage, and fire and safety procedures including the interpretation of service and repair data.
Motorcycle Engine and Power Train Repair Certificate

This certificate is for learners achieving training in the theory of operation, troubleshooting, major overhaul, and general repairs of motorcycle engines and power trains. This certificate includes instruction in basic motorcycle systems (MOTO 90), and a thorough understanding of all aspects of motorcycle engine principles, specialized measurements, tools and equipment, diagnosis and repair of power train problems, disassembly and assembly, and appropriate adjustments. (MOTO 93) Students completing this certificate program will be qualified for employment in engine power train service and repair.

Learning Outcomes

Upon completion of this certificate, students will be able to:

- Distinguish, classify and summarize motorcycle systems, functions, and their interrelation.
- Demonstrate safe shop practices and the use of diagnostic equipment.
- Evaluate, troubleshoot and service motorcycle fuel, lubrication, frame, suspension, brakes, wheels, and cooling systems.
- Set up and operate MIG, TIG, Gas Welding, English Wheel, Power Hammer, and various other metal shaping equipment or.
- Demonstrate knowledge and proper application of surface preparation products, base, mid and clear coats, color sanding, polishing and finishing techniques as well as creating and applying graphic designs using masking and airbrush techniques.

Students must complete each course with a grade of “C” or higher. Students may apply for certificate having completed course work or equivalent standards within the past 7 years.

Courses Required for the Certificate of Accomplishment in Motorcycle Engine and Power Train Repair

<table>
<thead>
<tr>
<th>Courses</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MOTO 90 Introduction to Motorcycle Technology</td>
<td>4</td>
</tr>
<tr>
<td>MOTO 93 Engine and Power Train Repair</td>
<td>4</td>
</tr>
</tbody>
</table>

Elective Courses: Choose 3 units from the following:

- MOTO 61 Custom Metal Fabrication ............... 3
- MOTO 63 Auto-Moto Custom Painting ............... 3

Total Units ........................................ 11

Motorcycle General Service Certificate

This certificate validates training in the design, operation, inspection, disassembly, cleaning, measuring, and rebuilding of components as well as preventive maintenance and troubleshooting situations. This certificate includes instruction in basic motorcycle systems (MOTO 90), and a thorough understanding of motorcycle fuel, lubrication, frame, suspension, brakes and cooling systems. (MOTO 91) Students completing this certificate program will be qualified for employment in general service and tune-up.

Learning Outcomes

Upon completion of this certificate, students will be able to:

- Distinguish, classify and summarize motorcycle systems, functions, and their interrelation.
- Demonstrate safe shop practices and the use of diagnostic equipment.
- Evaluate, troubleshoot and service motorcycle fuel, lubrication, frame, suspension, brakes, wheels, and cooling systems.
- Identify, troubleshoot, analyze, and diagnose components and systems in order to provide advice for customers seeking to modify parts.
- Analyze, design, and operate specialized metal working and painting equipment in projects related to modifying and restoring motorcycle bodies and frames.

Students must complete each course with a grade of “C” or higher. Students may apply for certificate having completed course work or equivalent standards within the past 7 years.

Courses Required for the Certificate of Accomplishment in Motorcycle General Service

<table>
<thead>
<tr>
<th>Courses</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MOTO 90 Introduction to Motorcycle Technology</td>
<td>4</td>
</tr>
<tr>
<td>MOTO 91 Motorcycle General Service ............</td>
<td>4</td>
</tr>
</tbody>
</table>

Elective Courses: Choose 3 units from the following:

- MOTO 61 Custom Metal Fabrication ............... 3
- MOTO 63 Auto-Moto Custom Painting ............... 3

Total Units ........................................ 11

Motorcycle Tune-up, Electrical, and Performance Certificate

This certificate validates training in the tune-up, trouble shooting, performance tuning on a dynamometer, electrical principles, components, regulation, controls, switching and testing of electrical systems. This certificate includes instruction in basic motorcycle systems (MOTO 90), and a thorough understanding of all aspects of motorcycle performance tuning and maintenance of electrical systems. (MOTO 92) Students completing this certificate program will be qualified for employment in performance tune-up and electrical diagnostics.

Learning Outcomes

Upon completion of this certificate, students will be able to:

- Distinguish, classify and summarize motorcycle systems, functions, and their interrelation.
- Demonstrate safe shop practices and the use of diagnostic equipment.

Courses Required for the Certificate of Accomplishment in Motorcycle Engine and Power Train Repair

<table>
<thead>
<tr>
<th>Courses</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MOTO 90 Introduction to Motorcycle Technology</td>
<td>4</td>
</tr>
<tr>
<td>MOTO 93 Engine and Power Train Repair</td>
<td>4</td>
</tr>
</tbody>
</table>
- Evaluate, troubleshoot and service electrical components, controls, switches, and perform dynamometer tuning in conjunction with air fuel systems.
- Analyze, design and operate specialized metal working and painting equipment in projects related to modifying and restoring motorcycle bodies and frames.

Students must complete each course with a grade of “C” or higher. Students may apply for certificate having completed course work or equivalent standards within the past 7 years.

Courses Required for the Certificate of Accomplishment in Motorcycle Tune-up, Electrical, and Performance

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MOTO 90 Introduction to Motorcycle Technology</td>
<td>4</td>
</tr>
<tr>
<td>MOTO 92 Tune-up, Electrical and Performance</td>
<td>4</td>
</tr>
<tr>
<td>Elective Courses: Choose 3 units from the following:</td>
<td></td>
</tr>
<tr>
<td>MOTO 61 Custom Metal Fabrication</td>
<td>3</td>
</tr>
<tr>
<td>MOTO 63 Auto-Moto Custom Painting</td>
<td>3</td>
</tr>
<tr>
<td>Total Units</td>
<td>12</td>
</tr>
</tbody>
</table>

Residential Plumbing Certificate

This certificate authenticates training in the methods and materials necessary to install a residential plumbing system. This certificate includes instruction in appropriate safety practices and procedures (CNST 69), foundational construction principles, procedures, tools and equipment (CNST 100), plumbing theory, major components, functions, materials, design and installation (CNST 103), regulations, permits, inspections, proper sequencing, and enforcement of code regulations (CNST 106), and successful reading and understanding blueprints and plumbing drawings (CNST 107).

Students completing this certificate program will be qualified for both union and non-union employment where residential plumbing skills are called upon.

Learning Outcomes

Upon completion of this certificate, students will be able to:
- Identify basic OSHA (Occupational Safety and Health Administration) requirements, recognize and evaluate general safety hazards and take appropriate action.
- Measure, layout, calculate, and estimate construction projects using appropriate tools and equipment.
- Interpret plumbing code requirements, drawings, and sequence of construction, as well as evaluate the various applications of materials and methods required by code standards.
- Analyze, design, and install supply/drain/waste/vent piping, valves, fittings and fixtures.
- Read floor plans, elevations and building sections.
- Interpret construction abbreviations, nomenclature, composition, and analyze interconnected systems.

Students must pass each class with a grade of “C” or higher.

Courses Required for the Certificate of Accomplishment in Residential Plumbing

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CNST 69 Construction Safety</td>
<td>1</td>
</tr>
<tr>
<td>CNST 100 Intro to Construction Applications</td>
<td>3</td>
</tr>
<tr>
<td>CNST 103 Residential Plumbing</td>
<td>4</td>
</tr>
<tr>
<td>CNST 106 Fundamentals of the Uniform Plumbing Code</td>
<td>3</td>
</tr>
<tr>
<td>CNST 107 Blueprint Reading</td>
<td>3</td>
</tr>
<tr>
<td>Total</td>
<td>14</td>
</tr>
</tbody>
</table>

Residential Wiring Certificate

This certificate validates training in the rules, methods, and materials necessary to install residential electrical systems. This certificate includes instruction in appropriate safety practices and procedures (CNST 69), foundational construction principles, procedures, tools
and equipment (CNST 100), basic electrical theory, hands on design and construction of electrical wiring systems (CNST 109), the ability to reference electrical codes and determine their proper application (CNST 105), and successfully reading and understanding blueprints and electrical schematics (CNST 107).

Students completing this certificate program will be qualified for employment in companies both union and non-union where residential wiring skills are called upon.

Learning Outcomes

Upon completion of this certificate, students will be able to:

- Identify basic OSHA (Occupational Safety and Health Administration) requirements, recognize and evaluate general safety hazards and take appropriate action.
- Measure, layout, calculate and estimate construction projects using appropriate tools and equipment.
- Identify and summarize basic electrical theory and its application in residential wiring systems.
- Design and install a residential wiring system in compliance with national, state and local codes.
- Interpret the language and navigate through the NEC (National Electric Code) to interpret the appropriate practical application.
- Read floor plans, elevations, and building sections; interpret construction abbreviations, nomenclature, composition, and analyze interconnected systems.

Students must pass each class with a grade of “C” or higher.

Students may apply for this certificate having completed course work or equivalent standards with in the past 5 years.

Courses Required for the Certificate of Accomplishment in Residential Wiring

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CNST 69 Construction Safety</td>
<td>1</td>
</tr>
<tr>
<td>CNST 100 Introduction to Construction</td>
<td>3</td>
</tr>
<tr>
<td>Applications</td>
<td></td>
</tr>
<tr>
<td>CNST 105 Electrical Code</td>
<td>6</td>
</tr>
<tr>
<td>CNST 107 Blueprint Reading</td>
<td>3</td>
</tr>
<tr>
<td>CNST 109 Residential Wiring</td>
<td>4</td>
</tr>
<tr>
<td>Total Units</td>
<td>17</td>
</tr>
</tbody>
</table>

Solar Hot Water Systems Certificate

Students completing this certificate program will be qualified for employment in the solar hot water field.

Upon successful completion of CNST (below) students will be eligible to take the North American Board of Certified Energy Practitioners (NABCEP) entry level exam. This certificate includes instruction in: Construction safety; Reading construction drawings; Plumbing; Solar hot water (SHW) systems.

Learning Outcomes

Upon completion of this certificate, students will be able to:

- Identify basic OSHA (Occupational Safety and Health Administration) requirements, recognize and evaluate general safety hazards and take appropriate action.
- Interpret construction drawings.
- Size an OG300 (domestic, non-commercial) system for a household.
- Follow installation guidelines and construction drawings for an OG300 SHW system.
- Install a code compliant drain back SHW system.

Students must complete each course with a grade of “C” or higher. Where applicable, grades of Pass maybe used. Students must complete 4 of 6 courses at City College of San Francisco. All courses must be taken within a 4 year period.

Courses Required for the Certificate of Accomplishment in Solar Hot Water Systems

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CNST 69 Construction Safety</td>
<td>1</td>
</tr>
<tr>
<td>CNST 107 Blueprint Reading</td>
<td>3</td>
</tr>
<tr>
<td>CNST 103 Residential Plumbing</td>
<td>4</td>
</tr>
<tr>
<td>CNST 106 Plumbing Code</td>
<td>4</td>
</tr>
<tr>
<td>CNST 104 Solar Hot Water Systems</td>
<td>4</td>
</tr>
<tr>
<td>Total Units</td>
<td>15</td>
</tr>
</tbody>
</table>

Recommended Additional Coursework: CNST 111

Building Maintenance/Custodial

Custodial Training Noncredit Certificate

This certificate of completion validates training in tool, equipment, chemical and personal safety, use of proper and appropriate cleaning and maintenance equipment and supplies, and proper handling of diverse chemicals (TICU 9550). Two electives are available for students in this program, one for those needing Vocational English as a Second Language specialty training for custodial workers (ESLV 4816), includes English terminology for equipment, supplies, common tasks, and safety. The other elective, Vocational Foundation Skills, (TRST 4604), includes instruction in the skills of reading, writing, math and studying. Students completing this certificate will be qualified for entry level custodial and building maintenance.

Students must have 85% of the required hours for the certificate with a grade of “C” or better.

Learning Outcomes

Upon completion of the certificate, students will be able to:

- Recognize and apply appropriate tool, equipment, chemical, and toxic waste safety and handling.
- Identify and demonstrate recommended practices for the use of custodial tools, machines, chemicals, and specialized equipment.
- Demonstrate general understanding of custodial terminology, directions, units of measurement and instructions.
- Apply critical reading, writing, math and study skills.

Required Course

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>TICU 9550 Custodial Training</td>
<td>108</td>
</tr>
</tbody>
</table>

Elective Courses: Choose one of the following

- ESLV 4816 Comm Skills for Janitorial Workers | 90   |
- TRST 4604 Vocational Foundation Skills      | 36-180 |

Total Hours                                     | 144-188 |

Announcement of Courses

Automotive Technology

Credit, Degree Applicable Courses:

AUTO 50. Intro to Automotive Mechanics (8)

Lec-8, lab-4, field trips

Prereq.: MATH E1, EX, BSMA G, H, or J, ESL 150

Orientation to the automobile: history, design aesthetics, cultural relativism, technical vocabulary, scientific physical principles, systems,
components, safety procedures, measuring systems, and proper use of appropriate tools and equipment; workplace hands-on skills, will include basic maintenance and repair for the automobile in accord with Automotive Service Excellence (ASE) certification. CSU

AUTO 51. Automotive Electrical (8)
Lec-6, lab-6, field trips
Prereq: AUTO 50 or pass Challenge Test
This course focuses on automotive electrical systems including basic electrical theory, wiring diagrams, battery technology, starting, charging, lighting, instrumentation and wiring systems, electrical/electronic troubleshooting, digital volt ohm meters, and storage oscilloscopes, in the diagnosis and repair of automotive electronics. Preparation for the ASE-A6, examination. CSU

AUTO 52. Brakes, Suspension, Alignment (8)
Lec-6, lab-6, field trips
Prereq: AUTO 50 or pass Challenge Test

AUTO 53. Automatic and Manual Transmissions (8)
Lec-6, lab-6, field trips
Prereq: AUTO 50 or pass Challenge Test
Instruction in diagnosis and servicing of automatic and manual transmissions, clutches, 4-wheel drives, drive shafts, differentials, and electronic sensing devices. Preparation is given for national certification test. CSU

AUTO 54. Engine Repair (8)
Lec-6, lab-6, field trips
Prereq: AUTO 50 or pass Challenge Test
A hands-on course focusing on the analysis of engine problems and proper steps in repair procedures, including cooling and exhaust systems and timing belt replacements as well as the disassembly, precision measurement, analysis of potential engine failures, reconditioning, and rebuilding of automotive engines. CSU

AUTO 55. Engine Performance/Drivability (8)
Lec-6, lab-6, field trips
Prereq: AUTO 50 or pass Challenge Test
Course focus is on maintenance and troubleshooting including the use of analog and digital volt ohm meters, digital storage oscilloscopes, scan tools, and engine analyzers, vacuum and pressure gauges in the diagnosis and repair of modern automotive ignition, fuel, and emission systems. Preparation for National Certification (ASE A8 and L-1 Engine Performance) Examinations, students become familiar with trade practices in the testing and replacement of ignition system components, vehicle fuel and emission systems testing, component testing and replacement. CSU

AUTO 56. Introduction to Hybrid Auto Maintenance and Repair (3)
Lec-3, lab-3, field trips
Prereq: AUTO 50 and AUTO 51
Principles and functions of hybrid automobiles, and procedures for their maintenance, problem diagnosis and repair. Function of individual system components examined. Critical importance of safety and hybrid-unique equipment and procedures. Maintenance procedures and diagnostic and repair processes for at least one type of hybrid (Parallel or Series-Parallel) taught in detail. CSU

AUTO 57. Alternative Fuel Vehicles (3)
Lec-3, Lab-3
Prereq: AUTO 50
Principles and functions of alternative fuel vehicles and procedures for their maintenance, system diagnosis for optional efficiency. Safety procedures and environmental practices will be emphasized. Hands-on lab exercises, vehicle inspections, along with repairs will be conducted. Discussion of the appropriate niche transportation for all situation will be analyzed. CSU

AUTO 58. Automotive Heating and Air-Conditioning (3)
Lec-3, lab-3
Learners will study the history, principles of operation, environmental concerns, scientific principles, mechanical components, diagnosis, servicing and testing, system controls, retrofit of old systems, and future trends of automotive HVAC systems. CSU

AUTO 60. Independent Study (Auto Technology) (1-3)
Ind st-5, 10, 15, conf-1, field trips
Prereq: AUTO 50
Advis: Completion of at least 16 units in Automotive Technology or consent of instructor. Student must obtain approval of project from instructor. Research and application of advanced skills within the topic of Automotive/Trade Skills. Allows student to investigate subjects of special interest and develop skills toward those interests, such as frame design and fabrication, suspension design and fabrication, engine performance modification and drivability computer. CSU

AUTO 61. Independent Study (Auto Body) (1-3)
Ind st-5, 10, 15, conf-1, field trips
Prereq: AUTO 50
Advis: Completion of at least 16 units in Auto Body Trade Skills or consent of instructor. Student must obtain approval of project from instructor.
Research and application of advanced skills within the topic of Auto Body Trade Skills. Allows student to investigate subjects of special interest and develop skills toward those interests, such as frame design and fabrication, suspension design and fabrication, sheet metal and fiberglass design and fabrication and show vehicle preparation. CSU

AUTO 62. Independent Study (Motorcycle Small Engine Repair) (1-3)
Ind st-5, 10, 15, conf-1, field trips
Prereq: AUTO 50
Advis: Completion of at least 6 units in Motorcycle and Small Engine Repair, or consent of instructor. Student must obtain approval of project from instructor. Research and application of advanced skills within the topic of Motorcycle and Small Engine Repair. Allows student to investigate subjects of special interest and develop skills toward those interests, such as Frame Design and Fabrication, Suspension Design and Fabrication, Engine Performance Modification and Sheet Metal Design and Fabrication. CSU

AUTO 69. Basic Automotive Maintenance and Care (2)
Lec-1, lab-3
This course is a basic overview of the maintenance and care of cars for the owner. The course includes: how cars work, safety, responsibility, upkeep, basic tools, and technical terminology. CSU
AUTO 98. Specialty Automotive Electronics (4)
Lec-4, lab-2  P/NP Available
PREREQ: AUTO 51
A technical course focusing on higher level electrical troubleshooting including the use of digital volt ohm meters, digital storage oscilloscopes, scan tools, and engine analyzers in the diagnosis and repair of modern automotive electronics. Preparation for the Official State Lamp Adjusting Licensing and National Certification (ASE L-1 Advanced Engine Performance) Examination. CSU

AUTO 129. Auto Body Trim and Hardware (3)
Lec-2, lab-4, field trips
Procedures related to assembly and disassembly of automotive body and fender components. Removal and replacement of side panels, windshields, braces, inner structural members, trim, upholstery, moldings and bumper assemblies. CSU

AUTO 200. Auto Body Dent and Damage Repair (2)
Lec-1, lab-3  P/NP Available
ADVISE: AUTO 50
Basic introduction to welding, metal bumping, metal finishing, and plastic filling. Students will learn analysis of minor body and fender damage and the sequential procedures involved in proper metal damage repair by integrating their classroom gained knowledge with shop practice. CSU

AUTO 201. Bolted Panel Replacement (2)
Lec-1, lab-3  P/NP Available
PREREQ: AUTO 50
This course concerns the methods and techniques of fastening and joining metal and plastic parts as they relate to a professional fit and finish on vehicle body and frame structures, including alignment of metal and plastic parts. CSU

AUTO 202. Welded Panel Replacement (2)
Lec-1, lab-3  P/NP Available
ADVISE: AUTO 50
This course involves the various methods and techniques of cutting, fastening, and joining of metals and metal parts as they relate to vehicle body and frame structures, including plasma arc cutting, electric spot, MIG (Metal Inert Gas), gas welding, brazing, and epoxy-joining processes. CSU

AUTO 203. Painting and Refinishing (2)
Lec-1, lab-3  P/NP Available
ADVISE: AUTO 50
This course is designed as an introduction to automotive urethane, polyurethane and water based refinishing. It includes a comprehensive study of the materials, equipment, techniques and processes in the successful application of each of the automotive refinishing materials by classroom gained knowledge with shop practice. CSU

AUTO 204. Body/Frame Straightening &Repair (2)
Lec-1, lab-3  P/NP Available
ADVISE: AUTO 50
This course concerns the study and repair of conventional and unitized vehicle frames, their straightening and alignment, alignment at cross members, rear and side frame members, suspension systems and steering principals. Frame straightening machines, gauges and tools as well as appropriate safety will be covered. CSU

AUTO 205. Auto Body Welding (2)
Lec-1, lab-3  P/NP Available
ADVISE: AUTO 50
In this course students will learn how to identify and work with different types of welding equipment used in the installation of welded panels. They will also learn various methods of welding, brazing, soldering and plasma are cutting of thin auto body material. CSU

AUTO 206. Plastic Repair &Refinishing (2)
Lec-1, lab-3  P/NP Available
ADVISE: AUTO 50
This course concerns the techniques of repairing, replacing, and refinishing the many types of plastic and fiberglass parts now being used in auto body construction. Many plastics can be heated, reshaped, repaired and refinishing using a variety of different methods. CSU

Motorcycle Technology

Credit, Degree Applicable Courses:

MOTO 61. Custom Metal Fabrication (3)
Lec-2, lab-3, field trips
Students will develop the skills necessary to cut, shape, weld, and fabricate various types of metal products from raw materials. Usage of MIG, TIG, gas welding, English Wheel, Power Hammer, and various other metal shaping equipment and techniques will be presented. CSU

MOTO 62. Custom Design and Assembly (3)
Lec-2, lab-3, field trips
This course will give the student working knowledge of the necessary skills required to design and assemble a custom motorcycle. Students will conceptualize design parameters, research component vendors, estimate parts costs, and plan and execute assembly strategies. CSU

MOTO 63. Auto-Moto Custom Painting (3)
Lec-2, lab-4, field trips
Topics covered will be: surface preparation, base coating, mid coating, clear coating, graphic layout and airbrush techniques for the purpose of custom automotive, motorcycle and related fields. This course may require a materials fee for take home projects. CSU

MOTO 81. Fuel, Lubrication and Cooling (4)
Lec-3, lab-3, field trips  P/NP available
PREREQ: MOTO 60 or 90
This course covers the principles, theory of operation, design and functions of motorcycle fuel, lubrication and cooling systems as well as the inspection, disassembly, cleaning, measuring and rebuilding of the components of those systems. Upon completion of this class, a student should be able to perform preventive maintenance, troubleshoot discrepancies, repair the system components and know how to select suitable aftermarket parts in both dealer and independent shop settings. CSU

MOTO 82. Motorcycle Tune-up/Service (4)
Lec-3, lab-3, field trips  P/NP available
PREREQ: MOTO 90
This course covers motorcycle tune-up, general service, ignition, valve adjustment, lubrication, oil and filter changes as well as the special tools required. Further, it covers service, parts books, micro-fiche, computerized manuals and the logic employed in them. Upon completion of this class, a student should be able to perform virtually all
aspects of scheduled maintenance such as tune-ups, valve adjustment, oil changes and lubrication service as well as troubleshoot and repair common maintenance discrepancies. CSU

MOTO 83. Motorcycle Electrical Systems (4)
Lec-3, lab-3, field trips P/NP available
PREREQ.: MOTO 90
This course covers the principles of basic electricity including terms, circuits, wiring diagrams and symbols, magnetism and methods of providing electrical energy for motorcycles. Various electrical components of generation, regulation, distribution, control, switching and methods of testing of motorcycle electrical systems will be discussed. Ignition systems and how they relate to the engine components will be covered. CSU

MOTO 84. Engine Theory (4)
Lec-3, lab-3, field trips P/NP available
PREREQ.: MOTO 60 or 90
This course offers a comprehensive view of how two and four-stroke motorcycle engines work through discussion of the theory of operation and technical principles involved in converting fuel to motion. This course is designed to give students the technical understanding necessary for working with modern internal combustion engines and students will learn the theory necessary in understanding the internal combustion engine. CSU

MOTO 85. Motorcycle Frame/Wheels/Brakes (4)
Lec-3, lab-3, field trips P/NP available
PREREQ.: MOTO 90
This course covers the theory, design and function of motorcycle exhaust systems, various frame and suspension designs, tires, cast and spoked wheels, and both disk and drum brakes. Upon completion of this course, a student should be able to perform preventive maintenance, troubleshoot discrepancies, repair systems and know how to select suitable aftermarket parts in both a dealer and independent shop setting. CSU

MOTO 86. Motorcycle Engine Overhaul (3)
Lec-2, lab-3, field trips P/NP available
PREREQ.: MOTO 60 or 90
This course offers a comprehensive view of overhaul techniques, pre-teardown diagnostics and post repair operations check of modern motorcycle engines. Repair procedures will be consistent with manufactures and professional repair standards. Upon the successful completion of this class, a student will be able to perform a complete overhaul of the various types of modern motorcycle engines including water-cooled, multi-valve, and air-cooled V-twins engines. The student will be able to analyze various aspects of performance modifications. CSU

MOTO 87. Power Transmission Systems (4)
Lec-3, lab-3, field trips P/NP available
PREREQ.: MOTO 90
This course covers motorcycle power transmission systems. Converting mechanical power produced at the crankshaft to the rear wheel through clutch, transmission and the final drive system. Theory of operation including lubrication requirements, gear ratios, design and function of the primary drive, the clutch, the transmission and the final drive will be covered. Clutches, transmissions, and drive systems will be removed, disassembled, cleaned, inspected, measured, rebuilt, installed and inspected for proper operation. CSU

MOTO 88. Motorcycle Dyno Testing/Repair (2)
Lec-1, lab-3, field trips P/NP available
PREREQ.: MOTO 90
This is an in-depth course covering motorcycle engine, component theory and function as related to dynamometer (dyno) operation. A dyno is used for data acquisition of operating conditions and used to diagnosis and troubleshoot performance problems. Various motorcycles will be run on a dyno so students can use the data to trouble-shoot maintenance problems. After repairs or adjustments, the motorcycles will be run again to measure the results. CSU

MOTO 90. Introduction to Motorcycle Technology (4)
Lec-3, lab-3 P/NP Available
This course is the prerequisite and entry level course to the motorcycle technician series. Students will learn an overview of the history of motorcycles, industry vocabulary and language, safety, tools, theory of operation and the basic use of hand tools in shop-related projects. CSU

MOTO 91. Motorcycle General Service (4)
Lec-3, lab-3 P/NP Available
PREREQ.: MOTO 90
This course covers motorcycle tune-up, troubleshooting, and performance tuning on a dynamometer. Included are also electrical principles, components and the generation, regulation, distribution, control, switching and testing of electrical systems. Upon completion of this class, a student should be able to perform, virtually all aspects of scheduled maintenance. CSU

MOTO 92. Tune-up, Electrical and Performance (4)
Lec-3, lab-3 P/NP Available
PREREQ.: MOTO 90
This course covers motorcycle tune-up, troubleshooting, and performance testing on a dynamometer. Included are also electrical principles, components and the generation, regulation, distribution, control, switching and testing of electrical systems. Upon completion of this class, a student should be able to perform, virtually all aspects of scheduled maintenance. CSU

MOTO 93. Engine & Power Train Repair (4)
Lec-3, lab-3 P/NP Available
PREREQ.: MOTO 90
This course trains students in the theory of operation, troubleshooting, major overhaul and general repairs of motorcycle engines and power trains. CSU

Construction
Credit, Non-Degree Applicable Course:
CNST A. Industrial Truck Training (0.5)
Lec-5, lab-3 (total hrs) P/NP Available
This is a safety certification course designed to comply with OSHA's powered industrial truck regulations. Upon successfully completing this course students will receive a certification card good for 3 years.

Credit, Degree Applicable Courses:
CNST 69. Construction Safety (1)
Lec-15 (total hrs)
A study of Occupational Safety and Health Administration requirements for the construction industry, leading to an ability to identify safety hazards and prevent accidents. The subject matter is tailored to specific occupations/trades as well as to general construction safety.
Successful completion earns a lifetime OSHA 10 hour Construction Safety Certificate. CSU

CNST 100. Introduction to Construction Applications (3)  
Lec-3, lab-2
PREREQ.: COMPLETION OF OR CONCURRENT ENROLLMENT IN CNST 69 or possession of OSHA 10 certificate  
Overview of trades, design and management occupations connected to building projects. Introduction to use of project documents, plans, and specifications. Introduces relevant green technologies in the construction field. Practice in using measuring, hand, and power tools. CSU

CNST 101. Photovoltaic Installation, Entry Level (4)  
Lec-3, lab-3
ADVICE: CNST 100 or CNST 1000 or CNST 109 or TIEE 1009 or TIEE 9576  
An introduction to the design, installation and maintenance of Solar Photovoltaic (PV) systems. A hands on approach to the installation of PV systems and associated safety issues. Prepares students to take the North American Board of Certified Energy Practitioners (NABCEP) entry level exam for "PV Installer". CSU

CNST 101A. Photovoltaic Theory & Design (3)  
Lec-3, field trips  
ADVICE: CNST 100 or CNST 1000 or CNST 109 or TIEE 1009  
An introduction to the theory and design of Solar Photovoltaic (PV) systems and associated safety issues. Prepares students to take the North American Board of Certified Energy Practitioners (NABCEP) entry level exam for PV Installer. CSU

CNST 101B. Photovoltaic Installation (3)  
Lec-1, lab-2, field trips  
An introduction to the installation and maintenance of Solar Photovoltaic (PV) systems. Hands on approach to the installation of PV systems and associated safety issues. CSU

CNST 102. Concrete Applications (3)  
Lec-2, lab-4  
ADVICE: CNST 69; and CNST 100 or CNST 1000  
An introduction to the uses, design and installation of concrete elements in construction. Students will apply classroom theory to real outdoor lab building projects. This class enables students to apply what they’ve learned to other construction courses, as well as to engineering and architecture. Industry safety standards will be strongly emphasized. CSU

CNST 103. Residential Plumbing (3)  
Lec-3, lab-3, field trips  
An introductory course in the methods and materials necessary to install a residential plumbing system. This course offers hands-on practice in the installation of supply, Drain/Waste/Vent (DWV), and gas systems. CSU

CNST 104. Solar Hot Water Installation (4)  
Lec-3, lab-2  
Training for installers of solar water heating systems on or at buildings. This course is applicable to the installation constructor who must be knowledgeable about system design, and be able to adapt designs to fit a particular application or customer need. CSU

CNST 105. Electrical Code (6)  
Lec-6  
An in depth coverage of the National Electrical Code, state and local codes. The course instructs the student on how to use the electrical code books and is essential towards the requirements for the California State Electricians Certificates and C-10 State Electrical Contractors License. CSU

CNST 106. Fundamentals of the Uniform Plumbing Code (3)  
Lec-3  
Provides training in the requirements of the California Uniform Plumbing Code Title 24. Topics include general regulations, permit and inspection, residential plumbing systems, storm drainage, fuel piping, health care medical gas, mandatory standards, indirect waste, private sewer disposal systems, gray water systems. CSU

CNST 107. Blueprint Reading (3)  
Lec-2, lab-4, field trips  
ADVICE: CNST 100 or CNST 1000; and MATH E or ET 108A  
This course teaches the skills of blueprint reading and specifications. The course enhances skills of those who have existing knowledge of construction drawings. CSU

CNST 107A. Practical Blueprint Reading (1)  
Lec-.5, lab-1.5  
ADVICE: CNST 100 or CNST 1000  
This course teaches the basic skills of blueprint reading and specifications. CSU

CNST 108. Fundamentals of Construction Contracting (3)  
Lec-3  
Principles for managing a construction business, California Contractor Licensing Law, worker’s compensation, construction bonds, labor code, employee relations, safety, construction contracts, scheduling, construction documents, plans, specifications, and the estimating process. CSU

CNST 109. Residential Wiring (4)  
Lec-3, lab-3  
A beginning course in residential wiring. This hands-on course teaches the student the rules, methods and materials necessary to install a residential electrical system. CSU

CNST 110. Advanced Photovoltaic Installation (3)  
Lec-3  
This course review the design, installation and maintenance of Solar Photovoltaic (PV) systems. It brings together the Electrical Code, electrical theory, PV system design and best practices, and prepares students to take the NABCEP PV Installer exam. CSU

CNST 111. Carpentry-Rough Framing (4)  
Lec-3, lab-3  
PREREQ.: CNST 69 and CNST 100 or CNST 1000  
An introductory course in the methods and materials necessary to build a wood framed building. This course offers hands-on practice in the framing of simple floors, walls, ceilings, roofs, and stairways. CSU

CNST 112. Carpentry-Advanced Framing (4)  
Lec-3, lab-3  
PREREQ.: CNST 69; CNST 100 or CNST 1000; and CNST 111 or CNST 1011  
An advanced course in the methods, materials and seismic requirements necessary to build a wood framed building. This course offers
hands-on practice in the framing of more complicated floors, walls, ceilings, roofs, and stairways. CSU

CNST 113. Finish Carpentry (4)
Lec-3, lab-3  P/NP Available
Prereq.: CNST 69; CNST 100 or CNST 1000
A course in the methods, materials, and installation techniques necessary the install windows, doors, stairs, siding, cabinets, and their respective trim. This course offers hands-on practice in the fine craftsmanship required for finish work. CSU

CNST 116. Furniture Making & Woodworking (3)
Lec-2, lab-4  P/NP Available
Coreq.: CNST 69
Designed to prepare students for entry-level work or to upgrade their existing skills in wood working. Focuses on safety procedures, furniture design, hand and machine tools, materials identification and applications, fabrication processes, and project planning. CSU

CNST 117. Advanced Project Furniture Making (3)
Lec-2, lab-4  P/NP Available
Prereq.: CNST 69; and CNST 116 or CNST 1016
This individualized project-based course is designed for advanced-level students in furniture making, incorporating the furtherance of those skills, (project planning, design, hand and machine tools, materials knowledge) acquired in the basic CNST 116 course. CSU

CNST 118A. Advanced Project Furniture Making I (3)
Lec-2, lab-4  P/NP available
Prereq.: CNST 116
Individualized project-based course designed for advanced-level students in furniture making, incorporating the furtherance of those skills (safety, project planning, design, hand and machine tools, material knowledge) acquired in the basic CNST 116 course.

CNST 118B. Advanced Project Furniture Making II (3)
Lec-2, lab-4  P/NP available
Prereq.: CNST 118A
Individualized project-based course designed as a continuation to CNST 118A for advanced-level students in furniture making, incorporating the furtherance of those skills (safety, project planning, design, hand and machine tools, materials knowledge) acquired in CNST 116 and CNST 118A

CNST 120A. Concrete in Residential Construction (0.5)
Lec-6, lab-12 (total hrs), field trips  P/NP Available
Introduction to the materials, tools and equipment used for concrete work in residential construction. Hands-on class on how to mix, form, pour and work with concrete, with instruction in the safe usage of hand and power tools. CSU

CNST 120B. Rough Carpentry in Residential Construction (0.5)
Lec-6, lab-12 (total hrs), field trips  P/NP Available
The basics of wood framing in residential construction for novices and trades people seeking cross over skills. A hands-on class that will demonstrate proper handling of tools and the appropriate use of fasteners in rough carpentry and the construction of small projects. CSU

Noncredit Courses:

CNST 1000. Introduction to Construction (90 hrs)
Prereq.: Completion of or concurrent enrollment in CNST 69 or possession of OSHA 10 certificate
Advise: CNST 1000 AND VESL 3832
Overview of trades, design and management, occupations connected to building projects. Introduction to use of project documents, plans and specifications. Introduces relevant green technologies in the construction field. Practice in using measuring, hand and power tools.

CNST 1002. Concrete Applications (105 hrs)
Prereq.: CNST 100 or CNST 1000
Coreq.: CNST 69 OR PREVIOUS OSHA CERTIFICATION
This course is an introduction to the uses, design and installation of concrete elements in construction. Students will apply classroom theory to real outdoor lab building projects. This class enables students to apply what they’ve learned to other construction courses, as well as to engineering and architecture. Industry safety standards will be strongly emphasized.
CNST 1003. Residential Plumbing (105 hrs)
**Advises:** CNST 69; and CNST 100 or CNST 1000
An introductory course in the methods and materials necessary to install a residential plumbing system. This course offers hands-on practice in the installation of supply, Drain/Waste/Vent (DWV), and gas systems.

CNST 1005. Electrical Code (105 hrs)
**Advises:** CNST 109 or CNST 1009
An in-depth coverage of The National Electrical Code, state and local codes. The course instructs the student on how to use the electrical code books and is essential towards the requirements for the California State Electricians Certificate and C-10 State Electrical Contractors License.

CNST 1007. Blueprint Reading (105 hrs)
Field trips
**Advises:** CNST 100 or CNST 1000; MATH E or ET 108A
Repeat: as needed
This course teaches the skills of blueprint reading and specifications. This course enhances skills of those who have existing knowledge of construction drawings.

CNST 1009. Residential Wiring (105 hrs)
**Advises:** CNST 1000 or CNST 100
A beginning course in residential wiring. This hands-on course teaches the student the rules, methods and materials necessary to install a residential electrical system.

CNST 1011. Carpentry-Rough Framing (105 hrs)
**Prereq.:** CNST 69 and CNST 100 or CNST 1011
An introductory course in the methods and materials necessary to build a wood framed building. This course offers hands-on practice in the framing of simple floors, walls, ceilings, roofs, and stairways.

CNST 1012. Carpentry-Advanced Framing (105 hrs)
**Prereq.:** CNST 69; CNST 100 or CNST 1000; and CNST 111 or CNST 1011
An advanced course in the methods, materials and seismic requirements necessary to build a wood framed building. This course offers hands-on practice in the framing of more complicated floors, walls, ceilings, roofs, and stairways.

CNST 1013. Finish Carpentry (105 hrs)
**Prereq.:** CNST 69; CNST 100 or CNST 1000
A course in the methods, materials, and installation techniques necessary the install windows, doors, stairs, siding, cabinets, and their respective trim. This course offers hands-on practice in the fine craftsmanship required for finish work.

CNST 1016. Furniture Making & Woodworking (105 hrs)
**Coreq.:** CNST 69
Designed to prepare students for entry-level work or to upgrade their existing skills in wood working. Focuses on safety procedures, furniture design, hand and machine tools, materials identification and applications, fabrication processes, and project planning.

CNST 1017. Advanced Project Furniture Making (105 hrs)
**Prereq.:** CNST 69; and CNST 116 or CNST 1016
This individualized project-based course is designed for advanced-level students in furniture making, incorporation the furtherance of those skills, (project planning, design, hand and machine tools, materials knowledge) acquired in the basic CNST 116 course.

### Automotive Technology

**TIAU 9513. Basic Auto Maintenance (105 hrs)**
Emphasis is on the proper operation, maintenance, and interdependence of the various units of the automobile. Includes the design and construction of the engine and the various systems of the automobile.

### Custodial

**TICU 9550. Custodial Training (108 hrs)**
Preparation for entry level employment as a custodian. Training in safety, use of tools, equipment, chemicals and materials, and the proper application of dusting, sweeping, mopping, use of ladders, scaffolds, various floor machines and specialized equipment.

### Electricity and Energy Conservation

**TIEE 9571. A.C. Electricity (108 hrs)**
Prereq.: TIEE 9572/Assent of Instructor
Review of basic electricity and Study of Alternating Current. Includes: fundamentals of Electromagnetism, Impedance, Inductance and Capacitance. Symbols, laws, diagrams, schematics mathematics and tools (including meters) will be used. Consists of Lectures, Demonstrations and Lab Exercises.

**TIEE 9572. D.C. Electricity (108 hrs)**
The study of basic Electricity. The difference between Direct Current and Alternating Current. The applications of D.C. Electricity in today's world.

**TIEE 9574. Electrical Code and Construction Practices (105 hrs)**
Requirements for State Licensed Contractors. Includes: electrical safety, vocabulary, terms, distributing electrical power, house services, house circuits, installing wiring, remodeling wiring, connection (hook-ups) for appliances and devices, application and procedures for permits.

**TIEE 9576. Electrical Applications in Construction (105 hrs)**
Includes: electrical safety, vocabulary, terms, distributing electrical power, house service, house circuits, installing wiring, remodeling wiring, connection (hook-ups) for appliances and devices, application and procedures for permits.

### Other Specialty Courses

**TIXX 9505. Plumbing Applications (105 hrs)**
Introduction to materials, tools and equipment used for installing a plumbing system. Interpretation of isometric drawings for installation of plumbing and piping systems. Understanding plumbing code requirements for installing Drain Waste Vent system, potable drinking water system, gas system and hot water heater. Maintenance and repair of plumbing fixtures, repair or replacement of pipe. Blueprint reading and reference to the Uniform Plumbing Code.

**TIXX 9709. California and San Francisco Plumbing Code (105 hrs)**
Field trips
Course will define the code requirements of the California and San Francisco Plumbing Code. History of water supply and distribution. Discuss the powers and duties of the Administrative Authority, inspection, testing and fees. Procedure for submitting plans and obtaining permits. Qualifications of a California license Plumbing Contractor. Discuss the terminology of trade. General regulations for installation of a safe plumbing system. Interpret blueprints and isometric drawings.
Upon completion of this degree, students will be able to:

- Demonstrate understanding of the processes of science, the scientific method, and the relationship between scientific research and established knowledge.
- Express biological scientific literacy in oral and written communication
- Demonstrate content knowledge in biology.
- Demonstrate fundamental lab skills
- Evaluate biological data, draw reasonable conclusions, recognize the ethical implications of these conclusions, and apply these conclusions to personal, community, and scientific problems.
- Meet the requirements for transfer to biology programs at UC, CSU or other four-year institutions.

**Learning Outcomes**

Biological Sciences students will develop an understanding of major biological concepts and awareness of how these are connected within various areas of the biological and physical sciences. Furthermore, students completing the CCSF Biological Sciences major will be prepared for upper division biology courses and for transfer to a baccalaureate major in Biology at a four-year college through their completion of courses that are both transferable and fulfill the lower division course requirements. In addition, students will train the problem solving, analytical, scientific inquiry and communication skills that will provide the foundation for lifelong learning and career development, as well as an appreciation of science as an integral part of society and everyday life.

**Biological Sciences Major (AS)**

CCSF’s Biological Sciences major offers basic courses in chemistry and biology to serve students with diverse goals, including transfer to biology programs at U.C., C.S.U. or other four-year institutions. Biological Sciences majors will be able to take most or all of their lower division courses at CCSF before they transfer, but should see a counselor to confirm their program of study. Additional courses might be required to transfer to particular institutions. The Biological Sciences major is suitable for students planning to transfer into programs in the biological sciences, including general biology, cell or molecular biology, organism biology, marine biology, botany, zoology, ecology, evolution, genetics, anatomy, physiology, microbiology, and agricultural sciences. The major is also designed for students planning to transfer into a pre-medical, pre-veterinary, pre-dental, pharmacy, or chiropractic degree program.

Through the core forty-four units of the Biological Sciences major, students will gain the scientific knowledge necessary to investigate problems and ideas presented in upper division biology courses, as well as to critically evaluate scientific information. The laboratory work will train students to use current laboratory technologies, equipment and techniques to engage in the research process using scientific methods and to investigate research questions safely.

**Learning Outcomes**

Upon completion of this degree, students will be able to:

- Demonstrate understanding of the processes of science, the scientific method, and the relationship between scientific research and established knowledge.
- Express biological scientific literacy in oral and written communication
- Demonstrate content knowledge in biology.
- Demonstrate fundamental lab skills
- Evaluate biological data, draw reasonable conclusions, recognize the ethical implications of these conclusions, and apply these conclusions to personal, community, and scientific problems.
- Meet the requirements for transfer to biology programs at UC, CSU or other four-year institutions.

**Courses Required for the Major in Biological Sciences**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO 100A General Biology</td>
<td>5</td>
</tr>
<tr>
<td>BIO 100B General Biology</td>
<td>5</td>
</tr>
<tr>
<td>CHEM 101A General College Chemistry</td>
<td>5</td>
</tr>
<tr>
<td>CHEM 101B General College Chemistry</td>
<td>5</td>
</tr>
<tr>
<td>CHEM 208A Organic Chemistry</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 208B Organic Chemistry</td>
<td>4</td>
</tr>
<tr>
<td>MATH 110A Calculus I</td>
<td>4</td>
</tr>
<tr>
<td>MATH 110B Calculus II</td>
<td>4</td>
</tr>
<tr>
<td>PHYC 2A Introductory Physics</td>
<td>3</td>
</tr>
<tr>
<td>PHYC 2AL Introductory Physics Lab</td>
<td>1</td>
</tr>
<tr>
<td>PHYC 2B Introductory Physics</td>
<td>3</td>
</tr>
<tr>
<td>PHYC 2BL Introductory Physics Lab</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total Units</strong></td>
<td><strong>44</strong></td>
</tr>
</tbody>
</table>

**Additional Course Requirements for Students**

Particular upper division institutions and programs might require additional lower-division course work. Therefore, it is strongly recommended that students contact a transfer counselor at CCSF and the appropriate department at the upper division institution in order to obtain the most accurate transfer information.

**Biological Sciences Certificate**

CCSF’s Biological Sciences Certificate offers basic courses in chemistry and biology to serve students with diverse goals, including transfer to biology programs at U.C., C.S.U. or other four-year institutions. Biological Sciences Certificates will be able to take most or all of their lower division courses at CCSF before they transfer, but should see a counselor to confirm their program of study. Additional courses might be required to transfer to particular institutions. The Biological Sciences Certificate is suitable for students planning to transfer into programs in the biological sciences, including general biology, cell or molecular biology, organism biology, marine biology, botany, zoology, ecology, evolution, genetics, anatomy, physiology, microbiology, and agricultural sciences. The Certificate is also designed for students planning to transfer into a premedical, pre-veterinary, pre-dental, pharmacy, or chiropractic degree program.

Through the core forty-four units of the Biological Sciences Certificate, students will gain the scientific knowledge necessary to investigate problems and ideas presented in upper division biology courses, as well as to critically evaluate scientific information. The laboratory work will train students to use current laboratory technologies, equipment and techniques to engage in the research process using scientific methods and to investigate research questions safely.

**Learning Outcomes**

Upon completion of this certificate, students will be able to:

- Demonstrate understanding of the processes of science, the scientific method, and the relationship between scientific research and established knowledge.
- Express biological scientific literacy in oral and written communication
- Demonstrate content knowledge in biology.
- Demonstrate fundamental lab skills
- Evaluate biological data, draw reasonable conclusions, recognize the ethical implications of these conclusions, and apply these conclusions to personal, community, and scientific problems.
Upon completion of the major, students will be able to:

- Meet the requirements for transfer to University of California (UC), California State University (CSU), or other four-year institutions.

Courses Required for the Certificate of Achievement in Biological Sciences

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO 100A General Biology</td>
<td>5</td>
</tr>
<tr>
<td>BIO 100B General Biology</td>
<td>5</td>
</tr>
<tr>
<td>CHEM 101A General College Chemistry</td>
<td>5</td>
</tr>
<tr>
<td>CHEM 101B General College Chemistry</td>
<td>5</td>
</tr>
<tr>
<td>CHEM 208A Organic Chemistry</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 208B Organic Chemistry</td>
<td>4</td>
</tr>
<tr>
<td>MATH 110A Calculus I</td>
<td>4</td>
</tr>
<tr>
<td>MATH 110B Calculus II</td>
<td>4</td>
</tr>
<tr>
<td>PHYC 2A Introductory Physics</td>
<td>3</td>
</tr>
<tr>
<td>PHYC 2AL Introductory Physics Lab</td>
<td>1</td>
</tr>
<tr>
<td>PHYC 2B Introductory Physics</td>
<td>3</td>
</tr>
<tr>
<td>PHYC 2BL Introductory Physics Lab</td>
<td>1</td>
</tr>
</tbody>
</table>

Total Units: 44

Environmental Studies and Science Major (AS)

CCSF's Environmental Studies and Science Major offers basic courses in chemistry, biology, and environmental studies with elective courses in ecology, conservation, and environmental policy. These fundamental courses will serve students with diverse goals including transfer to University of California (UC), California State University (CSU), or other four-year institutions and with interests in either scientific or social science research fields and careers. Environmental Studies and Science majors will be able to take most or all of their lower division preparation at CCSF before they transfer but should meet with a counselor to confirm their program of study.

Through the core twenty-two units of the Environmental Studies and Science Major, students will gain an understanding of the process of science, its importance in understanding human impacts on the environment, and be able to critically evaluate both the scientific evidence and sociopolitical aspects of environmental and natural resources problems, their causes, and proposed solutions. The Ecology and Conservation concentration requires a minimum of four units focusing on plant-animal interactions and hands-on laboratory and field investigations. The Environmental Studies Concentration requires a minimum of four units focusing on human interactions with the environment and its implications for human welfare and sustainability.

Learning Outcomes

Upon completion of the major, students will be able to:

- Demonstrate an understanding of the process of science, the scientific method, and the relationship between scientific research and established knowledge.
- Safely and proficiently employ fundamental laboratory and field study practice and utilize appropriate scientific instrumentation to collect, analyze and interpret data.
- Illustrate the interdisciplinary nature of environmental science by outlining contributions from the natural sciences, social sciences, and engineering and technology to our understanding of human impacts on the environment.
- Analyze and integrate evidence from research in the natural sciences, social sciences, engineering and technology to critically evaluate proposed solutions to environmental and resource issues.
- Communicate clearly when writing or speaking about environmental and resource issues demonstrating content knowledge of major environmental science concepts and their social, political, and historical context.

Courses Required for the Major in Environmental Studies and Science

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO 31 Introduction to Environmental Science</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 101A General College Chemistry</td>
<td>5</td>
</tr>
<tr>
<td>BIO 100A General Biology</td>
<td>5</td>
</tr>
<tr>
<td>BIO 100B General Biology</td>
<td>5</td>
</tr>
</tbody>
</table>

Option 1: Environmental Studies and Science, Concentration in Ecology and Conservation

Elective Coursework: One of the following course combinations (4 units)

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECOL 10 Introduction to Ecology</td>
<td>3</td>
</tr>
<tr>
<td>with BIO 41L Ecology Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>BIO 40 Plants and Animals of California</td>
<td>3</td>
</tr>
<tr>
<td>with BIO 41L Ecology Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>BIO 40 Plants and Animals of California</td>
<td>3</td>
</tr>
<tr>
<td>with BIO 26 Habitat Restoration Field Studies</td>
<td>1</td>
</tr>
<tr>
<td>BIO 32 Marine Biology</td>
<td>3</td>
</tr>
<tr>
<td>with BIO 32L Marine Biology Laboratory</td>
<td>1</td>
</tr>
</tbody>
</table>

Option 2: Environmental Studies and Science, Concentration in Environmental Studies

Elective Coursework: One of the following course combinations (4 units)

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO 30 Ecology and Human Environment</td>
<td>3</td>
</tr>
<tr>
<td>with BIO 41L Ecology Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>POLS 22 Environmental Politics and Policy</td>
<td>3</td>
</tr>
<tr>
<td>with BIO 25 Ecology of San Francisco Bay</td>
<td>1</td>
</tr>
</tbody>
</table>

Total Units: 22

Announcements of Courses

Credit, Degree Applicable Courses:

Anatomy

ANAT 14. Introduction to Human Anatomy and Physiology (4)
Lec-3, lab-3, field trips
Not recommended for students who have completed ANAT 25 or PHYS 1 or PHYS 12 with a “C” or higher.
An integrated course covering the fundamental principles of human anatomy and physiology. CSU/UC

ANAT 25. General Human Anatomy (4)
Lec-3, lab-3
Study of the gross and microscopic structure of the human body. CSU/UC

ANAT 26. Sectional Anatomy (1)
Lab-3
Prereq.: Completion/concurrent enrollment in ANAT 25
Study of the gross structure of the human body according to region as visualized in cross sections and sagittal sections. CSU

Anthropology

ANTH 1. Biological Anthropology (3)
Lec-3
The biological nature of humans and the changes that have occurred from prehistoric times to the present. The place of humans in nature, vertebrate and primate evolution, fossil evidence for human antiquity,
individual and population genetics, mechanisms of evolution, and human variation. CSU/UC

**Biology**

**BIO 9. Human Biology (4)**  
Lec-3, lab-3  
 ADVISED: MATH E1 or MATH E3; OR PLACEMENT IN MATH 40 OR MATH 840; ESL 140 (OR PLACEMENT IN ESL 150), OR PLACEMENT IN ENGL 92  
An introduction to scientific and biological principles through the study of humans as exemplary organisms. Lectures and laboratory exercises will explore current scientific issues, develop critical thinking skills, and examine the structure and function of the human body in relation to health and disease. CSU/UC

**BIO 11. The Science of Living Organisms (4)**  
Lec-3, lab-3, field trips  
Not recommended for students who have taken BIO 100A or 100B.  
The major concepts of the biological sciences including biochemistry, cells, evolution, genetics, bioenergetics, microbiology, botany, mycology, zoology, ecology, and biotechnology. CSU/UC

**BIO 15. The Biology of HIV (3)**  
Lec-3, field trips  
A survey of the biology of human immunodeficiency virus (HIV) and AIDS. The course provides the biological basis for HIV/AIDS origins & emergence; transmission and epidemiology; retrovirus structure and replication; interaction of HIV with the immune system and disease progression; HIV testing; current treatment, vaccine and prevention strategies. CSU/UC

**BIO 16. Studying the Biological Sciences (1)**  
Lec-2, field trips  
An in-depth orientation to the academic life and culture of transfer biology majors. Students will acquire concepts, skills and information necessary for making a successful transition to upper division biology programs at four-year institutions, and for choosing professional careers in science. CSU/UC

**BIO 21. Natural History of California (2) Weekend**  
Lec-1, lab-3, field trips  
A series of field trips to specific California ecosystems. Emphasis on the general concepts of ecosystem analysis and the interaction of climate, physiography, and biotic factors in shaping varied habitats within California. CSU

**BIO 22. Natural History of the Sierra Nevada (1)**  
Lec-1, field trips  
An examination of the geology, biology, and human history of the Sierra Nevada from Lake Tahoe basin to high altitude. A study of the interrelationships of plants, animals, and humans at high elevation. CSU

**BIO 24. Ecology of Point Reyes (1)**  
Lec-1, lab-3, field trips  
Not recommended for students who have completed BIO 81, Selected Topic: Ecology of Point Reyes.  
An examination of the ecology, biology and human history of Point Reyes National Seashore. A study of the interrelationships of plants, animals and humans within the forests, grasslands and coastal regions of the park. CSU

**BIO 25. Ecology of San Francisco Bay (1)**  
Lec-1, lab-3, field trips  
P/NP available  
An examination of the geology, biology, chemistry, and human history of San Francisco Bay. An analysis of the interrelationships of plants, animals, and humans within the diverse ecosystems which comprise the San Francisco Bay. Investigation of the terrestrial, freshwater and marine environments. CSU

**BIO 26. Habitat Restoration Field Studies (1)**  
Lec-1, field trips  
P/NP available  
A biology field class that examines the principles of habitat restoration and environmental rehabilitation. CSU

**BIO 28. Ecology of the Golden Gate National Recreation Area (1)**  
Lec-1, field trips  
P/NP available  
An ecology field class that examines the geology, biology, ecology and human history of the Golden Gate National Recreation Area. CSU

**BIO 29. Scientific Illustration (1)**  
Lec-1, field trips  
P/NP available  
A natural history course in recording and illustrating ecological and behavioral observations in a scientific field journal. Course format consists of an on-campus orientation session followed by in-depth Saturday field trips to various natural habitats in the San Francisco Bay Area. CSU

**BIO 30. Ecology and the Human Environment (3)**  
Lec-3, field trips  
Not recommended for students who have completed BIO 20B.  
Examination of the human environment with emphasis on the causes of human-made pollution, health effects, and possible solutions. CSU/UC

**BIO 31. Introduction to Environmental Science (3)**  
Lec-3, field trips  
P/NP Available  
Prereq: ENGL 92 or higher  
An examination of the scientific and research evidence regarding the causes, consequences, and proposed solutions to environmental and natural resource issues. Study of sustainability and potential solutions from different academic fields including the natural sciences, social sciences and engineering. CSU/UC

**BIO 31 = GEOG 31 = SUST 31**

**BIO 32. Marine Biology (3)**  
Lec-3, field trips  
P/NP available  
The natural history of California marine plants and animals with emphasis on the interrelationships between marine life and their environment. CSU/UC

**BIO 32 = IDST 9**

**BIO 32L. Marine Biology Laboratory (1)**  
Lab-3, field trips  
P/NP available  
Coreq: BIO 32 or IDST 9  
A laboratory course, utilizing a laboratory/field trip format, designed to reinforce and augment the student’s understanding of basic principles of marine biology as taught in BIO 32/IDST 9. CSU/UC

**BIO 33. Introduction to Conservation Biology (3)**  
Lec-3  
P/NP available  
An introduction to the discipline of conservation biology focusing on biodiversity, the threats to biodiversity from human activities and the practical aspects of conserving species, habitats and ecosystem function. CSU
BIO 35. Biological Field Monitoring (3)
Lec-3, field trips  P/NP available
An overview of the theories and practices of field monitoring, as well as its practical applications to ecological research. CSU

BIO 40. Plants and Animals of California (3)
Lec-3, field trips  P/NP available
Advised: ENGL 92 or ESL 150 or Placement in ENGL 93 or 94; or ESL 160
Analysis of California’s natural geographic, biologic and geologic regions. Examine the basic concepts of ecology, geology, and evolution as they relate to the distribution of California’s plants and animals. Assessment of impacts of modern human society on the California biodiversity hotspot and evaluation of mitigating strategies. CSU/UC

BIO 41L. Ecology Laboratory (1)
Lab-3, field trips
Prereq: Completion or concurrent enrollment in ECOL 10 or 40
Advised: ENGL 92 or ESL 150 or Placement in ENGL 93 or 94; or ESL 160
A laboratory course examining the fundamental concepts of ecology and applying these concepts to field observations and experiments. The course will focus on understanding biodiversity and factors influencing the abundance and distribution of living organisms in California and is designed to augment the student’s understanding of concepts taught in Biology 20 and Biology 40. CSU/UC

BIO 55. Bioethics (3)
Lec-3  P/NP available
Ethical principles will be applied to scientific work and to the emergence of new technologies. Principles to be considered include: professional conduct among scientists, the role of governmental regulation, individual choice, safety, and the rationale for particular areas of research. Attention will be given to genetic engineering of humans and other organisms, cloning, race, stem cells, pesticide use, and other areas of science. CSU/UC

BIO 70. Selected Topics in Biology (1, 2, 3)
Lec-1,2,3, Lab 1,2,3, field trips  P/NP available
Investigation in depth of selected topics in biology: considering current issues and innovations; expanding subjects covered briefly in introductory courses; or exploring topics not studied in depth in other classes in biology.

BIO 70A. Selected Topics in Biology: Botanical Illustration (1)
CSU/UC
BIO 70B. Selected Topics in Biology: Bird Illustration (1) CSU/UC

BIO 80. Selected Topics in Ecology (1, 2, 3)
Lec-1,2,3, Lab 1,2,3, field trips  P/NP available
Investigation in depth of selected topics in ecology: considering current issues and innovations; expanding subjects covered briefly in introductory courses; or exploring topics not studied in depth in other classes in biology; or field studies that provide hands-on experiences that demonstrate the ecological principles being studied. Topics and places will vary for topical courses and the alphabetical sequence is not meant to imply that the set of topical courses are to be taken in sequence. CSU

BIO 80C. Topics in Biology-Agroecology (1) CSU

BIO 81A. Ecology of San Francisco (1)
Lec-1, field trips
Advise: ENGL 92 or ESL 150
An examination of abiotic and biotic factors shaping nature in San Francisco. An analysis of plant, animal, and human interactions within the diverse habitat types over time. CSU

BIO 83A. Natural History of Australia (3)
Lec-3, field trips
An examination of the natural history and ecology of Australia, including its geology, ecosystems, zoogeography, evolution, and conservation. An analysis of the interrelationships of weather, soil, water, fire, wildlife, and humans in the subtropical rainforests, temperate woodlands, outback, deserts, freshwater habitats, coastal wetlands, and coral reefs. CSU

BIO 83B. Natural History of East Africa (3)
Lec-3, field trips
An examination of the natural history and ecology of East Africa, including its geology, ecosystems, phytogeography, zoogeography, evolution, and conservation. An analysis of the interrelationships of weather, soil, water, fire, wildlife, and humans in the vast Serengeti ecosystem which includes Tanzania’s Serengeti National Park, Lake Manyara Park, Ngorongoro Crater, Tarangire National Park, Olduvai Gorge and Mount Kilimanjaro. CSU

BIO 91. On-Campus Biology Work Experience (1-8)
Work-5,10,15,20, 25, 30, 35, 40 field trips  P/NP available
Prereq: Consent of biology instructor required
Repeat: BIO 91 and 92 combined, max. credit: 16 units
On campus college work experience in a project in the fields of biology, ecology or environmental science subject to the approval and under the supervision of a biology department instructor. CSU

BIO 92. Off-Campus Biology Work Experience (1-8)
Work-5,10,15,20, 25, 30, 35, 40 field trips  P/NP available
Prereq: Consent of biology instructor required
Repeat: BIO 91 and 92 combined, max. credit: 16 units
Off campus college work experience with a community partner in the fields of biology, ecology or environmental science subject to approval and under the supervision of a biology department instructor. CSU

BIO 100A. General Biology (5)
Lec-3, conf-2, lab-4
Prereq: One yr hs biology or BIO II or equivalent; completion of CHEM 101A; or demo of the exit skills of both BIO II and CHEM 101A
Advise: ENGL 93
A general introduction to cell structure and function, cell biochemistry, cell cycle, principles of molecular and organismal genetics, genetic engineering, and animal form and function. Intended for students majoring in the biological sciences, but open to all qualified students. CSU/UC

BIO 100B. General Biology (5)
Lec-3, conf-2, lab-4
Prereq: BIO 100A or demo of the exit skills of BIO 100A
A general introduction to evolution, the diversity of life, plant form and function, and ecology. Intended for students majoring in the biological sciences, but open to all qualified students. CSU/UC
BIO 223. Introduction to Environmental Monitoring (1)
Lec-0.5, lab-1.5, field trips  . P/NP available
Study of regulations, protocol and procedures for collection and storage of air, soil and liquid samples. Quality assurance/quality control, safety, site selection, sample storage and preservations. Practical experience includes use of portable instruments and immunoassay kits for chemical contaminants. Microbiological laboratory techniques for analysis of soil and water samples. CSU
BTEC 223=ECOL 223

**Botany**

BOT 10. Plant Biology (4)
Lec-3, lab-3, field trips  . P/NP available
Introduction to plant structure, function, evolution, classification and ecology. Topics include reproduction and development of seed and non-seed plants, levels of organization, metabolism, form and function of systems, and survey of major taxa; will include fungi and photosynthetic protists. Laboratory exercises are coordinated with lecture topics, may include field exercises. CSU/UC

**Ecology**

ECOL 10. Introduction to Ecology (3)
Lec-3, field trips  . ADVISE: ENGL 92 or ESL 150 or PLACEMENT in ENGL 93 or ESL 160
Not recommended for students who have completed BIO 20A Ecology and Human Environment ECOL10=BIO 20
A lecture course examining the fundamental concepts of ecology. Application of the scientific method; chemical and energy cycles; effect of the physical and biological environment on community structure; diversity and distribution; population dynamics and interspecific relationships; biodiversity on the genetic, species, and ecosystems level and relevant social ecological problems. CSU/UC
ECOL 10=BIO 20

ECOL 20. Introduction to Ecology (4)
Lec-3, lab-3, field trips
Fundamental concepts of ecology, field observations and experiments applying the scientific method; chemical and energy cycles; effect of physical and biological environment on community structure; diversity and distribution; population dynamics and interspecific reactions; biodiversity of the genetic, species, and ecosystems level and relevant social ecological problems. CSU/UC

ECOL 26X. Environmental Toxicology (3)
Lec-3  . P/NP Available
Prereq.: BIO 11
A comprehensive examination of the environmental fate and effect of toxic substances resulting from human activities. Topics include basic principles of toxicology, movement and transformation of toxins in the environment, and examination of the impacts of air/water/soil pollutants. Methods to identify, study, and remediate environmental toxins will be addressed. CSU/UC
ECOL 26X=EMAP 26X

ECOL 80E. Ecology of Coastal Mendocino County (1)
Lec-1, lab-3, field trips  . P/NP available
Formerly this course was listed as BIO 81. Selected Topic: Ecology of Mendocino. An investigation of the ecological significance of coastal Mendocino County and historical and current abiotic and biotic factors shaping it. Identification of habitats and the adaptations of their key microbial, plant and animal components. CSU

**Microbiology**

M B 10. Emerging Diseases (3)
Lec-3, field trips  . P/NP available
A general education course emphasizing the microbiology, epidemiology and ecology of selected infectious disease agents that threaten human and animal welfare around the globe. It analyzes the influences of social and biological factors on the emergence of new diseases as well as the re-emergence of ancient plagues. CSU/UC

M B 12. Introduction to Microbiology (4)
Lec-3, lab-4, field trips  . P/NP available
Prereq.: CHEM 32 or CHEM 101A or an equivalent course.
An introductory microbiology course, surveying eukaryotic, viral, and bacterial microbes. The course will cover six themes: a) Microbial cell biology; b) Microbial genetics; c) Human-microbe interactions; d) Microbial ecology; e) Microbial evolution and diversity; and f) Historical development of microbiology. Additionally, students will learn laboratory skills essential to microbiology, which will develop problem-solving skills. CSU/UC

M B 28X. Environmental Microbiology (4)
Lec-3, lab-4  . P/NP Available
Prereq.: BIO 11
An introduction to microbial diversity and environmental microbiology. Topics include: microbial cellular architecture, metabolic diversity, biogeochemistry, bioenergetics, and growth; population and com
Nutrition

NUTR 12. Introduction to Nutrition (3)
Lec-3  P/NP available
An introductory nutrition course intended for students interested in entering the allied health fields with emphasis on physiology, metabolism of nutrients, metabolic diseases and dietary modification to optimize recovery and health. Students will understand and evaluate dietary intake, nutritional assessment, and nutrition care commonly used at clinics and hospitals. CSU/UC

NUTR 51. Nutrition and Culinary Arts (2)
Lec-2, field trips  P/NP available
Not intended for students who have completed NUTR 12 or NUTR 52. Nutrition and food concepts relevant to students in the Culinary Arts and Hospitality Management Programs. Review properties of nutrients, common metabolic and digestive problems and the required diet modifications and treatment. CSU/UC

NUTR 52. Introduction to Nutrition (3)
Lec-3
Not intended for students who have completed NUTR 12 or NUTR 51. Emphasis on the practical application of nutrition to everyday life such as planning a healthy diet, assessing one's nutritional food intake, understanding nutritional labels and useful sources for nutrition information. Scientific principles behind the development of Dietary Reference Intakes (DRIs) and Food Guidelines. CSU/UC

Physiology

PHYS 1. Introductory Human Physiology (5)
Lec-3, lab-6
Prereq.: CHEM 32 or 101A
A course in systems physiology with an emphasis on the quantitative aspects of cellular and molecular mechanisms contributing to homeostasis of the human organism. This course is intended for students transferring to four-year institutions and for those entering graduate-level professional allied health programs. CSU/UC

PHYS 12. Introduction to Human Physiology (4)
Lec-3, lab-3
Prereq.: CHEM 32 or 101A
Not intended for students who have completed PHYS 1.
A course in general human physiology which stresses the normal function of the human body, including the physiology of cells, muscles, the nervous system, sensation, digestion, circulation, respiration, metabolism, excretion, endocrines, and reproduction. This course is intended for students entering nursing and other allied health fields. CSU/UC

PHYS 67. Exploring Neuroscience: An Introduction to the Brain (3)
Lec-3, field trips  P/NP available
Advise: ENGL 93 or ESL 160
Designed to expose students to topical questions in the field of neuroscience, this course will investigate cellular communication, simple reflexes, complex neural networks and complex behaviors such as consciousness, coordinated movement, emotions, motivation, and memory. This course is intended for all students interested in understanding the science behind the brain. CSU/UC

Zoology

ZOOL 10. Animal Biology (4)
Lec-3, lab-3, field trips  P/NP available
ZOOL 10 is designed for students not specializing in biology, zoology, botany, or the medical sciences and is not recommended for students who have taken BIO 100A, 100B, 11, or PHYS 1.
An introduction to the biology, evolution, and ecology of animals. Topics include chemistry, cell biology, anatomy, physiology, behavior, evolution, classification, genetics, and the diversity of invertebrate and vertebrate organisms. CSU/UC

Broadcast Electronic Media Arts
Office: Art X 160
Phone Number: (415) 239-3527
Web Site: www.ccsf.edu/broadcast

Announcement of Curricula

General Information
The Broadcast Electronic Media Arts department prepares students for university transfer and provides lifelong learners and degree holders the opportunity to upgrade workplace skills and prepare for career transition. Graduates either transfer to a university or seek employment in radio, television, video production, cable, broadcast news, advertising, public relations, sound reinforcement, music recording, interactive media, corporate, and industrial media production.

Program Emphasis. The department offers instruction in the design and creation of content for the electronic media with focus on writing, storytelling, teamwork, leadership, production craft skills, and emerging technologies. Media literacy is emphasized throughout the curriculum.

Admission. Enrollment is open to all interested students. Please note that some classes have prerequisites, corequisites, and advisories.

Work Experience and Internships. Students enrolled in Broadcast Electronic Media Arts classes refine skills in an in-house internship program which provides the College with media services, video production services, programming for education access television, and support for the College public relations office. After basic production craft skills are mastered, students are supported in internships at industry sites such as radio stations, television stations, video production houses, sound recording studios, and emerging media companies.

Transfer Information. All Broadcast Electronic Media Arts courses are credit and degree applicable, and selected courses transfer to the CSU and/or UC systems. Students are encouraged to work with a college counselor and a department program advisor to establish an education plan during the first semester of study. For additional information consult the “Transfer Information” section of this catalog.

Facilities and Equipment. Broadcast Electronic Media Arts facilities have undergone extensive upgrades which include installation of a
digital video editing lab, digital audio production lab, hybrid sound recording studio, two digital teleproduction studios, and a digital cable FM radio station. San Francisco's Educational Access Television Channel 27 and Channel 75 cablecast citywide from the department's facilities.

Additional Information. Consult the Department Chair for more information at (415) 239-3527.

The Broadcast Electronic Media Arts certificate program is recommended for those seeking to acquire entry-level skills, or upgrade and retool skills, and for lifelong learners preparing for career transition. The department offers nine certificate programs: 1) Broadcast Journalism, 2) Broadcast Motion Graphics, 3) Digital Radio, 4) Live Sound, 5) Sound Design, 6) Sound Recording, 7) Television Production, 8) Video Post-Production, and 9) Video Production and Editing. Each course sequence is designed to provide students with an opportunity to develop and refine essential workforce skills for entry-level employment in the electronic media industry.

Requirements for the Certificate of Accomplishment. Students may obtain the Certificate of Accomplishment in Broadcast Electronic Media Arts by completing each course in their program of study with a final grade of “C” or higher.

Audio and Video for the Web Certificate

The Audio and Video for the Web certificate combines the study of creating media content, process and problem solving with tools and techniques of visual communication for broadband distribution. This course of study prepares the student to distribute audio and video content effectively via broadband.

Learning Outcomes

Upon completion of this certificate, students will be able to:

- Describe and analyze the processes involved in creating audio and video content for broadband delivery.
- Discuss, evaluate and analyze the impact of internet content on society.
- Plan, organize and create effective online content that conveys intended message.
- Demonstrate technical skills necessary for creating effective audio and video content for the internet including, but not limited to: recording, editing and compressing to appropriate format.
- Display professionalism and understanding of workforce protocol in communication and behavior.

Students must complete each course with a grade of “C” or higher.

Students must complete courses at City College of San Francisco. All courses must be completed within four years.

Courses Required for the Certificate of Accomplishment in Audio and Video for the Web

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>BCST 119 Digital Media Skills</td>
<td>3</td>
</tr>
<tr>
<td>BCST 135 Audio for the Web</td>
<td>1</td>
</tr>
<tr>
<td>BCST 136 Video for the Web</td>
<td>1</td>
</tr>
<tr>
<td>BCST 159 Digital Media Portfolio</td>
<td>1</td>
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<tr>
<td>Total</td>
<td>6</td>
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</tbody>
</table>

Broadcast Motion Graphics Certificate

This certificate provides instruction in video editing and the production of motion graphic and digital video effects for broadcast and independent programming. Students completing this certificate program will be qualified for entry-level employment in video production for television, advertising, public relations, education, music, theater, film, entrepreneurial projects and media departments of agencies, businesses, and institutions.

Learning Outcomes

Upon completion of this certificate, students will be able to:

- Analyze, plan, edit, and manage the creative and technical elements of broadcast motion graphics and video editing workflows through the postproduction stages.
- Work in a variety of areas within the context of postproduction, including and motion graphic design assistant, postproduction assistant, assistant editor.
- Apply knowledge of digital audio/video formats and file types, efficiently manage logging and capturing and/or transferring of video material.
- Identify the key story focus, primary audience, purpose and goals and employ a variety of visual techniques appropriate to content and genre.

Students must complete each course with a grade of “C” or higher.

Students must complete 4 of 6 courses at City College of San Francisco. All courses must be taken within the last four years.

Courses Required for the Certificate of Accomplishment in Broadcast Motion Graphics

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>BCST 119 Digital Media Skills</td>
<td>3</td>
</tr>
<tr>
<td>BCST 140 Studio Video Production</td>
<td>3</td>
</tr>
<tr>
<td>BCST 145 Field Video Production</td>
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</table>

Second Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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<tbody>
<tr>
<td>BCST 143 Digital Video Editing-AVID</td>
<td>3</td>
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<tr>
<td>or BCST 144 Digital Video Editing-FCP &amp; Premiere</td>
<td>3</td>
</tr>
<tr>
<td>BCST 160 College Internship</td>
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<tr>
<td>or BCST 165 Industry Internship</td>
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</table>

Third Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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<tbody>
<tr>
<td>BCST 146 Digital Video Effects</td>
<td>3</td>
</tr>
<tr>
<td>BCST 148 HD TV Studio Production</td>
<td>3</td>
</tr>
<tr>
<td>or BCST 149 HD TV Field Production</td>
<td>3</td>
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<tr>
<td>Total</td>
<td>17</td>
</tr>
</tbody>
</table>

Recommended Additional Coursework: VMD 130, VMD 154, VMD 150

Convergent Media Production Certificate

This certificate focuses on multi-platform and multi-format production concepts, techniques, and technologies using audio, video, web, and storytelling for interactive digital convergent media production.

Learning Outcomes

Upon completion of this certificate, students will be able to:

- Integrate industry-standard skills across a range of media for delivery of audio and video content on the Internet.
- Develop, manage and complete professional digital video and audio projects using industry standard software and equipment.
- Develop, implement and manage creative storytelling across platforms and devices.
- Create a distribution and promotional plan for a convergent media product.
• Use critical thinking skills to analyze and critique projects, provide constructive criticism and communicate complex ideas clearly, both in written and verbal form.
• Display professionalism and understanding of workforce protocol in communication and behavior.

Students must complete each course with a final grade of “C” or higher. Students must complete 40 of the 55-56 units at City College of San Francisco. All courses must be completed within the last six years.

Courses Required for the Certificate of Achievement in Convergent Media Production

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>First Semester</td>
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<tr>
<td>SPCH 8 Rhetoric of Popular Culture</td>
<td>3</td>
</tr>
<tr>
<td>VMD 103 Content and Form</td>
<td>3</td>
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<tr>
<td>BCST 119 Digital Media Skills</td>
<td>3</td>
</tr>
<tr>
<td>or VMD 105 Digital Skills for Visual Media</td>
<td></td>
</tr>
<tr>
<td>BCST 140 Studio Video Production</td>
<td>3</td>
</tr>
<tr>
<td>or BCST 145 Field Video Production</td>
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<tr>
<td>Second Semester</td>
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<tr>
<td>BCST 120 Audio Production</td>
<td>3</td>
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<tr>
<td>VMD 140 Web Production I</td>
<td>3</td>
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<tr>
<td>VMD 191 Social Media for Professionals</td>
<td>3</td>
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<tr>
<td>BCST 110 Writing for Electronic Media</td>
<td></td>
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<tr>
<td>or CINE 75 Screenwriting</td>
<td></td>
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<tr>
<td>or JOUR 22 Feature Writing</td>
<td>3</td>
</tr>
<tr>
<td>BCST 143 Digital Video Editing - AVID</td>
<td>3</td>
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<tr>
<td>or BCST 144 Digital Video Editing - FCP-PR</td>
<td>3</td>
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<tr>
<td>Third Semester</td>
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<tr>
<td>BCST 135 Audio for the Web</td>
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<tr>
<td>BCST 136 Video for the Web</td>
<td>1</td>
</tr>
<tr>
<td>BCST 146 Digital Video Effects</td>
<td>3</td>
</tr>
<tr>
<td>VMD 141 Web Production II</td>
<td>3</td>
</tr>
<tr>
<td>JOUR 26 Fundamentals of Public Relations</td>
<td>3</td>
</tr>
<tr>
<td>BCST 124 Digital Audio Production</td>
<td>3</td>
</tr>
<tr>
<td>or BCST 126 Sound for Visual Media</td>
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<tr>
<td>Fourth Semester</td>
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<tr>
<td>BCST 159 Digital Media Portfolio</td>
<td>1</td>
</tr>
<tr>
<td>VMD 127 User Experience</td>
<td>3</td>
</tr>
<tr>
<td>BCST 148 - HDTV Studio Production</td>
<td></td>
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<tr>
<td>or BCST 149 - HDTV Field Production</td>
<td></td>
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<tr>
<td>or CINE 40 - Film Exhibition</td>
<td></td>
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<tr>
<td>or JOUR 29 - Magazine Editing and Production</td>
<td>3</td>
</tr>
<tr>
<td>BCST 160 - College Internship</td>
<td></td>
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<tr>
<td>or BCST 165 - Industry Internship</td>
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<tr>
<td>Electives</td>
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<td>Total</td>
<td>55-56</td>
</tr>
</tbody>
</table>

Select six elective units from course options listed above and/or from this recommended additional coursework list: BCST 125, BCST 128, BCST 147, CINE 24, CINE 25, CINE 30, CINE 54, CINE 56, CINE 60, CINE 72, CINE 136, MUS 29, MUS 30, PHOT 51, PHOT 57, PHOT 102B, VMD 120, VMD 130, VMD 126, VMD 145, VMD 152, VMD 153, VMD 154, VMD 155, VMD 156, VMD 166, VMD 180, VMD 184.

Learning Outcomes
Upon completion of the certificate, students will be able to:
• Describe and analyze the history of radio and explain its impact on the structure of radio today.
• Employ contemporary radio programming and management techniques.
• Operate on-air studio equipment and digital radio software.
• Research, write and produce audio packages for airing.
• Display professionalism and understanding of workforce protocol in communication and behavior.

Students must complete each course with a grade of “C” or higher. Students must complete 4 of 6 courses at City College of San Francisco. All courses must be taken within four years.

Courses Required for the Certificate of Accomplishment in Digital Radio Management

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>First Semester</td>
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<tr>
<td>BCST 100 Intro to BCST Electronic Media</td>
<td>3</td>
</tr>
<tr>
<td>BCST 119 Digital Media Skills</td>
<td>3</td>
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<tr>
<td>BCST 120 Audio Production</td>
<td>3</td>
</tr>
<tr>
<td>Second Semester</td>
<td></td>
</tr>
<tr>
<td>BCST 132 Radio Management Skills</td>
<td>4</td>
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<tr>
<td>BCST 150 Special Project</td>
<td>2</td>
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<tr>
<td>BCST 160 College Internship</td>
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<tr>
<td>or BCST 165 Industry Internship</td>
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<tr>
<td>Total Units</td>
<td>17</td>
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</tbody>
</table>

Recommended courses: MUS 23, 26, and 27R

Digital Radio News and Public Affairs Certificate
This certificate provides students with practical production and performance craft skills for entry-level employment in contemporary radio.

Learning Outcomes
Upon completion of the certificate, students will be able to:
• Describe and analyze the history of radio and explain its impact on the structure of radio today.
• Analyze and demonstrate current presentation trends for news, entertainment and public affairs, including the use of social media.
• Research, write and produce audio packages for airing.
• Display professionalism and understanding of workforce protocol in communication and behavior.

Students must complete each course with a grade of “C” or higher. Students must complete 4 of 6 courses at City College of San Francisco. All courses must be taken within four years.

Courses Required for the Certificate of Accomplishment in Digital Radio News and Public Affairs

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>First Semester</td>
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<tr>
<td>BCST 100 Intro to BCST Electronic Media</td>
<td>3</td>
</tr>
<tr>
<td>BCST 119 Digital Media Skills</td>
<td>3</td>
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<tr>
<td>BCST 120 Audio Production</td>
<td>3</td>
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<tr>
<td>Second Semester</td>
<td></td>
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<tr>
<td>BCST 110 Introduction to Writing for</td>
<td>3</td>
</tr>
<tr>
<td>Electronic Media</td>
<td></td>
</tr>
<tr>
<td>BCST 130 Radio News and Public Affairs</td>
<td>3</td>
</tr>
</tbody>
</table>
Students must complete 4 of 6 courses at City College of San Francisco. Students must complete each course with a grade of “C” or higher.

Digital Radio Performance and Production Certificate

This certificate provides students with practical production and performance craft skills for entry-level employment in contemporary radio.

Learning Outcomes
Upon completion of the certificate, students will be able to:

- Describe and analyze the history of radio and explain its impact on the structure of radio today.
- Analyze and demonstrate current performance and production for radio, including the use of social media.
- Operate on-air studio equipment and digital radio software.
- Display professionalism and understanding of workforce protocol in communication and behavior.

Students must complete each course with a grade of “C” or higher. Students must complete 4 of 6 courses at City College of San Francisco. All courses must be taken within four years.

Courses Required for the Certificate of Accomplishment in Digital Radio Performance and Production

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>First Semester</td>
<td></td>
</tr>
<tr>
<td>BCST 100 Intro to BCST Electronic Media</td>
<td>3</td>
</tr>
<tr>
<td>BCST 119 Digital Media Skills</td>
<td>3</td>
</tr>
<tr>
<td>BCST 120 Audio Production</td>
<td>3</td>
</tr>
<tr>
<td>Second Semester</td>
<td></td>
</tr>
<tr>
<td>BCST 115 Announcing and Performance</td>
<td>3</td>
</tr>
<tr>
<td>BCST 131 Radio Production &amp; Performance</td>
<td>3</td>
</tr>
<tr>
<td>BCST 160 College Internship</td>
<td>2</td>
</tr>
<tr>
<td>BCST 165 Industry Internship</td>
<td></td>
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<tr>
<td>Total Units</td>
<td>17</td>
</tr>
</tbody>
</table>

Recommended course: BCST 124

Live Sound Certificate

This certificate provides students with a foundation in the application of live sound in various acoustic spaces. Students learn how to operate and troubleshoot live sound production equipment and are prepared for entry level work doing live sound for theaters, nightclubs, concert halls, sporting events, conferences, conventions, presentations, and live sound distribution via broadcast, cable, wireless, mobile devices and emerging media.

Learning Outcomes
Upon completion of this certificate, students will be able to:

- Plan and execute the sound reinforcement set-up for vocals, acoustic and electronic instruments including but not limited to drums/percussion, strings, woodwinds, and brass using microphone and line level devices.
- Configure public address (PA) system for various sized spaces and audience numbers and demonstrate proper placement and distribution of speakers.
- Identify and troubleshoot acoustics of various sized spaces with regard to microphone pick-up and speaker placement.
- Utilize equalization techniques to remedy any problems with acoustics.
- Plan and configure multi-track recorder and video camera for live event recording.
- Display professionalism and understanding of workforce protocol in communication and behavior.

Students must complete each course with a grade of “C” or higher. Students must complete 4 of 6 courses at City College of San Francisco. All courses must be taken within the last four years.

Courses Required for the Certificate of Accomplishment in Live Sound

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>First Semester</td>
<td></td>
</tr>
<tr>
<td>BCST 119 Digital Media Skills</td>
<td>3</td>
</tr>
<tr>
<td>BCST 120 Audio Production</td>
<td>3</td>
</tr>
<tr>
<td>BCST 145 Field Video Production</td>
<td>3</td>
</tr>
<tr>
<td>Second Semester</td>
<td></td>
</tr>
<tr>
<td>BCST 124 Digital Audio Production</td>
<td>3</td>
</tr>
<tr>
<td>BCST 128 Sound Reinforcement</td>
<td>3</td>
</tr>
<tr>
<td>Choose 2 units from the following:</td>
<td></td>
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<tr>
<td>BCST 160 College Internship</td>
<td>2</td>
</tr>
<tr>
<td>BCST 165 Industry Internship</td>
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<tr>
<td>Total Units</td>
<td>17</td>
</tr>
</tbody>
</table>

Multimedia Journalism Certificate

This certificate provides students with news research, writing, reporting, and packaging skills for entry-level employment in radio, television, cable, syndicated, Internet, and satellite news organizations. The Multimedia Journalism certificate is recommended for degree holders seeking to upgrade skills for career transition.

Learning Outcomes
Upon completion of the certificate, students will be able to:

- Identify and analyze structure and writing style of material for electronic media news.
- Illustrate various electronic news media writing and announcing techniques through information gathering, writing news stories and on-camera presentation.
- Define terms, methods and practices related to digital video and audio production for electronic newsgathering.
- Produce and assemble broadcast-multimedia news packages (MMJs) and programs.
- Display professionalism and understanding of workforce protocol in the communication and behavior.

Students must complete each course with a grade of “C” or higher. Students must complete 4 of 6 courses at City College of San Francisco. All courses must be taken within the last four years.

Courses Required for the Certificate of Accomplishment in Multimedia Journalism

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>First Semester</td>
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<tr>
<td>BCST 119 Digital Media Skills</td>
<td>3</td>
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<tr>
<td>BCST 110 Introduction to Writing for</td>
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<tr>
<td>Electronic Media</td>
<td>3</td>
</tr>
<tr>
<td>BCST 115 Announcing and Performance</td>
<td>3</td>
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<tr>
<td>Second Semester</td>
<td></td>
</tr>
<tr>
<td>BCST 130 Radio News and Public Affairs</td>
<td>3</td>
</tr>
<tr>
<td>BCST 145 Field Video Production</td>
<td>3</td>
</tr>
</tbody>
</table>
BCST 160 College Internship  
or BCST 165 Industry Internship  
Total Units  

Recommended Additional Coursework: BCST 100, 135, 136, JOUR 21, 22, 24, 29, 37

### Sound Design Certificate

This certificate combines the study of audio theory and sound design as used in relation to video, TV, film, radio, video games and multimedia productions. Students learn recording and editing techniques and apply them to the equipment used in audio production facilities and location sound systems. Students who complete this certificate are prepared for entry-level positions in facilities specializing in video and film production, television, radio production, advertising, and theater.

**Learning Outcomes**

Upon completion of this certificate, students will be able to:

- Analyze the visual media and assess the sound post-production needs including, dialog, sound-effects and music.
- Plan, engineer and perform Foley and ADR recording sessions including spotting.
- Operate a digital audio workstation to edit, signal process, sweeten, arrange and mix-down the D-M-E audio in sync to picture.
- Demonstrate an understanding of the various surround sound formats for mixing sound to picture.
- Display professionalism and understanding of workforce protocol in communication and behavior.

Students must complete each course with a grade of “C” or higher. 

Students must complete 4 of 6 courses at City College of San Francisco. 

All courses must be taken within the last four years.

**Courses Required for the Certificate of Accomplishment in Sound Recording**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>BCST 119 Digital Media Skills</td>
<td>3</td>
</tr>
<tr>
<td>BCST 120 Audio Production</td>
<td>3</td>
</tr>
<tr>
<td>BCST 145 Field Video Production</td>
<td>3</td>
</tr>
<tr>
<td>BCST 124 Digital Audio Production</td>
<td>3</td>
</tr>
<tr>
<td>BCST 126 Sound for Video</td>
<td>3</td>
</tr>
<tr>
<td>BCST 160 College Internship</td>
<td>2</td>
</tr>
<tr>
<td>or BCST 165 Industry Internship</td>
<td>2</td>
</tr>
<tr>
<td>Total Units</td>
<td>17</td>
</tr>
</tbody>
</table>

Recommended Additional Coursework: BCST 127

### Television Production Certificate

This certificate provides basic video production skills including instruction in preproduction planning, audio and video production competency, program completion and distribution via broadcast, tape, disc and the Internet. Students completing this certificate program will be qualified for entry-level employment in video production for television, advertising, public relations, multimedia, education, music, theater, film, entrepreneurial projects and media departments of agencies, businesses, and institutions.

**Learning Outcomes**

Upon completion of this certificate, students will be able to:

- Plan, implement, and manage the aesthetic and technical elements of TV studio and video field production through the preproduction, production, and delivery stages.
- Work in a variety of areas within the context of a television studio and field production, including producing, directing, floor manager, camera, lighting, switcher, character generator, teleprompter and audio control.
- Produce and direct a short video production.
- Demonstrate the knowledge of major audio-visual script formats as well as a familiarity with the basic vocabulary of videography including basic shots, angles, editing transitions, and camera movements.
• Apply basic photographic principles as F-stops, depth of field, and focal length and be able to use these principles creatively in their own productions.
• Display professionalism and understanding of workforce protocol of communication and behavior.

Students must complete each course with a grade of "C" or higher.
Students must complete 4 of 6 courses at City College of San Francisco.
All courses must be taken within the last four years.

**Courses Required for the Certificate of Accomplishment in Television Production**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td><strong>First Semester</strong></td>
<td></td>
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<tr>
<td>BCST 119 Digital Media Skills</td>
<td>3</td>
</tr>
<tr>
<td>BCST 140 Studio Video Production</td>
<td>3</td>
</tr>
<tr>
<td>BCST 145 Field Video Production</td>
<td>3</td>
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<tr>
<td><strong>Second Semester</strong></td>
<td></td>
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<tr>
<td>BCST 110 Introduction to Writing for Electronic Media</td>
<td>3</td>
</tr>
<tr>
<td>BCST 160 HD TV Studio Production or BCST 149 HD TV Field Production</td>
<td>3</td>
</tr>
<tr>
<td>BCST 160 College Internship or BCST 165 Industry Internship</td>
<td>2</td>
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<tr>
<td><strong>Total</strong></td>
<td>17</td>
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</tbody>
</table>

**Recommended Additional Coursework:** BCST 115, 120, BCST 143 and BCST 144

**Video Post-Production Certificate**

This certificate provides instruction in video editing, managing postproduction tasks and distribution of video programs via broadcast, tape, disc and the Internet. Students completing this certificate program will be qualified for entry-level employment in video production for television, advertising, public relations, multimedia, education, music, theater, film, entrepreneurial projects and media departments of agencies, businesses, and institutions.

**Learning Outcomes**

Upon completion of this certificate, students will be able to:

• Plan, edit, and manage the aesthetic and technical elements of video programs through the preproduction, production, and postproduction stages in the context of video editing and finishing.
• Work in a variety of areas within the context of postproduction, including video editor, assistant editor and postproduction management assistant.
• Demonstrate knowledge of current digital audio and video file types and formats.
• Apply a variety of video editing techniques related to content; efficiently manage logging and capturing/transferring video media; identify the key story focus, primary audience, purpose and goals.
• Demonstrate knowledge and the ability to finish a video program using color correction, audio finishing and simple motion graphic techniques.
• Display professionalism and understanding of workforce protocol of communication and behavior.

Students must complete each course with a grade of "C" or higher.
Students must complete 4 of 6 courses at City College of San Francisco.
All courses must be taken within the last four years.

**Courses Required for the Certificate of Accomplishment in Video Post-Production**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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<tbody>
<tr>
<td><strong>First Semester</strong></td>
<td></td>
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<tr>
<td>BCST 119 Digital Media Skills</td>
<td>3</td>
</tr>
<tr>
<td>BCST 145 Field Video Production</td>
<td>3</td>
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<tr>
<td><strong>Second Semester</strong></td>
<td></td>
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<tr>
<td>BCST 143 Digital Video Editing-AVID</td>
<td>3</td>
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<tr>
<td>BCST 144 Digital Video Editing-FCP &amp; Premiere</td>
<td>3</td>
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<tr>
<td><strong>Third Semester</strong></td>
<td></td>
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<tr>
<td>BCST 147 Video Postproduction</td>
<td>3</td>
</tr>
<tr>
<td>BCST 160 College Internship or BCST 165 Industry Internship</td>
<td>2</td>
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<tr>
<td><strong>Total</strong></td>
<td>17</td>
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</tbody>
</table>

**Recommended Additional Coursework:** BCST 120, BCST 126, BCST 146, BSCT 148 and BCST 149

**Video Production and Editing Certificate**

This certificate provides basic video production and editing craft skills for entry-level employment in video production and editing for television, advertising, public relations, multimedia, education, music, theater, film, entrepreneurial projects and media departments of agencies, businesses, and institutions.

**Learning Outcomes**

Upon completion of this certificate, students will be able to:

• Plan, implement, and manage the aesthetic and technical elements of TV studio and video field production through the preproduction, production, and delivery stages.
• Work in a variety of areas within the context of a television studio and field production, including producing, directing, floor manager, camera, lighting, switcher, character generator, teleprompter and audio control.
• Work in a variety of areas within the context of postproduction, including video editor, assistant editor and postproduction management assistant.
• Demonstrate knowledge of current digital audio and video file types and formats.
• Apply a variety of video editing techniques related to content, efficiently manage logging and capturing/transferring video media, identify the key story focus, primary audience, purpose and goals.
• Display professionalism and understanding of workforce protocol of communication and behavior.

**Courses Required for the Certificate of Accomplishment in Video Production and Editing**

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<tr>
<th>Course</th>
<th>Units</th>
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<tbody>
<tr>
<td><strong>First Semester</strong></td>
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<tr>
<td>BCST 100 Intro to BCST Electronic Media</td>
<td>3</td>
</tr>
<tr>
<td>BCST 119 Digital Media Skills</td>
<td>3</td>
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<tr>
<td><strong>Second Semester</strong></td>
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<tr>
<td>BCST 140 Studio Video Production or BCST 145 Field Video Production</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Units</strong></td>
<td>17</td>
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</tbody>
</table>
Announcement of Courses

Students enrolled in Broadcast Electronic Media Arts lecture and laboratory courses may be required to purchase additional materials. Students may be charged a materials use fee.

Credit, Degree Applicable Courses:

BCST 100. Introduction to Electronic Media (3)
Lec-3
Advised: ENGL 93 or 94 or placement in ENGL 96
Development and impact of electronic media institutions of radio, television, cable, satellite, internet, and new media technologies as social, vocational, economic, and political forces in American society. The emphasis of this course is on history, organization, operation, occupation, programming, political development, regulation, and business practices. CSU

BCST 101. Media Literacy (3)
Lec-3
Advised: SPCH 1A or 11
Critical analysis of structure, economics, aesthetics, language, and technical aspects of radio, television, cable, and satellite programming. Methods of interpreting the visual and oral messages present in news, entertainment, and advertising. Impact of emerging technologies on program content and form. CSU

BCST 102. New Media: Navigating the Information Age (3)
Lec-3
Survey of new electronic media such as interactive teleconferencing and video conferencing, direct broadcast satellite, digital radio and television, interactive television, desktop audio and video production, virtual news sets, holographic sportscasts, webcasting, computer-based broadcast news production, multimedia, digital cable, and wireless systems. Application of communication theories and research using technological, historical, social, and political perspectives. Impact of emerging communication technologies on broadcast electronic media. CSU

BCST 103. Mass Media and Society (3)
Lec-3
A general interest course covering the history, organization and social role of major mass communication media, such as radio, television, motion pictures, print, recording industries, multimedia, the Internet, and the World Wide Web. Basic theory of communication and communication research. Emphasis on the influence of mass media on the individual and society. CSU/UC

BCST 104. Race and Media (3)
Lec-3, field trips
Advised: ENGL 93 or 94 or placement in ENGL 96
Historical study of the images of African-Americans, Asians, Hispanics, and other racial groups as projected through mass media. This includes print, film, radio, television, music, cable, Internet and emerging media. Socio-historical-legal analysis of ways in which affected groups have responded to these images. CSU/UC

BCST 105. Gender and Mass Media (3)
Lec-3
An exploration of the mass mediated messages—radio, television, film, print, and the Internet—and how they influence and define gender roles, with particular emphasis on how women are represented. A critique of roles given to each gender. An update on opportunities for women in each of the mainstream and alternative media industries. CSU

BCST 106. Queer TV: Television and Lesbian and Gay Identity (3)
Lec-3
Prereq: BCST 110
Examination of how gays, lesbians, bisexuals, and transgendered people are represented in and by the mainstream electronic media with strong emphasis on television. CSU

BCST 107. Introduction to Writing for Electronic Media (3)
Lec-3
Basic introductory course in writing for electronic media. Emphasis on preparing scripts in proper formats, including fundamental technical, conceptual and stylistic issues related to writing fiction and non-fiction scripts for informational and entertainment purposes in electronic media. Includes a writing evaluation component as a significant part of the course requirement. CSU

BCST 108. Investigative Reporting for Broadcast Electronic Media (3)
Lec-3
Prereq.: BCST 110
Investigative techniques used in radio television, cable, and webcast news. Research methods, interviewing methods, reporting techniques, story development techniques, story analysis, and writing methods for electronic media news. Introduction to digital media news gathering skills and news equipment, World Wide Web news gathering, and electronic news reporting by world media services and organizations. CSU

BCST 109. Broadcast Journalism (3)
Lec-3, lab-3
Prereq.: BCST 110 and 115
Writing, announcing, producing, packaging, and evaluating radio, television, cable, and satellite news. An examination of news formats, news judgment, social impact, and broadcast news ethics. Impact of emerging technologies on broadcast news. CSU

BCST 110. Announcing and Performance (3)
Lec-3
Advised: BCST 120
Introduction to interpretation of copy, pronunciation, and announcer’s duties for radio, television, cable, and webcast. Practical experience announcing commercials, news, public service, and other kinds of programs. Performance skills are developed through regular use of audio and video facilities and equipment. CSU

BCST 111. Sports Announcing and Production (3)
Lec-3, lab-3
Prereq.: BCST 115 and 131 or 140 or demonstration of their exit skills.
All aspects of sports announcing and production for radio, television, cable, satellite, and the Internet. An exploration of sports coverage history, issues, technology, production, play-by-play announcing, color announcing, and career opportunities. Students will announce and produce live and live-on-tape broadcasts of City College sports events. CSU

BCST 112. Sports Announcing and Production (3)
Lec-3, lab-3
Prereq.: BCST 115 and 131 or 140 or demonstration of their exit skills.
All aspects of sports announcing and production for radio, television, cable, satellite, and the Internet. An exploration of sports coverage history, issues, technology, production, play-by-play announcing, color announcing, and career opportunities. Students will announce and produce live and live-on-tape broadcasts of City College sports events. CSU

BCST 113. Broadcast Journalism (3)
Lec-3, lab-3
Prereq.: BCST 110 and 115
Writing, announcing, producing, packaging, and evaluating radio, television, cable, and satellite news. An examination of news formats, news judgment, social impact, and broadcast news ethics. Impact of emerging technologies on broadcast news. CSU

BCST 114. Investigative Reporting for Broadcast Electronic Media (3)
Lec-3
Prereq.: BCST 110
Investigative techniques used in radio television, cable, and webcast news. Research methods, interviewing methods, reporting techniques, story development techniques, story analysis, and writing methods for electronic media news. Introduction to digital media news gathering skills and news equipment, World Wide Web news gathering, and electronic news reporting by world media services and organizations. CSU

BCST 115. Announcing and Performance (3)
Lec-3
Advised: BCST 120
Introduction to interpretation of copy, pronunciation, and announcer’s duties for radio, television, cable, and webcast. Practical experience announcing commercials, news, public service, and other kinds of programs. Performance skills are developed through regular use of audio and video facilities and equipment. CSU

BCST 116. Sports Announcing and Production (3)
Lec-3, lab-3
Prereq.: BCST 115 and 131 or 140 or demonstration of their exit skills.
All aspects of sports announcing and production for radio, television, cable, satellite, and the Internet. An exploration of sports coverage history, issues, technology, production, play-by-play announcing, color announcing, and career opportunities. Students will announce and produce live and live-on-tape broadcasts of City College sports events. CSU

BCST 117. Sports Announcing and Production (3)
Lec-3, lab-3
Prereq.: BCST 115 and 131 or 140 or demonstration of their exit skills.
All aspects of sports announcing and production for radio, television, cable, satellite, and the Internet. An exploration of sports coverage history, issues, technology, production, play-by-play announcing, color announcing, and career opportunities. Students will announce and produce live and live-on-tape broadcasts of City College sports events. CSU

BCST 118. Sports Announcing and Production (3)
Lec-3, lab-3
Prereq.: BCST 115 and 131 or 140 or demonstration of their exit skills.
All aspects of sports announcing and production for radio, television, cable, satellite, and the Internet. An exploration of sports coverage history, issues, technology, production, play-by-play announcing, color announcing, and career opportunities. Students will announce and produce live and live-on-tape broadcasts of City College sports events. CSU

BCST 119. Digital Media Skills (3)
Lec-2, conf-1, lab-1
A hands-on overview of computer operations, industry standard software, equipment common to digital video and audio production, media storage and manipulation of audio and video media within the digital realm. Introduction to issues and the impact of new technology
in the sound recording, video, multimedia, television, radio and film industries. CSU

**BCST 120. Audio Production (3)**  
Lec-3, lab-4  
Theory of sound, recording techniques and operation of audio production equipment. Theoretical and aesthetic aspects of sound, acoustics, audio signal flow, sound recording, mixing, sound for video, television, internet and live sound reinforcement. Proper use of microphones, recorders, digital audio workstations, audio consoles, and other common audio production equipment. CSU

**BCST 124. Digital Audio Production (3)**  
Lec-3, lab-3  
PREREQ: BCST 120 AND BCST 119 OR DEMONSTRATION OF THEIR EXIT SKILLS.  
Introduction to the digital audio production process. Basic skills of the entertainment/communications/multimedia industries including techniques and equipment currently used in digital audio production. CSU

**BCST 125. Sound Recording Studio (4)**  
Lec-3, lab-6  
PREREQ: BCST 124  
ADVISE: BCST 124  
This course covers the analog and digital multi-track techniques used in the various stages of professional sound recording as well as the workflow and etiquette required in a professional studio environment. The processes of acquiring basic tracks, overdubbing, editing, mixing and mastering will be examined. CSU

**BCST 126. Sound for Visual Media (3)**  
Lec-3, lab-3, field trips  
PREREQ: BCST 124 (MAY BE TAKEN CONCURRENTLY)  
ADVISE: BCST 140 OR 145 OR EQUIVALENT SKILLS  
Hands-on overview and theory of the processes, craft skills, and equipment used to apply sound to picture. Examines the stages of location sound production, dialog recording, sound editorial, sound design, Foley, music and mixing techniques for television, Internet, games and emerging media. CSU

**BCST 127. Advanced Sound Recording (3)**  
Lec-3, lab-3, field trips  
PREREQ: BCST 124 AND 125  
Theory and project-intensive course examining and using skills required for mixing and mastering audio. Students produce complex music production and sound-for-visual-media projects and examine digital and analog mixing techniques for various current and emerging media. CSU

**BCST 128. Sound Reinforcement (3)**  
Lec-3, lab-3, field trips  
PREREQ: BCST 120  
Live sound history, theory, technology, and craft skills with an emphasis on skill and the technical manipulation of sound in acoustic spaces. Includes hands-on live sound production and operations for nightclubs, theaters, large-scale concert venues, and distributed sound systems. CSU

**BCST 130. Radio News and Public Affairs (3)**  
Lec-2, lab-5  
PREREQ: COMPLETION/CONCURRENT ENROLLMENT IN BCST 110  
ADVISE: BCST 100  
Practical experience in researching, writing, producing and presenting radio news, public affairs, and promotions. Students research stories and write news, public affairs and promotional materials, and produce radio new packages for KCSF Radio, City College of San Francisco's student managed and student staffed Internet radio station. CSU

**BCST 131. Radio Production and Performance (3)**  
Lec-2, lab-5, field trips  
PREREQ: BCST 120  
ADVISE: BCST 115  
Practical experience in radio production and on-air announcing. Students gain hands-on experience as announcers, on-air personalities and board operators for KCSF, City College of San Francisco's Internet radio station. CSU

**BCST 132. Radio Management Skills (4)**  
Lec-2, lab-8  
ADVISE: BCST 130 AND 131  
Practical experience managing individuals and small groups within a non-commercial and commercial radio station. A laboratory experience for understanding the dynamics of motivating people to perform creatively and skillfully within the skill sets required of a radio management team. Performance of key tasks which operate a digital radio system; supervising the programming and scheduling of radio station formats. CSU

**BCST 133. Digital Radio Programming (3)**  
Lec-3, lab-1, field trips  
ADVISE: BCST 119  
P/NP available  
Students will program and operate radio music, radio production, promotional spots, and radio scheduling databases for both live and automated radio presentation using industry standard software and systems. CSU

**BCST 135. Audio for the Web (1)**  
Lec-12, lab-12 (total hours)  
PREREQ: COMPLETION OF OR CONCURRENT ENROLLMENT IN BCST 119  
ADVISE: BCST 120  
A hands-on class focusing on technical considerations and content issues required to produce and deliver audio over the web. History of audio on the web and its impact on traditional broadcast media. CSU

**BCST 136. Video for the Web (1)**  
Lec-12, lab-12 (total hours)  
PREREQ: BCST 135  
ADVISE: BCST 145  
A hands-on class focusing on technical considerations and content issues required to produce and deliver video content over the Internet. History of video delivery technology and its impact on traditional broadcast media. CSU

**BCST 140. Studio Video Production (3)**  
Lec-2, lab-4  
Theory and operation of video production equipment and facilities. Video production planning and organization; concept development, and production management. Instruction in camera, audio, lighting, live switching, server operation as well as above-the-line roles such as writer, director, producer, etc. Students acquire knowledge and skills by creating studio-based video programming. CSU

**BCST 143. Digital Video Editing-AVID (3)**  
Lec-3, lab-3  
PREREQ: BCST 140 OR 145 OR FILM 24, PLUS BCST 119, CS 100M, OR DEMONSTRATION OF THEIR EXIT SKILLS  
Digital video editing for video and film projects using industry stan
standard AVID Xpress and Media Composer software on a Macintosh platform. Organizing the video edit, routing a networked video signal, digitizing video signal, creating the EDL, editing theory, editing principles, editing aesthetics, titling and 2D/3D effects, and output of final product from network to videotape. Students complete several short video editing projects. CSU

BCST 144. Digital Video Editing—FCP & Premiere (3)
Lec-3, lab-3
Prereq.: BCST 140 or CINE 24, plus BCST 119, CS 100M, or demonstration of their skills
An introduction to digital video editing for television, video, and multimedia programs using Apple Final Cut Pro and Adobe Premiere Pro on an Apple Macintosh operating system. This hands-on class focuses on the operation, technology, techniques, and aesthetic process of editing video content with related title and visual effects components. CSU

BCST 145. Field Video Production (3)
Lec-3, lab-3
Aesthetic and technical elements of video field production, with emphasis on concept development, pre-production, production, and post-production. Students collaborate to create video packages for air on San Francisco’s Educational Access cable channels and assist with productions for clients of the College’s Broadcast Media Services video production unit. CSU

BCST 146. Digital Video Effects (3)
Lec-3, lab-3
Prereq.: BCST 119 or VMD 105; and BCST 143 or 144 or VMD 154 or VMD 150 or CINE 56 or PHOT 57 or 60A
Hands-on course for creating digital effects for broadcast, cablecast, webcast and distribution on mobile devices by applying video motion graphics and compositing techniques using both software and hardware-based methodologies. Effects are conceived, created and integrated with video projects in studio and laboratory settings. CSU

BCST 147. Advanced Digital Video Editing (3)
Lec-3, lab-3
Prereq.: BCST 143 or BCST 144 or CINE 56
An advanced video editing course that builds on prior introductory classes. The focus is on understanding and practicing video editing processes and techniques across a variety of TV and video genres as well as to gain a solid understanding of current video technology as related to processes, formats, visual effects and hardware. CSU

BCST 148. HD TV Studio Production (3)
Lec-3, lab-6, field trips
Prereq.: BCST 140 and completion/concurrent enrollment in BCST 119
Advice: BCST 110, 115, 126, 145; and BCST 143 or 144
Aesthetic and technical elements of studio television production with emphasis on program development. Students collaborate to design, write and produce programming using contemporary broadcast studio standards and technology for cablecast on San Francisco’s Educational Access Cable Channel 27, 75, and distribution on the internet. CSU

BCST 149. HD TV Field Production (3)
Lec-3, lab-6, field trips
Prereq.: BCST 145 and completion/concurrent enrollment in BCST 119
Advice: BCST 110, 126, 140; and BCST 143 or 144
Advanced Aesthetic and technical elements of digital video field production. Students write and produce digital video packages from concept through post-production, and collaborate in teams to create professional quality digital video packages and segments for cablecast on Educational Access Television Channel 27, 75, and distribution on the internet. CSU

BCST 150. Special Projects (2)
Conf-1, lab-2, work-3, field trips P/NP available
Work on electronic media communications project acceptable to both the student and the instructor. Only a project having significant value in the field of broadcast electronic media arts will be approved. CSU

BCST 159. Digital Media Portfolio (1)
Lec-12, lab-24 (total hrs), field trips P/NP Available
Conceptualizing and development of an online portfolio for gaining entry level work in the Broadcast Electronic Media and Sound Recording industries. Students will refine and present a professional resume. Students will apply best practice in portfolio presentation. CSU

BCST 160. College Internship (1-8)
Work-5, 10, 15, 25, 30, 35, 40 P/NP available
Coreq.: Enrollment in minimum of 7 units of course work (including this course) and consent of instructor
Repeat: 16 units in BCST 160 and BCST 165 combined
Media related work experience and further career development in a supervised setting. On-campus college work experience in college district media support services such as Broadcast Media Services, Educational Access Television, Audio Visual, Outreach and Recruitment Services and Marketing and Public Information. Resume writing, networking, communication and interview skills. CSU
Formerly BCST 160A

BCST 165. Industry Internship (1-8)
Work-5, 10, 15, 25, 30, 35, 40 P/NP Available
Coreq.: Enrollment in minimum of 7 units of course work (including this course) and consent of instructor
Repeat: 16 units in BCST 160 and 165 combined
Media related work experience and further career development in a supervised setting. Work experience in an approved industry facility such as a television station, a sound recording studio or business, a webcast enterprise, a radio station, a video production company, a corporate media production enterprise, and/or a multimedia/transmedia production team. Resume writing, networking, communication and interview skills. CSU
Formerly BCST 165A

Noncredit Course:
BCST 1000. Supervised Training for Broadcast Electronic Media Arts (140 hrs)
A course designed to assist students in achieving course learning outcomes, reinforce classroom learning and improve practical skills in sound recording, sound design, live sound, motion graphics, video production, audio production, radio production, post production, media writing and production planning. Students work on individual and team assignments and projects with faculty available for consultation, clarification and guidance.
Announcement of Curricula

General Information

The Business Department offers two-year degree programs in accounting, administrative support, general business, finance, marketing, paralegal/legal studies, real estate and travel and tourism. Credit certificate programs are available in real estate, microcomputer accounting, general business, finance, international business, marketing, paralegal/legal studies, office technology, real estate, retail management, travel and tourism, travel and tourism destination specialist, and supervision. Noncredit (no tuition fees) two semester certificate programs are available in various areas of administrative/office support, computerized accounting, computer applications, and small business. In addition, a variety of mini-certificates in areas such as word processing (Word), spreadsheets (Excel), web pages for business, and office publishing can be earned in less than a semester.

Admission. Enrollment in the Business Program is open to all interested students. In some curricula, however, students must satisfy prerequisites before being admitted to certain courses.

Instruction in Business and General Education. Training is designed to help students acquire a high degree of technical skill, familiarize themselves with business principles and procedures, and develop the sense of responsibility essential to success. Each curriculum in the Credit Business Programs includes instruction in both a major field and related subjects such as business correspondence, speech, and business mathematics. Instruction in general education is included so that students may satisfy the College graduation requirements in this area.

Work Experience Training. Students enrolled in the Credit Business Programs may obtain credit for experience in their major fields by enrolling in work experience courses. Students are supervised by both employers and instructors.

Students may offer toward graduation a maximum of six semester units of credit earned in off- or on-campus work-experience courses or in any combination of both.

Associate in Science Degree. The Business Department offers majors in accounting, administrative support, general business, finance, marketing, paralegal/legal studies, real estate and travel and tourism. Students who complete all courses required for their major and satisfy general College graduation requirements will receive the Associate in Science Degree.

Transfer Information. Students in the Business Program who intend to transfer to other colleges or universities should consult their academic advisers and their counselors and should consult the section of this catalog entitled, “Transfer Information.”

Noncredit Certificate Programs. These programs provide directed training for employment in the modern office. Computer skills, communication skills, and job preparation courses are emphasized in the noncredit sequences to prepare students for entry-level, clerical employment.

Programs Offered:

Accounting
- Accounting Major
- Microcomputer Accounting Credit Certificate

Noncredit Certificates:
- Accounting Assistant
- Computerized Accounting Specialist
- QuickBooks for Accounting
- Specialized Accounting

Administrative Support/Office Technology
- Administrative Support Major
- Office Technology Credit Certificate

Noncredit Certificates:
- Administrative Assistant
- Advanced Word Processing
- Basic Business Office Skills for Customer Service
- Basic Business Skills for Medical Office
- Basic Computer Concepts
- Basic Word Processing
- Business Office Publishing Basics
- Business Office Publishing Specialist
- Business Office Support Skills I
- Business Office Support Skills II
- Business Web Pages Basics
- Business Web Pages Intermediate
- Clerical Support Specialist
- Computer Applications for Business
- Construction Administrative Assistant
- Excel Basics
- Excel Specialist
- Microsoft Office Specialist
- Office Receptionist
- PowerPoint Specialist

Finance
- Finance Major
- Finance Credit Certificate

General Business
- General Business Major
- General Business Credit Certificate

Green Business
- Green and Sustainable Business Credit Certificate
- Green and Sustainable Small Business Noncredit Certificate

International Business
- International Business Credit Certificate

Marketing
- Marketing Major
- Marketing Credit Certificate

Paralegal/Legal Studies
- Paralegal/Legal Studies Major
- Paralegal/Legal Studies Credit Certificate

Real Estate
- California Real Estate Major
- California Real Estate Credit Certificate
Retail Management  
Retail Management Credit Certificate

Small Business  
Small Business Noncredit Certificate

Supervision and Management  
Supervision and Management Credit Certificate

Travel and Tourism  
Travel and Tourism Major

Credit Certificates:  
Destination Specialist  
Green and Sustainable Travel  
Travel and Tourism  
Travel and Tourism Management

Accounting  

Accounting Major (AS)  

Students who satisfactorily complete the Curriculum in Accounting, a two-year course of study, are qualified for employment as junior accountants in private, public, and civil-service accounting and as junior auditors in private and civil-service accounting. Positions to which graduates have advanced after gaining experience and undertaking further study include those of accounting supervisor, senior accountant, and senior auditor.

The course of study includes instruction in principles of accounting, intermediate accounting, auditing, cost accounting, microcomputer accounting, and income-tax procedure.

Students who complete each of the following courses, and complete the Graduation requirements for the AS degree, or the CCSF transfer Associate Degree General Education requirements, will satisfy the requirements for the Accounting Major.

Learning Outcomes  

Upon completion of the Accounting major, the students will be able to:

- Develop and maintain a financial information system
- Apply uniform commercial law to common business transactions
- Generate and analyze management reports
- Analyze and explain financial statements in oral and written communication
- Prepare individual federal and California income tax returns
- Use standard business software
- Qualify for entry level accounting position

Courses Required for the Major in Accounting  

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>First Semester</strong></td>
<td></td>
</tr>
<tr>
<td>ACCT 1 Fin Acct</td>
<td>4</td>
</tr>
<tr>
<td>MABS 60 Intro to Computer Appl. for Business</td>
<td>3</td>
</tr>
<tr>
<td>BSL 1 Business Law</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 59 Federal Income Tax</td>
<td>3</td>
</tr>
<tr>
<td>MABS 101 Spreadsheets for Bus/Excel</td>
<td>3</td>
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<tr>
<td>Additional graduation requirements</td>
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<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td><strong>Second Semester</strong></td>
<td></td>
</tr>
<tr>
<td>ACCT 2 Managerial Acct</td>
<td>4</td>
</tr>
<tr>
<td>MABS 74 Bus Corresp</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 53 Acct on Microcomp</td>
<td>3</td>
</tr>
<tr>
<td>MABS 66 or 68 Bus Math or Math of Bus</td>
<td>3 or 4</td>
</tr>
<tr>
<td>Additional graduation requirements</td>
<td></td>
</tr>
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</table>

Third Semester  

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT 51 (fall only) Intermed. Accounting</td>
<td>4</td>
</tr>
<tr>
<td>ACCT 55 (fall only) Cost Accounting</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 53 Acct on Microcomp</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 59B Calif Income Tax</td>
<td>1</td>
</tr>
<tr>
<td>Additional graduation requirements</td>
<td></td>
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</tbody>
</table>

Fourth Semester  

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT 52 (spring only) Inter Accounting</td>
<td>4</td>
</tr>
<tr>
<td>ACCT 54 (spring only) Auditing</td>
<td>3</td>
</tr>
<tr>
<td>CRER 62 Successful Job Search Techniques</td>
<td>1</td>
</tr>
<tr>
<td>Additional graduation requirements</td>
<td></td>
</tr>
</tbody>
</table>

Total Units: 48-49

Recommended Additional Coursework: BSEN 76, SMBS 135

Microcomputer Accounting Certificate  

The program is designed to prepare students to enter the job market in positions that use the microcomputer for Accounts Receivable, Accounts Payable, Payroll, General Ledger, and other accounting functions.

Admission. Enrollment is open to all interested students.

Learning Outcomes  

Upon completion of the requirements for this certificate, the students will be able to:

- Understand, analyze and explain financial statements
- Demonstrate basic understanding of the fundamentals of double-entry bookkeeping
- Demonstrate competency in business software applications
- Develop and maintain a financial information system
- Qualify for entry level bookkeeping position

Students may obtain the Certificate of Achievement in Microcomputer Accounting by completing each of the following courses with a final grade of “C” or higher.

Courses Required for the Certificate of Achievement in Microcomputer Accounting  

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT 10 Intro to Accounting or ACCT 15 Fin Accounting</td>
<td>4</td>
</tr>
<tr>
<td>ACCT 53 Acct on Microcomp</td>
<td>3</td>
</tr>
<tr>
<td>MABS 60 Intro to Computer Appl. for Business</td>
<td>3</td>
</tr>
<tr>
<td>MABS 101 Spreadsheets for Bus/Excel</td>
<td>3</td>
</tr>
<tr>
<td>BSL 1 Business Law</td>
<td>3</td>
</tr>
<tr>
<td>BSMA 66 or 68 Bus Math or Math of Bus</td>
<td>4 or 3</td>
</tr>
<tr>
<td>MABS 25** Keyboarding</td>
<td>1</td>
</tr>
<tr>
<td>CRER 62 Successful Job Search Techniques</td>
<td>1</td>
</tr>
</tbody>
</table>

Total Units: 18-19

**Students may satisfy the requirements for MABS 25 by passing an examination in typing.

Accounting Assistant Noncredit Certificate  

Program Goal: Prepare the student for entry-level assistant positions in A/P, A/R, billing, payroll, or in the financial services industry, such as bank teller or tax assistant. The student builds soft skills in customer service and communication with applicable computer skills.
Learning Outcomes

- Describe and apply accounting principles and concept.
- Describe and apply basic payroll theory and procedures, including withholding and tax reporting.
- Create and maintain financial statements using accounting computer software.
- Apply standard business English to oral and written communication, including grammar, punctuation, mechanics, vocabulary, style and usage.
- Use a variety of business applications software including word processing, spreadsheet and database; discuss current technology and trends.

Courses Required for the Certificate of Completion in Accounting Assistant

<table>
<thead>
<tr>
<th>Core Courses</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>AAPS 3111 Orientation to Noncredit Certificates and Programs</td>
<td>15</td>
</tr>
<tr>
<td>ACBO 9201 Accounting I—Proprietorship and Partnership or ACBO 9206 Basic Accounting Concepts I and ACBO 9207 Basic Accounting Concepts II</td>
<td>90</td>
</tr>
<tr>
<td>ACBO 9205 QuickBooks Complete or ACBO 9208 QuickBooks: Level I and ACBO 9209 QuickBooks: Level II or ACBO 9211 Microsoft Office Accounting-Level I and ACBO 9212 Microsoft Office Accounting-Level II</td>
<td>90</td>
</tr>
<tr>
<td>ACBO 9210 Income Tax Prep: Intro</td>
<td>15</td>
</tr>
<tr>
<td>COMP 9245 Windows Essentials for MS Office Applications</td>
<td>30</td>
</tr>
<tr>
<td>COMP 9932 Excel for Accounting Principles or ACBO 9215 Microsoft Access for Accounting Principles</td>
<td>45</td>
</tr>
<tr>
<td>COMP 9904 Microsoft Excel for Business II or COMP 9867 Microsoft Excel Essentials I and COMP 9895 Microsoft Excel Essentials II and COMP 9888 Microsoft Excel Essentials III</td>
<td>45</td>
</tr>
<tr>
<td>BOSS 4503 Business English or BOSS 4500 Business English I and BOSS 4501 Business English II</td>
<td>90</td>
</tr>
<tr>
<td>BOSS 4510 Business Communications</td>
<td>45</td>
</tr>
<tr>
<td>BOSS 3501 Customer Service Skills</td>
<td>15</td>
</tr>
<tr>
<td>BOSS 5505 Keyboarding Quick</td>
<td>15</td>
</tr>
<tr>
<td>BOSS 5506 Computer Keyboarding: The Numeric Keypad</td>
<td>15</td>
</tr>
<tr>
<td>COMP 9889 Intro to MS Office Applications for Business or COMP 9952 Internet &amp; E-mail for the Business Office and COMP 9964 Microsoft Outlook Essentials and WOPR 9991 Microsoft Word Essentials I and WOPR 9993 Microsoft Word Essentials II and COMP 9894 Microsoft Access Essentials I and COMP 9951 PowerPoint</td>
<td>90</td>
</tr>
<tr>
<td>BOSS 3500 Job Preparation or LERN 1062 Job Search Skills</td>
<td>15-45</td>
</tr>
<tr>
<td>Total Hours</td>
<td>615-645</td>
</tr>
</tbody>
</table>

Exit Requirements. Successful completion of all courses with a passing grade of “C” or better. Typing: 30+ wpm in a timed test with 90% accuracy. Minimum attendance of 80% in all classes is required. Completion of certificate coursework within three consecutive semesters.


Computerized Accounting Specialist Noncredit Certificate

Program Goal. Prepare students for entry- or mid-level jobs in the accounting and related fields. This program provides both manual and computerized instruction in maintaining records and in preparing appropriate reports and analyses. The student will also learn the accounting functions of spreadsheet programs to assist in the preparation of financial reports.

Advisory Entrance Requirements: Eligibility for noncredit ESL Level 5/6; typing: 25 net wpm.

Learning Outcomes

Upon completion of this certificate, students will be able to:

- Keyboard a minimum of 35 net words a minute.
- Describe and apply accounting principles and concepts.
- Use a computer to maintain accounting records.
- Demonstrate appropriate language including word choice and sentence variety.
- Utilize a variety of business applications software including word processing, spreadsheet, database, computerized accounting.

Courses Required for the Certificate of Completion in Computerized Accounting Specialist

<table>
<thead>
<tr>
<th>Core Courses</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>AAPS 3111 Orientation to Noncredit Certificates and Programs</td>
<td>15</td>
</tr>
<tr>
<td>ACBO 9203 Principles of Accounting (Comprehensive) or ACBO 9201 Accounting I—Proprietorship &amp; Partnership and ACBO 9202 Accounting—Corporate or ACBO 9206 Basic Acct Concepts I and ACBO 9207 Basic Accounting Concepts II and ACBO 9202 Accounting—Corporate</td>
<td>180</td>
</tr>
<tr>
<td>ACBO 9205 Computerized Accounting or ACBO 9208 QuickBooks: Level I and ACBO 9209 QuickBooks: Level II</td>
<td>90</td>
</tr>
<tr>
<td>COMP 9889 Intro to MS Office Applications for Business II or COMP 9857 MS Office Business Applications with Simulated Projects</td>
<td>90</td>
</tr>
<tr>
<td>COMP 9904 Microsoft Excel—Intermediate</td>
<td>45</td>
</tr>
<tr>
<td>COMP 9932 Excel for Accounting Principles or ACBO 9215 Microsoft Access for Accounting Principles</td>
<td>45</td>
</tr>
<tr>
<td>COMP 9928 PowerPoint for Business or BOSS 4503 Business English or BOSS 4500 Business English I and BOSS 4501 Business English II</td>
<td>45</td>
</tr>
<tr>
<td>BOSS 4510 Business Communications</td>
<td>45</td>
</tr>
<tr>
<td>BOSS 5500 Keyboarding for Computers</td>
<td>45</td>
</tr>
<tr>
<td>BOSS 3500 Job Preparation or LERN 1062 Job Search Skills</td>
<td>15-45</td>
</tr>
<tr>
<td>Total Hours</td>
<td>705-735</td>
</tr>
</tbody>
</table>

Exit Requirements. Successful completion of all courses with a passing grade. Typing: 35+ wpm in a timed test with 90% accuracy. Minimum attendance of 80% in all classes is required. Completion of certificate coursework within two years.

**QuickBooks for Accounting Noncredit Certificate**

**Program Goal.** Prepare students for entry-level and mid-level clerical office accounting positions. Students will learn skills needed to be competitive in the present job market—Microsoft Word, Excel, and accounting principles with the integration of QuickBooks.

Students who receive this certificate will be qualified to apply for various accounting positions including, but not limited to, bookkeeper, accounts receivable, accounts payable and/or payroll clerk.

**Learning Outcomes**

Upon completion of the QuickBooks for Accounting Noncredit Certificate, students will be able to:

- Identify the steps in the accounting cycle.
- Use technology (Microsoft Word, Excel and QuickBooks) as a tool to complete essential business office tasks.
- Prepare and interpret simple financial statement for businesses.
- Qualify to successfully pass the QuickBooks Certified User Exam (professional exam).

**Advisory Entrance Requirements:** ESL Level 5/6

**Courses Required for the Certificate of Completion in QuickBooks for Accounting**

Course | Hours
---|---
ACBO 9201 Acctg I - Proprietorship & Partnership | 3
Or both of the following:
ACBO 9206 Basic Acctg Concepts I | 3
ACBO 9207 Basic Acctg Concepts II | 9
ACBO 9205 QuickBooks Complete | 9
Or both of the following:
ACBO 9208 QuickBooks, Level I | 3
ACBO 9209 QuickBooks, Level II | 3
COMP 9900 Microsoft Excel for Bus I | 4
COMP 9904 Microsoft Excel for Bus II | 4
COMP 9932 Excel for Accounting Principles | 4
WOPR 9486 Microsoft Word for Bus I | 4
Total Hours | 36

**Exit Requirements.** Successful completion of all courses with a grade of “C” or higher.

**Specialized Accounting Skills Noncredit Certificate**

**Program Goal.** Basic familiarization of specialized accounting skills in the areas of Income Tax Preparation, Accounts receivable and payable, and Payroll using QuickBooks. Provides students with a minimum of skills towards employability.

**Learning Outcomes**

Upon completion of the Specialized Accounting Skills Noncredit Certificate, students will be able to:

- Use various software applications to prepare tax forms
- Operate QuickBooks relative to Accounts Receivable, Accounts Payable, and Payroll
- Apply published instructions by the Internal Revenue Service to various tax forms
- Locate the numeric and operator keys by touch

**Advisory Entrance Requirements.** Eligibility for noncredit ESL levels 5/6

**Courses Required for the Certificate of Completion in Specialized Accounting Skills**

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACBO 9210 Income Tax Prep Intro</td>
<td>15</td>
</tr>
<tr>
<td>ACBO 9213 QuickBooks A/P, A/R</td>
<td>15</td>
</tr>
<tr>
<td>ACBO 9214 QuickBooks, Payroll</td>
<td>15</td>
</tr>
<tr>
<td>BOSS 5506 Computer Keyboarding: The Numeric Keypad</td>
<td>15</td>
</tr>
<tr>
<td>Total Hours</td>
<td>60</td>
</tr>
</tbody>
</table>

**Exit Requirements.** Successful completion of all courses with a grade of “C” or higher.

**Administrative Assistant/Office Technology**

**Administrative Support Major (AS)**

This program is designed for students working or planning to work in administrative support positions in industry and government. Areas of emphasis include word processing, spreadsheets, and database management. Computer classes are taught “hands-on” in computer labs.

Students have the opportunity to polish their written communication skills as well as learn the computer skills needed to succeed in a challenging office environment. Students who complete the curriculum receive the Associate in Science degree in Administrative Support.

**Learning Outcomes**

Students will be able to:

- Write effective business-related documents
- Apply computer skills to complete business tasks.
- Communicate effectively and appropriately in an office environment.
- Keyboard a minimum of 45 net words a minute
- Qualify for entry-level positions in administrative support

**Courses Required for the Major in Administrative Support**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MABS 25 Keyboarding</td>
<td></td>
</tr>
<tr>
<td>or MABS 30 Computer Keyboarding</td>
<td></td>
</tr>
<tr>
<td>or MABS 35 Speedbuilding I: Keyboard*</td>
<td>1, 2, or 3</td>
</tr>
<tr>
<td>MABS 40 Internet Explorer &amp; MS Outlook</td>
<td>3</td>
</tr>
<tr>
<td>BSEN 70 Fund. of English Grammar &amp; Comp</td>
<td>4</td>
</tr>
<tr>
<td>Additional graduation requirements**</td>
<td></td>
</tr>
</tbody>
</table>

**First Semester**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>MABS 25 Keyboarding</td>
<td></td>
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<tr>
<td>or MABS 30 Computer Keyboarding</td>
<td></td>
</tr>
<tr>
<td>or MABS 35 Speedbuilding I: Keyboard*</td>
<td>1, 2, or 3</td>
</tr>
<tr>
<td>MABS 40 Internet Explorer &amp; MS Outlook</td>
<td>3</td>
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<td>BSEN 70 Fund. of English Grammar &amp; Comp</td>
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**Second Semester**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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<tbody>
<tr>
<td>MABS 38 Keyboarding with Microsoft Word</td>
<td>3</td>
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<tr>
<td>BSEN 74 Business Correspondence</td>
<td>3</td>
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<tr>
<td>BSMA 66 Business Mathematics</td>
<td>3</td>
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<tr>
<td>or BSMA 68 Mathematics of Business</td>
<td>3 or 4</td>
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**Third Semester**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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<tr>
<td>MABS 391 Word Processing/Microsoft Word</td>
<td>3</td>
</tr>
<tr>
<td>MABS 101 Spreadsheets for Business/Excel</td>
<td>3</td>
</tr>
<tr>
<td>SPCH 6 Workplace Communication</td>
<td>3</td>
</tr>
<tr>
<td>or PSYC 26 Applied Psychology</td>
<td>3</td>
</tr>
<tr>
<td>Additional graduation requirements**</td>
<td></td>
</tr>
</tbody>
</table>

**Fourth Semester**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MABS 67 Database for Business/Access</td>
<td>3</td>
</tr>
<tr>
<td>BSEN 76 Report Writing</td>
<td>3</td>
</tr>
</tbody>
</table>
CRER 62 Successful Job Search Techniques ....... 1
MABS 405 Developing Web Sites/Frontpage
  or MABS 202 Powerpoint Presentations
  or MABS 406 Dev Web Sites/Dreamweaver
  or MABS 407 Dev Web Sites/Expression Web
  or CNIT 101 Operating Systems I/Windows
  or MRKT 145 Comp Marketing Appl ............. 3

Additional graduation requirements*

Total Units ........................................ 36-40

*Completion of program requires a keyboarding speed of 45 wpm. Keyboarding classes may be waived for students who pass the equivalency test of 45 wpm

**See a counselor for more information on graduation requirements

Office Technology Certificate
The certificate curriculum is a 21-23 unit program designed for students who desire recognition for completing a rigorous course of study in business office skills but who may not be interested in pursuing a degree. Students who complete the following courses with grades of C or higher in each course will receive the Certificate of Achievement in Office Technology.

Learning Outcomes
Students will be able to:

- Write effective business-related documents
- Apply computer skills to complete business tasks.
- Communicate effectively and appropriately in an office environment.
- Keyboard a minimum of 45 net words a minute
- Qualify for entry-level positions in office support

Courses Required for the Certificate of Achievement in Office Technology

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>First Semester</td>
<td></td>
</tr>
<tr>
<td>MABS 25 Keyboarding</td>
<td>1-3</td>
</tr>
<tr>
<td>or MABS 30 Computer Keyboarding</td>
<td>1-3</td>
</tr>
<tr>
<td>or MABS 35 Speedblng I: Keyboard*</td>
<td>1-3</td>
</tr>
<tr>
<td>MABS 40 Internet Explorer &amp; MS Outlook</td>
<td>1-3</td>
</tr>
<tr>
<td>BSEN 70 Funda of English Grammar &amp; Comp</td>
<td>4</td>
</tr>
<tr>
<td>CRER 62 Successful Job Search Techniques</td>
<td>1</td>
</tr>
<tr>
<td>Second Semester</td>
<td></td>
</tr>
<tr>
<td>MABS 38 Keyboarding with Microsoft Word</td>
<td>1-3</td>
</tr>
<tr>
<td>or MABS 391 Word Process/Microsoft Word</td>
<td>1-3</td>
</tr>
<tr>
<td>BSEN 74 Business Correspondence</td>
<td>1-3</td>
</tr>
<tr>
<td>MABS 101 Spreadsheets for Business/Excel</td>
<td>1-3</td>
</tr>
<tr>
<td>SPCH 6 Workplace Communication or PSYC 26 Applied Psychology</td>
<td>1-3</td>
</tr>
<tr>
<td>Total Units</td>
<td>21-23</td>
</tr>
</tbody>
</table>

*Completion of program requires a keyboarding speed of 45 wpm. Keyboarding classes may be waived for students who pass the equivalency test of 45 wpm.

Administrative Assistant Noncredit Certificate
Program Goal. Prepare the student for entry- to mid-level administrative support and related positions. Emphasis on developing both hard and soft skills needed to become an effective administrative assistant.

Curriculum includes: keyboarding, document formatting, computer applications, customer service, business communication, and office procedures.

Advisory Entrance Requirements: Eligibility for noncredit ESL Level 5/6; typing: 25 net wpm; completion of WOPR 9486

Learning Outcomes
Upon completion of this certificate, students will be able to:

- Apply standard business English to oral and written communication and to proofreading tasks— including grammar, punctuation, mechanics, vocabulary, style and usage.
- Identify and apply appropriate behaviors to satisfy customers and clients.
- Operate a variety of office equipment, including computers, peripherals, and non-computerized office machines, such as copiers, postal meters, and electronic calculators.
- Keyboard a minimum of 50 net words a minute.
- Use standard business applications software including word processing, presentation, spreadsheet, accounting, and database.

Courses Required for the Certificate of Completion in Administrative Assistant

<table>
<thead>
<tr>
<th>Courses</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>AAPS 111 Orientation to Noncredit Certificates and Programs</td>
<td>15</td>
</tr>
<tr>
<td>BOSS 5500 Keyboarding for Computers</td>
<td>45</td>
</tr>
<tr>
<td>BOSS 5510 Document Formatting &amp; Production</td>
<td>90</td>
</tr>
<tr>
<td>BOSS 5509 Office Procedures for the 21st Century</td>
<td>45</td>
</tr>
<tr>
<td>BOSS 5508 Advanced Office Procedures for the 21st Century</td>
<td>45</td>
</tr>
<tr>
<td>ACBO 9208 QuickBooks: Level I</td>
<td>45</td>
</tr>
<tr>
<td>or ACBO 9211 Microsoft Office</td>
<td>45</td>
</tr>
<tr>
<td>Accounting-Level I</td>
<td>45</td>
</tr>
<tr>
<td>COMP 9947 Windows Folder &amp; File Concepts</td>
<td>15</td>
</tr>
<tr>
<td>COMP 9952 Internet &amp; E-mail for the Business Office</td>
<td>15</td>
</tr>
<tr>
<td>COMP 9948 Acrobat Bus Office Doc Conversion</td>
<td>15</td>
</tr>
<tr>
<td>COMP 9867 Microsoft Excel Essentials I</td>
<td>15</td>
</tr>
<tr>
<td>COMP 9895 Microsoft Excel Essentials II</td>
<td>15</td>
</tr>
<tr>
<td>COMP 9888 Microsoft Excel Essentials III</td>
<td>15</td>
</tr>
<tr>
<td>COMP 9928 PowerPoint for Business</td>
<td>45</td>
</tr>
<tr>
<td>COMP 9901 Microsoft Access for Business</td>
<td>45</td>
</tr>
<tr>
<td>BOSS 2500 Business Math w/Spreadsheets</td>
<td>45</td>
</tr>
<tr>
<td>BOSS 4503 Business English</td>
<td>45</td>
</tr>
<tr>
<td>or BOSS 4500 Business English-Level I</td>
<td>45</td>
</tr>
<tr>
<td>and BOSS 4501 Bus English-Level II</td>
<td>90</td>
</tr>
<tr>
<td>BOSS 4511 Effective Business Communications</td>
<td>45-90</td>
</tr>
<tr>
<td>or BOSS 4510 Business Communications</td>
<td>45-90</td>
</tr>
<tr>
<td>BOSS 3501 Customer Service Skills</td>
<td>15</td>
</tr>
<tr>
<td>WOPR 9995 Microsoft Word for Business</td>
<td>45</td>
</tr>
<tr>
<td>WOPR 9996 Microsoft Word for Business III</td>
<td>45</td>
</tr>
<tr>
<td>BOSS 3500 Job Preparation or LERN 1062 Job Search Skills</td>
<td>15-45</td>
</tr>
<tr>
<td>Plus (1) elective from the following:</td>
<td></td>
</tr>
<tr>
<td>WOPR 9997 Word Processing-Special Projects</td>
<td>45</td>
</tr>
<tr>
<td>COMP 9941 Simulated Projects for MS Office-Self-paced</td>
<td>45</td>
</tr>
<tr>
<td>COMP 9938 Publisher for Business Desktop Publishing</td>
<td>45</td>
</tr>
<tr>
<td>COMP 9920 Using SharePoint Designer (Web Expression) for Basic Web Pages</td>
<td>45</td>
</tr>
<tr>
<td>Total Hours</td>
<td>810-885</td>
</tr>
</tbody>
</table>

Exit Requirements. Successful completion of all courses with a passing grade of “C” or better. Typing: 50+ wpm with 90% accuracy. Minimum
attendance of 80% in all classes is required. Completion of certificate coursework within two years


**Basic Business Office Skills for Customer Service Noncredit Certificate**

*Program Goal.* To develop both written and oral communication skills as well as effective ways to service and maintain customers or clients in business.

*Learning Outcomes.* Upon completion of this certificate, students will be able to:

- Apply the basics of quality customer service
- Identify customer needs and effectively handle them, including complaints
- Demonstrate effective telephone manners and e-mail etiquette

*Advisory Entrance Requirements.* Eligibility for noncredit ESL levels 5/6

*Courses Required for the Certificate of Completion in Basic Business Office Skills for Customer Service*

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BOSS 4510 Business Communication (45)</td>
<td>45</td>
</tr>
<tr>
<td>BOSS 3501 Customer Service Skills</td>
<td>15</td>
</tr>
<tr>
<td>WOPR 9991 Microsoft Essentials I</td>
<td>15</td>
</tr>
<tr>
<td>BOSS 5505 Keyboarding Quick</td>
<td>15</td>
</tr>
<tr>
<td>COMP 9950 E-mail Writing</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total Hours</strong></td>
<td><strong>95</strong></td>
</tr>
</tbody>
</table>

**Basic Business Skills for the Medical Office Noncredit Certificate**

*Program Goal.* Prepare students for entry-level medical office positions, such as a receptionist or an admitting clerk. Topics include basic skills in Microsoft Office (Word, Excel, and PowerPoint), basic office/clerical procedures, keyboarding, medical terminology and software used in medical offices.

*Advisory Entrance Requirements.* Completion of Certificate of Competency in Business Office Support Skills-Phase I or equivalent, ESL Level 7/8.

*Learning Outcomes.*

- Quality for an entry-level position in a medical office.
- Keyboard a minimum of 35 net words a minute.
- Use technology (Microsoft Word, Excel and Medisoft) as a tool to complete essential business office task.
- Prepare and interpret simple business statements for the medical office.

*Courses Required for the Certificate of Completion in Basic Business Skills for the Medical Office*  

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BOSS 4500 Business English</td>
<td>45</td>
</tr>
<tr>
<td>BOSS 5501 Keyboarding – Skill Development</td>
<td>90</td>
</tr>
<tr>
<td>BOSS 5509 Office Procedures for the 21st Century</td>
<td>45</td>
</tr>
<tr>
<td>BOSS 6500 Data Entry in Office Apps &amp; Medisoft</td>
<td>45</td>
</tr>
<tr>
<td>BOSS 6501 Using Medisoft for Business Data Entry 1</td>
<td>90</td>
</tr>
<tr>
<td>BOSS 6502 Using Medisoft for Business Data Entry 2</td>
<td>90</td>
</tr>
<tr>
<td>BOSS 6503 Simulated Office Practice Using Medisoft</td>
<td>45</td>
</tr>
<tr>
<td>BUSG 9901 Business Vocabulary</td>
<td>45</td>
</tr>
<tr>
<td><strong>COMP 9900 Microsoft Excel – Beginning</strong></td>
<td><strong>45</strong></td>
</tr>
<tr>
<td><strong>COMP 9928 PowerPoint for Business I</strong></td>
<td><strong>45</strong></td>
</tr>
<tr>
<td><strong>COMP 9936 Using Outlook for Office Support, Level I</strong></td>
<td><strong>45</strong></td>
</tr>
<tr>
<td><strong>WOPR 9995 Microsoft Word for Business II</strong></td>
<td><strong>45</strong></td>
</tr>
<tr>
<td><strong>WOPR 9996 Microsoft Word for Business III</strong></td>
<td><strong>45</strong></td>
</tr>
</tbody>
</table>

**Total Hours** .................................................. **720**

*Students must complete two sections of COMP 9908-Computer & Web-based Applications Current Topics (MediSoft Level 1 and Level 2).*

*Exit Requirements.* Successful completion of all courses with a grade of “C” or higher. Typing 35 net wpm with no more than 10% error rate.

**Offered by:** Mission Center .......................... 551-1120

**Basic Computer Concepts Noncredit Certificate**

*Program Goal.* To develop basic competency skills using applications such as Microsoft Windows, email, searching the Internet and proper keyboarding techniques.

*Advisory Entrance Requirements.* Eligibility for noncredit ESL levels 5/6

*Learning Outcomes.*

Upon completion of the Basic Computer Concepts Noncredit Certificate, students will be able to:

- Keyboard a minimum of 20+ net words a minute.
- Use technology as a tool to complete essential business tasks.
- Use standard Internet and emailing practices.

*Courses Required for the Certificate of Completion in Basic Computer Concepts*  

<table>
<thead>
<tr>
<th>Courses</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BOSS 5500 Keyboarding for Computers</td>
<td>45</td>
</tr>
<tr>
<td><strong>One of the following options:</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Option 1</strong></td>
<td></td>
</tr>
<tr>
<td>COMP 9889 Intro to MS Office Appl for Business</td>
<td>90</td>
</tr>
<tr>
<td><strong>Option 2</strong></td>
<td></td>
</tr>
<tr>
<td>COMP 9905 Intro to Windows for MS Office Appl</td>
<td>45</td>
</tr>
<tr>
<td>COMP 9921 Intro to Internet for Office Support</td>
<td>45</td>
</tr>
<tr>
<td><strong>Total Hours</strong></td>
<td><strong>135</strong></td>
</tr>
</tbody>
</table>

*Exit Requirements.* Successful completion of all courses with a passing grade of “C” or higher. Typing 20+ wpm in a timed test with 90% accuracy (time test administered by keyboarding instructor and submitted with petition). Minimum attendance of 80% in all classes is required.

**Basic Word Processing Noncredit Certificate**

*Program Goal.* Develop basic employability in word processing skills to create typical business documents such as letters, memos and reports. Students learn basic editing and formatting skills, creating and formatting headers and footers, tables and references. Noncredit courses.

*Advisory Entrance Requirements.* Eligibility for noncredit ESL level 5/6

*Learning Outcomes.*

Upon completion of the Basic Word Processing Noncredit Certificate, students will be able to:

- Keyboard a minimum of 25 net words a minute.
- Perform fundamental operations using Microsoft Word.
• Use the mail merge task pane to create data sources, insert merge fields, and generate form letters.
• Utilize appropriate file management techniques.
• Demonstrate proper technique when keyboarding.

### Courses Required for the Certificate of Completion in Basic Word Processing

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BOSS 5500 Keyboarding for Computers</td>
<td>45</td>
</tr>
<tr>
<td>WOPR 9991 Microsoft Word Essentials I</td>
<td>15</td>
</tr>
<tr>
<td>WOPR 9993 Microsoft Word Essentials II</td>
<td>15</td>
</tr>
<tr>
<td>WOPR 9994 Microsoft Word Essentials III</td>
<td>15</td>
</tr>
</tbody>
</table>

**Option 2**

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>WOPR 9486 Microsoft Word for Business I</td>
<td>45</td>
</tr>
<tr>
<td>WOPR 9995 Microsoft Word for Business II</td>
<td>45</td>
</tr>
</tbody>
</table>

**Total Hours** ............... 90 – 135

### Advanced Word Processing Noncredit Certificate

**Program Goal.** Increase word processing competency in efficiently producing more complex documents (such as multi-page reports and brochures, mail merge documents, and simple web pages) using Microsoft Word. Noncredit courses.

**Learning Outcomes**

Upon completion of the Advanced Word Processing Noncredit Certificate, students will be able to:

• Key a minimum of 35 words per minute with 90% accuracy.
• Create a reference document using a master document and sub-document with table of contents and index.
• Create, edit, and run a macro.
• Design and use a template.

**Advisory Entrance Requirements.** Eligibility for noncredit ESL levels 5/6; Keyboarding 35 wpm net.

### Courses Required for the Certificate of Completion in Advanced Word Processing

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BOSS 5501 Keyboarding: Skill Development</td>
<td>15</td>
</tr>
<tr>
<td>or BOSS 5505 Keyboarding Quick</td>
<td>90</td>
</tr>
<tr>
<td>WOPR 9996 Microsoft Word for Business III</td>
<td>45</td>
</tr>
<tr>
<td>WOPR 9997 Word Processing - Special Projects</td>
<td>45</td>
</tr>
</tbody>
</table>

**Total Hours** ............... 105 – 180

### Business Office Publishing Basics Noncredit Certificate

**Program Goal.** To develop basic desktop publishing skills required in business. Noncredit courses.

**Advisory Entrance Requirements.** Eligibility for noncredit ESL levels 5/6

**Learning Outcomes**

Upon completion of the Business Office Publishing Basics Noncredit Certificate, students will be able to:

• Perform fundamental operations using MS Publisher.
• Use digital photo-editing software to enhance publications.
• Create basic office publications.

### Courses Required for the Certificate of Completion in Business Office Publishing Specialist Noncredit Certificate

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMP 9914 Desktop Publishing Advanced</td>
<td>45</td>
</tr>
<tr>
<td>COMP 9943 Special Projects using Publisher</td>
<td>45</td>
</tr>
<tr>
<td>COMP 9958 PhotoShop Elements II</td>
<td>15</td>
</tr>
<tr>
<td>or COMP 9959 PhotoShop Elements</td>
<td>45</td>
</tr>
</tbody>
</table>

**Total Hours** ............... 105 – 135

### Business Office Support Skills, Phase I Noncredit Certificate

**Program Goal.** Prepare students for entry-level office positions. Topics to be covered include basic skills in Microsoft Office applications (Windows and File Organization, Word, Excel, Access, and PowerPoint), Data Entry/10-Key, Customer Service, and general office procedures. Students who receive the certificate will be qualified to apply for such positions as: Office Clerk; Junior Office Assistant; Filing Clerk; Shipping and Receiving Clerk; Bank Teller; Desk Clerk; Call Center Representative; Appointment Setter; Receptionist, Customer Service/Dispatch Representative; Office Support; Data Entry Clerk; Legal Records Clerk; Cashier; Entry level Clerical Support; Financial Teller; Front Desk.

**Learning Outcomes**

Upon completion of the Business Office Support Skills, Phase I Noncredit Certificate, students will be able to:

• Demonstrate accurate keyboard input at a minimum of 30 words per minute and numeric data entry at 175 strokes per minute.
• Use Microsoft Office applications such as Word, Excel, Access, and PowerPoint to produce basic documents.
• Apply basic office procedures to routine office tasks.
• Demonstrate basic knowledge and skills to be successful in an entry-level office position.

**Advisory Entrance Requirements.** Eligibility for noncredit ESL levels 5/6
Courses Required for the Certificate of Completion in Business Office Skills, Phase I

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BOSS 3501 Customer Service Skills</td>
<td>15</td>
</tr>
<tr>
<td>BOSS 4503 Business English</td>
<td>90</td>
</tr>
<tr>
<td>BOSS 5501 Keyboarding-Skill Development</td>
<td>90</td>
</tr>
<tr>
<td>or BOSS 5502 Clerical Keyboarding</td>
<td>90</td>
</tr>
<tr>
<td>BOSS 5506 Computer Keyboarding: The Numeric Keypad</td>
<td>15</td>
</tr>
<tr>
<td>BOSS 5509 Office Procedures for the 21st Century</td>
<td>15</td>
</tr>
<tr>
<td>COMP 9889 Intro to MS Office Applications for Business and COMP 9951 PowerPoint OR ALL OF THE FOLLOWING</td>
<td>45</td>
</tr>
<tr>
<td>COMP 9952 Internet &amp; E-mail for the Business Office</td>
<td></td>
</tr>
<tr>
<td>COMP 9975 Microsoft Office Applications I</td>
<td></td>
</tr>
<tr>
<td>COMP 9976 Microsoft Office Applications II</td>
<td>105</td>
</tr>
</tbody>
</table>

Total Hours: 360

Exit Requirements. Successful completion of all courses with a grade of “C” or higher. Typing 30+ net wpm with no more than a 10% error rate.

Business Office Support Skills, Phase II Noncredit Certificate

Program Goal. Prepare students for mid- to high-level office positions. Topics to be covered include proficiency in Microsoft Office applications (Windows and File Organization, Word, Excel, Access, and PowerPoint).

Students who receive the certificate will be qualified to apply for such positions as: Office Manager; Mid/Senior Level Staff Assistant; Secretary/Personal Assistant; Assistant Manager; Administrative Assistant; Office Administrator; Legal Secretary; Bilingual receptionist; Executive Assistant; Data Management Secretary.

Learning Outcomes

Upon completion of the Business Office Support Skills, Phase II Noncredit Certificate, students will be able to:

- Demonstrate accurate keyboard input at a minimum of 50 words per minute.
- Use business application software such as Microsoft Word, Excel, Access, and PowerPoint to produce simple to complex documents.
- Demonstrate ability to communicate (both spoken and written) in a business office.

Advisory Entrance Requirements. Completion of Certificate of Competency in Business Office Support Skills, Phase I; Eligibility for noncredit ESL levels 7/8; type 30 wpm.

Courses Required for the Certificate of Completion in Business Office Skills, Phase II

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BOSS 4310 Business Communications or BOSS 4311 Effective Business Communication</td>
<td>45-90</td>
</tr>
<tr>
<td>BOSS 5500 Keyboarding Quick or BOSS 5501 Keyboarding - Skill Development or BOSS 5502 Clerical Keyboarding or BOSS 5503 Keyboarding All Levels</td>
<td>45-180</td>
</tr>
<tr>
<td>BOSS 5510 Document Formatting &amp; Production or both of the following: COMP 9941 Simulated Projects for MS Office Suite WOPR 9996 Microsoft Word for Business III</td>
<td>90</td>
</tr>
<tr>
<td>COMP 9909 Microsoft Excel for Business III</td>
<td>45</td>
</tr>
<tr>
<td>COMP 9910 Microsoft Access for Business II</td>
<td>45</td>
</tr>
<tr>
<td>COMP 9928 PowerPoint for Business II</td>
<td>45</td>
</tr>
<tr>
<td>COMP 9936 Using Outlook for Office Support Level 1</td>
<td>45</td>
</tr>
</tbody>
</table>

Total Hours: 360-540

Exit Requirements. Successful completion of all courses with a grade of “C” or higher. Typing 50+ net wpm with no more than a 10% error rate.

Business Web Pages-Basics Noncredit Certificate

Program Goal. To develop basic knowledge and skills in web page development that can be applied to an entry-level office position requiring basic web page knowledge.

Advisory Entrance Requirements. Eligibility for noncredit ESL levels 5/6

Learning Outcomes

- Apply computer skills to complete business tasks.
- Use a variety of business software including digital photo-editing, and web development.
- Perform fundamental operations using Adobe Dreamweaver.
- Perform fundamental operations using Adobe Photoshop Elements.
- Perform fundamental operations using Adobe Flash.

Courses Required for the Certificate of Completion in Business Web Pages-Basics

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMP 9917 Building Individual Web Sites (45) or COMP 9918 Building Business Web Sites</td>
<td>45</td>
</tr>
<tr>
<td>COMP 9949 Dreamweaver</td>
<td>15</td>
</tr>
<tr>
<td>COMP 9956 Introductory Flash for Bus/Office</td>
<td>15</td>
</tr>
</tbody>
</table>

One of the following Photoshop Elements options: Option 1

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMP 9957 PhotoShop Elements I</td>
<td>15</td>
</tr>
<tr>
<td>COMP 9958 PhotoShop Elements II</td>
<td>15</td>
</tr>
</tbody>
</table>

Option 2

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMP 9959 PhotoShop Elements</td>
<td>45</td>
</tr>
</tbody>
</table>

Total Hours: 105-120

Business Web Pages-Intermediate Noncredit Certificate

Program Goal. To develop a broader knowledge and skills base in business web page development that can be applied to an entry- or mid-level office position requiring web page skills.

Advisory Entrance Requirements. Eligibility for noncredit ESL levels 5/6

Learning Outcomes

- Use a variety of business software including digital photo-editing, and web development.
- Perform fundamental operations using Adobe Dreamweaver.
- Perform fundamental operations using Adobe Photoshop Elements.
- Create a business web site with a database connection.
- Use web graphic tools.
Courses Required for the Certificate of Completion in Business Web Pages-Intermediate

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMP 9999 Using Dreamweaver for Basic Business Web Pages</td>
<td>45</td>
</tr>
<tr>
<td>or COMP 9920 Using Web Expression for Web Pages</td>
<td>45</td>
</tr>
<tr>
<td>COMP 9959 Photoshop Elements</td>
<td>45</td>
</tr>
<tr>
<td>COMP 9933 Building Business Web Pages with Adobe Web Standard-Level I</td>
<td>45</td>
</tr>
<tr>
<td>COMP 9934 Building Business Web Pages with Adobe Web Standard-Level II</td>
<td>45</td>
</tr>
<tr>
<td>COMP 9935 Business Web Graphics</td>
<td>45</td>
</tr>
<tr>
<td>COMP 9922 Flash for Bus/Office Presentation</td>
<td>45</td>
</tr>
<tr>
<td>Total Hours</td>
<td>270</td>
</tr>
</tbody>
</table>

Clerical Support Specialist Noncredit Certificate

Program Goal. Prepare the student for entry-level general office support positions (such as receptionist, file clerk, information or general office clerk, data-entry clerk, shipping and receiving clerk). Students develop both the soft skills and hard skills required to work efficiently, productively and successfully in the modern business office.

Advisory Entrance Requirements: Eligibility for noncredit ESL Level 5/6; typing: 15–20 net wpm.

Learning Outcomes

- Keyboard a minimum of 40+ net words a minute.
- Utilize a variety of business applications software including word processing, spreadsheet, database.
- Actively assist in implementing general office procedure, including records management.
- Use the Internet and standard business procedures.
- Orally present information using appropriate language, style and format.

Courses Required for the Certificate of Completion in Clerical Support Specialist

<table>
<thead>
<tr>
<th>Courses</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>AAPS IIII Orientation to Noncredit Certificates and Programs</td>
<td>15</td>
</tr>
<tr>
<td>BOSS 5501 Keyboarding: Skill Development</td>
<td>90</td>
</tr>
<tr>
<td>BOSS 5510 Document Formatting &amp; Production</td>
<td>90</td>
</tr>
<tr>
<td>BOSS 5509 Office Procedures for the 21st Century</td>
<td>45</td>
</tr>
<tr>
<td>COMP 9245 Windows Essentials for MS Office</td>
<td>30</td>
</tr>
<tr>
<td>Office Applications</td>
<td>30</td>
</tr>
<tr>
<td>COMP 9952 Internet &amp; E-mail for the Business Office</td>
<td>15</td>
</tr>
<tr>
<td>WOPR 9486 Microsoft Word for Business I</td>
<td>45</td>
</tr>
<tr>
<td>WOPR 9995 Microsoft Word for Business II</td>
<td>45</td>
</tr>
<tr>
<td>BOSS 4503 Business English</td>
<td>45</td>
</tr>
<tr>
<td>or BOSS 4500 Business English - Level I</td>
<td>90</td>
</tr>
<tr>
<td>and BOSS 4501 Business English - Level II</td>
<td>90</td>
</tr>
<tr>
<td>BOSS 4511 Effective Business Communication</td>
<td>45</td>
</tr>
<tr>
<td>or BOSS 4510 Business Communications</td>
<td>90</td>
</tr>
<tr>
<td>ACBO 9200 Recordkeeping for the Business Office</td>
<td>45</td>
</tr>
<tr>
<td>or BOSS 5508 Advanced Office Procedures</td>
<td>45</td>
</tr>
<tr>
<td>for the 21st Century</td>
<td>45</td>
</tr>
<tr>
<td>COMP 9900 Microsoft Excel for Business I</td>
<td>45</td>
</tr>
<tr>
<td>COMP 9894 Microsoft Access Essentials I</td>
<td>15</td>
</tr>
<tr>
<td>COMP 9951 PowerPoint</td>
<td>15</td>
</tr>
<tr>
<td>COMP 9964 Microsoft Outlook Essentials</td>
<td>15</td>
</tr>
<tr>
<td>COMP 9957 Photoshop Elements I</td>
<td>15</td>
</tr>
</tbody>
</table>

BOSS 3500 Job Preparation or LERN 1062 Job Search Skills........ 15-45

Total Hours ........................................................................................................ 675–750

Exit Requirements. Successful completion of all courses with a passing grade. Typing 40+ net wpm in a timed test with 90% accuracy. Minimum attendance of 80% in all classes is required. Completion of certificate coursework within two years.


Computer Applications for Business Noncredit Certificate

Enrollment in Computer Applications for Business courses is for students interested in all levels of administrative positions including administrative office practices (keyboarding, computer literacy/applications, clerical and general office work, internet research, eBusiness and eOffice web technologies, scheduling and appointment systems, creating and organizing documents, and employee/customer relations). Studies will exit the program with Business English and Business Math skills.

Entrance Advisories. Eligibility for noncredit ESL Level 6+; typing 25 wpm.

Learning Outcomes

- Keyboard a minimum of 35 net words a minute.
- Apply standard business English to oral and written communication, including grammar, punctuation, mechanics, vocabulary, style and usage.
- Use a variety of applications software including word processing, spreadsheet, database, digital photo-editing.
- Apply computer skills to complete business tasks.

Courses Required for the Certificate of Completion in Computer Applications for Business

<table>
<thead>
<tr>
<th>Courses</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>AAPS IIII Orientation to Noncredit Certificates</td>
<td>15</td>
</tr>
<tr>
<td>COMP 5501 Keyboarding: Skill Development</td>
<td>90</td>
</tr>
<tr>
<td>COMP 9905 Intro to Windows for MS Office</td>
<td>90</td>
</tr>
<tr>
<td>OR ALL OF THE FOLLOWING: COMPA 9245 Windows Essentials for MS Office</td>
<td>45</td>
</tr>
<tr>
<td>COMP 9964 Microsoft Outlook Essentials</td>
<td>45</td>
</tr>
<tr>
<td>BOSS 3500 Job Preparation or LERN 1062 Job Search Skills</td>
<td>15-45</td>
</tr>
<tr>
<td>BOSS 4500 Business English II</td>
<td>45</td>
</tr>
<tr>
<td>BOSS 4510 Business Communications</td>
<td>45</td>
</tr>
<tr>
<td>BOSS 4503 Business English</td>
<td>45</td>
</tr>
<tr>
<td>or BOSS 4500 Business English - Level I</td>
<td>90</td>
</tr>
<tr>
<td>and BOSS 4501 Business English - Level II</td>
<td>90</td>
</tr>
<tr>
<td>BOSS 4511 Effective Business Communication</td>
<td>45</td>
</tr>
<tr>
<td>or BOSS 4510 Business Communications</td>
<td>90</td>
</tr>
<tr>
<td>ACBO 9200 Recordkeeping for the Business Office</td>
<td>45</td>
</tr>
<tr>
<td>or BOSS 5508 Advanced Office Procedures</td>
<td>45</td>
</tr>
<tr>
<td>for the 21st Century</td>
<td>45</td>
</tr>
<tr>
<td>COMP 9900 Microsoft Excel for Business I</td>
<td>45</td>
</tr>
<tr>
<td>COMP 9894 Microsoft Access Essentials I</td>
<td>15</td>
</tr>
<tr>
<td>COMP 9951 PowerPoint</td>
<td>15</td>
</tr>
<tr>
<td>COMP 9964 Microsoft Outlook Essentials</td>
<td>15</td>
</tr>
<tr>
<td>COMP 9957 Photoshop Elements I</td>
<td>15</td>
</tr>
<tr>
<td>COMP 9965 OpenOffice for Business I</td>
<td>45</td>
</tr>
<tr>
<td>COMP 9966 OpenOffice for Business II</td>
<td>45</td>
</tr>
<tr>
<td>COMP 9967 Google Apps for Business I</td>
<td>45</td>
</tr>
<tr>
<td>COMP 9968 Google Apps for Business II</td>
<td>45</td>
</tr>
<tr>
<td>WOPR 9486 Microsoft Word for Business I</td>
<td>45</td>
</tr>
<tr>
<td>WOPR 9995 Microsoft Word for Business II</td>
<td>45</td>
</tr>
<tr>
<td>COMP 9900 Microsoft Excel for Business I</td>
<td>45</td>
</tr>
</tbody>
</table>
Upon completion of this certificate, students will:

- Keyboard a minimum of 30+ net words a minute
- Use technology as a tool to complete essential business tasks
- Use appropriate conventions including format, grammar, punctuation, spelling, and paragraphing
- Identify the steps in the accounting cycle
- Qualify for entry-level positions in administrative support

Exit Requirements. Successful completion of all courses with a passing grade; typing 40 wpm in a timed test with 90% accuracy; hold a minimum attendance of 80% in all classes required; completion of certificate coursework within two years.


Construction Administrative Assistant Noncredit Certificate

Program Goal. Prepare students for entry level positions in the construction office. Students study the basic procedures of this industry, terminology, jobsite operation and management handling.

Students who complete this certificate will be better prepared for entry-level positions such as: Administrative Assistant; Project Coordinator; Receptionist.

Advisory Entrance Requirements: Eligibility for noncredit ESLN 3700; type 20 wpm.

Learning Outcomes

Upon completion of this certificate, students will:

- Keyboard a minimum of 30+ net words a minute
- Use technology as a tool to complete essential business tasks
- Use appropriate conventions including format, grammar, punctuation, spelling, and paragraphing
- Identify the steps in the accounting cycle
- Qualify for entry-level positions in administrative support

Excel Basics Noncredit Certificate

Program Goal. Essential Microsoft Excel skills are developed and practiced such that students establish a basic competency of and employability in working with Excel. Noncredit courses.

Advisory Entrance Requirements. Eligibility for noncredit ESL levels 5/6.

Learning Outcomes

- Perform fundamental operations using Microsoft Excel.
- Define basic spreadsheet concepts and terms.
- Use simple macros, formulas, functions, and lists.

Courses Required for the Certificate of Completion in Excel Basics

<table>
<thead>
<tr>
<th>Courses</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Option 1</td>
<td></td>
</tr>
<tr>
<td>COMP 9900 Microsoft EXCEL-Beginning</td>
<td>45</td>
</tr>
<tr>
<td>COMP 9904 Microsoft EXCEL-Intermediate</td>
<td>45</td>
</tr>
<tr>
<td>Option 2</td>
<td></td>
</tr>
<tr>
<td>COMP 9867 Microsoft Excel Essentials I</td>
<td>15</td>
</tr>
<tr>
<td>COMP 9895 Microsoft Excel Essentials II</td>
<td>15</td>
</tr>
<tr>
<td>COMP 9888 Microsoft Excel Essentials III</td>
<td>15</td>
</tr>
<tr>
<td>Total Hours</td>
<td>45-90</td>
</tr>
</tbody>
</table>

Excel Specialist Noncredit Certificate

Program Goal. Advanced Microsoft Excel skills are developed and practiced such that students gain a solid competency of Excel and are capable of passing employment testing in this area. Noncredit courses.

Advisory Entrance Requirements. Eligibility for noncredit ESL levels 5/6.

Learning Outcomes

- Perform complex operations using Microsoft Excel.
- Integrate Microsoft Excel with accounting principles.
- Use spreadsheet software to make everyday business calculations.
- Create financial statements using Microsoft Excel.

Courses Required for the Certificate of Completion in Excel Specialist

<table>
<thead>
<tr>
<th>Courses</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMP 9909 Microsoft Excel for Business III</td>
<td>45</td>
</tr>
<tr>
<td>COMP 9932 Excel for Accounting</td>
<td>45</td>
</tr>
</tbody>
</table>
BOSS 2500 Business Math w/Excel .......... 45 – 90
Total Hours ................................ 135 – 180

**Microsoft Office Specialist Noncredit Certificate**

**Program Goal.** Prepares the student for entry-level clerical positions requiring the use of Microsoft Office applications. The student learns and develops the core competencies of Microsoft Word, Excel, Access, Outlook and PowerPoint while progressing through the various levels of each application.

**Advisory Entrance Requirements.** Eligibility for noncredit ESL 5/6; typing: 25 net wpm.

**Learning Outcomes**

Upon completion of the Microsoft Office Specialist Noncredit Certificate, students will be able to:

- Qualify for an entry level clerical position.
- Keyboard a minimum of 35 net words a minute.
- Develop and produce presentations utilizing electronic media and printed documents.
- Use a variety of business applications software including word processing, spreadsheet, presentation, and database.
- Use technology as a tool to complete essential business tasks.

**Courses Required for the Certificate of Completion in Microsoft Office Specialist**

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>AAPS IIII Orientation to Noncredit Certificates</td>
<td>15</td>
</tr>
<tr>
<td>and Programs</td>
<td></td>
</tr>
<tr>
<td>BOSS 5500 Keyboarding for Computers</td>
<td>45</td>
</tr>
<tr>
<td>BOSS 5510 Document Formatting &amp; Production</td>
<td>90</td>
</tr>
<tr>
<td>WOPR 9486 Microsoft Word for Business I</td>
<td>45</td>
</tr>
<tr>
<td>WOPR 9995 Microsoft Word for Business II</td>
<td>45</td>
</tr>
<tr>
<td>WOPR 9996 Microsoft Word for Business III</td>
<td>45</td>
</tr>
<tr>
<td>COMP 9900 Excel-Beginning</td>
<td>45</td>
</tr>
<tr>
<td>COMP 9904 Excel-Intermediate</td>
<td>45</td>
</tr>
<tr>
<td>COMP 9909 Microsoft Excel for Business III</td>
<td>45</td>
</tr>
<tr>
<td>COMP 9901 Microsoft Access for Business I</td>
<td>45</td>
</tr>
<tr>
<td>COMP 9910 Microsoft Access for Business II</td>
<td>45</td>
</tr>
<tr>
<td>COMP 9936 Using Outlook for Office Support, Lvl I</td>
<td>45</td>
</tr>
<tr>
<td>COMP 9928 Powerpoint for Business</td>
<td>45</td>
</tr>
<tr>
<td>Plus (1) Elective from the following:</td>
<td></td>
</tr>
<tr>
<td>COMP 9940 Excel Special Topics-Beyond Adv</td>
<td>45</td>
</tr>
<tr>
<td>WOPR 9997 Word Processing-Special Projects</td>
<td>45</td>
</tr>
<tr>
<td>COMP 9938 Publisher for Business</td>
<td></td>
</tr>
<tr>
<td>Desktop Publishing</td>
<td>45</td>
</tr>
<tr>
<td>Total Hours</td>
<td>645</td>
</tr>
</tbody>
</table>

**Exit Requirements:** Successful completion of all courses with a passing grade. Typing: 35+ wpm in a timed test with 90% accuracy. Minimum attendance of 80% in all classes is required. Completion of certificate coursework within three consecutive semesters.

**Financial Assistance:** The Microsoft Office Specialist Certificate Program is eligible for financial assistance. Please consult a counselor for further information.

**Office Receptionist Noncredit Certificate**

**Program Goal.** Prepare students for entry-level front office desk positions. Topics to be covered include Microsoft Office applications (Word, Excel, PowerPoint, Access, and Outlook), data entry, general office procedures, customer service skills, business letters, and email composition.

Students who receive the certificate will be qualified to apply for such positions as: Receptionist, Customer Service Representative, General Office Clerk, or Clerical Support Specialist.

**Advisory Entrance Requirements.** Completion of noncredit ESL levels 7 or placement in ESL level 8.

**Learning Outcomes**

Upon completion of this certificate students will:

- Keyboard a minimum of 35 net words a minute.
- Use technology (the Internet, Microsoft Windows, Word, Excel, Access, PowerPoint and Outlook) as a tool to complete essential business tasks.
- Demonstrate proficiency in answering phones, assisting customers, scheduling appointments, responding to email, and handling incoming and outgoing mail and packages.
- Use appropriate writing conventions including formatting, grammar, punctuation, and spelling.
- Qualify for entry-level clerical positions as indicated above.

**Courses Required for the Certificate of Completion in Office Receptionist**

<table>
<thead>
<tr>
<th>Courses</th>
<th>Course Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>AAPS IIII Orientation to Noncredit Certificate Programs</td>
<td>15</td>
</tr>
<tr>
<td>BOSS 3502 Customer Services Principles</td>
<td>45</td>
</tr>
<tr>
<td>BOSS 4500 Business English, Level I</td>
<td>45</td>
</tr>
<tr>
<td>BOSS 4511 Effective Business Communication</td>
<td>90</td>
</tr>
<tr>
<td>BOSS 5501 Keyboarding-Skill Development</td>
<td>90</td>
</tr>
<tr>
<td>BOSS 5509 Office Procedures for the 21st Century</td>
<td>45</td>
</tr>
<tr>
<td>BOSS 5510 Document Formatting and Production</td>
<td>90</td>
</tr>
<tr>
<td>COMP 9900 Microsoft Excel for Business I</td>
<td>45</td>
</tr>
<tr>
<td>COMP 9928 PowerPoint for Business</td>
<td>45</td>
</tr>
<tr>
<td>COMP 9947 Windows File and Folder Concepts</td>
<td>15</td>
</tr>
<tr>
<td>COMP 9952 Internet and Email for the Business Office</td>
<td>15</td>
</tr>
<tr>
<td>COMP 9964 Microsoft Outlook Essentials</td>
<td>15</td>
</tr>
<tr>
<td>COMP 9894 Microsoft Access Essentials I</td>
<td>15</td>
</tr>
<tr>
<td>WOPR 9486 Microsoft Word for Business I</td>
<td>45</td>
</tr>
<tr>
<td>Electives (30 Hours Minimum)</td>
<td></td>
</tr>
<tr>
<td>ACP 2126 Recordkeeping for the Business Office</td>
<td>45</td>
</tr>
<tr>
<td>BOSS 4501 Business English, Level II</td>
<td>45</td>
</tr>
<tr>
<td>BOSS 5508 Advanced Office Procedures</td>
<td>45</td>
</tr>
<tr>
<td>COMP 9921 Intro to the Internet for Office Support</td>
<td>45</td>
</tr>
<tr>
<td>COMP 9949 Dreamweaver</td>
<td>15</td>
</tr>
<tr>
<td>COMP 9957 Photoshop Elements I</td>
<td>15</td>
</tr>
<tr>
<td>COMP 9904 Microsoft Excel for Business II</td>
<td>45</td>
</tr>
<tr>
<td>WOPR 9995 Microsoft Word for Business II</td>
<td>45</td>
</tr>
<tr>
<td>Total Hours</td>
<td>645-660</td>
</tr>
</tbody>
</table>

**Exit Requirements:** Successful completion of all courses with a grade of “C” or higher.

**Typing.** 35 wpm in a timed test with 90% accuracy. Minimum attendance of 80% in all courses.

**Financial Assistance.** The Office Receptionist Certificate Program may be eligible for financial assistance. Please consult a counselor for further information.

**PowerPoint Specialist Noncredit Certificate**

**Program Goal.** Prepare students for various highly technical duties required in administrative support. The PowerPoint Specialist will create presentations with enhanced visual elements, integrate data with Excel or Word, proofread; perform duties such as grammar, spelling, and data accuracy.
Advisory Entrance Requirements. Completion of noncredit ESL levels 7 or placement in ESL level 8.

Learning Outcomes
Upon completion of this certificate, students will be able to:

- Use Microsoft Office applications with Photoshop Elements to create professional presentations.
- Integrate Microsoft Office applications efficiently to produce effective marketing presentations.
- Use technology as a tool to complete essential business tasks.

Courses Required for the Certificate of Completion in PowerPoint Specialist

<table>
<thead>
<tr>
<th>Courses</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BOSS 5509 Office Procedures for the 21st Century</td>
<td>45</td>
</tr>
<tr>
<td>COMP 9899 Desktop Publishing I</td>
<td>45</td>
</tr>
<tr>
<td>COMP 9900 Excel for Business I</td>
<td>45</td>
</tr>
<tr>
<td>COMP 9919 Using Dreamweaver for Basic Business Web Pages or COMP 9920 Using SharePoint Designer</td>
<td>45</td>
</tr>
<tr>
<td>COMP 9928 PowerPoint for Business</td>
<td>45</td>
</tr>
<tr>
<td>COMP 9959 Photoshop Elements</td>
<td>45</td>
</tr>
<tr>
<td>COMP 9969 Dynamic PowerPoint for Business</td>
<td>45</td>
</tr>
</tbody>
</table>

Elective Courses: Choose one of the following:
- ACBO 9208 QuickBooks Level I | 45 |
- BOSS 3502 Customer Service Skills | 45 |
- BOSS 4500 Keyboarding for Computers | 45 |
- BOSS 5508 Advanced Office Procedures | 45 |
- COMP 9904 Microsoft Excel for Business II | 45 |
- COMP 9914 Desktop Publishing Advanced | 45 |
- COMP 9922 Flash for Bus/Office Presentation | 45 |

Total Hours | 360

Exit Requirements. Successful completion of all courses with a grade of "C" or higher. Minimum attendance of 80% in all classes is required.

Finance

Finance Major (AS)
The two-year program leading to the Associate in Science degree is primarily designed for those planning to enter the financial services industry in entry-level or operational positions and those in the industry seeking advancement. The program is also meant for those students wishing to gain knowledge about the discipline of finance before transferring to a four-year college or university.

Learning Outcomes
- Demonstrate competence in core skills (Math, Accounting and Technology) as applied to financial analyses
- Use effective and suitable oral and written communications
- Demonstrate knowledge of the functions and operations of financial markets, institutions and instruments
- Analyze and manage risk
- Value real and financial assets, at the personal and company level
- Make investment decisions, incorporating the appropriate use of credit

Courses Required for the Certificate of Achievement in Finance

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>First Semester</td>
<td></td>
</tr>
<tr>
<td>FIN 130 (fall only) Prin of Bank Operations</td>
<td>3</td>
</tr>
<tr>
<td>BSMA 66 Bus Math</td>
<td></td>
</tr>
<tr>
<td>or BSMA 68 Math for Bus</td>
<td></td>
</tr>
<tr>
<td>or MATH 75 Math Analysis for Bus</td>
<td></td>
</tr>
<tr>
<td>or MATH 90 Advanced Algebra*</td>
<td>3 – 5</td>
</tr>
<tr>
<td>GNBS 119 Intro to Business</td>
<td>3</td>
</tr>
<tr>
<td>Second Semester</td>
<td></td>
</tr>
<tr>
<td>FIN 133 (spring only) Money &amp; Banking</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 10 or ACCT 1 Intro to Acct or Fin Acct</td>
<td>4</td>
</tr>
<tr>
<td>ECON 1 Principles of Macroeconomics*</td>
<td>3</td>
</tr>
<tr>
<td>MABS 60 Intro to Computer Appl. for Business</td>
<td>3</td>
</tr>
<tr>
<td>Third Semester</td>
<td></td>
</tr>
<tr>
<td>FIN 136 Intro to Fin Planning</td>
<td>3</td>
</tr>
<tr>
<td>MABS 101 Spreadsheets for Bus/Excel</td>
<td>3</td>
</tr>
<tr>
<td>One elective from those listed below†</td>
<td>3</td>
</tr>
<tr>
<td>Fourth Semester</td>
<td></td>
</tr>
<tr>
<td>FIN 138 Principles of Investment</td>
<td>3</td>
</tr>
<tr>
<td>MABS 67 or CS 101 Database for Bus/Access for Windows or Intro to Information Systems</td>
<td>3</td>
</tr>
<tr>
<td>MRKT 122 Professional Selling or MRKT 140 Principles of Marketing</td>
<td>3</td>
</tr>
<tr>
<td>One elective from those listed below†</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Units | 43 – 45

* Required program courses that fulfill General Education Requirements

† Students wishing to transfer to a four-year university may substitute those courses meeting that requirement from the required electives.

Electives: BSEN 74, SMBS 135, FIN 110, RE 181, RE 186, SUPV 231, ACCT 2, BSL 1, ECON 3, INTR 170

Finance Certificate
The Certificate of Achievement curriculum is designed for students who desire recognition for completing a rigorous course of study in financial services skills but who may not be interested in pursuing a degree. Students completing the curriculum with an average final grade point of C+ or higher (2.5 GPA) will receive the Certificate of Achievement in Finance.

Learning Outcomes
- Demonstrate competence in core skills (Math, Accounting and Technology) as applied to financial analyses
- Use effective and suitable oral and written communications
- Demonstrate knowledge of the functions and operations of financial markets, institutions and instruments
- Analyze and manage risk
- Value real and financial assets, at the personal and company level
- Make investment decisions, incorporating the appropriate use of credit

Courses Required for the Certificate of Achievement in Finance

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>First Semester</td>
<td></td>
</tr>
<tr>
<td>FIN 110 (fall only) Prin of Risk Management</td>
<td>3</td>
</tr>
<tr>
<td>FIN 130 (fall only) Prin of Bank Operations</td>
<td>3</td>
</tr>
<tr>
<td>FIN 136 Intro to Fin Planning</td>
<td>3</td>
</tr>
</tbody>
</table>
Courses Required for the Major in General Business

GNBS 119 Intro to Business .......................... 3
MABS 101 Spreadsheets for Bus/Excel .................. 3

Second Semester
ECON 1 Principles of Macroeconomics ................. 3
FIN 133 (spring only) Money & Banking ................ 3
FIN 138 Principles of Investments ........................ 3
MABS 67 or CS 101 Database for Bus/Access for
Windows or Intro to Information Systems .............. 3
MRKT 122 or 140 Professional Selling .................. 3
Total Units ........................................... 30

General Business

General Business Major (AS)

This field of concentration allows students to earn the Associate.
Degree while partially preparing them for transfer into the Business
Administration major at a four year college or university. In addi-
tion, it prepares the student for an entry level position in any business
office. Students who complete the curriculum in the major receive the
Associate in Science degree in General Business.

Learning Outcomes

Upon completion of this certificate, students will be able to:

- Use business terms and concepts related to functional areas of
  business including: marketing, finance, human resources, man-
  agement, operations, accounting, economics and international
  business.
- Examine the external forces (social, economic, technological,
  competitive and regulatory) that impact business decisions.
- Develop and exhibit high standards of professional practice,
  demonstrating awareness of ethical and social responsibili-
  ties in today’s multi-cultural, team-oriented, rapidly-changing
  environment.
- Critically evaluate, analyze and interpret information to solve
  problems and make business decisions.
- Analyze the Impact of Globalization on Business and the
  Diverse World of Global Business.

Courses Required for the Major in General Business

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>GNBS 119 Introduction to Business</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 1 Financial Accounting</td>
<td>4</td>
</tr>
<tr>
<td>ACCT 2 Managerial Accounting</td>
<td>4</td>
</tr>
<tr>
<td>ECON 1 Principles of Macroeconomics</td>
<td>3</td>
</tr>
<tr>
<td>ECON 3 Principles of Microeconomics</td>
<td>3</td>
</tr>
<tr>
<td>ECON 5 Introduction to Statistics</td>
<td>4</td>
</tr>
<tr>
<td>MABS 60 Intro to Computer Appl. for Bus</td>
<td>3</td>
</tr>
<tr>
<td>BSL 1 Business Law</td>
<td>3</td>
</tr>
<tr>
<td>Total Units</td>
<td>27</td>
</tr>
</tbody>
</table>

Recommended Additional Coursework: . BSEN 74, SPCH 1A, BSMA
68, MABS 101 SMBS 135, FIN 136, ECON 10, MATH 110A, MATH 75.

Additional graduation requirements
Satisfies General Education Breadth Requirements

Green Business

Green & Sustainable Business Certificate

Companies are looking at green business initiatives as a means of
reducing costs, meeting government mandates, and to meet customer
expectations. This certificate will provide students of all business disci-
plines an essential overview of green business concepts.

Learning Outcomes

Upon completion of this certificate, students will be able to:

- Classify the major business sectors and the environmental pro-
  file and impact of each
- Plan and implement processes and technology to improve their
  environmental profile and profitability
- Define the role each department within a company plays in
  making a company greener and more sustainable

Requirement for the Certificate of Accomplishment. Students may
obtain the Certificate of Accomplishment in Green Business by com-
pleting each of the following courses with a final grade of “C” or higher

Courses Required for the Certificate of Accomplishment in Green and
Sustainable Business:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>GNBS 119 Introduction to Business</td>
<td>3</td>
</tr>
<tr>
<td>GNBS 125 Green and Sustainable Business</td>
<td>3</td>
</tr>
</tbody>
</table>
**Marketing**

**Marketing Major (AS)**

**Degree Curriculum**
The Curriculum in Marketing, a two-year course of study, offers students interested in careers in advertising, professional sales, marketing research, marketing management, promotion, and other marketing jobs specialized training for career advancement and employment. The Marketing curriculum combines classroom instruction, practical experiences, coordinated part-time employment, and internships.

**Learning Outcomes**
Upon completion of this major, students will be able to:
- Create an integrated marketing communications plan which includes promotional strategies and measures of effectiveness
- Identify core concepts of marketing and the role of marketing in business and society
- Formulate marketing strategies that incorporate psychological and sociological factors which influence consumers
- Analyze marketing problems and provide solutions based on a critical examination of marketing information
- Apply marketing knowledge and skills to real-world experiences on the job

**Courses Required for the Major in Marketing**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BSMA 66 or 68 Mathematics for Business</td>
<td>4 or 3</td>
</tr>
<tr>
<td>INTR 163 International Marketing</td>
<td>3</td>
</tr>
<tr>
<td>MRKT 122 Fundamentals of Salesmanship</td>
<td>3</td>
</tr>
<tr>
<td>MRKT 140 Principles of Marketing</td>
<td>3</td>
</tr>
<tr>
<td>MRKT 145 Computer Mktng Application</td>
<td></td>
</tr>
<tr>
<td>MRKT 148 Marketing Management &amp; Supervision</td>
<td>3</td>
</tr>
<tr>
<td>MRKT 150 Consumer Behavior</td>
<td>3</td>
</tr>
<tr>
<td>MRKT 170 Fundamentals of Advertising</td>
<td>3</td>
</tr>
<tr>
<td>SMBS 135 Ownership/Operation of Small Business</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>27–28</strong></td>
</tr>
</tbody>
</table>

**Recommended Additional Coursework:** BSEN 70, 74; CS 101; PSYC 1, 26; SPCH 11, 12; ACCT 1 or 10.

**Marketing Certificate**

Students may receive a Certificate of Achievement in Marketing by completing the following courses with a final grade of “C” or better:

**Learning Outcomes**
Upon completion of the Marketing Certificate, students will be able to:
- Create an integrated marketing communications plan which includes promotional strategies and measures of effectiveness
- Identify core concepts of marketing and the role of marketing in business and society
- Formulate marketing strategies that incorporate psychological and sociological factors which influence consumers
- Analyze marketing problems and provide solutions based on a critical examination of marketing information
- Apply knowledge and skills to real-world experiences on the job

**Courses Required for the Certificate of Achievement in Marketing**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BSMA 66 or 68 Bus Math or Math of Bus</td>
<td>4 or 3</td>
</tr>
<tr>
<td>INTR 163 International Marketing</td>
<td>3</td>
</tr>
<tr>
<td>MRKT 122 Salesmanship</td>
<td>3</td>
</tr>
<tr>
<td>MRKT 140 Marketing</td>
<td>3</td>
</tr>
<tr>
<td>MRKT 145 Computer Mktng Appl</td>
<td>3</td>
</tr>
<tr>
<td>MRKT 148 Mktng Mgmt &amp; Supervision</td>
<td>3</td>
</tr>
<tr>
<td>MRKT 150 Consumer Behavior</td>
<td>3</td>
</tr>
<tr>
<td>MRKT 170 Advertising</td>
<td>3</td>
</tr>
<tr>
<td>SMBS 135 Small Business</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>27–28</strong></td>
</tr>
</tbody>
</table>

**Recommended Additional Coursework:** BSEN 70, 74; CS 101; PSYC 1, 26; SPCH 11, 12; ACCT 1 or 10.

**Paralegal/Legal Studies**

**Paralegal/Legal Studies Major (AS)**
The work of a paralegal has been recognized by the American Bar Association, state bars, and local bar associations as an important step in helping the legal profession meet the increasing demand for its
services and in providing these services more efficiently and promptly. Today’s law offices seek paralegals qualified to do certain work under the supervision of an attorney. NOTE: Paralegals may not provide legal services directly to the public except as permitted by law.

**Associate in Science Degree**

City College of San Francisco trains students in a two-year course of study in Paralegal/Legal Studies. The course of study is designed so that students may satisfy the general education requirements and paralegal course requirements for graduation from the College. Students who satisfy graduation requirements and the courses in Paralegal/Legal Studies with a letter grade of “C” or higher receive the degree of Associate in Science with a Major in the Paralegal/Legal Studies. Students will also be eligible to receive a Certificate of Achievement provided that they complete all courses in the Paralegal/Legal Studies Program with a letter grade of “C” or higher. IMPORTANT NOTE: The paralegal certificate is ONLY awarded upon completion of the general education requirements for the Associate’s degree.

**Admission.** Enrollment is open to all students who are admitted to City College of San Francisco and who have satisfied the prerequisites listed next to each course before enrolling in that course. Students entering the degree program must have placed into ENGL 1A or completed ENGL 96 with a final grade of “C” or higher.

**Coursework Transfer.** Coursework Transfer. Students may transfer up to 12 units of paralegal courses completed at an ABA-approved paralegal program OR at an accredited college or university in the United States provided that (1) the courses are similar in content and contact hours to our existing courses and (2) the letter grade earned in such courses was a C or higher. Courses completed in law school are not acceptable as these courses do not emphasize or teach paralegal skills. Students transferring coursework completed at another school must furnish an official transcript.

**Employment.** Those who complete the curriculum satisfactorily are qualified for employment as paralegals in law offices, government offices, and other businesses.

**Description of the Major.** The course of study includes instruction in the following: introduction to paralegal studies; civil litigation; commercial law; tort law; wills, trusts, and probate administration; family law; civil and criminal evidence; legal research and writing; law office management and procedures; real estate law; environmental law; family law; medical law; debtors’ rights and creditors’ remedies; corporate law; intellectual property law; immigration law; communications law; and work experience.

**General Education Requirements for ABA Certification.** The Paralegal/Legal Studies Program is applying for approval from the American Bar Association ("ABA"). The ABA has general requirements that are different than those required by CCSF. In preparation to meet these general education requirements, students must see the Paralegal/Legal Studies Program Coordinator about the general education courses that are acceptable to the ABA. Please call 415/239-3508 to speak to the Paralegal/Legal Studies Program Coordinator. Currently, the ABA does NOT accept courses approved for CCSF’s General Education areas as follows:

- **Area A.** Business Mathematics, Computer Science, Design, Microcomputer Applications for Business, and Supervision and Management
- **Area C.** Nutrition and Ornamental Horticulture
- **Area D.** Academic Achievement Personal Success, Health Education, and Physical Education
- **Area E.** Design

**Area G.** Culinary Arts, Health Education, Nutrition, and Physical Education

**Area H.** Health Education, Physical Education, and Supervision and Business Management

**Learning Outcomes**

Upon completion of this degree, students will be able to:

- Write and communicate in formats acceptable in today’s law offices.
- Locate, read, and analyze the law.
- Respond appropriately to issues facing today’s legal professionals.
- Prepare and file pleadings in both the federal and California court systems.
- Function within a law office, use law office software, and interact professionally with clients, employers, co-workers, and third parties.

In addition, students will learn practical skills in law office software and business practice as well as receive instruction in the areas of substantive law. Writing and ethics are taught across the curriculum.

**Courses Required for the Major in Paralegal/Legal Studies**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PLS 1 Intro to Paralegal Studies (formerly L A 51)</td>
<td>3</td>
</tr>
<tr>
<td>PLS 2 Legal Research and Writing I</td>
<td>3</td>
</tr>
<tr>
<td>BSL 1 Business Law</td>
<td>3</td>
</tr>
<tr>
<td>PLS 3 Legal Research &amp; Writing II</td>
<td>3</td>
</tr>
<tr>
<td>PLS 4 Litigation I</td>
<td>3</td>
</tr>
<tr>
<td>BSL 2 Business Law 2</td>
<td>3</td>
</tr>
<tr>
<td>PLS 5 Litigation II</td>
<td>3</td>
</tr>
<tr>
<td>PLS 6 Law Office Management and Procedures</td>
<td>3</td>
</tr>
</tbody>
</table>

**Elective Courses: Choose 12 units from the following**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PLS 7 Corporate Law</td>
<td>3</td>
</tr>
<tr>
<td>PLS 9 Wills, Trusts, and Probate Administration</td>
<td>3</td>
</tr>
<tr>
<td>PLS 10 Environmental Law</td>
<td>3</td>
</tr>
<tr>
<td>PLS 11 Debtors’ Rights and Creditors’ Remedies</td>
<td>3</td>
</tr>
<tr>
<td>PLS 12 Family Law</td>
<td>3</td>
</tr>
<tr>
<td>PLS 13 Intellectual Property</td>
<td>3</td>
</tr>
<tr>
<td>PLS 14 Immigration Law</td>
<td>3</td>
</tr>
<tr>
<td>PLS 15 Medical Law</td>
<td>3</td>
</tr>
<tr>
<td>PLS 16 Paralegal Work Experience</td>
<td>3</td>
</tr>
<tr>
<td>PLS 17 Communications Law</td>
<td>3</td>
</tr>
<tr>
<td>PLS 18 Paralegal Work Experience</td>
<td>2</td>
</tr>
<tr>
<td>PLS 19 Paralegal Work Experience</td>
<td>1</td>
</tr>
</tbody>
</table>

**Total Units** | 36

**Paralegal/Legal Studies Certificate**

The program of study for the Certificate of Achievement in Paralegal/Legal Studies complies with the requirements established under current California law to become a paralegal. The program is designed to prepare students for employment as paralegals. NOTE: Paralegals may not provide legal services directly to the public except as permitted by law.

**Admission.** Enrollment is open to all interested students who already hold a college degree OR who have completed 30 units of general education or law-related courses with a 2.00 grade point average or higher at an accredited, post-secondary school PRIOR TO admission into our paralegal program. Students entering the certificate program must have placed into ENGL 1A or completed ENGL 96 with a final grade of “C” or higher.
Coursework Transfer. Students may transfer up to 12 units of paralegal courses completed at an ABA-approved paralegal program or at an accredited college or university in the United States provided that (1) the courses are similar in content and contact hours to our existing courses and (2) the letter grade earned in such courses was a C or higher. Courses completed in law school are not acceptable as these courses do not emphasize or teach paralegal skills. Students transferring coursework completed at another school must furnish and official transcript.

Employment. Those who complete the curriculum satisfactorily are qualified for employment as paralegals in law offices, government offices, and other businesses.

Description of the Certificate. The course of study includes instruction in the following: introduction to paralegal studies; civil litigation; commercial law; tort law; wills, trusts, and probate administration; family law; civil and criminal evidence; legal research and writing; law office management and procedures; real estate law; environmental law; family law; medical law; debtors' rights and creditors' remedies; corporate law; intellectual property law; immigration law; communications law; and work experience.

All courses must be taken within a 4-year period.

Learning Outcomes
Upon completion of this degree, students will be able to:

- Write and communicate in formats acceptable in today's law offices.
- Locate, read, and analyze the law.
- Respond appropriately to issues facing today's legal professionals.
- Prepare and file pleadings in both the federal and California court systems.
- Function within a law office, use law office software, and interact professionally with clients, employers, co-workers, and third parties.

In addition, students will learn practical skills in law office software and business practice as well as receive instruction in the areas of substantive law. Writing and ethics are taught across the curriculum.

Courses Required for the Certificate of Achievement in Paralegal/Legal Studies

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PLS 1 Intro to Paralegal Studies (formerly L.A. 51)</td>
<td>3</td>
</tr>
<tr>
<td>PLS 2 Legal Research and Writing I</td>
<td>3</td>
</tr>
<tr>
<td>BSL 1 Business Law</td>
<td>3</td>
</tr>
<tr>
<td>PLS 3 Legal Research &amp; Writing II</td>
<td>3</td>
</tr>
<tr>
<td>PLS 4 Litigation I</td>
<td>3</td>
</tr>
<tr>
<td>BSL 2 Business Law 2</td>
<td>3</td>
</tr>
<tr>
<td>PLS 5 Litigation II</td>
<td>3</td>
</tr>
<tr>
<td>PLS 6 Law Office Management and Procedures</td>
<td>3</td>
</tr>
</tbody>
</table>

Elective Courses: Choose 6 units from the following

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PLS 7 Corporate Law</td>
<td>3</td>
</tr>
<tr>
<td>PLS 9 Wills, Trusts, and Probate Administration</td>
<td>3</td>
</tr>
<tr>
<td>PLS 10 Environmental Law</td>
<td>3</td>
</tr>
<tr>
<td>PLS 11 Debtors’ Rights and Creditors’ Remedies</td>
<td>3</td>
</tr>
<tr>
<td>PLS 12 Family Law</td>
<td>3</td>
</tr>
<tr>
<td>PLS 13 Intellectual Property</td>
<td>3</td>
</tr>
<tr>
<td>PLS 14 Immigration Law</td>
<td>3</td>
</tr>
<tr>
<td>PLS 15 Medical Law</td>
<td>3</td>
</tr>
<tr>
<td>PLS 16 Paralegal Work Experience</td>
<td>3</td>
</tr>
</tbody>
</table>

PLS 17 Communications Law .......................... 3
PLS 18 Paralegal Work Experience ................ 2
PLS 19 Paralegal Work Experience ................ 1

Total Units ........................................ 30

Real Estate

California Real Estate Major (AS)

The curriculum in Real Estate, a two-year course of study, is designed to give students a sound foundation in theory and practice so that they may hold a salaried position while they prepare for specialized real estate work, and to help them obtain the California real estate salesperson’s license. The curriculum is sponsored by the Department of Real Estate of the State of California, the California Association of Realtors, and the San Francisco Board of Realtors.

Entry positions open to graduates who pass the California State examination for a salesperson’s or broker’s license include those of sales agent, rental agent, or property manager for a bank or land-development company; or in the property department of a corporation, a savings-and-loan company, or an insurance company. Graduates may also search titles and close transactions in the escrow departments of any of these establishments or for escrow companies.

Students interested in obtaining a real estate salesperson’s or a broker’s license may obtain information by telephoning the Oakland office of the State of California Department of Real Estate at (510) 622-2552.

The course of study includes instruction in the following: principles of real estate, real estate practice, real estate economics and investments, legal aspects of real estate, principles of real estate appraisal, and principles of real estate finance.

Students who complete the Curriculum in Real Estate with an average final grade of "C" plus (2.50 grade-point average) or higher receive the degree of Associate in Science and the California Real Estate Certificate.

Learning Outcomes

Upon successful completion of the program, students will be able to:

- Apply the principles and practice of real estate in California.
- Apply critical thinking and analytical skills of California real estate concepts.
- Demonstrate knowledge of California real estate contracts, disclosures and procedures.
- Demonstrate understanding and commitment to real estate ethics as outlined in business and professional code of conduct.
- Analyze and evaluate the financial suitability of real estate opportunities.
- Work in real estate office or transfer to four year college.

Students must satisfy the City College graduation requirements and must complete the following courses:

Courses Required for the Major in California Real Estate

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>RE 181 Principles of Real Estate</td>
<td>3</td>
</tr>
<tr>
<td>RE 184 Real Estate Practice</td>
<td>3</td>
</tr>
<tr>
<td>RE 185 Legal Aspects of Real Estate</td>
<td>3</td>
</tr>
<tr>
<td>RE 186 Principles of Real Estate Finance</td>
<td>3</td>
</tr>
<tr>
<td>RE 189 Real Estate Economics</td>
<td>3</td>
</tr>
<tr>
<td>RE 191 Principles of Real Estate Appraisal</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Units ........................................ 18
California Real Estate Certificate

The California Real Estate Certificate is currently awarded by 90 community colleges in California. City College of San Francisco participates in this Statewide program and awards the California Real Estate Certificate to any day or evening student who completes a prescribed program of 24-semester units.

A student may complete only those courses required for the California Real Estate Certificate, since this is awarded independently of the Associate in Science degree. However, students who complete the full course of study leading to that degree will automatically have completed the requirements for, and will be awarded, the California Real Estate Certificate.

Training for the Certificate is designed so that those seeking entry employment may prepare themselves to take the State licensing examination for real estate salespersons, and so that those already employed in various branches of real estate work may gain further knowledge and develop additional competence.

Learning Outcomes

Upon successful completion of the certificate, students will be able to:

- Define an overview of the basic concepts of California Real Estate.
- Apply tools learned to the California Real Estate market place.
- Demonstrate knowledge of agency and fiduciary responsibility.
- Demonstrate an understanding of real estate opportunities and risk.
- Identify and understand key real estate terms.
- Qualify to take the California Department of Real Estate State Exam

Students may obtain the California Real Estate Certificate by completing the following courses:

Courses Required for the Certificate of Achievement in California Real Estate

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>RE 181 Princ of Real Estate</td>
<td>3</td>
</tr>
<tr>
<td>RE 184 Real Estate Practice</td>
<td>3</td>
</tr>
<tr>
<td>RE 185 Legal Aspects of Real Estate</td>
<td>3</td>
</tr>
<tr>
<td>RE 186 Prin of Real Estate Finance</td>
<td>3</td>
</tr>
<tr>
<td>RE 189 Real Estate Economics</td>
<td>3</td>
</tr>
<tr>
<td>RE 191 Prin of Real Estate Appraisal</td>
<td>3</td>
</tr>
<tr>
<td>Electives</td>
<td>6</td>
</tr>
<tr>
<td><strong>Total Units</strong></td>
<td><strong>24</strong></td>
</tr>
</tbody>
</table>

The six semester units in the elective courses indicated above must be completed by two real estate courses currently listed.

<table>
<thead>
<tr>
<th>Electives</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>RE 182 Escrow Fundamentals</td>
<td>3</td>
</tr>
<tr>
<td>RE 183 Real Estate Property Management</td>
<td>3</td>
</tr>
<tr>
<td>RE 187 Real Estate Taxation</td>
<td>3</td>
</tr>
<tr>
<td>RE 192 Advanced Real Estate Appraisal</td>
<td>3</td>
</tr>
<tr>
<td>RE 193 Real Estate Compute Applications</td>
<td>3</td>
</tr>
<tr>
<td>RE 194 Affordable Housing Property Management</td>
<td>3</td>
</tr>
</tbody>
</table>

Retail Management

Retail Management Certificate

The Retail Management Certificate introduces students to the fundamentals of business, marketing, and retail. Retail experience is a plus, but is not required to successfully complete this program. The Certificate meets the requirements of the Western Association of Food Chains (WAFCL) Retail Management Certificate program.

Learning Outcomes

Upon completion of this certificate, students will be able to:

- Analyze market opportunities
- Recruit and manage people
- Manage supplier relationships
- Promote a retail business using online and offline marketing strategies
- Use the principles of consumer behavior to create a buying experience that will build loyal customers
- Analyze business profitability

Admission. Enrollment is open to all interested students. However, students may be required to satisfy prerequisites before being admitted to certain courses.

Students may obtain the Certificate of Achievement in Retail Management by completing the required 10 courses totaling 31/32 units. Each course must be completed with a grade of “C” or higher or Pass.

Courses Required for the Certificate of Achievement in Retail Management

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BSEN 74 Business Correspondence</td>
<td>3</td>
</tr>
<tr>
<td>BSMA 66 Business Math</td>
<td>4 or 3</td>
</tr>
<tr>
<td>MABS 60 Intro to Computer Appl. for Business</td>
<td>3</td>
</tr>
<tr>
<td>SUPV 234 Communication for Bus Mgmt</td>
<td>3</td>
</tr>
</tbody>
</table>

Intermediate Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>SUPV 231 Intro to Supervision/Mgmt</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 1 Financial Accounting</td>
<td>4</td>
</tr>
<tr>
<td>or ACCT 10 Intro to Accounting</td>
<td>3</td>
</tr>
<tr>
<td>MRKT 140 Principles of Marketing</td>
<td>3</td>
</tr>
</tbody>
</table>

Advanced Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>SUPV 232 Org Behavior for Supervisors</td>
<td>3</td>
</tr>
<tr>
<td>SUPV 233 Human Resources Management</td>
<td>3</td>
</tr>
<tr>
<td>FASH 44 Merchandising—Retail Buying</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Units</strong></td>
<td><strong>31 – 32</strong></td>
</tr>
</tbody>
</table>

Small Business

Small Business Noncredit Certificate

Prepares students for a successful start for their own small business and helps current small business owners increase the effectiveness and operation of their business. This program provides instruction in best practices for the spectrum of activities involved in running a small business, including legal structures, marketing, financial statements, technology, greening your business, and management.

Students who receive this certificate will have the basic skills to start a business or work for a small business.

Learning Outcomes

Upon completion of this certificate, students will be able to:

- Write a basic business plan including a company description, description of the target market and marketing plan.
- Produce financial statements to determine business feasibility and performance, including a break even analysis, income statement and cash flow statement.
- Describe the infrastructure and systems necessary to launch a simple small business.

**Courses Required for the Certificate of Completion in Small Business**

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>SMBU 9419 Developing a Business Plan</td>
<td>18</td>
</tr>
<tr>
<td>SMBU 9467 Getting Started in Business</td>
<td>18</td>
</tr>
</tbody>
</table>

**Elective Courses: Choose two of the following:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>SMBU 9476 Green and Sustainable Small Business</td>
<td>18</td>
</tr>
<tr>
<td>SMBU 9792 Small Business Management</td>
<td>18</td>
</tr>
<tr>
<td>SMBU 9793 Small Business Marketing and Sales</td>
<td>18</td>
</tr>
<tr>
<td>SMBU 9799 Technology for Small Business</td>
<td>18</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>72</strong></td>
</tr>
</tbody>
</table>

**Supervision and Management**

**Supervision and Management Certificate**

Enrollment in these courses is for those who desire to advance to supervisory and/or management positions in business, government, education, non-profit, and community-based organizations and also for others who are currently employed as supervisors and desire to upgrade their supervisory skills.

**Learning Outcomes**

Upon completion of the Supervision and Management Certificate, students will be able to:

- Recognize, demonstrate, and articulate an understanding of the principal of organizing, planning, directing, and leading staff.
- Apply up-to-date HRM systems, processes, and procedures by demonstrating and evaluating practices concerning recruitment and selection, managing performance for added value, maximizing employee contribution, effective employment relations, and delivering equity and fairness.
- Effectively use both verbal and non-verbal communication skills to articulate and deliver clear, concise, coherent, and persuasive messages through barriers.
- Effectively use critical thinking and problem-solving processes to produce sound strategic decisions by identifying, comparing, and contrasting information logically, accurately, and quantitatively.
- Demonstrate knowledge and understanding of the challenges facing women in today's business world and the ability to analyze current social and political trends from feminist perspectives as well as the ability to synthesize feminist theory and research with contemporary social problems in order to offer effective and ethical strategies for change.

Requirements for the Certificate of Accomplishment. Students may obtain the Certificate of Accomplishment in Supervision and Management by completing the following courses with a final grade of “C” or higher:

**Courses Required for the Certificate of Accomplishment in Supervision and Management**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>SUPV 231 Intro to Super/Management</td>
<td>3</td>
</tr>
<tr>
<td>SUPV 232 Organizational Behavior &amp; Dev.</td>
<td>3</td>
</tr>
<tr>
<td>SUPV 233 Human Resource Mgmt</td>
<td>3</td>
</tr>
<tr>
<td>SUPV 234 Communication for Bus Mgmt</td>
<td>3</td>
</tr>
<tr>
<td>SUPV 235 Organizational Leadership</td>
<td>3</td>
</tr>
<tr>
<td>or SUPV 236 Women Leaders at Work</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Units</strong></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

**Travel and Tourism**

**Travel and Tourism Major (AS)**

The curriculum in Travel and Tourism offers two different Certificates of Accomplishment, as well as a two-year course of study with special emphasis in either Marketing, Management, or Destination Development.

**Learning Outcomes**

The specific course of study that the student will follow is an integral part of the course content of the Principal of Travel and Tourism classes. Upon completion of TRTV 157 and TRTV 159, the student will know if they will pursue their Travel and Tourism Degree in marketing, management, or in destination development. The Travel and Tourism program prepares students for jobs with the airlines as reservation agents, marketing representatives, customer service personnel to name just a few of the jobs, the same kinds of jobs with hotels, tour companies, cruise lines, consolate and tourist information offices and with travel agencies (corporate, leisure, special interest, group or meeting and planning agencies). Many of the students enrolled in this program are pursuing a second career, so careful evaluation of their current job skills help determine where they fit into this quickly changing and growing industry.

The curriculum in Travel and Tourism provides practical training in the specific vocabulary used in the industry, the reference books used in all sectors, how to read and design tour and cruise brochures, common business practices, airline computer operations and formats, airfare constructions, group sales pricing, special interest tour development. The Destination classes are designed to advise the student of all there is to know about travel in a specific region of the world. Students learn about visa requirements, how to get there, competitive airfares to the destination, which tour companies sell the destination, languages, religious, what to see, what to do. Completion of the two-year degree will give students a necessary foundation in computer skills, communication skills as in learning to qualify the client, written and spoken English, psychology, anthropology, marketing skills, management styles, and specific tourist destinations in the world.

**Learning Outcomes**

Upon completion of this program students will be able to:

- Define the component industries of the travel and tourism industry and how they are interconnected
- Plan any type of travel to destinations throughout the world
- Analyze the methods businesses in the travel and tourism industry differentiate themselves to be competitive
- Design a detailed time sensitive day by day itinerary
- Apply the principles of thinking geographically, qualifying the destination and qualifying the client
- Categorize the major categories of travelers and be able to specify appropriate travel products for each
- Summarize the component segments of the travel industry and analyze the management techniques used in each

To successfully complete this Major every class must be completed with a grade of “C” or better.

**Courses Required for the Major in Travel and Tourism**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>TRTV 157 Principles of Travel &amp; Tourism</td>
<td>3</td>
</tr>
<tr>
<td>TRTV 159 Adv. Principles of Travel &amp; Tourism</td>
<td>3</td>
</tr>
<tr>
<td>TRTV 160 Transportation Field Work</td>
<td>1</td>
</tr>
</tbody>
</table>
Travel and Tourism Certificate

The Certificate of Accomplishment in Travel and Tourism fulfills the needs of two groups: those who desire to prepare for employment in any of the travel related industries including airlines, hotels, tour companies, travel agencies and tourist offices; and those currently employed professionals who wish to improve their on the job skills in this industry.

Learning Outcomes

Upon completion of this certificate, students will be able to:

- Define the component industries of the travel and tourism industry and how they are interconnected
- Plan any type of travel to destinations throughout the world
- Analyze the methods businesses in the travel and tourism industry differentiate themselves to be competitive
- Design a detailed time sensitive day by day itinerary
- Apply the principles of thinking geographically, qualifying the destination and qualifying the client

To successfully complete this certificate every class must be completed with a grade of “C” or better.

Courses Required for the Certificate of Accomplishment in Travel and Tourism

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>TRTV 157 Principles of Travel &amp; Tourism</td>
<td>3</td>
</tr>
<tr>
<td>TRTV 159 Adv. Principles Travel &amp; Tourism</td>
<td>3</td>
</tr>
<tr>
<td>TRTV 160 Transportation Field Work</td>
<td>1</td>
</tr>
<tr>
<td>TRTV 176 Destinations: Great Trips</td>
<td>3</td>
</tr>
<tr>
<td>MABS 60 Intro to Computer Appl. for Business</td>
<td>3</td>
</tr>
</tbody>
</table>

A minimum of 3 units of the following courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>TRTV 171A Destinations: Cities I</td>
<td>3</td>
</tr>
<tr>
<td>TRTV 171B Destinations: Cities II</td>
<td>3</td>
</tr>
<tr>
<td>TRTV 172 Destinations: Natural Wonders</td>
<td>3</td>
</tr>
<tr>
<td>TRTV 173 Destinations: Historical &amp; Archaeological</td>
<td>3</td>
</tr>
<tr>
<td>TRTV 174 Destinations: Cruises</td>
<td>3</td>
</tr>
<tr>
<td>TRTV 175 Destinations: Hotels, Resorts, &amp; Spas</td>
<td>3</td>
</tr>
<tr>
<td>TRTV 176 Destinations: Great Trips</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Units: 16

Travel and Tourism Management Certificate

The Certificate of Accomplishment in Travel and Tourism Management prepares students to work in management in various aspects of the travel and tourism industry. This program is intended to give students experience in the major areas of the travel and tourism industry and provide them practical exposure to the requirements of management.

Learning Outcomes

Upon completion of this certificate, students will be able:

- Summarize the steps needed in the creation of an eco-system.
- Categorize the major eco-destinations by continent type and level of development.
- Differentiate the needs of business travelers from leisure travelers.
- Arrange and plan a convention and/or an event for a major company.
- Manage all aspects of a guided land tour including hiring, pay schedule, and dispute resolution.

Courses Required for the Certificate of Accomplishment in Travel and Tourism Management

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>TRTV 157 Principles of Travel &amp; Tourism</td>
<td>3</td>
</tr>
<tr>
<td>TRTV 159 Adv. Principles Travel &amp; Tourism</td>
<td>3</td>
</tr>
<tr>
<td>TRTV 180 Ecological Travel</td>
<td>3</td>
</tr>
<tr>
<td>TRTV 181 Business Travel</td>
<td>3</td>
</tr>
<tr>
<td>TRTV 182 Tour Management</td>
<td>3</td>
</tr>
</tbody>
</table>

A minimum of 2 units of any of the following courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>TRTV 157 Meeting and Event Planning</td>
<td>1</td>
</tr>
<tr>
<td>TRTV 160 Transportation Field Work</td>
<td>1</td>
</tr>
<tr>
<td>MABS 202 PowerPoint</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Units: 17

*Repeatable course-max. of 2 units may count towards certificate

Destination Specialist Certificate

Travel and tourism is defined by its destinations. Those professionals who have the greatest knowledge of destinations are those that will have the most opportunity for career advancement. The Destinations Specialist Certificate (15 units) is designed to give students a well rounded background in the important travel destinations of the world.

Learning Outcomes

Upon completion of this certificate, students will be able:

- Classify the major types of destinations and the profiles of the travelers that visit them
- Plan and write itineraries for any destination
- Analyze the process of development for the tourism industry around the world

To successfully complete this certificate every class must be completed with a grade of “C” or better.

Courses Required for the Certificate of Accomplishment in Travel and Tourism: Destination Specialist

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>TRTV 171A Destinations: Cities I</td>
<td>3</td>
</tr>
<tr>
<td>TRTV 171B Destinations: Cities II</td>
<td>3</td>
</tr>
<tr>
<td>TRTV 172 Destinations: Natural Wonders</td>
<td>3</td>
</tr>
<tr>
<td>TRTV 173 Destinations: Historical &amp; Archaeological</td>
<td>3</td>
</tr>
<tr>
<td>TRTV 174 Destinations: Cruises</td>
<td>3</td>
</tr>
<tr>
<td>TRTV 175 Destinations: Hotels, Resorts, &amp; Spas</td>
<td>3</td>
</tr>
<tr>
<td>TRTV 176 Destinations: Great Trips</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Units: 15
Green and Sustainable Travel Certificate

Green and Sustainable Travel Certificate is one of the fastest growing segments of the travel and tourism industry. All companies either have green initiatives in place or are developing them. There is a great need in the industry for workers to understand the requirements of green travel. Students that have completed this certificate will have an advantage when entering the workplace.

Learning Outcomes

Upon completion of this certificate, students will be able:

- Summarize the steps needed in the creation of an eco-destination.
- Propose new eco-destinations and research localities that have potential as eco-friendly destinations.
- Analyze the roles of governmental bodies and non-governmental organizations in the development and preservation of environmentally sensitive tourist sites.
- Compare the positive and negative impacts of tourism on a particular destination or ecosystem.

Courses Required for the Certificate of Accomplishment in Green and Sustainable Travel:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>GNBS 125 Green and Sustainable Business</td>
<td>3</td>
</tr>
<tr>
<td>TRTV 172 Destinations: Natural Wonders</td>
<td>3</td>
</tr>
<tr>
<td>TRTV 173 Destinations: Historical &amp; Archaeological</td>
<td>3</td>
</tr>
<tr>
<td>TRTV 180 Eco Travel &amp; Tourism</td>
<td>3</td>
</tr>
</tbody>
</table>

A minimum of 3 units of the following courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>TRTV 157 Principles of Travel &amp; Tourism</td>
<td>3</td>
</tr>
<tr>
<td>TRTV 159 Adv. Principles of Travel &amp; Tourism</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Units | 15

Announcement of Courses

Accounting

Credit, Degree Applicable Courses:

ACCT 1. Financial Accounting (4)
Lec-5
PreReq.: ENGL 92 or ESL 72 or 150 or Placement in ENGL 93 or 94; or ESL 160
Advis: BSMA 66 or 68
Introduction to the accounting information system and recording and reporting of business transactions with a focus on the accounting cycle, terminology, applications of basic principles and theories, classified financial statements and statement analysis for decision makers. Includes issues relating to Balance Sheet valuations, revenue and expense recognition and cash flows. CSU/UC/C-ID ACCT 110

ACCT 2. Managerial Accounting (4)
Lec-5
PreReq.: ACCT 1
Fundamental concepts and applications of managerial accounting techniques in the business world. Cost determination, cost analysis and control, performance evaluation, and the preparation and use of economic information for internal management purposes. CSU/UC/C-ID ACCT 120

ACCT 10. Introduction to Accounting (4)
Lec-5
ACCT 1 may be elected in lieu of ACCT 10 to satisfy the requirement in any curriculum in business.
Advis: BSMA G, H or MATH E and ESL 140 or Placement in ESL 150
Designed to meet the needs of students in specific occupational programs and as an exploratory course to determine student interest and aptitude in accounting. Emphasis on the principles of double-entry bookkeeping, business and accounting terminology, and the use of various accounting worksheets to calculate and prepare accounting and business reports. CSU
Formerly ACCT 50.

ACCT 21. Introduction to Budgeting for Community Health and Social Service Providers (1)
Lec-1
P/NP available
This course emphasizes key concepts and techniques of budgeting common to social service programs and agencies, including introduction to budgets and budget development, implementation, record keeping, tracking, reporting and cost analysis. The implications of managing funds and the role of ethics will be examined. CSU

ACCT 51. Intermediate Accounting (4)
Lec-5
PreReq.: ACCT 2
Designed for the student who pursues accounting beyond introductory study. A rapid review of fundamentals, with problems in valuation and presentation of assets, and liabilities, together with a study of analytical procedures. The course meets the educational requirements to sit for the Certified Public Accountant (CPA) exam as determined by the California State Board. CSU

ACCT 52. Intermediate Accounting (4)
Lec-5
PreReq.: ACCT 51
Designed for students who pursue accounting beyond introductory study. Course topics include investments, revenue recognition, income taxes, accounting changes, and error analysis. This course may help meet the educational requirement for the Certified Public Accountant (CPA) exam as determined by the California State Board of Accountancy. CSU

ACCT 53. Accounting on the Microcomputer (3)
Lec-3
PreReq.: ACCT 10 or ACCT 1
Advis: MABS 60 and BSMA 66 or 68
Integration of accounting principles and microcomputers in the operation of microcomputer-based accounting systems. Topics include accounts receivable, accounts payable, payroll, general ledger, financial statement analysis, and the comparison, analysis, and use of microcomputer accounting software systems. CSU

ACCT 54. Auditing (3)
Lec-3
PreReq.: ACCT 2
Advis: ACCT 51
Designed for students who are pursuing accounting beyond introductory study. Covers the objectives, scope and history of external auditing for financial statements. Qualifies as meeting a part of the
educational requirements for the Certified Public Accountant exam as determined by the California State Board of Accountancy as of September 2013. CSU

ACCT 55. Cost Accounting (3)
Lec-3
Prereq.: ACCT 2
Fundamental accounting procedures covering job order, process, and standard cost systems; budgetary control; direct costing; cost reports for management use. CSU

ACCT 56. Municipal Governmental Accounting (3)
Lec-3
Prereq.: ACCT 1
A study of the practices and methods of municipal governmental accounting encompassing terminology, reporting requirements, recording methods and the uses of funds. CSU

ACCT 57. Accounting with QuickBooks (3)
Lec-3
Prereq.: ACCT 10 or ACCT 1
Instruction in the use of QuickBooks, an integrated computerized accounting system for small business. Topics include new company setup, report preparation, customers and sales, employees and payroll, and purchase transactions. CSU

ACCT 59. Federal Income Tax (3)
Lec-3
Designed for students who want to pursue the study of tax accounting or who want to prepare their own individual tax returns. Topics include tax filing requirements, gross income, itemized deductions, capital gains and losses. This course may help meet the requirement for the Certified Public Accountant (CPA) exam. CSU

ACCT 59B. California Income Tax (1)
Lec-18 (total hrs) P/NP available
Prereq.: ACCT 59
Study of California State Income Tax, income tax problems, and the preparation of California income tax returns. CSU

Noncredit Courses:

ACBO 9201. Accounting I - Proprietorship and Partnership (90 hrs)
Advisibe: ESL Levels 5/6
Fundamental accounting principles and procedures of a service business organized as a proprietorship or a partnership. Topics include steps in the accounting cycle for a proprietorship and a partnership such as financial statements, ledgers, journals, cash control systems, and bank reconciliations. The integration of Microsoft Excel and QuickBooks is introduced.

ACBO 9202. Accounting II - Corporate (90 hrs)
Advisibe: ESL Levels 5/6, ACBO 9201
Fundamental accounting principles and procedures of a merchandising business organized as a corporation. Topics include the accounting cycle for a corporation such as financial statements, special journals, ledgers, inventory, payroll and taxes. The integration of Microsoft Excel and QuickBooks is introduced.

ACBO 9203. Principles of Accounting-Comprehensive (180 hrs)
Advisibe: ESL Levels 5/6
Fundamental accounting principles and procedures for both a service and merchandising business. Topics include steps in the accounting cycle for a proprietorship, partnership and a corporation such as financial statements, special journals, ledgers, inventory, payroll and taxes. The integration of Microsoft Excel and QuickBooks is covered in this course.

ACBO 9205. QuickBooks Complete (90 hrs)
Advisibe: ESL Levels 5/6
Through simulated practice for various business entities, students will learn to use QuickBooks Pro to perform and complete simple to complex accounting tasks such as accounts receivable and payable, invoicing, and payroll.

ACBO 9206. Basic Accounting Concepts I (45 hrs)
Advisibe: ESL Level 6+
Introduction to business accounting principles and concepts. Students will record business transactions in journals and ledgers, prepare balance sheets and income statements using a manual system.

ACBO 9207. Basic Accounting Concepts II (45 hrs)
Advisibe: ACBO 9206 or equivalent, ESL Level 6+
Emphasis is placed on reconciliation of bank accounts and understanding the distinction between accrual and cash basis accounting. Petty cash and calculating payroll are introduced.

ACBO 9208. QuickBooks: Level 1 (45 hrs)
Advisibe: ACBO 9201, 9203, 9206 or equivalent, COMP 9245, 9905 or equivalent, ESL Level 6+
Service business accounting for a sole proprietorship and payroll simulations using QuickBooks Pro.

ACBO 9209. QuickBooks: Level 2 (45 hrs)
Advisibe: ACBO 9201, 9203, 9206 or equivalent, COMP 9245, 9905 or equivalent, ESL Level 6+
Fundamentals to computerize a manual accounting system using QuickBooks Pro for a partnership type of business. Students use simulated business projects to learn the process.

ACBO 9210. Income Tax Prep: Intro (15 hrs)
Advisibe: ESL Level 6 or above
Introduction to the basic mechanism of federal individual income taxation, including, but not limited to Form 1040, Sch A, Sch B, Sch C, Sch D, and Sch E.

ACBO 9211. Microsoft Office Accounting-Level 1 (45 hrs)
Advisibe: ESL Levels 5/6
Perform and complete simple to complex accounting tasks such as accounts receivable, accounts payable, end-of-period procedures, and payroll for service businesses utilizing Microsoft Office Accounting (MOA) software.

ACBO 9212. Microsoft Office Accounting-Level 2 (45 hrs)
Advisibe: ESL Levels 5/6, ACBO 9211
Through advanced simulated merchandising practices, students will learn to use Microsoft Office Accounting to perform full-cycle accounting procedures including inventory, taxes, payroll, and setting up a company from a manual accounting system.

ACBO 9213. QuickBooks, A/P, & A/R (15 hrs)
Advisibe: ACBO 9206 or equivalent, COMP 9245, 9905 or equivalent, ESL Level 6 or above
Fundamentals of recording simple accounting transactions in Accounts Payable and Receivable using QuickBooks Pro software. Skills are taught through self-paced modules and projects.
BOSS 4503. Business English (90 hrs)
Advised: ESLN 3800
Development of written communication skills: punctuation, business vocabulary, capitalization, composition of business correspondence, spelling, proofreading, and use of office reference materials.

BOSS 4511. Effective Business Communication (90 hrs)
Advised: Basic knowledge of word processing. Completion of business English strongly recommended.
Students will learn skills and strategies to become more effective writers. These skills provide students with the necessary foundation for continued development and advancement in their careers through improved written communication.

### Business Law

#### Credit, Degree Applicable Courses:

BSL 1. Business Law 1 (3)
Lec-3
Prereq.: ENGL 96 or BSEN 70 or placement in ENGL 1A
The nature, purpose, and sources of law; the historical development of the law and its function with respect to society and business; contracts, agency, tort, and personal property. CSU/UC
Formerly CLW 18

BSL 2. Business Law 2 (3)
Lec-3
Prereq.: BSL 1 or L A 53A
Sales, partnerships, corporations, the regulation of business, and negotiable instruments. CSU/UC
Formerly CLW 19

### Business Mathematics

#### Credit, Non-Degree Applicable Courses:

BSMA G. Arithmetic Review and Basic Business Arithmetic (3) (offered only in the evening)
Lec-3
P/NP only
Required of all business students who do not make a satisfactory score on the City College placement examination in mathematics. BSMA G may be elected in lieu of BSMA H or J. Not open to students who have completed BSMA H or J with a final grade of "C" or higher, or Credit, or MATH E with a final grade of "C" credit.
A review of arithmetic and its application to business problems in the fundamental processes; fractions; decimals; percentage; and the principles of problem-solving.

BSMA H. Arithmetic Review and Basic Business Arithmetic (3)
Lec-5
P/NP only
Students who need a thorough review of mathematics should take this course rather than BSMA J to meet first-semester requirements. Students whose score in the City College placement examination in mathematics is extremely low should take this course rather than BSMA J or G to meet first-semester requirements. Counselors may require students to take BSMA H instead of BSMA J or G.

BSMA J. Elementary Mathematics (2)
Lec-2
P/NP only
Required of all business students who do not make a satisfactory score on the City College placement examination in mathematics. Two hours per week, required in the first semester of all business students who fail to make a satisfactory score in the City College placement examination in mathematics. BSMA H may be selected in lieu of BSMA J. A brief review and application to business problems of the fundamental arithmetic processes, fractions, decimals, percentages, equations, proportions, and the principles of problem solving.
Credit, Degree Applicable Courses:
BSMA 66. Business Mathematics (4)
Lec-5
Advise: Completion of BSMA G, H, or J with a final grade of "C" credit or MATH E with a final grade of "C" credit; BSMA 66 may be elected in lieu of any major requirement for BSMA 68. A study of gross wages and payroll deductions, trade and cash discounts, markups and markdowns, depreciation methods, simple and compound interest, present value and annuities, installment sales, rule of 78, loan amortization, financial statements of different business organizations, various inventory methods, insurance, bank reconciliation, and the use of graphs and tables. CSU

BSMA 68. Mathematics of Business (3)
Lec-3
Advise: Completion of BSMA G, H, or J with a final grade of "C" credit or higher or MATH E with a final grade of "C" credit. A study of gross wages and payroll deductions, trade and cash discounts, markups and markdowns, depreciation, simple and compound interest, present value and annuities, installment sales, loan amortization, financial statements of different business organizations, inventory methods, insurance, bank reconciliation, and the use of graphs and tables. CSU

Commercial Law
See Business Law

Computer Applications for Business
Credit, Degree Applicable Courses:
MABS 25. Keyboarding (1)
Lab-5 (8 wks)  P/NP available
Not recommended for students who have had previous training in typing.
Development of keyboard control; accuracy, speed, and concentration exercises; equipment operation and care.
Completion requirement: Ability to type by the touch method, 25 words a minute gross in a series of three-minute tests with an average of not more than one error per minute. CSU
Formerly WDPR 78.

MABS 30. Computer Keyboarding (3)
Lec-3  P/NP available
Advise: ESL 140
Beginning computer keyboarding and desktop computing essentials. Students learn to keyboard by touch, use the 10-key numeric keypad, and apply these skills to professional computer applications. Proper technique is stressed to enhance speed and accuracy. Includes computer hardware and software concepts, ergonomics, word processing, and using Internet Explorer for office tasks. CSU

MABS 35. Speedbuilding I: Keyboarding (1)
Lab-5 (8 wks)  P/NP available
Prereq: MABS 30, 25 or WDPR 78, or the ability to type 25 words a minute with no more than 3 errors.
Keyboarding skill development on computer keyboard with associated software, emphasizing proper technique to develop speed and accuracy. Drills target individual student deficiencies. Develop proper touch control of entire computer keyboard (including alphabetic, number, and symbol keys; numeric keypad) with proper control of the Space Bar, Enter, Tab, and Shift keys. CSU
Formerly WDPR 79.

MABS 38. Keyboarding with Microsoft Word (3)
Lec-3
Prereq: MABS 35 or WDPR 79 or the ability to type 35 words a minute with no more than one error a minute
Advise: ESL 72 or 150 or Placement in ENGL 92 or ESL 160
Entering, formatting, proofreading, and revising business documents such as letters, single and multi-page reports, outlines, tables, minutes, and resumes to an acceptable office standard using a word processing system. Students also interpret proofreading marks, compose brief office messages, and continue to enhance their keyboarding skills. CSU
Formerly WDPR 80.

MABS 40. Internet Explorer and Outlook Email (3)
Lec-3  P/NP available
Advise: ESL 140
Use of Internet Explorer to find solutions for common business tasks, and the use of Microsoft Outlook to send and receive e-mails, set up contact lists, maintain a calendar, create appointments, schedule meetings, and more. Efficient search techniques are stressed. Also covered are computer hardware basics and Windows file management. CSU

MABS 60. Introduction to Computer Applications for Business (3)
Lec-3  P/NP available
Advise: MABS 25 or MABS 30
Introduction to the concepts and skills of using personal computers for business. Includes fundamental concepts of hardware, the operating system, and the five most frequently used office applications: word processing, electronic spreadsheet, database management, web browser, and email. CSU/UC

MABS 61. Advanced Microsoft Office for Windows (3)
Lec-3  P/NP available
Prereq: MABS 60 or Demonstration of MABS 60 Exit Skills
Creating spreadsheet, database, word processing, and presentation projects using advanced features in Microsoft Office. Preparing documents for the World Wide Web by utilizing Office's built-in tools. CSU

MABS 67. Database for Business/Access for Windows (3)
Lec-3  P/NP available
Advise: MABS 25
Introduction to a relational dynamic database environment using Access for Windows. Experience creating and modifying business databases; data manipulation and retrieval, and report generation. CSU

MABS 90. iPad for Business (1)
Lec-18 (total hours), field trips  P/NP Available
Introduction to the concepts and skills of using an iPad for business. Topics include using built-in tools such as Safari and Mail; Apple apps such as Pages, Keynote and Numbers; third-party apps such as Office apps, PDF management apps and cloud computing services. CSU

MABS 101. Spreadsheets for Business/Excel (3)
Lec-3  P/NP available
Advise: MABS 25 or Ability to Type 25 wpm; BSMA 66 or 68
Experience in creating, modifying, and printing spreadsheets using Excel software on either IBM-PC compatible or Macintosh computers. Includes creating charts, working with database features, and the use of macros. CSU

MABS 160. Survey of Business Information Technology (3)
Lec-3
An introduction for business students stressing the principles, analysis, problem-solving, and decision-making techniques for systems development.
opment. The concepts of a management information system, its uses, limitations, and impact on organizations reviewed. An introduction to communication tools, CASE tools, financial analysis tools, project management tools, and Internet resource tools. CSU/C-ID BUS 140

MABS 202. PowerPoint Presentations (3)
Lec-3 P/NP available
Advis: MABS 25
Creating business presentations using Microsoft PowerPoint. Topics include planning an effective presentation, developing on-screen slides; inserting tables, pictures, charts and diagrams into slides; and constructing a slide show utilizing animation, transitions, sound, and timings. The design of master slides and templates is also covered. CSU

MABS 391. Word Processing/Microsoft Word (3)
Lec-3 P/NP available
Prereq: MABS 35 or the ability to type at least 35 words a minute with no more than one error a minute
Advis: ESL 150 or placement in ESL 160
Experience creating, formatting, editing, and printing documents on the IBM personal or compatible computer using Word for Windows. Features covered include the spelling and grammar checkers, page numbering, and tables. Advanced features include headers and footers, footnotes, merge features, macros (automatic keystroke repetition), style sheets, newspaper and parallel columns, sorting, and other features as time permits. CSU
Formerly WDPR 391.

MABS 405. Developing Web Sites - FrontPage (3)
Lec-3 P/NP available
Advis: MABS 60 (knowledge of Microsoft Windows and Microsoft Office)
Practical instruction in designing and publishing business web pages on the Internet using Microsoft FrontPage. Web sites will include: page division with frames, interactive input forms, tables, hyperlinks, graphics, animated images and multimedia. Exploration of how an enterprise might plan, design, produce, promote, and maintain a business web site. CSU

MABS 406. Developing Web Sites - Dreamweaver (3)
Lec-3 P/NP available
Advis: MABS 60
Designing and publishing business web pages on the Internet using Macromedia Dreamweaver. Web sites will include page division with frames, interactive input forms, tables, hyperlinks, graphics, animated images and multimedia. The course will explore how an enterprise might plan, design, produce, promote, and maintain a business web site. CSU

MABS 407. Developing Web Sites - Expression Web (3)
Lec-3 P/NP available
Advis: MABS 60
Introduction to creating and maintaining business web pages using Microsoft Expression Web. Includes working with hyperlinks, tables, forms, graphics, and sound. Efficient production methods using style sheets and dynamic web templates are covered. Includes publishing a web site to a server computer connected to the Internet. CSU

Noncredit Courses:
BOSS 2500. Business Math With Spreadsheets I (45 – 90 hrs)
Advis: HSEN 2267 and ESLN 3500
Use of spreadsheet software to make common business calculations such as discounts, commissions, markup, credit charges, simple and compound interest, and present value.

BOSS 3500. Job Preparation (45 hrs)
Advis: ESLN 3600 or placement in ESLN 3700; and COMP 9905 or COMP 9245 or COMP 9947, and WOPR 9486 or WOPR 9950 or WOPR 9991; and COMP 9921 or COMP 9952
Students improve the efficiency of their job search and learn methods for finding work in their field. They also learn to self-assess their strengths, write resumes, cover letters and thank you letters, build interviewing skills, and use the Internet to do company and industry research and locate job openings.

BOSS 3501. Customer Service Skills (15 hrs)
Advis: WOPR 9991 or equivalent; COMP 9921 or equivalent; ESL Level 6+
This course will teach specific skills in effectively dealing with customers and clients to gain new business and retain existing business relationships. It addresses the front-line employee who makes the initial contact with the potential customer/client.

BOSS 3502. Customer Service Principles (45 hrs)
Advis: ESLN 3700 or placement in ESLN 3800 or TRST 3331
This course focuses on retaining customers by establishing effective customer service practices. Topics include web-based customer service, electronic communication, the lost customer, customer feedback, and behaviors to satisfy new and existing customers.

BOSS 4500. Business English I (45 hrs)
Advis: ESLN 3800
Development of written communication skills: punctuation, business vocabulary, capitalization, composition of business correspondence, spelling, proofreading, and use of office reference materials.

BOSS 4501. Business English II (45 hrs)
Advis: BOSS 4500 or equivalent; ESLN 3800
Continued development of written communication skills: punctuation, business vocabulary, capitalization, composition of business correspondence, spelling, proofreading, and use of office reference materials.

BOSS 4503. Business English (90 hrs)
Advis: ESLN 3800
Comprehensive coverage of written communication skills: business grammar, punctuation, business vocabulary, capitalization, composition of business correspondence, spelling, proofreading, and use of office reference materials.

BOSS 4510. Business Communications (45 hrs)
Advis: BOSS 4500 or equivalent; ESL Level 6+
A lecture-lab course to develop basic writing skills for the business world. Topics in this course include developing meaningful paragraphs, writing opening and closing sentences in letters, and writing good-news letters and bad-news letters.

BOSS 4511. Effective Business Communication (90 hrs)
Advis: Basic knowledge of work processing. Completion of business English strongly recommended
A comprehensive lecture-lab course to develop writing skills for the business world. Topics in this course include business letter and business report writing skills.

BOSS 5500. Keyboarding For Computers (45 hrs)
Advis: ESLN 3400
Students will acquire basic knowledge of the keyboard to interact more efficiently with desktop computers, computer terminals, or elec-
tronic communication systems. Instruction covers introduction to the keyboard and development of basic keyboarding skills.

**BOSS 5501. Keyboarding: Skill Development (90 hrs)**

Keyboarding skill development on computer keyboard with associated software, emphasizing proper technique. Keyboarding drills target individual student deficiencies. The student will develop touch control of the keyboard and proper typing techniques to build basic speed.

**BOSS 5502. Clerical Keyboarding (90 hrs)**

*Advised: BOSS 5500, 5501 or 5503*

Emphasis on formatting business documents such as reports, letters, and memorandums. Topics also include skill building for accuracy/speed, practice keyboarding and working in a simulated office and learn the ten-key numeric keypad.

**BOSS 5503. Keyboarding - All Levels (180 hrs)**

Emphasis on touch control and proper typing techniques to build speed/accuracy. Enhancing keyboarding skills while focusing on formats of business documents such as reports, letters, memorandums and tables.

**BOSS 5505. Keyboarding: Quick Course (15 hrs)**

Multi-level course serves as either a quick introduction, a quick review of the alphabetic and numeric keys, or a quick speed/accuracy building course. Emphasis on individual student need. Skills taught through instructor-led and/or self-paced instruction.

**BOSS 5506. Computer Keyboarding: The Numeric Keypad (15 hrs)**

Emphasis on the development and mastery of the numeric keypad on the computer keyboard. Students will learn numeric key location; develop speed and accuracy by touch. This course is slasser for data entry, accounting, administrative and on-site support positions requiring numeric input.

**BOSS 5507. Data Entry/10 Key (90 hrs)**

Build data entry skills using the ten-key numeric keypad. The use of simulated business projects enhance the learning and development of effective techniques that improve speed and accuracy.

**BOSS 5508. Advanced Office Procedures for the 21st Century (45 hrs)**

*Prereq.: BOSS 5509*

Advanced training in the business office. Topics include ethical and behavioral practices, conducting job searches, coping with stress, strategies for advancement, and perform office procedures in a legal office through a job simulation.

**BOSS 5509. Office Procedures for the 21st Century (45 hrs)**

*Advised: ESL Levels 5/6*

Students learn essential office procedures and competencies in areas such as human relations, developing telephone etiquette and business communications, records management, handling financial procedures, making travel arrangements, planning meetings, and developing oral presentation skills to be successful in the business office.

**BOSS 5510. Document Formatting & Production (90 hrs)**

*Advised: ESL Level 5/6, BOSS 5500 or Equivalent*

Hands-on lab class. Students apply proper formatting procedures to produce error-free business documents such as correspondence, reports and tables using applicable word processing software.

**BOSS 5511. Office Procedures for the Construction (45 hrs)**

*Advised: ESLN 3600 or TRST 1322 or Placement in ESLN 3700*

Students learn essential construction office procedures and competencies in areas such as overview of the construction business, business development including sales and marketing, customer service, processing mail, telecommunications, planning meetings and records management.

**COMP 9000. Supervised Training of Computer Applications for Business (90 hrs)**

An instructor-supervised computer lab for currently enrolled Business Department students. Students will work independently on assignments given in other Business Department credit and noncredit classes.

**COMP 9245. Windows Essentials for MS Office Applications (30 hrs)**

*Advised: ESLN 5/6*

An introductory course on computer concepts and techniques for the novice computer user. Students will build knowledge to better understand the function and use of the Windows operating system as it applies to managing one's computer system, data, resources, and software applications. Students will learn Internet and E-mail basics, and will get a brief overview of Microsoft Word, Excel, and PowerPoint applications.

**COMP 9857. MS Office Business Applications with Simulated Projects (90 hrs)**

A comprehensive introduction of Microsoft Office business applications—Word, Excel, Access, and PowerPoint. Students will learn the fundamental features and functions of these applications and apply and/or integrate them to produce real-world business projects.

**COMP 9867. Microsoft Excel Essentials I (15 hrs)**

*Advised: COMP 9905 or Equivalent; ESL Levels 5/6*

Microsoft Excel Essentials I is an introduction to using spreadsheet software and terminology. Students learn to create, edit, and print spreadsheets. Additionally, students learn to format data, enter labels, use logical and mathematical functions, and create charts from spreadsheet data.

**COMP 9869. Computer Lab Orientation (9 hrs)**

*Advised: ESLN 3400; BOSS 5500*

A hands-on introduction to the hardware, software, operating system and lab procedures.

**COMP 9888. Microsoft Excel Essentials III (15 hrs)**

*Prereq.: COMP 9895*  
*Advised: ESL Level 5/6*

Students learn enhanced worksheet design for business applications, database management techniques, and creating and executing simple and complex macros, and debugging recorded macros. Students explore analyzing data with PivotTables and PivotCharts.

**COMP 9889. Intro to MS Office Applications for Business (90 hrs)**

*Advised: ESLN 5/6*

Introduction to Microsoft Office Applications for Business is a comprehensive introduction to Microsoft Office applications of Word, Excel, Access, and PowerPoint, preceded by a brief overview of basic computer concepts and history. A brief introduction to Windows operating system and Outlook are included.
COMP 9894. Microsoft Access Essentials I (15 hrs)
Advised: COMP 9905 or equivalent; ESL levels 5/6
Microsoft Access Essentials I is an introduction to using database software and terminology. Students learn to create the structure of the database, create tables, queries, forms, and reports. Additionally, students learn to create relationships between tables, modify tables, design and establish query criteria, and customize forms and reports.

COMP 9895. Microsoft Excel Essentials II (15 hrs)
Prerequisite: COMP 9867
Advised: ESL Level 5/6
Students learn how to design advanced formulas and functions, basic Excel charting concepts, and techniques for handling multiple worksheets. Students explore 3D worksheets concepts, advanced printing features, inserting graphics images on worksheets, and adding SmartArt to worksheets.

COMP 9896. Microcomputers - Individual Projects (45 hrs)
Advised: Completion of at least one 45-hour applications course or equivalent experience
Students will undertake individual projects using micro applications such as word processing, spreadsheets, databases, and desktop publishing. Projects will be individualized or worked on in teams and will be determined in consultation with the instructor. Students will learn strategies and problem solving techniques related to practical applications including importing and exporting files between any two programs.

COMP 9899. Desktop Publishing for Business I (45 hrs)
Advised: ESL 6+, COMP 9245, or COMP 9905, or COMP 9889
This course introduces the student to the basis of desktop publishing for business using such programs as Microsoft Publisher or Adobe InDesign. Students will create business documents for print or electronic distribution including slide shows, business forms, charts, office stationary, flyers, Web publications, and PDF documents.

COMP 9900. Microsoft Excel for Business I (45 hrs)
Advised: ESLN 5/6
A comprehensive introduction to using spreadsheet software to solve business problems. Students learn to set up, format, save and print spreadsheets. Additional topics include using logical and mathematical functions and creating graphs from spreadsheet data.

COMP 9901. Microsoft Access for Business I (45 hrs)
Prerequisite: COMP 9905
Advised: ESL Level 5/6
Students learn database design guidelines to create the structure of the database, which allows them to create tables, queries, forms, and reports. Students learn to edit tables, design and establish query criteria, and customize forms and reports.

COMP 9902. Graphics for Business (45 hrs)
Advised: ABE 3088; ESLN 3500; COMP 9245
Students learn to prepare and present business information in graphic form. Pie, bar, text, and other charts are created using appropriate software, with emphasis on selecting appropriate graph formats to increase visual impact.

COMP 9903. Software Update (15 hrs)
Advised: Windows OS Basics, ESL Level 6 or above
An overview course that introduces students to the basic features of current business software, including, but not limited to Microsoft Office XP products (word processing, spreadsheets, databases, electronic presentations), Internet and E-mail, computerized accounting, business graphics or desktop publishing software, Web authoring and animation software, and business multimedia software.

COMP 9904. Microsoft Excel for Business II (45 hrs)
Advised: ESLN 5/6
A comprehensive course providing proficiency in using spreadsheet software to solve business problems. Students learn enhanced worksheet design for business applications, database management techniques, and creating and executing simple and complex macros.

COMP 9905. Intro to Windows for MS Office Applications (45 hrs)
Advised: ESLN 5/6
An introduction to computer concepts and techniques for beginning computer students. Students will learn to use the Windows operating system to organize and manage data, resources and Office applications. A brief introduction of the Office applications: Word, Excel, PowerPoint, and Access, and a unit on Internet and E-mail is included.

COMP 9906. Microsoft Access Essentials II (15 hrs)
Prerequisite: COMP 9894
Advised: ESL Level 5/6
Students learn how to create reports and forms and use the Report Wizard and the Forms Wizard. Students learn to use macros, design a switchboard, and about PivotTables and PivotCharts.

COMP 9907. Desktop Publishing for Business II (45 hrs)
Advised: ESL 6+, COMP 9245, or COMP 9905, or COMP 9889
This course further develops the concept of desktop publishing for business by enhancing office publications and making them interactive using such programs as Microsoft Publisher and Adobe InDesign. Students create templates, learn power shortcuts, create a business office newsletter, make interactive slide presentations, add effects, and work with Acrobat Professional.

COMP 9908. Computer and Web-based Applications Current Topics (45 hrs)
Advised: TRST 4601 or ESLV 3821; BOSS 5500 or 25 NET WPM KEYBOARDING; ANY HANDS-ON INTRODUCTORY COMPUTER COURSE OF AT LEAST 27 HOURS OR EQUIVALENT EXPERIENCE
Use of the latest state-of-the-art computer and/or web-based software and its applications for business and office procedures. Students work with industry-specific software and explore new features in the latest version of an older software release. Instructor led demonstration with individual work, group work, data entry, and one-on-one tutoring as needed.

COMP 9909. Microsoft Excel for Business III (45 hrs)
Prerequisite: COMP 9904
Advised: ESL Level 5/6
Students learn enhanced worksheet design for business applications, database management techniques, creating and executing simple and complex macros, and debugging recorded macros. Students analyze data with PivotTables and PivotCharts.

COMP 9910. Microsoft Access for Business II (45 hrs)
Prerequisite: COMP 9901
Advised: ESL Level 5/6; COMP 9905
Students create custom reports and forms, use the Report Wizard and the Forms Wizard, and create search criteria for performing searches, queries and sorts. Students learn to use macros, design a switchboard, and about PivotTables and PivotCharts.
COMP 9911. Microsoft Access for Business III (45 hrs)
Prereq.: COMP 9910
Advisory: ESL Level 5/6, COMP 9905
Students create and design forms and reports using design view and create subforms and subreports. Students learn to use advanced form techniques.

COMP 9912. PC Upgrade and Optimization (15 hrs)
Advisory: Windows OS Basics, ESL Level 6 or above
An overview course that introduces students to the basic concepts of computer components, preparing a hard disk for installation of Windows XP, installation of Windows XP, installing and uninstalling application software, installing device drivers, installation and use of antivirus, spyware and firewall software.

COMP 9913. Microcomputer Lab (90 hrs)
An open laboratory in which students may complete their microcomputer assignments or word processing assignments.

COMP 9914. Desktop Publishing - Advanced (45 hrs)
Advisory: COMP 9907
Setting type to specifications and learning specialized features such as marking text and graphics for printing spot color overlays, automatic table of contents generation and automatic index generation. Individual projects.

COMP 9917. Building Individual Web Sites (45 hrs)
Advisory: Completion of Beginning Word Processing, Spreadsheet, and Database courses and at least one intermediate word processing, spreadsheet or database course
Integrating the individual applications and services contained in Office 97 into a functional unit for building custom solutions to business problems, individually, in a workgroup, and on the Web, using readily available Office 97 capabilities such as data access, reporting, and analysis, information publishing, messaging and query operations, document collaboration, and macros.

COMP 9918. Building Business Web Sites (45 hrs)
Advisory: Completion of at least one word processing, spreadsheet, or database course
Using the Internet for business information gathering and dissemination. Designing, maintaining, and publishing business web sites. Creating web pages and Internet business applications using FrontPage and Office 97.

COMP 9919. Using Dreamweaver for Basic Business Web Pages (45 hrs)
Advisory: COMP 9245, COMP 9905, or COMP 9889, ESL Level 6 or above
Individualized and instructor-led instruction in the use of web authoring tools used to create a personal or business website using Adobe Dreamweaver. Beginning through intermediate skills are taught through self-paced modules and projects; e.g. new site creation, editing, and maintaining the site, image and text insertions, and using tables.

COMP 9920. Using SharePoint Designer (Expression Web) for Basic Web Pages (45 hrs)
Advisory: Windows OS Basics, ESL Level 6 or above
This is a hands-on, interactive course with instruction in Microsoft SharePoint Designer (Expression Web) web authoring tool to create a personal or business website. Beginning, through intermediate skills are covered through self-paced modules and projects. Topics include new site creation, editing, and maintaining the site, image and text insertions, publishing a site, and using tables, frames and forms.

COMP 9921. Intro to the Internet for Office Support (45 hrs)
Advisory: Windows OS Basics, ESL Level 6 or above
Hands-on and project-oriented instruction in the use of the Internet via a browser is provided for the office/business professional or other serious personal computer user. Topics covered include services and tools available on the Internet and World Wide Web, browser features, navigating through the Web, e-mailing, and identifying useful sites for office/business professionals.

COMP 9922. Flash for Business/Office Presentations (45 hrs)
Advisory: COMP 9925, 9245, 9905 or Equivalent, ESL Level 6+
Introduces business office students to the basic concepts of business presentations using Flash. Business students learn introductory techniques in creating storyboards, animated slide shows, ad banners, and Web pages. Students are also introduced to basic publishing concepts for viewing their work in the Flash Player and creating CD-ROMs.

COMP 9928. PowerPoint for Business (45 hrs)
Advisory: Windows OS Basics, ESL Level 6 or above
Instruction in the fundamentals of PowerPoint, the presentation graphics application of Microsoft Office. It is designed for the office/business professional or other serious computer user. Topics include creating a PowerPoint slide show, adding visuals to enhance a slide show, customizing a presentation, and delivering a presentation.

COMP 9932. Excel for Accounting Principles (45 hrs)
Advisory: ACBO 9203, Windows OS Basics, ESL Level 6 or above
Instruction in the utilization of Microsoft Excel (spreadsheet software) as it relates to accounting principles. Students will have practice in formatting, formulas, and functions, charts/graphs, worksheet manipulation, database and macro commands.

COMP 9933. Building Business Web Pages with Adobe Web Standard-Level I (45 hrs)
Advisory: Windows OS Basics, ESL Level 6 or above
Hands-on instruction using a step-by-step and/or a project-oriented approach to developing a business web site using Adobe Web Standard Software with core functions in Dreamweaver, Fireworks, Flash, and Coldfusion. An online marketing or product information online interface would be developed.

COMP 9934. Building Business Web Pages with Adobe Web Standard-Level II (45 hrs)
Prereq.: COMP 9933 or COMP 9919 or COMP 9918 or Equivalent
Advisory: COMP 9933 or Equivalent, Windows OS Basics, ESL Level 6 or above
Hands-on instruction using a step-by-step and/or a project-oriented approach to familiarizing students with Adobe Web Standard and Web Content Management Software for the development of dynamic, interactive eBusiness web applications. Emphasis is on software functions without programming.

COMP 9935. Business Web Graphics (45 hrs)
Advisory: Windows OS Basics, ESL Level 6 or above
Hands-on instruction using a step-by-step and/or a project-oriented approach to creating web graphics using Adobe web authoring tools such as Fireworks, Flash, and Photoshop Elements. Topics include graphic layout, backgrounds, rollovers, banners, and navigational elements; digitizing media and image optimization.
COMP 9936. Using Outlook for Office Support, Level I (45 hrs)
Advised: Windows OS Basics, ESL Level 6 or above
A hands-on lecture and lab course that introduces Outlook-Microsoft’s desktop information management application. Topics include e-mail basics, creating a personal schedule, task list and a contact list using Outlook’s features of Contacts, Calendar, Inbox, and Tasks.

COMP 9937. Using Outlook for Office Support, Level II (45 hrs)
Advised: COMP 9936, Windows OS Basics, ESL Level 6 or above
Interactive instruction in intermediate desktop management skills that reinforce concepts taught in COMP 9936. New topics include searching for messages; setting and removing filters on messages, using message formats, stationery, and delivery options to customize messages; learning how to export personal folders onto a floppy disk and later import subfolders for further updating; archiving mail messages, and creating unique e-mail signatures for multiple accounts.

COMP 9938. Publisher for Business Desktop Publishing (45 hrs)
Advised: Windows OS Basics, Keyboarding, ESL Level 6 or above
A lecture and lab course in which students learn beginning through intermediate desktop publishing skills to create professional publications in business such as advertising flyers, newsletters, tri-fold brochures, and business cards using Microsoft Publisher. Topics include creating and editing a publication, newsletter and brochure design and development, personalizing and customizing publications with information sets, and creating business forms and tables.

COMP 9940. Excel Special Topics - Beyond Advanced (45 hrs)
Advised: COMP 9909, Windows OS Basics, ESL Level 6 or above
A course designed for the office/business professional or other serious computer user to provide topics beyond the advanced level in Excel, the spreadsheet application of Microsoft Office. Topics include creating macro, formula auditing, data validation, using Solver, Scenario Manager, Pivot Tables, and Pivot Charts.

COMP 9941. Simulated Projects for MS Office Self-Paced (45 hrs)
Advised: COMP 9909, 9910, 9921, 9928, 9936; WDPR 9995, or equivalent, ESL Level 6 or above, Keyboarding 35+wpm, Office Technology, Clerical Keyboarding, or Document Production
A self-paced office projects course geared to enhance one’s working knowledge of Microsoft Office Suite applications. Students will complete real-world simulated projects requiring the use of Microsoft Word, Excel, PowerPoint, Outlook and Access, for any integration of the products. Students will analyze real-world business problems and then apply appropriate media and strategy solutions, utilizing the Internet, multimedia and graphics to enhance document design, layout, functionality, and appearance.

COMP 9942. Microcomputer Lab (45 hrs)
An instructor-supervised computer lab for currently-enrolled Business Department students. Students will work independently on assignments given in other Business Department computer classes.

COMP 9943. Special Projects Using Publisher (45 hrs)
Advised: COMP 9938 or equivalent, ESL Level 6
Create publications from topics related to the business world using MS Publisher software. Projects may include flyers, newsletters, brochures and other topics.

COMP 9944. Acrobat for Bus/Office (45 hrs)
Advised: COMP 9245, 9905 or equivalent, ESL Level 6+
An introductory course teaching the business office students to create business documents and presentations as Portable Document Format (PDF) files. Business students will learn to use these basic techniques for distribution of electronic documents in an office environment and on the web.

COMP 9947. Windows Folder and File Concepts (15 hrs)
Advised: ESL Level 5/6 or above
Fundamentals of efficient management of electronic files/folders in a business office. Students learn the concepts of creating, viewing and navigating through levels of folders for file storage on the hard drive and flash drives.

COMP 9948. Acrobat Bus/Office Doc Conversion (15 hrs)
Advised: COMP 9245, 9905 or equivalent, ESL Level 6+
An introductory course teaching the business office students to convert business documents, such as word documents, spreadsheet files, and Web pages to Portable Document Format (PDF) files. PDF files allow individuals in a business office environment to create a more secure format for document exchange.

COMP 9949. Dreamweaver I (15 hrs)
Advised: COMP 9245, 9905, 9947 or equivalent, ESL Level 6+
A hands-on course using a step-by-step approach to web page development. Students tour the interface, define a site, create a simple template, create files and folders, insert text and images, create links, insert and modify tables.

COMP 9950. E-mail Writing (5 hrs)
Advised: ESL Level 6 or above
Provides the students with hands-on instruction in establishing an e-mail account and practicing transmitting and receiving e-mail messages.

COMP 9951. PowerPoint (15 hrs)
Advised: COMP 9942, 9905, 9947 or equivalent, ESL Level 6+
Instruction in the fundamentals of PowerPoint, the presentation graphics application of Microsoft Office. The course is designed for the office/business professional and other computer users. Topics include creating and editing a PowerPoint slide show, adding visuals to enhance a slide show, customizing a presentation, and delivering a presentation.

COMP 9952. Internet and E-mail for the Business Office (15 hrs)
Advised: COMP 9942, 9905, 9947 or equivalent, ESL Level 6+
Introductory overview course to provide familiarity of the Internet using a browser. Designed for the office professional or other serious computer user. Topics covered include an introduction to the Internet network, browser features, navigating the Web, and identifying useful sites for office professionals.

COMP 9956. Introductory Flash for the Bus/Office (15 hrs)
Advised: COMP 9225, 9245, 9905 or equivalent, ESL Level 6+
Introductory course in Flash for the Bus/Office is designed for business students on how to use Flash to create files that can be imported in PowerPoint presentations and for use on the Web. Information obtained in this short course will enable the business student to quickly produce a basic presentation for office use.

COMP 9957. Photoshop Elements I. (15 hrs)
Advised: COMP 9245, COMP 9905, or equivalent, ESLN 5/6
Photoshop Elements, Level I, is a basic introduction to photograph imaging. Students are introduced to editing images and digital photographs, opening, viewing, and saving image files. Students will learn to enhance photographs, print and share images.
COMP 9958. Photoshop Elements II (15 hrs)
Advisory: COMP 9245, COMP 9905, or equivalent; COMP 9957; ESLN 5/6
This course is a second-level introductory course to Photoshop Elements, Level II, which introduces students to the basics of editing images and digital photographs, opening, viewing, and saving image files. Students will learn to enhance photographs, print, and share images.

COMP 9959. Photoshop Elements (45 hrs)
Advisory: COMP 9245, COMP 9905, or equivalent; ESLN 5/6
This course teaches students the fundamentals of Photoshop Elements as it applies to business publications and personal/business web pages. Students are introduced to editing images and digital photographs, opening, viewing, and saving image files. Students will learn to enhance photographs, print, and share images.

COMP 9964. Microsoft Outlook Essentials (15 hrs)
Advisory: COMP 9905, ESL Level 5/6 or above
Hands-on lecture/lab introduces the business student to the basics of Outlook—Microsoft’s desktop information management application. Students will explore the basic concepts of using Outlook for email; create contact lists, task lists, calendars, and appointments.

COMP 9965. OpenOffice for Business I (45 hrs)
Advisory: ESL 6+, COMP 9245, or COMP 9905, or COMP 9889
Students will learn to create business documents with Writer, presentations with Impress, graphs with Gallery and Draw, as well as create business documents for the web. Students will be able to download, install, and use OpenOffice free of charge on their personal computers.

COMP 9966. OpenOffice for Business I (45 hrs)
Advisory: ESL 6+, COMP 9245, or COMP 9905, or COMP 9965
Students will learn to create business spreadsheets with Calc, databases with Base, graphs with Gallery and Draw, as well as create business documents for the web. Students will be able to download, install, and use OpenOffice free of charge on their personal computers.

COMP 9967. Google Apps for Business I (45 hrs)
Advisory: ESL 6+, COMP 9245, or COMP 9905, or COMP 9889
Google Apps for Business I is a hands-on lecture and lab course that introduces students to free Web-based email, time management, Web page creator, and file collaborative tools. Students learn basic concepts of emailing; create multiple calendars and Web pages to plan meetings and activities; and collaborate on business projects in real-time.

COMP 9968. Google Apps for Business II (45 hrs)
Advisory: ESL 6+, COMP 9245, or COMP 9905, or COMP 9889
Google Apps for Business II is a hands-on lecture and lab course that introduces students to free Web-based word processor, spreadsheet, presentation, and web page development tools. Students will create, edit, and upload/download web documents while collaborating in real-time with other users.

COMP 9969. Dynamic PowerPoint for Business (45 hrs)
Advisory: ESL 6+, COMP 9245, or COMP 9905, or COMP 9889
A hands-on business lecture and lab course introduces the business student to concepts beyond those taught in a basic PowerPoint course. Business students can use the concepts to dynamically enhance their business PowerPoint presentations for greater audience impact.

COMP 9971. Microsoft Visio for Business (45 hrs)
Advisory: ESL 6+, COMP 9245, or COMP 9905, or COMP 9889
A hands-on business lecture and computer lab course introducing business students to the concepts of flow charting. Students learn to create workflow diagrams, streamline business processes, track project and resources, chart organizations, and create business diagrams.

COMP 9972. Microsoft Office Project for Business (45 hrs)
Advisory: ESL 6+, COMP 9245, or COMP 9905, or COMP 9889
This hands-on business lecture and lab course covers Microsoft Office Project, a standard in project management software. Business students learn to use the software to manage projects more efficiently and effectively. Topics include business project planning and set-up, project schedule, communicating project information, assigning resources and costs, tracking progress and closing the project.

COMP 9975. Microsoft Office Applications I (45 hrs)
Advisory: COMP 9905, COMP 9952, and COMP 9947 or equivalent; ESL Levels 5/6
An introduction to Microso office applications in Word, Excel, Access, and PowerPoint. Topics include Microsoft Office basics, formatting business letters, creating and editing worksheets and databases, PowerPoint presentations, and additional hands-on simulated projects.

WOPR 9486. Microsoft Word for Business I (45 hrs)
Prerequisite: COMP 9905
Advisory: ESL Level 5/6
Students learn to create, format, edit, and save business documents using Word tools. Topics include themes, tables, graphics, and managing and printing documents.

WOPR 9487. Word: Tables (5 hrs)
Advisory: COMP 9245, 9905 or equivalent, WOPR 9486, 9991 or equivalent, ESL Level 6+
Introduces intermediate and advanced concepts of Microsoft Word Table feature. Advanced skills are taught through instructor-led and self-paced instruction.

WOPR 9488. Word: Templates and Forms (5 hrs)
Advisory: WOPR 9486 or equivalent, ESL Level 6+
Course introduces advanced concepts of Microsoft Word’s Templates and Forms features. Create customized documents such as letters, envelopes, and reports. Advanced skills are taught through instructor-led and self-paced instruction.

WOPR 9990. Word Processing (Multi-Level) (90 hrs)
Advisory: BOSS 4503; BOSS 5503
Identification and use of equipment typical of a word processing center. Operation of text-editing equipment to create, store, edit, and print various types of documents suitable for personal use.

WOPR 9991. Microsoft Word Essentials I (15 hrs)
Advisory: ESL Levels 5/6
Beginning Microsoft Word focusing on fundamental word processing skills as required in a business office. Students learn to prepare, format, maintain documents, create tables, insert pictures and objects.
WOPR 9993. Microsoft Word Essentials II (15 hrs)  
*Advise: ESL Levels 5/6, WOPR 9991*
An intermediate Microsoft Word course which includes more advanced methods of customizing paragraphs and pages, merging documents, automating and customizing formatting, customizing themes and formatting using styles.

WOPR 9994. Microsoft Word Essentials III (15 hrs)  
*Advise: WOPR 9993*
Advanced Microsoft Word course focusing on topics such as customizing columns, illustrating documents with graphics, formatting files using Office Web apps (cloud service), and customizing templates.

WOPR 9995. Microsoft Word for Business II (45 hrs)  
*Prereq: WOPR 9486*  
*Advise: ESL Level 5/6*
Students learn to create custom documents, tables, watermarks, and insert WordArt, and text boxes. Students create a data source and learn to create form letters and mailing labels to use with a mail merge.

WOPR 9996. Microsoft Word for Business III (45 hrs)  
*Prereq: WOPR 9995*  
*Advise: ESL Level 5/6*
Students learn to create custom documents containing a table of contents, sections, index references and an index. Students create macros, fill-in forms, master documents, subdocuments and outlines.

WOPR 9997. Word Processing - Special Projects (45 hrs)  
*Prereq: WOPR 9996*  
*Advise: ESL Level 5/6*
Students learn to perform different topics like a mail merge using custom documents that they have created. Students learn to use a table of contents, sections, indexing, and the outline feature.

WOPR 9998. Word: Mail Merge (5 hrs)  
*Advise: WOPR 9486 or equivalent, ESL Level 6+*
Course introduces advanced concepts of Microsoft Word’s Mail Merge feature. Create customized documents such as letters, envelopes and reports. Advanced skills are taught through instructor-led and self-paced instruction.

WOPR 9999. Word: Styles and Macros (5 hrs)  
*Advise: WOPR 9486 or equivalent, ESL Level 6+*
Course introduces intermediate and advanced concepts of Microsoft Word’s Styles and Macros features. Advanced skills are taught through instructor-led and self-paced instruction.

**General Business**

**Credit, Degree Applicable Courses:**

**GNBS 119. Introduction to Business (3)**  
*Lec-3*
This course emphasizes the role of enterprise in society and the international nature of business. For some, this course will be their only exposure to business; others will go on to additional training, education, and specialization with transfer to upper-division institutions in business and other fields. CSU/UC

**GNBS 120. Business Ethics (3)**  
*Lec-3*  
*P/np available*
*Advise: ENGL 92 or ESL 150 or Placement in ENGL 93 or 94; or ESL 160*
An examination of business ethics from the 1990s to the present, with an emphasis on what may have caused key members of the business community to lie, cheat, and steal. This course will focus on the process of making ethical decisions in a business environment. Case studies will be drawn from real-life examples of ethical failures and successes. CSU/UC

**GNBS 125. Green and Sustainable Business (3)**  
*Lec-3*  
*P/np available*
*Advise: ENGL 92 or ESL 160; or placement in ENGL 93 or ESL 170*
The course examines the environmental profiles of the major business segments. Learn the major concepts of green business including natural capitalism, the costs and benefits of green business, and how green technologies can improve competitiveness and profitability. CSU

**Comercial Law**

See Business Law

**Finance**

**Credit, Degree Applicable Courses:**

**FIN 110. Principles of Risk Management (3)**  
*Lec-3*
The fields of risk, risk management, and insurance, including the legal elements of risk and contracts. Designed for any business student who is interested in learning about risk management, legal contracts, and financial risk, as well as those interested in the insurance industry. CSU  
Formerly INS 110

**FIN 130. Principles of Bank Operations (3)**  
*Lec-3*
An overview of commercial banking in the U.S.A. from colonial times to the present day. Terminology and principles that form the necessary foundation for students who plan to do advanced work in specialized banking classes. Stressing practical applications, this course prepares both students who intend to work in the financial services industry and students who understand the importance of commercial banking in a general business program. CSU

**FIN 133. Money and Banking (3)**  
*Lec-3*  
*P/np available*
The nature and significance of money in both a historical and contemporary sense. Emphasis on the commercial banking process and the Federal Reserve. Financial institutions other than commercial banks; international payment problems. CSU

**FIN 136. Introduction to Financial Planning (3)**  
*Lec-3*  
*P/np available*
Nothing happens without a plan, and this class will help you develop financial plans in your personal life to buy a house, invest, and understand the important of starting to save for retirement right away! This class is also useful as preparation for university-level classes in Finance. CSU

**FIN 138. Principles of Investment (3)**  
*Lec-3*  
*P/np available*
The principles and practices in the investment field and successful investment policies for the individual investor. The risks and problems in establishing an investment program, sources of investment information, and tools utilized in security and market analysis. An analysis of the securities markets, investment companies, mutual funds, and individual stocks and bonds. CSU
International Business

Credit, Degree Applicable Courses:

INTR 162. Survey of International Business (3)
Lec-3
This course provides an overview of international business focusing on global perspective of international trade and investment, financial markets, business issues and strategies in the global economy, international marketing and business operations of multinational corporations. CSU

INTR 163. International Marketing (3)
Lec-3, field trips P/NP Available
ADVICE: ENGL 93 OR PLACEMENT IN ENGL 96
Marketing execution in an international environment. Impact of cultural, economic, legal, and political environments on creating, pricing, promoting, and distributing products/services. Role of global trade organizations on international marketing strategy. CSU

INTR 166A. Letters of Credit (0.5)
Lec-1 (3 wks)
Methods of structuring, negotiating, and processing letters of credit, discussing costs and defining fees involved. Rights and obligations of the bank, the customer, and the beneficiary are examined, including sources of technical advice, typical problems, payment arrangements, and ways of working with the bank's international division. CSU

INTR 167. International Law (3)
Lec-3
An introduction to the legal aspects of International Business, including U.S. trade laws, contracts, transactions, technology transfers, intellectual property protection, shipping documents, insurance, finance, economic communities, and dispute resolution. CSU

INTR 170. International Finance (3)
Lec-3
An introduction to the financial decisions impacting International Business, including assessing the current economic environment, computing foreign exchange rates, analyzing foreign exchange risks, learning how to calculate time value of money of global assets, and considering current and prior issues impacting international finance. CSU

INTR 172. International E-Business: Resources and Tools (3)
Lec-3 P/NP available
A practical exploration of conducting successful international business using the tools and resources of today's Internet, including E-commerce marketing, product and trade data access, search engines, web site alternatives, transportation tracking, governmental resources and assistance, electronic submission of customs documentation, electronic payments, internet software tools and business related hardware options. CSU

INTR 173. Export-Import (3)
Lec-3
A comprehensive examination of the process of international Export and Import practices. The course includes techniques, terminology, philosophies, and various approaches to international export-import business. Special focus will be given to preparing small and medium-sized business enterprises to compete in a global environment. (Please note that students that have taken either INTR-164A or INTR-165A are not eligible to take this course.) CSU

INTR 175. Business Practice: Vietnam (2)
Lec-2 P/NP available
A course covering the current business environment in Southeast Asia with a focus on Vietnam, including legal developments, infrastructure issues, policy changes, trade agreements and labor practices. CSU

INTR 176. Business/Culture: Vietnam (3)
Lec-3, field trips P/NP available
A course exploring Vietnamese culture and its impact on business. Subjects include history, aesthetics, communication, social structures, and customs. This course will create a context for doing business in Southeast Asia. CSU

INTR 176 = ASIA 176

Marketing

Credit, Degree Applicable Courses:

MRKT 122. Professional Selling (3)
Lec-3 P/NP available
ADVICE: ENGL 93 OR 160; OR PLACEMENT IN ENGL 96 OR ESL 170
The fundamentals of selling in a professional environment. Students learn to identify target markets, prospect for clients, write a sales plan, develop a sales strategy, identify and resolve conflicts of interest, make an oral presentation, respond effectively to objections, ask for a commitment, and manage a sales force. CSU

MRKT 140. Principles of Marketing (3)
Lec-3
Required for all Marketing and Fashion Merchandising majors
A general survey of types and functions of marketing institutions, products and services, channels of distribution, trends in marketing practices, and a study of consumer behavior. CSU

MRKT 145. Computer Marketing Applications (3)
Lec-3
Introduction to desktop publishing and presentation software using Microsoft Office professional applications. Design and create professional marketing materials such as newsletters, brochures, flyers, logos, business forms, and animated sideshows. CSU

MRKT 148. Marketing Management and Supervision (3)
Lec-3
Supervisory skills and management techniques for middle management personnel in marketing businesses and industry. Topics include understanding and motivating people, leading others, communicating, delegating, training, decision-making and personal development. CSU

MRKT 150. Consumer Behavior (3)
Lec-3 P/NP Available
Introduction to the core concepts and applications of contemporary consumer behavior. Consumer behavior topics include needs and motives, personality, perception, learning, attitudes, cultural influence
that lead to understanding consumer decision-making and behavior. Explores the impact of consumer behavior on marketing strategies and promotional tactics. CSU

MRKT 170. Introduction to Advertising (3)
Lec-3
Required for all Marketing and Fashion Merchandising majors
Exploration of the role of advertising in the marketplace. Topics include elements of a successful advertising campaign and targeting an audience. Also includes the procedures needed for advertising production, such as efficient planning, selection and coordination of media, sales promotion, and product display. CSU

Paralegal/Legal Studies
Credit, Degree Applicable Courses:

PLS 1. Introduction to Paralegal Studies (3)
Lec-3
PREREQ: ENGL 96 or placement in ENGL 1A
What is a paralegal? This course will answer this question and cover the following: the American legal system, the role of the paralegal, the relationship between paralegal and attorney, legal terminology, and substantive areas of law. CSU

PLS 2. Legal Research and Writing I (3)
Lec-3
PREREQ: ENGL 96 or placement in ENGL 1A
Basic techniques of writing including review of grammar, spelling and word usage, sentence structure, basic writing, punctuation, capitalization and oral and electronic communication skills as they relate to the legal field. CSU

PLS 3. Legal Research and Writing II (3)
Lec-3
PREREQ: PLS 1 and 2
Students will learn the proper techniques of researching primary and secondary authorities of law. Students will receive extensive practice in the techniques of writing legal memoranda. CSU

PLS 4. Litigation I (3)
Lec-3
PREREQ: PLS 1, 2, and BSL 1, and completion of or concurrent enrollment in PLS 3
Introduction to civil litigation process from client interview through appeal, including drafting of various litigation documents. This course will deal mostly with California civil procedure, although reference to federal civil procedure may occasionally be made. CSU

PLS 5. Litigation II (3)
Lec-3
PREREQ: PLS 3, 4 and BSL 1
In the investigation segment, students study case take and investigation of facts, effective witness interviewing, and investigation of opponent’s claims. In the discovery segment, students prepare interrogatories, requests for production of documents, requests for admission, and other discovery documentation. In trial preparation, students learn how paralegals assist in trials. CSU

PLS 6. Law Office Management and Procedures (3)
Lec-3
PREREQ: PLS 1, 2, 3, 4, BSL 1, and MABS 60 (or demonstration of MABS 60 exit skills)
Topics include law office management systems, personnel management, accounting, and operations. Students receive hands-on training in the use of law office equipment and in the preparation of legal documents and correspondence. PLS 6 is the Capstone course for the paralegal degree and certificate. CSU

PLS 7. Corporate Law (3)
Lec-3
PREREQ: PLS 3 and BSL 1
This course covers legal aspects of various business enterprises, including corporations, sole proprietorships, partnerships, and joint ventures. The emphasis is on common procedural and organizational aspects, legal issues, and the role of the attorney and the paralegal in approaching these issues. CSU

PLS 9. Wills, Trusts, and Probate Administration (3)
Lec-3
PREREQ: PLS 3 and BSL 1
This course teaches the fundamental principles of the law of wills and trusts, including simple will and trust forms; the organization and jurisdiction of a California probate court; the administration of estates in California probate courts, including gift inheritance, and estate taxes. CSU

PLS 10. Environmental Law (3)
Lec-3
PREREQ: PLS 3 and BSL 1
This course will cover the fundamentals of federal and California environmental law. Students will study the major regulatory programs of environmental law; the agencies implementing environmental law; research sources and approaches to environmental law; and the diverse roles and opportunities for paralegals in the field. CSU/UC

PLS 11. Debtors’ Rights and Creditors’ Remedies (3)
Lec-3
PREREQ: PLS 3 and BSL 1
This course focuses on collection issues related to litigation and how judgments are enforced. Before taking this course, students should already know what a complaint and answer are, how to serve a summons and complaint, and how to do discovery. CSU

PLS 12. Family Law (3)
Lec-3
PREREQ: PLS 3
Students learn about marital dissolutions, annulments, adoptions, domestic violence and paternity matters, and how these matters are handled from beginning to end. Students will have the opportunities to use the requisite Judicial Council forms and Dissomaster software to calculate child and spousal support. CSU

PLS 13. Intellectual Property (3)
Lec-3
PREREQ: PLS 3 and BSL 1
This course focuses on the principles of intellectual property law in trademarks, copyrights, and patents including international conventions and differences between ideas and expression of ideas, fair-use doctrine, trade secrets, and the notion of public domain. CSU

PLS 14. Immigration Law (3)
Lec-3
ADVISE: PLS 3 and BSL 1
This course is a practice-oriented overview of immigration law, with an emphasis on immigration procedures and practices of Citizenship and Immigration Services, San Francisco District Office, the California Service Center, and the Immigration Court. The course covers family
and employment visas, political asylum, naturalization, non-immigrant visas, and removal. CSU

PLS 15. Medical Law (3)
Lec-3
Prereq.: PLS 2 and BSL 1
This course applies general business law, including the law of contracts, corporate legal structures, and antitrust liability, to the establishment of health-care organizations. It also addresses the law of health-care management, including such topics as managed care, professional liability and patients’ rights, and health care as a legal right. CSU

PLS 16. Work Experience (3)
Work-minimum paid supervised 225 hrs. or unpaid supervised 180 hrs. plus coordinating conferences and individual meetings
Prereq.: PLS 1, 2, 3, AND 4
PLS 16 provides actual work experience in a legal setting to students completing the Paralegal/Legal Studies Program. Students will work with real attorneys and paralegals, practice the skills learned in the paralegal classes, and gain experience working in a legal environment. CSU

PLS 17. Communications Law (3)
Lec-3
Advis: BCST 100, 103, BSL 1, OR JOUR 19
Students will examine the major legal issues faced by the media in the United States. Topics include the First Amendment, prior restraint, defamation, obscenity, fair trial, and free press. Additional topics include broadcasting, cable, and new electronic media as well as the evolving legal and ethical issues associated with the Internet. CSU

PLS 18. Work Experience (2)
Work-minimum paid supervised 150 hrs. or unpaid supervised 120 hrs. plus coordinating conferences and individual meetings
Prereq.: PLS 1, 2, 3, AND 4
PLS 18 provides actual work experience in a legal setting to students completing the Paralegal/Legal Studies Program. Students will work with real attorneys and paralegals, practice the skills learned in the paralegal classes, and gain experience working in a legal environment. CSU

PLS 19. Paralegal Work Experience (1)
Work-minimum paid supervised 75 hrs. or unpaid supervised 60 hrs. plus coordinating conferences and individual meetings
Prereq.: PLS 1, 2, 3, AND 4
PLS 19 provides actual work experience in a legal setting to students completing the Paralegal/Legal Studies Program. Students will work with real attorneys and paralegals, practice the skills learned in the paralegal classes, and gain experience working in a legal environment. CSU

PLS 20. Introduction to Careers in Law (1)
Lec-1
This course is open to all students and will introduce students to the many careers in today’s law offices: what education is needed, what employers expect, and how to pursue this career. Note: PLS 20 is NOT part of the Paralegal/Legal Studies degree and certificate programs. CSU

Real Estate

Credit, Degree Applicable Courses:
RE 97. Work Experience in Real Estate (3)
Work-225 total paid, supervised hrs., or 180 total unpaid, supervised hrs., conf-var.
Coreq.: Enrollment in at least 4 additional units and written consent of instructor

Repeat: Maximum credit: 6 units
Supervised employment involving real estate duties. CSU

RE 181. Principles of Real Estate (3)
Lec-3
The fundamental real estate course covering the basic laws and principles of California real estate; background and terminology necessary to advanced study in specialized courses. Designed to assist those preparing for the California state real estate salesperson licensing examination. CSU

RE 182. Escrow Fundamentals (3)
Lec-3
Basic methods and techniques of escrow procedures and legal responsibilities of individuals engaged in escrow work. Types of instruments used on the job and their preparation, closing statements, disbursement of funds, proration calculations, public and ethical responsibilities. CSU

RE 183. Real Estate Property Management (3)
Lec-3
An introductory course dealing with real estate property management and its relation to the areas of management, agency, contracts, rentals (e.g., lease and rental agreements), basic rent rules, rent control, tenant selection, insurance, repairs and maintenance, evictions, discrimination, landlord and tenant rights, public and private housing facilities, government regulations and participation, and the real estate industry. CSU

RE 184. Real Estate Practice (3)
Lec-3
Day-to-day functions and operations of the real estate broker and salesperson. The duties and responsibilities of real estate brokerage including listing, prospecting, advertising, marketing, financing, sales techniques, escrow, ethics, and compliance of state and federal regulations. CSU

RE 185. Legal Aspects of Real Estate (3)
Lec-3
California real estate law (including rights incident to property ownership and management, agency, and contracts) as applied to real estate transfer, conveyance, probate proceedings, trust deeds, and foreclosure, as well as recent legislation governing real estate transactions. CSU

RE 186. Principles of Real Estate Finance (3)
Lec-3
Analysis of real estate financing, including lending policies in financing residential, commercial and special purpose properties. Emphasis on various methods of financing and lending criteria. CSU

RE 187. Real Estate Taxation (3)
Lec-3
This course encompasses Federal and California State income tax and other tax laws influencing the purchase, sale, exchange, and use of real property. Topics include depreciation, capital gains, installment sales, pre-paid interest, and tax saving opportunities. Tax planning, federal gift and estate taxes, and transfer taxes are explored. CSU

RE 189. Real Estate Economics (3)
Lec-3
Use of economic analysis as the basis for prudent real estate purchases and investments. Students will explore the impact of financing and government policies with respect to investment markets. Review the
economic advantages and disadvantages of various types of real estate purchases and investment. CSU

RE 191. Principles of Real Estate Appraisal (3)
Lec-3, field trips
A basic course in real estate valuation with emphasis on residential property. Definitions and concepts; principles of valuation; the appraisal process; analysis of city, neighborhood and site data; architectural styles and utility; depreciation; valuation by market data, cost and income approaches; correlation of approaches and final estimate of value; the appraisal report; and the professional appraiser. CSU

RE 192. Advanced Real Estate Appraisal (3)
Lec-3
Advanced study in appraisal and valuation techniques with emphasis on income, commercial, and industrial properties. Evolutions of rental income sheets and analysis of expenses. Review types of narrative reports Case testimony reports for the governmental agencies. CSU

RE 193. Real Estate Computer Applications (3)
Lec-3
Exploration of basic computer functions, along with the latest computer software dealing with the real estate appraisal, property management, finance, escrow, sales, listings, record keeping and other related areas of real estate. CSU

RE 194. Affordable Housing Property Management (3)
Lec-3
Introduction to affordable housing property management and its relation to the areas of management, agency, contracts, rentals (e.g., lease and rental agreements), basic rent rules, rent control, tenant selection, insurance, repairs and maintenance, evictions, discrimination, landlord and tenant rights, HUD rules and regulations, public and private housing facilities, government regulations and participation, and the real estate industry. CSU

Small Business

Credit, Degree Applicable Courses:

SMBS 135. Ownership and Operations of a Small Business (3)
Lec-3 P/NP available
An introduction to organizing and managing a successful business enterprise. Emphasis on formulating a business plan, preparing financial statements, conducting marketing research, finding sources of financing, developing marketing and business strategies, and responding to legal and ethical issues. CSU

Noncredit Courses:

SMBU 9418. Small Business and Taxes (3 hrs)
A non-technical introduction to Federal and State tax laws that are applicable to small business owners. Topics include basic terminology, reportable income, deductions, tax credits and tax saving strategies.

SMBU 9419. Developing a Business Plan (18 hrs)
Benefits of developing a business plan for a small business. Introduction to the parts of a successful business plan, creation of common financial statements and drafts of several sections of the plan.

SMBU 9421. Successful Sales (3 hrs)
An overview of successful sales techniques including: telemarketing, tracking sales prospects, sales presentations, and successful closings.

SMBU 9436. Buying a Business (3 hrs)
A discussion of the basic steps involved in the purchase of a business: evaluation of the merits of the business, determination of purchase price and financing of purchase.

SMBU 9450. Effective Advertising (3 hrs)
An overview of the types, objectives and limitations of small business advertising, emphasizing forms of advertising that are most effective for small business. Topics include the development and implementation of an advertising plan and budget.

SMBU 9451. Business Licenses and Permits (3 hrs)
This class provides an overview of the various types of required permits and licenses and offers guidance in obtaining them.

SMBU 9452. Supervising Employees (3 hrs)
An overview of employee supervision focusing on various management structures and styles and how they can be used to supervise and motivate employees.

SMBU 9453. Business Communication (3 hrs)
An introduction to the role of effective communication in a small business and the essential skills of effective listening, questioning, summarizing and presentation.

SMBU 9466. Employer/Employee Rights (3 hrs)
An overview of the rights and responsibilities of employees and employers and a discussion of the legal framework of the employee/employer relationship.

SMBU 9467. Getting Started in Business (18 hrs)
An overview of the considerations involved in starting a new business. Entrepreneur and small business characteristics; business licenses and permits; legal structures for business; strategy development and industry and competitor analysis.

SMBU 9470. Marketing Strategy (3 hrs)
An in-depth look at the objectives, components, implementation and evaluation of a well-designed marketing strategy.

SMBU 9471. Pricing a Product or Service (3 hrs)
A broad discussion of the factors affecting pricing including government regulations and specific pricing policies established by manufacturers, wholesalers, retailers and the service industry.

SMBU 9476. Green and Sustainable Small Business (18 hrs)
An exploration of the major types of green certifications and the process of achieving them, as well as the obstacles and opportunities small businesses face in implementing and maintaining sustainable practices that are economically, ecologically and socially sound.

SMBU 9477. eBay for Your Small Business (9 hrs)
Create an online presence for your small business using eBay. Learn how to open a seller's account, research and create winning listings, incorporate photos of product displays, set prices, open and use a PayPal account, monitor listings and complete sales.

SMBU 9772. Finding the Right Location (3 hrs)
An overview of the criteria for selecting and optimal business location. Topics include matching business types and locations; understanding the rent vs. buy option; defining business needs and evaluation locations.
SMBU 9774. Selling and Sales Management (3 hrs)
An overview of the concepts, types and techniques of selling as well as guidelines for preparing and conducting winning sales presentations.

SMBU 9776. Record Keeping (3 hrs)
A practical course which evaluates the necessity of setting up and maintaining an effective system of records for a small business. Examination of the different system and methods of organizing data.

SMBU 9781. Legal Structure for a Business (3 hrs)
An evaluation of each of the legal structures a business can assume. Corporations, partnerships, sale proprietorships, the process of incorporation.

SMBU 9782. Home Based Business (3 hrs)
An overview of the many considerations and challenges that are encountered when starting a home-based business and working at home.

SMBU 9784. Finance for Small Business (3 hrs)
Examination of the initial and on-going financial needs of a small business, with attention to basic financial analysis, statements, ratios, and trends.

SMBU 9791. Introduction to Finance (3 hrs)
An introduction to the vocabulary, concepts, and principles of finance as they relate to the operation of a small business.

SMBU 9792. Small Business Management(18 hrs)
An introduction to basic administration and management concepts and procedures for small business, including an overview of the rights and responsibilities of employees and employers.

SMBU 9793. Small Business Marketing and Sales (18 hrs)
A practical, targeted study of how to develop and implement a successful marketing and sales strategy for small business.

SMBU 9796. Profiting from Financial Statements (3 hrs)
An introduction to basic financial analysis through the study of financial statements, ratios, and trend recognition.

SMBU 9799. Technology for Small Business (18 hrs)
An introduction to important basic software and hardware tools for entrepreneurs such as website management, blogging, point of sale, databases and IT security.

SMGB 8500. Achieving San Francisco Green Business Certification (9 hrs)
Green certification is becoming an increasingly important tool for gaining and keeping customers for San Francisco businesses. We cover the step by step methodology of getting green certified and how to maintain your certification once you get it.

SMGB 8501. Green Marketing for Small Business (6 hrs)
The growing importance of being an environmentally friendly small business cannot be overemphasized. Learn the tools to go beyond compliance and learn how to leverage green as a marketable advantage.

SMGB 8502. Cost Benefits of Being Green (6 hrs)
An introduction to how going green can save your company money. Find the ways to cut costs, and what types of grants and credits are available to help you.

SMGB 8503. The Green Supply Chain (6 hrs)
As green initiatives become more pervasive in business, key customers will insist in green compliance from their vendors. Learn how you fit in the green supply chain and how to ensure your suppliers comply.

SMGB 8504. Green Certifications (6 hrs)
There are many different green certifications available to today’s businesses. We will cover the major types of certifications, the process of achieving them and how certification can help you get and retain customers.

**Supervision and Business Management**

**Credit, Degree Applicable Courses:**

**SUPV 231. Introduction to Supervision/Management (3)**
Lec-3
Concepts of supervision and management including planning, organizing, recruiting, training, decision-making, communication, employee relations, motivation, discipline, rewards/incentives, and grievances. CSU

**SUPV 232. Organizational Behavior for Supervisors (3)**
Lec-3
Concepts and principles of human behavior in organizations, including application of motivational theory, group dynamics, managing change, leadership styles, training, and organizational development. CSU

**SUPV 233. Human Resources Management (3)**
Lec-3
This course focuses on human resources management principles and techniques including recruiting, job performance, employee development, career management, discipline, labor relations, and employment law; also sexual harassment, health issues in the workplace, discrimination, Americans with Disabilities Act, downsizing, managing a diverse workforce, and governmental regulations. CSU

**SUPV 234. Communication for Business Management (3)**
Lec-3 P/NP available
Concepts, strategies, and models to help improve communication, writing, presentations, speeches, teamwork, and negotiating skills. CSU

**SUPV 235. Organizational Leadership (3)**
Lec-3 P/NP available
This course explores collaborative and inclusive leadership and management styles along with the vision and values needed to effectively lead successful organizations. Examines strategies for developing and encouraging skills that enable leaders and managers to succeed in business, government, nonprofits, education, and community-based organizations. CSU/UC

**SUPV 236. Women Leaders at Work (3)**
Lec-3 P/NP available
This course explores women's leadership, management, and communication styles and the vision and values women leaders bring to an effective environment in business, education, government and community organizations. Examines strategies for developing and encouraging skills that enable and allow women leaders and managers to succeed. CSU

**SUPV 240. Introduction to Retirement Planning (3)**
Lec-3 P/NP available
This course explores the fundamentals of retirement planning including but not limited to initial savings, investment decision, withdrawals
at retirement age, working during retirement, non employment emotional outlets and managing expectations. Examines strategies for developing and effective individual retirement plan that will enable students to effectively prepare for retirement whether the retirement date is a short or long term goal.

Travel and Tourism

Credit, Degree Applicable Courses:

TRTV 155. Meeting and Event Planning (1)
Lec-1, field trips
Learn to plan a meeting, seminar, training session, convention, trade show, or product launch. CSU

TRTV 157. Principles of Travel and Tourism (3)
Lec-3
An overview of the components and satellite industries that make up the business of Travel and Tourism: airlines, hotels and resorts, ground transportation, bus, rail, cruise lines, tour companies, etc. Emphasis on the specific and basic terminology of the industry, on researching the development of a destination, packaging and then selling it. Designed to give the student the basics for all components of the industry. CSU

TRTV 159. Advanced Principles of Travel and Tourism (3)
Lec-3
Methods of developing a travel destination, advertising and selling that destination; dynamics of tourism sales and marketing concepts including wholesale and retailing practices of the travel industry. CSU

TRTV 160. Transportation Field Work (1)
Work-5 P/NP only
Advisory: Consent of the Travel and Tourism Program Advisor
Repeat: Maximum credit: 2 units
On the job laboratory training in customer service with airlines, travel agencies, and other passenger service companies. Placement of students is determined according to cooperating firm's requirements. CSU

TRTV 171A. Destinations: Cities I (3)
Lec-3
Examination of the numerous features that make selected cities in Western Europe, South America and Africa great destinations to visit. TRTV 171A and B may be taken in any order or independently. CSU

TRTV 171B. Destinations: Cities II (3)
Lec-3
Examination of the numerous features that make selected cities in Eastern Europe, North America, and Australasia great destinations to visit. CSU

TRTV 172. Destinations: Natural Wonders (3)
Lec-3
One of the oldest and fastest growing segments of the travel and tourism industry are trips to the natural wonders of the world. The student will learn what types of natural wonders exist, where they are located, steps to preserving them, and how to plan trips to visit them.CSU

TRTV 173. Destinations: Historical and Archaeological (3)
Lec-3
An analysis of the historical and archaeological travel destinations of the world. Travelers want to find a connection to their heritage. Learn all the “must see” places for the well traveled. More people travel to historical and archaeological sites than any other segment of the travel industry. CSU

TRTV 174. Destinations: Cruises (3)
Lec-3
An in-depth analysis and evaluation of all types of cruises, including large and small cruise ships, boats, barges, ferries, freighters, and sailing vessels with particular emphasis on the cruise experience as a destination. What are the benefits of cruise travel and who offers the best itineraries. CSU

TRTV 175. Destinations: Hotels, Resorts and Spas (3)
Lec-3
Learn all there is to know about the accommodation segment of the travel and tourism industry. What makes a great hotel, resort, or spa? How do hotel rating systems work? Where are the top properties located, and how do you get the best rates for your clients? CSU

TRTV 176. Destinations: Great Trips (3)
Lec-3
An introduction to the world's greatest trips, based on lists produced annually by the leading authorities in the travel and tourism industry. An overview of all the top trips offered by air, sea, and land worldwide. A must class for anyone interested in traveling or planning a career in travel and tourism. CSU

TRTV 180. Eco-Travel and Tourism (3)
Lec-3, field trips
Ecological and green travel is the fastest growing segment of the travel industry. Learn what makes a destination green, the differences between green, sustainable, and ecological travel, and how destinations are developed with green objectives in mind. CSU

TRTV 181. Business Travel (3)
Lec-3, field trips
What does the business traveler need and how does it differ from the leisure traveler? Learn about special contract agreements and the needs of the business traveler. An ideal class for administrative assistants and anyone working in the business world. CSU

TRTV 182. Tour Management (3)
Lec-3, field trips
Advisory: TRTV 157 and/or TRTV 159
Learn how to develop, price, market, and account for all components of a special interest guided tour. Negotiate with airlines, hotels, ground operators and other suppliers for pricing and terms. At the completion of this course the student will be able to plan a profitable guided tour. CSU

Word Processing

See curricula and course listings under Computer Applications for Business in this section of the catalog.

Work Experience

Credit, Degree Applicable Courses:

WKEX 301. General Career Work Experience (1)
Work-min. 75 (total hrs) P/NP only
Prereq: Approval of Business Dept. Work-Experience Coordinator. Students may enroll in only one work experience course per semester.
Repeat: WKEX 301, 302, and 303 combined, max. credit: 6 units
Students work at a paid or an unpaid off-campus job
Work experience course designed for the student who may not yet have selected a specific occupational goal but who is presently employed off campus. An orientation to the world of work and a solid foundation for career planning, using the resources of both CCSF and the employer. CSU

WKEX 302. General Career Work Experience (2)
Work-min. 150 (total hrs) P/NP only
Prereq.: Approval of Bussiness Dept. Work-Experience Coordinator. Students may enroll in only one work experience course per semester.
Repeat: WKEX 301, 302, and 303 combined, max. credit: 6 units
Students work at a paid or an unpaid off-campus job
Work experience course designed for the student who may not yet have selected a specific occupational goal but who is presently employed off campus. An orientation to the world of work and a solid foundation for career planning, using the resources of both CCSF and the employer. CSU

WKEX 303. General Career Work Experience (3)
Work-min. 225 (total hrs) P/NP only
Prereq.: Approval of Bussiness Dept. Work-Experience Coordinator. Students may enroll in only one work experience course per semester.
Repeat: WKEX 301, 302, and 303 combined, max. credit: 6 units
Students work at a paid or an unpaid off-campus job
Work experience course designed for the student who may not yet have selected a specific occupational goal but who is presently employed off campus. An orientation to the world of work and a solid foundation for career planning, using the resources of both CCSF and the employer. CSU

WKEX 805. On-Campus Work Experience (1)
Work-min. 60 (total hrs) P/NP only
Prereq.: Approval of Bussiness Dept. Work-Experience Coordinator. Students may enroll in only one work experience course per semester.
Repeat: WKEX 805, 806, and 807 combined, max. credit: 6 units
Students work at an unpaid on-campus job
Work experience course designed to introduce students to the requirements of the workplace in an academic environment. The focus of the course varies according to the CCSF department in which the student works.

WKEX 806. On-Campus Work Experience (2)
Work-min. 120 (total hrs) P/NP only
Prereq.: Approval of Bussiness Dept. Work-Experience Coordinator. Students may enroll in only one work experience course per semester.
Repeat: WKEX 805, 806, and 807 combined, max. credit: 6 units
Students work at an unpaid on-campus job
Work experience course designed to introduce students to the requirements of the workplace in an academic environment. The focus of the course varies according to the CCSF department in which the student works.

WKEX 807. On-Campus Work Experience (3)
Work-min. 180 (total hrs) P/NP only
Prereq.: Approval of Bussiness Dept. Work-Experience Coordinator. Students may enroll in only one work experience course per semester.
Repeat: WKEX 805, 806, and 807 combined, max. credit: 6 units
Students work at an unpaid on-campus job
Work experience course designed to introduce students to the requirements of the workplace in an academic environment. The focus of the course varies according to the CCSF department in which the student works.

Students work at an unpaid on-campus job
Work experience course designed to introduce students to the requirements of the workplace in an academic environment. The focus of the course varies according to the CCSF department in which the student works.

Career Development
Office: MU 39
Phone Number: (415) 239-3117
Web Site: www.ccsf.edu/cdc
Formerly CDCD

Mission Statement
Within the Continuing Student Counseling Department, we strive to assist students to develop skills to succeed in college, graduate, earn certificates, transfer, and to create and to maintain meaningful careers. Additionally, we endeavor to assist students to reflect on and articulately express their thoughts, values, skills, and interests, and to contribute to society in meaningful ways. To this end, our program of counseling services and courses will guide students to:

Learning Outcomes
- Apply self-assessment information to academic and career exploration.
- Construct and take proactive steps to manage and overcome academic and personal obstacles.
- Compare and contrast college majors and transfer institutions thoroughly before making a decision.
- Identify and analyze their rights and responsibilities.
- Investigate ways to contribute to society.
- Apply research skills while taking action to create academic, career, and life options.
- Recognize and value diversity within themselves and among others.

Announcement of Courses
Credit, Degree Applicable courses:
CRER 60. Creating Career Options (3)
Lec-3, field trips P/NP available
An in-depth guide to career decision-making and career change and their impact on lifelong learning. Topics include self-assessment, assessment of the world of work, evaluation of options, and the creation of a career action plan. Focus is on the role of career development in contributing to a satisfying life. Helpful to people considering a career change or undecided about a college major. CSU/UC
Formerly LERN 60.

CRER 61. Orientation to Career Success (1)
Lec-1 P/NP available
Constructing career success through integrating values, skills, and interests with an understanding of the emerging world of work. Topics include self-assessment, on-line and other career resources, and the construction of a plan for exploring career options. Appropriate for new college students as well as continuing students. CSU
Formerly LERN 61.

CRER 62. Successful Job Search Techniques (1)
Lec-1 P/NP available
A comprehensive job search course that addresses skills assessment, generating employment options, hard copy and electronic resources
and job postings, research techniques, traditional résumé types as well as keyword-scannable résumés and cover letters, and interview techniques. Emphasis on techniques to sustain healthy motivation for job search network and development throughout life. CSU Formerly LERN 62.

CRER 63. Career Counseling for Work Experience (1)
Lec-1 P/NP only
Coreq.: Concurrently working in a paid or unpaid position
The seminar provides support and skill building experiences for students currently working in paid or unpaid positions. The content addresses workplace objectives, and interpersonal, communication and problem solving skills and their work site application. CSU Formerly LERN 63.

LERN 64. Financial Planning for Academic/Career (1)
Lec-1 P/NP only
Critical analysis and practical application of topics related to career and financial planning as they relate to success in college. This course will provide students with financial planning and management tools for academic and career success. Appropriate for new and continuing college students.

CRER 68. Career Coaching for Youth Workers (3)
Lec-3, field trips P/NP only
An introduction to the elements of career coaching for those interested in working with youth and young adults. Methods and skills appropriate to facilitate career awareness, exploration, and development. Formerly LERN 68.

NONCREDIT COURSES:
LERN 1062. Job Search Skills (15 hrs)
A job search-course that teaches skills to generate employment options through self assessment, the use of interview techniques, cover letter and resume development, and job search strategies.

Chemistry
Office: Science 236
Phone Number: (415) 239-3377
Web Site: www.ccsf.edu/chemistry

Learning Outcomes
Upon completion of courses in chemistry, students will be able to:
- Use current technology to access, organize, and apply relevant chemical information.
- Apply mathematical representations to describe chemical systems and phenomena.
- Apply the language of chemistry to communicate an understanding of chemistry in written and oral form.

Chemistry Major (AS)*
*This program is pending state approval.
Please refer to the online version of the Catalog.

Announcement of Courses
Credit, Non-Degree Applicable Courses:
CHEM C. Calculations in Chemistry (1)
Conf-1.5 P/NP only
Coreq.: CHEM 101A
Recommended as a supplement to be taken concurrently with CHEM 101A for students who need additional help.
Illustration and discussion of problem-solving methods for calculations in CHEM 101A. Recommended as a supplement to be taken concurrently with CHEM 101A for students who need additional help.

CHEM D. Chemistry Calculations (1)
Conf-1.5 P/NP only
Coreq.: CHEM 103A
Recommended as a supplement to be taken concurrently with CHEM 103A for students who need additional help.
Illustration and discussion of problem-solving methods for calculations in CHEM 103A.

CHEM E. Organic Problem-Solving Methods I (1)
Conf-1.5 P/NP only
Coreq.: CHEM 212A
Recommended as a supplement to be taken concurrently with CHEM 212A for students who need additional help.
Illustration and discussion of problem-solving methods in CHEM 212A.

CHEM F. Organic Problem-Solving Methods II (1)
Conf-1.5 P/NP only
Coreq.: CHEM 212B
Recommended as a supplement to be taken concurrently with CHEM 212B for students who need additional help.
Illustration and discussion of problem-solving methods in CHEM 212B.

Credit, Degree Applicable Courses:
CHEM 17. Problem-Solving Methods (3)
Lec-3
Prereq.: Completion/concurrent enrollment in MATH 40, or placement in MATH 60 or higher
The normal progression is from CHEM 17 to CHEM 40. Students who have completed CHEM 40, 101A, or 103A may not receive credit for CHEM 17.
Problem-solving, with emphasis on the how and why of solving problems. Useful for all areas where quantitative reasoning is needed. Designed for the student who knows how to perform various mathematical operations but who has difficulty in setting up problems for solution. Most problems assigned in this course have some basis in commonly known or easily learned aspects of the physical sciences. CSU
CHEM 32. Introduction to Medical Chemistry (4)
Lec-3, lab-3  P/NP available
Open to all students. No previous chemistry or physics required. Satisfies the requirements of nursing and related majors that require one semester of chemistry. Also satisfies the recommended prerequisite for PHYS 12 and MATH 12.
Students taking a major that requires two semesters of chemistry should enroll in CHEM 33 after completing CHEM 32. Students preparing to enroll in CHEM 101A or 103A should enroll in CHEM 40.
Basic concepts of inorganic and organic chemistry, biochemistry, and physics as they apply to the chemistry and physics of the human body. CSU

CHEM 33. Adv Medical Chemistry and Biotechnology (4)
Lec-4, lab-2
Prereq: CHEM 32 or CHEM 208A, or CHEM 212A; and MATH 40 or placement in a higher level math course
Advanced topics in general and biological chemistry, including equilibrium processes, gene expression, DNA manipulation and analysis, biochemical transformations, specialized biomolecules, enzymes, metabolic pathways, and nuclear chemistry. CSU

CHEM 40. Introduction to Chemical Principles (4)
Lec-3, conf-1, lab-3
Prereq: ET 108B or MATH 40 or placement in MATH 60 or higher
Students may enroll in this course to remove a high school deficiency in chemistry. Designed to prepare the beginning student as well as to strengthen the re-entry student for CHEM 101A or 103A. Students who plan to enroll in CHEM 101A or 103A are advised to take MATH 60 concurrently.
An introductory study of the fundamental laws and concepts of classical and modern chemistry, including dimensional analysis, nomenclature, stoichiometry, gases, solutions and atomic and molecular structures. CSU/UC

CHEM 65A. Introduction to GC-MS (0.5)
Lec-7, lab-6 (total hrs)  P/NP available
Principles and applications of gas chromatography and mass spectrometry, including the technique's growing use in biotechnology, qualitative analysis and identification of unknown compounds, quantitative analysis of solutes, and method development using a computer interface. CSU

CHEM 65B. Introduction to HPLC (0.5)
Lec-7, lab-6 (total hrs)  P/NP available
Principles and applications of HPLC, with a focus on uses in biotechnology, qualitative and quantitative analysis, and method development using a computer interface. CSU

CHEM 65C. Introduction to Capillary Electrophoresis (0.5)
Lec-7, lab-6 (total hrs)  P/NP available
Principles and practical applications of capillary electrophoresis, including biotechnology applications, qualitative analysis and identification of unknown compounds, quantitative analysis of solutes, and method development using a computer interface. CSU

CHEM 65D. Introduction to AA Spectroscopy (0.5)
Lec-7, lab-6 (total hrs)  P/NP available
Principles and practical applications of atomic absorption (AA) spectroscopy, including environmental analysis and identification of unknown elements, and quantitative analysis of elements and ions. CSU

CHEM 80-81. Selected Topics in Chemistry (0.5-1-2-3)
Lec-0.5, 1, 2, 3, field trips  P/NP available
Investigation in depth of selected topics in chemistry, such as: considering current issues and innovations, expanding subjects covered briefly in introductory courses, exploring topics not studied in other classes in chemistry, or instruments newly available. CSU

CHEM 85. Seminar in Chemistry (1)
Lec-1.5  P/NP available
Discussions on current research in chemistry, biochemistry, and related fields. Presentations on career opportunities for students studying chemistry, as well as on study strategies for chemistry courses. CSU

CHEM 90-91-92. Laboratory Projects in Chemistry (0.5-1-2)
Lab-1.5, 3, 6, field trips  P/NP available
Investigation in depth of selected laboratory techniques in chemistry, such as: methods of analysis using instruments available at CCSF or elsewhere; computer modeling using research-quality software; or groups of experiments not part of the curriculum in a currently-offered chemistry course at CCSF. CSU

CHEM 101A. General College Chemistry (5)
Lec-4, lab-6
Prereq: CHEM 40, 50, or an Advanced Placement test score of 3 or higher, or placement in CHEM 101A/103A by examination and advising; AND MATH 60 or placement in any math course higher than MATH 60
Students who are majoring in engineering, except chemical engineering, should enroll in CHEM 103A.
CHEM 101A-B are the standard college courses required in many curricula. CHEM 101A may be substituted for CHEM 103A.
Stoichiometry, solubility, solutions, gas behavior, thermochemistry, atomic structure, periodic table, chemical bonding, molecular structure, solids and liquids, and an introduction to chemical equilibrium. CSU/UC/C-ID CHEM 110; C-ID CHEM 120S (CHEM 101A+101B)

CHEM 101B. General College Chemistry (5)
Lec-3, lab-6
Prereq: CHEM 101A or 103A
Chemical kinetics, applications of aqueous equilibrium, chemical thermodynamics, oxidation and reduction, electrochemistry, symmetry, crystal structures and solid state chemistry, transition metal ions, descriptive chemistry of selected elements, and introduction to organic chemistry; CSU/UC/C-ID CHEM 120S (CHEM 101A+101B)

CHEM 101L. General Chemistry Lab I (2)
Lab-6
Prereq: A lecture course equivalent to CHEM 101A
CHEM 101L is designed for students who have previously passed the lecture portion of first-semester general chemistry and who now need to satisfy the laboratory requirement.
The laboratory component of CHEM 101A. CSU

CHEM 102L. General Chemistry Lab II (2)
Lab-6
Prereq: A lecture course equivalent to CHEM 101B
CHEM 102L is designed for students who have previously passed the lecture portion of second-semester general chemistry and who now need to satisfy the laboratory requirement.
The laboratory component of CHEM 101B. CSU
CHEM 103A. General Chemistry for Engineering (4)
Lec-4, lab-3
Prereq.: CHEM 40, 50, or an Advanced Placement test score of 3 or higher, or placement in CHEM 101A/103A by examination and advising; and MATH 60 or placement in any math course higher than MATH 60
Described for students majoring in all engineering programs except chemical engineering.
Thermochemistry, atomic structure, periodic properties, bonding, solid-state structures, fundamentals of organic chemistry, solution chemistry, thermodynamics, kinetics, equilibrium, acids and bases, and electrochemistry. CSU/UC

CHEM 107. Computers in Chemistry (2)
Lec-1, lab-3
Prereq.: Completion/concurrent enrollment in CHEM 101A or 103A
Spreadsheet programs and the BASIC programming language will be used as tools for problem solving, calculations, graphing and visual presentation of chemical data. Students will also use mathematical utilities programs in chemical settings. All projects utilize the principles taught in general chemistry. No prior computer experience is required. CSU/UC

CHEM 110. Chemistry for Nonscientists (3)
Lec-3, field trips P/NP available
A non-mathematical presentation of chemical principles with emphasis on their relevance to modern life. Designed for non-science majors. CSU/UC

CHEM 110L. Laboratory for Nonscientists (1)
Lab-3 P/NP available
Prereq.: Completion/concurrent enrollment in CHEM 110
Laboratory practice in modern and commonly used chemical techniques. CSU/UC

CHEM 205. Quantitative Analysis (4)
Lec-2, lab-6
Prereq.: CHEM 101B
Recommended that CHEM 205 be taken soon after CHEM 101B
The fundamentals of quantitative analysis. Solubility, acid-base, redox, complex formation equilibria and their applications in volumetric and gravimetric analysis. Selected topics in instrumental analysis. CSU/UC

CHEM 208A. Organic Chemistry (4)
Lec-3, lab-3
Prereq.: CHEM 101A or 103A
The first semester of a one-year course in organic chemistry for students not majoring in chemistry or biochemistry. CHEM 208A/208B is designed for students majoring in the life sciences, including pre-medical students. CSU/UC/C-ID CHEM 150

CHEM 208B. Organic Chemistry (4)
Lec-3, lab-3
Prereq.: CHEM 208A or 212A
The continuation of CHEM 208A. The second semester of a one-year course for students not majoring in chemistry or biochemistry. CSU/UC

CHEM 208L. Organic Chemistry Lab I (1)
Lab-3
Prereq.: A lecture equivalent to CHEM 208A or 212A
CHEM 208L is designed for students who have previously passed the lecture portion of first-semester organic chemistry and who now need to satisfy the laboratory requirement.
The laboratory component of CHEM 208A. CSU

CHEM 212A. Organic Chemistry (5)
Lec-4, lab-6
Prereq.: CHEM 101B
CHEM 212A may be substituted for CHEM 208A.
The first semester of a one-year course in organic chemistry for students who major in chemistry, biochemistry, or other sciences. CHEM 212A/212B also satisfies the organic chemistry requirements of medical schools. CSU/UC/C-ID CHEM 150

CHEM 212B. Organic Chemistry (5)
Lec-4, lab-6
Prereq.: CHEM 212A or 208A
CHEM 212B may be substituted for CHEM 208B.
The continuation of CHEM 212A. CSU/UC

CHEM 212L. Organic Chemistry Lab I (2)
Lab-6
Prereq.: A lecture course equivalent to CHEM 212A
CHEM 212L is designed for students who have previously passed the lecture portion of majors-level first-semester organic chemistry and who now need to satisfy the laboratory requirement.
The laboratory component of CHEM 212A. CSU

Child Development and Family Studies
Office: (New Building) Multi-Use Bldg. MUB 249
Phone Number: (415) 239-3172
Web Site: www.ccsf.edu/cdev

Announcement of Curricula
General Information
The Child Development and Family Studies Department provides educational curriculum for adult students interested in entering or continuing education for careers with children and provides services to support the needs of children and families from diverse backgrounds. The Department offers a wide variety of credit, noncredit and grant-funded programs and services that further adult understanding of how children learn, grow and develop, including: educational and practicum experiences for adults, quality ECE programs for infants, preschoolers and school-age children, and youth, parent education programs at varied times and community locations throughout San Francisco, and transfer courses for students interested in K – 12 teaching, CTE teaching and related careers.

Learning Outcomes
- Students will become prepared to work in group or individual settings with children and youth.
- Students will understand appropriate practice and planning necessary to meet the needs of children in group settings.
- Students will be able to support children in their development and will be able to create environments for growth.

Early Childhood Education Major (AS-T)
Associate in Science in Early Childhood Education for Transfer.
This degree is intended for students who plan to complete a bachelor's degree in a similar major at a CSU campus. Students completing the degree are guaranteed admission to the CSU system, but not to a particular campus or major. A student graduating with an

Child Development and Family Studies
Associate in Science in Early Childhood Education for Transfer (Early Childhood Education AS-T) may transfer to a CSU Campus to complete a Bachelor’s Degree in Early Childhood Education, Child and Adolescent Development, Family and Consumer Sciences, Human Communication, Human Services, Liberal Studies or related fields.

Learning Outcomes
Upon completion of the AS-T courses, students will be able to:

- Understand and describe stages of child growth and development, including brain development, sensory motor development, cognitive development, language development, physical development and social-emotional development.
- Examine the role of families and communities in the lives of children and youth, including secure relationships, community resources, diverse family structures, inclusion and the development of a community commitment to social justice.
- Describe developmentally appropriate practice and diverse philosophical approaches in early childhood settings.
- Understand and describe the fundamental importance of play, sensory learning, inclusion and nurturing and responsive relationships.
- Compare and apply practices that promote professional and personal integrity among children, families, staff and colleagues including reflective practice, collaboration and teamwork strategies.
- Design and apply cross-cultural skills and knowledge to develop curriculum, communicate with families, build relationships with families and support the positive identity development of culturally diverse children and families.
- Describe safe and healthy environments in early education settings and in the community.
- Evaluate and demonstrate formal and informal observations and assessments of children to document development, play, growth and learning.
- Meet the requirements for transfer to a CSU campus for a Bachelor degree program in Early Childhood Education, Child and Adolescent Development or a related field.

Degree Requirements: Students who wish to earn the Associate in Science in Early Childhood Education for Transfer (AS-T) must complete 60 CSU transferable units with at least a 2.0 grade point average. This must include the units required for full completion of the IGETC or CSU GE curriculum and the 24 units for the major as specified below. Each course in the major must be completed with a grade of “C” or better. Courses used to meet the major requirement may also be used to meet IGETC or CSU GE requirements.

Courses Required for the Major in Early Childhood Education

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CDEV 65 Orientation to ECE Principles and Practice</td>
<td>3</td>
</tr>
<tr>
<td>CDEV 67 Child, the Family, and the Community</td>
<td>3</td>
</tr>
<tr>
<td>CDEV 53 Child Growth and Development</td>
<td>3</td>
</tr>
<tr>
<td>CDEV 66 Intro to Early-Childhood Curriculum</td>
<td>3</td>
</tr>
<tr>
<td>CDEV 93 Cultural Diversity in ECE</td>
<td>3</td>
</tr>
<tr>
<td>CDEV 73 Observing and Assessing Children</td>
<td>3</td>
</tr>
<tr>
<td>CDEV 92 Health, Safety, and Nutrition in Early Childhood Programs</td>
<td>3</td>
</tr>
<tr>
<td>CDEV 72 Supervised Field Experience in Early Childhood</td>
<td>3</td>
</tr>
<tr>
<td>Total</td>
<td>24</td>
</tr>
</tbody>
</table>

Child Development Major (AS)

Admission. Enrollment is open to all students interested in working with children in Early Childhood Programs or in gaining knowledge needed to become employed in related professions such as K-12 teacher, recreation worker, paraprofessional, youth worker or to transfer for further study.

Associate in Science Degree. The Child Development Program is designed so that students may satisfy the requirements for graduation from the College.

Learning Outcomes
Upon completion of the Associate of Science degree in Child Development and Family Studies, students will be able to:

- Understand and describe stages of child growth and development, including brain development, sensory motor development, cognitive development, language development, physical development and social-emotional development.
- Examine the role of families and communities in the lives of children and youth, including secure relationships, community resources, diverse family structures, inclusion and the development of a community commitment to social justice.
- Describe developmentally appropriate practice and diverse philosophical approaches in early childhood settings.
- Understand and describe the fundamental importance of play, sensory learning, inclusion and nurturing and responsive relationships.
- Compare and apply practices that promote professional and personal integrity among children, families, staff and colleagues including reflective practice, collaboration and teamwork strategies.
- Design and apply cross-cultural skills and knowledge to develop curriculum, communicate with families, build relationships with families and support the positive identity development of culturally diverse children and families.
- Describe safe and healthy environments in early education settings and in the community.
- Evaluate and demonstrate formal and informal observations and assessments of children to document development, play, growth and learning.

Courses required for the major in Child Development and Family Studies

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<tr>
<td>CDEV 72 Supervised Field Experience in Early Childhood</td>
<td>3</td>
</tr>
<tr>
<td>Total</td>
<td>30</td>
</tr>
</tbody>
</table>

The Degree curriculum requires a total of 60 semester units. After completing 30 units from the Child Development Department AND
the 18–24 units of General Education Requirements, a student may enroll in any course (as elective) to total the 60 units for an A.S. Degree.

**Child Development: Administration Certificate**

A "Certificate of Achievement" will be granted upon successful completion of the required number of units in course work. A grade of “C” or better is required in all certificate courses.

**Learning Outcomes**

Upon completion of this certificate students will be able to:

- Understand and describe stages of child growth and development, including brain development, sensory motor development, language development, cognitive development, physical development and social-emotional development.
- Examine the role of families and communities in the lives of children and youth, including secure relationships, community resources, diverse family structures and the development of a community commitment to social justice.
- Describe developmentally appropriate practice and diverse philosophical approaches in a range of settings for children and youth.
- Identify the basic competencies and general regulatory requirements needed to administer a child development program.
- Define the components of supervision needed to lead a child development program.

**Courses Required for the Certificate of Achievement in Child Development: Administration**

<table>
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<td>3</td>
</tr>
<tr>
<td>CDEV 65 Orientation to ECE Principles and Practice</td>
<td>3</td>
</tr>
<tr>
<td>CDEV 66 Intro to Early Childhood Curriculum</td>
<td>3</td>
</tr>
<tr>
<td>CDEV 67 The Child, Family, and Community</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Area of Specialization: Administration</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>CDEV 90 Early Childhood Admin I</td>
<td>3</td>
</tr>
<tr>
<td>CDEV 91 Early Childhood Admin II</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Units ............................................. 18

**Child Development: Appreciating Diversity Certificate**

A "Certificate of Accomplishment" will be granted upon successful completion of the required number of units in course work. A grade of “C” or better is required in all certificate courses.

**Learning Outcomes**

Upon completion of this certificate students will be able to:

- Recognize and define practices that support inclusion and equity in settings for children.
- Consider diverse perspectives and experiences when designing curriculum for children.

**Courses Required for the Certificate of Accomplishment in Child Development: Appreciating Diversity**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Complete 9 Units from the following:</td>
<td></td>
</tr>
<tr>
<td>CDEV 93 Cultural Diversity in ECE</td>
<td>3</td>
</tr>
<tr>
<td>CDEV 76 Supporting LGBT Families in Edu Settings</td>
<td>3</td>
</tr>
<tr>
<td>CDEV 74 Children with Special Needs</td>
<td>3</td>
</tr>
<tr>
<td>CDEV 77 Diverse LGBT Issues</td>
<td>3</td>
</tr>
<tr>
<td>IDST 80A Diversity: Racism</td>
<td>5</td>
</tr>
<tr>
<td>IDST 80C Diversity: Sexism</td>
<td>5</td>
</tr>
</tbody>
</table>

Total Units ............................................. 6

**Child Development: Family Childcare Certificate**

A "Certificate of Accomplishment" will be granted upon successful completion of the required number of units in course work. A grade of “C” or better is required in all certificate courses.

**Learning Outcomes**

Upon completion of this certificate, students will be able to:

- Describe basic components and responsibilities of college courses about early childhood development.
- Define the elements of family childcare and describe the regulatory requirements in place for home-based childcare.
- Consider the developmental needs of children when planning curriculum for family childcare settings.

The Family Childcare Certificate requires completion of 6 units from the courses listed below:

**Courses Required for the Certificate of Accomplishment in Child Development: Family Childcare**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Complete 3 units from the following:</td>
<td></td>
</tr>
<tr>
<td>CDEV 70 Family Childcare</td>
<td>1</td>
</tr>
<tr>
<td>CDEV 41E Issues in Child Dev-Starting a Childcare Ctr</td>
<td>1</td>
</tr>
<tr>
<td>or Large Family Childcare Home In SF</td>
<td>1</td>
</tr>
<tr>
<td>CDEV 41H Adv Business Practices</td>
<td>1</td>
</tr>
<tr>
<td>CDEV 41Q Advancing Careers in FCC</td>
<td>1</td>
</tr>
<tr>
<td>CDEV 41R Recruiting Infants into FCC</td>
<td>1</td>
</tr>
<tr>
<td>CDEV 44 Environ Rating Scale Family CC</td>
<td>1</td>
</tr>
</tbody>
</table>

**SECTION II**

Complete 3 units from the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CDEV 41F Serving Children with Special Needs in FCC</td>
<td>1</td>
</tr>
<tr>
<td>CDEV 41G Communicating with Families in FCC</td>
<td>1</td>
</tr>
<tr>
<td>CDEV 41H Environments in Family Childcare</td>
<td>1</td>
</tr>
<tr>
<td>CDEV 41I Infant/Toddler Development in FCC</td>
<td>1</td>
</tr>
<tr>
<td>CDEV 41K Infant/Toddler Curriculum in FCC</td>
<td>1</td>
</tr>
<tr>
<td>CDEV 41N Music and Movement in FCC</td>
<td>1</td>
</tr>
<tr>
<td>CDEV 41O Outdoor Learning in FCC</td>
<td>1</td>
</tr>
<tr>
<td>CDEV 41P Learning Activities in FCC</td>
<td>1</td>
</tr>
<tr>
<td>CDEV 41W Exploring Science in FCC</td>
<td>1</td>
</tr>
</tbody>
</table>

Total Units ............................................. 6

**Child Development: Infant/Toddler Care Certificate**

A "Certificate of Achievement" will be granted upon successful completion of the required number of units in course work. A grade of “C” or better is required in all certificate courses.
Learning Outcomes
Upon completion of this certificate, students will be able to:

- Identify and describe stages of child growth and development, including brain development, sensory motor development, language development, cognitive development, physical development and social-emotional development.
- Examine the role of families and communities in the lives of children and youth, including secure relationships, community resources, diverse family structures and the development of a community commitment to social justice.
- Describe developmentally appropriate practice and diverse philosophical approaches in infant/toddler settings.
- Differentiate the critical elements of developmental needs for infants and toddlers.
- Apply an understanding of infant and toddler development when caring for infants and toddlers.
- Examine and analyze appropriate curriculum choices for infants and toddlers.

Courses Required for the Certificate of Achievement in Child Development: Infant/Toddler Care

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CDEV 53 Child Growth and Development</td>
<td>3</td>
</tr>
<tr>
<td>CDEV 65 Orientation to ECE Principles and Practice</td>
<td>3</td>
</tr>
<tr>
<td>CDEV 66 Intro to Early Childhood Curriculum</td>
<td>3</td>
</tr>
<tr>
<td>CDEV 67 The Child, Family, and Community</td>
<td>3</td>
</tr>
</tbody>
</table>

Elective Courses: 6 units required from following courses:

- CDEV 61 Infant/Toddler Growth and Development
- CDEV 62 Infant/Toddler Curriculum
- CDEV 85 Relationship-based Infant Toddler care

Total Units: 18

Child Development: Practitioner Certificate

A “Certificate of Accomplishment” will be granted upon successful completion of the required number of units of coursework. A grade of “C” or better is required in all certificate courses.

Learning Outcomes
Upon completion of this certificate, students will be able to:

- Understand and describe stages of child growth and development, including brain development, sensory motor development, language development, cognitive development, physical development and social-emotional development.
- Examine the role of families and communities in the lives of children and youth, including secure relationships, community resources, diverse family structures and the development of a community commitment to social justice.
- Describe developmentally appropriate practice and diverse philosophical approaches in a range of settings for children and youth.
- Demonstrate depth of knowledge in one specific area of early childhood curriculum or programs.
- Define best practices and professional competencies in either Health, Safety and Nutrition; Observation and Assessment; or Interactions with Children.

Courses Required for the Certificate of Achievement in Child Development: Practitioner

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CDEV 53 Child Growth and Development</td>
<td>3</td>
</tr>
<tr>
<td>CDEV 65 Orientation to ECE Principles and Practice</td>
<td>3</td>
</tr>
<tr>
<td>CDEV 66 Intro to Early Childhood Curriculum</td>
<td>3</td>
</tr>
<tr>
<td>CDEV 67 The Child, Family, and Community</td>
<td>3</td>
</tr>
</tbody>
</table>

Elective Courses: 3 units required from following courses:

- CDEV 68 Interactions with Children
- CDEV 73 Observing and Assessing Young Children
- CDEV 92 Health, Safety and Nutrition In ECP

Elective Courses: 3 units required from following depth courses:

- CDEV 64 Intro to Stress and Coping in ECE
- CDEV 98 Sensory-Motor Development and Activities
- CDEV 106 Exploring Science in ECP
- CDEV 107 Introduction to Child Nutrition
- CDEV 108 Communicating with Parents and Guardians
- CDEV 110 Jumpstart and Preschool Children

Total Units: 18

Child Development: Pre-Teacher Certificate

A “Certificate of Accomplishment” will be granted upon successful completion of the required number of units of coursework. A grade of “C” or better is required in all certificate courses.

Learning Outcomes
Upon completion of this certificate, students will be able to:

- Understand and describe stages of child growth and development, including brain development, sensory motor development, language development, cognitive development, physical development and social-emotional development.
- Examine the role of families and communities in the lives of children and youth, including secure relationships, community resources, diverse family structures and the development of a community commitment to social justice.
- Describe developmentally appropriate practice and diverse philosophical approaches in K-12 settings.
- Identify teaching strategies for engaging diverse learners and facilitating the success of K-12 students.
- Examine the role of the K-12 teacher, common standards, the pathway to teaching K-12 and core educational issues like bilingual education and educational equity.

Courses Required for the Certificate of Accomplishment in Child Development: Pre-Teacher

The Pre-Teacher Certificate requires completion of 15 units from the courses listed below:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CDEV 53 Child Growth and Development</td>
<td>3</td>
</tr>
<tr>
<td>CDEV 67 The Child, the Family &amp; the Community</td>
<td>3</td>
</tr>
<tr>
<td>CDEV 71 Elementary Supervised Field Experience</td>
<td>3</td>
</tr>
<tr>
<td>CDEV 75 High School Supervised Field Experience</td>
<td>3</td>
</tr>
<tr>
<td>CDEV 150 Orientation to Education</td>
<td>3</td>
</tr>
</tbody>
</table>

Elective Courses: 3 Units Required from the Following Courses:

- CDEV 120 Special Education K-12
- PSC 11 Physical Science
Child Development: Professional Development and Advocacy Certificate

A “Certificate of Achievement” will be granted upon successful completion of the required number of units in course work. A grade “C” or better is required in all certificate courses.

Learning Outcomes

Upon completion of this certificate, students will be able to:

- Understand and describe stages of child growth and development, including brain development, sensory motor development, language development, cognitive development, physical development and social-emotional development.
- Examine the role of families and communities in the lives of children and youth, including secure relationships, community resources, diverse family structures and the development of a community commitment to social justice.
- Describe developmentally appropriate practice and diverse philosophical approaches in early childhood settings.
- Analyze and examine the impact of federal and state policies on children and families and advocacy strategies in the field of early childhood education.

Courses Required for the Certificate of Achievement in Child Development: Professional Development and Advocacy

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CDEV 53 Child Growth and Development</td>
<td>3</td>
</tr>
<tr>
<td>CDEV 65 Orientation to ECE Principles and Practice</td>
<td>3</td>
</tr>
<tr>
<td>CDEV 66 Intro to Early Childhood Curriculum</td>
<td>3</td>
</tr>
<tr>
<td>CDEV 67 The Child, Family, and Community</td>
<td>3</td>
</tr>
</tbody>
</table>

Area of Specialization: Professional Development and Advocacy

Elective Courses from the following (at least 1 unit):

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CDEV 41B Mentor Teacher Seminar</td>
<td>5–1</td>
</tr>
<tr>
<td>CDEV 41C Mentor Director Seminar</td>
<td>5–1</td>
</tr>
<tr>
<td>CDEV 41D Professional advising-CDEV Permit</td>
<td></td>
</tr>
<tr>
<td>CDEV 41I Advocacy and Professional Standards</td>
<td>1</td>
</tr>
<tr>
<td>CDEV 86 Advanced Supervised Field Experience</td>
<td>3</td>
</tr>
<tr>
<td>LBCS 94A-C Labor Relations in Childcare</td>
<td>1–3</td>
</tr>
</tbody>
</table>

Elective Courses from the following (3-5 units):

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CDEV 41M Substitute Teaching In ECE Programs</td>
<td></td>
</tr>
<tr>
<td>CDEV 41U Dual Language Learning in EC</td>
<td></td>
</tr>
<tr>
<td>CDEV 44 Environ Rating Scale Family Child Care</td>
<td>1</td>
</tr>
<tr>
<td>CDEV 45 ITERS &amp; ECERS Rating Scales</td>
<td>1</td>
</tr>
<tr>
<td>CDEV 46 Teacher Child Interactions Using CLASS</td>
<td>3</td>
</tr>
<tr>
<td>CDEV 80 Literacy Development - School Age Child</td>
<td>3</td>
</tr>
<tr>
<td>CDEV 81 Early Literacy Development-Preschool</td>
<td>1</td>
</tr>
<tr>
<td>CDEV 87 Promoting Social Emotional Competence</td>
<td>3</td>
</tr>
<tr>
<td>CDEV 94 Literacy Development in Early Childhood</td>
<td>3</td>
</tr>
<tr>
<td>CDEV 105 Superv Adults in Early Childhood Prog</td>
<td>2</td>
</tr>
<tr>
<td>CDEV 114 Work Exp in Child Development</td>
<td>1–3</td>
</tr>
<tr>
<td>ESL 51A ESL for Child Development</td>
<td></td>
</tr>
</tbody>
</table>

Total Units ................................................. 15

Child Development: School-Age Care Certificate

A “Certificate of Achievement” will be granted upon successful completion of the required number of units in course work. A grade “C” or better is required in all certificate courses.

Learning Outcomes

Upon completion of this certificate, students will be able to:

- Understand and describe stages of child growth and development, including brain development, sensory motor development, language development, cognitive development, physical development and social-emotional development.
- Examine the role of families and communities in the lives of children and youth, including secure relationships, community resources, diverse family structures and the development of a community commitment to social justice.
- Describe developmentally appropriate practice and diverse philosophical approaches in early childhood settings.
- Analyze and examine the impact of federal and state policies on children and families and advocacy strategies in the field of early childhood education.

Courses Required for the Certificate of Achievement in Child Development: School-Age Care

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CDEV 53 Child Growth and Development</td>
<td>3</td>
</tr>
<tr>
<td>CDEV 65 Orientation to ECE Principles and Practice</td>
<td>3</td>
</tr>
<tr>
<td>CDEV 66 Intro to Early Childhood Curriculum</td>
<td>3</td>
</tr>
<tr>
<td>CDEV 67 The Child, Family, and Community</td>
<td>3</td>
</tr>
</tbody>
</table>

Area of Specialization: School-Age Care

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CDEV 95 School-Age Curriculum</td>
<td>3</td>
</tr>
<tr>
<td>CDEV 97 School-Age Child Growth &amp; Development</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Units ................................................. 18

Child Development: Violence Intervention in Early Childhood Certificate

A “Certificate of Achievement” will be granted upon successful completion of the required number of units in course work. A grade “C” or better is required in all certificate courses.

Learning Outcomes

Upon completion of this certificate, students will be able to:

- Understand and describe stages of child growth and development, including brain development, sensory motor development, language development, cognitive development, physical development and social-emotional development.
- Examine the role of families and communities in the lives of children and youth, including secure relationships, community resources, diverse family structures and the development of a community commitment to social justice.
- Describe developmentally appropriate practice and diverse philosophical approaches in early childhood settings.
- Analyze and examine the impact of federal and state policies on children and families and advocacy strategies in the field of early childhood education.

Courses Required for the Certificate of Achievement in Child Development: Violence Intervention in Early Childhood

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CDEV 45 ITHERS &amp; ECERS Rating Scales</td>
<td>1</td>
</tr>
<tr>
<td>CDEV 46 Teacher Child Interactions Using CLASS</td>
<td>3</td>
</tr>
<tr>
<td>CDEV 80 Literacy Development - School Age Child</td>
<td>3</td>
</tr>
<tr>
<td>CDEV 81 Early Literacy Development-Preschool</td>
<td>1</td>
</tr>
<tr>
<td>CDEV 87 Promoting Social Emotional Competence</td>
<td>3</td>
</tr>
<tr>
<td>CDEV 94 Literacy Development in Early Childhood</td>
<td>3</td>
</tr>
<tr>
<td>CDEV 105 Superv Adults in Early Childhood Prog</td>
<td>2</td>
</tr>
<tr>
<td>CDEV 114 Work Exp in Child Development</td>
<td>1–3</td>
</tr>
<tr>
<td>ESL 51A ESL for Child Development</td>
<td></td>
</tr>
</tbody>
</table>

Total Units ................................................. 18
• Assess violence prevention and intervention strategies for children, families and communities.
• Demonstrate individualized interventions for children who have experienced trauma.

Courses Required for the Certificate of Achievement in Child Development: Violence Intervention in Early Childhood

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CDEV 53 Child Growth and Development</td>
<td>3</td>
</tr>
<tr>
<td>CDEV 66 Intro to Early Childhood Curriculum</td>
<td>3</td>
</tr>
<tr>
<td>CDEV 67 The Child, Family, and Community</td>
<td>3</td>
</tr>
<tr>
<td>CDEV 100 Violence and Its Impact on Children and Their Families</td>
<td>3</td>
</tr>
<tr>
<td>Area of Specialization: Violence Intervention</td>
<td>3</td>
</tr>
<tr>
<td>CDEV 101 Intro to Violence Intervention</td>
<td>3</td>
</tr>
<tr>
<td>CDEV 72 Supervised Field Exp. in Early Childhood</td>
<td>3</td>
</tr>
<tr>
<td>Total Units</td>
<td>18</td>
</tr>
</tbody>
</table>

Child Development: Youth Worker Certificate

A certificate of achievement will be granted upon successful completion of the required number of units in coursework. A grade of “C” or better is required in all certificate courses.

Learning Outcomes

Upon completion of this certificate, students will be able to:
• Examine the role of families and communities in the lives of children and youth, including secure relationships, community resources, diverse family structures and the development of a community commitment to social justice.
• Define the emerging field of youth worker and examine the variety of settings where youth are served.
• Consider the developmental needs of older children and youth when planning curriculum for youth programs in the community.
• Demonstrate a knowledge of best practices and articulate core youth development competencies.

Courses Required for the Certificate of Achievement in Child Development: Youth Worker

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CDEV 53 Child Growth and Development</td>
<td>3</td>
</tr>
<tr>
<td>CDEV 97 School-Age Child Growth &amp; Dev.</td>
<td>3</td>
</tr>
<tr>
<td>CDEV 67 The Child, Family, and the Community</td>
<td>3</td>
</tr>
<tr>
<td>HLTH 65 Youth Development and Leadership</td>
<td>3</td>
</tr>
<tr>
<td>CDEV 78 Supervised Field Experience</td>
<td>3</td>
</tr>
<tr>
<td>in Community Youth Organizations</td>
<td>3</td>
</tr>
<tr>
<td>CDEV 79 Youth Program Development</td>
<td>3</td>
</tr>
<tr>
<td>Electives: Students must complete at least 3 units from the following courses:</td>
<td></td>
</tr>
<tr>
<td>IDST 80A Diversit: Racism</td>
<td>5</td>
</tr>
<tr>
<td>IDST 80C Diversity: Sexism</td>
<td>5</td>
</tr>
<tr>
<td>IDST 80D Diversity: Heterosexism</td>
<td>5</td>
</tr>
<tr>
<td>IDST 80E Diversity: Ableism</td>
<td>5</td>
</tr>
<tr>
<td>IDST 80F Diversity: Classism</td>
<td>5</td>
</tr>
<tr>
<td>IDST 80G Diversity &amp; Social Justice: Transphobia</td>
<td>5</td>
</tr>
<tr>
<td>IDST 81B Diversity: Anti-Semitism/Anti-Arabism</td>
<td>1</td>
</tr>
<tr>
<td>IDST 81A Diversity: Ageism and Adultism</td>
<td>1</td>
</tr>
<tr>
<td>CDEV 99 Sensory Process Disorder in Children</td>
<td>1</td>
</tr>
<tr>
<td>CDEV 121 AD/HD.</td>
<td>1</td>
</tr>
<tr>
<td>CDEV 122 Social Emotional Disturbance</td>
<td>1</td>
</tr>
<tr>
<td>CDEV 123 Learning Disabilities</td>
<td>1</td>
</tr>
</tbody>
</table>

Electives: Students must complete at least 3 units from the following courses:

- CDEV 124 Individualized Education Plans
- CDEV 125 Children’s Mental Health

Special Education: Early Intervention or K-12 Focus Certificate

A Certificate of Achievement will be granted upon successful completion of the required number of units in coursework. A grade of “C” or better is required in all certificate courses. The Special Education Certificate: Early Intervention Focus or K-12 Focus, requires completion of 18 units total, including the 12 required units below and 6 additional units from the courses listed under “Electives.”

Courses Required for the Certificate of Achievement in Special Education: Early Intervention or K-12 Focus

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CDEV 67 Child, Family Community</td>
<td>3</td>
</tr>
<tr>
<td>CDEV 53 Child Growth and Development</td>
<td>3</td>
</tr>
<tr>
<td>CDEV 66 Introduction to Early Childhood Curriculum</td>
<td>3</td>
</tr>
<tr>
<td>CDEV 74 Children with Special Needs</td>
<td>3</td>
</tr>
</tbody>
</table>

Special Education: Early Intervention Focus

Learning Outcomes

Upon completion of this certificate, students will be able to:
• Understand and describe stages of child growth and development, including brain development, sensory motor development, language development, cognitive development, physical development and social-emotional development.
• Examine the role of families and communities in the lives of children and youth, including secure relationships, community resources, diverse family structures and the development of a community commitment to social justice.
• Describe developmentally appropriate practice and diverse philosophical approaches in early childhood settings.
• Understand and describe differentiated teaching strategies for creating inclusive early childhood classrooms and engaging children with diverse learning styles, strengths and needs.
• Describe sensory and learning challenges and identify strategies to address them.
• Demonstrate an understanding of various special needs and describe appropriate interventions.

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CDEV 67 Child, Family Community</td>
<td>3</td>
</tr>
<tr>
<td>CDEV 53 Child Growth and Development</td>
<td>3</td>
</tr>
<tr>
<td>CDEV 66 Introduction to Early Childhood Curriculum</td>
<td>3</td>
</tr>
<tr>
<td>CDEV 74 Children with Special Needs</td>
<td>3</td>
</tr>
</tbody>
</table>
Required Electives (6 units from the following)

- CDEV 96 Understanding Children with Difficult Behaviors in Early Childhood Programs .................................................. 3
- CDEV 4IT Early Care for Children with Autism ......................... 1
- CDEV 99 Sensory Processing Disorder in Children .................. 1
- CDEV 121 Children with AD/HD ........................................ 1
- CDEV 122 Social Emotional Disturbance ............................. 1
- CDEV 123 Learning Disabilities .......................................... 1
- CDEV 124 Individualized Education Plans ............................ 1
- CDEV 125 Children’s Mental Health .................................... 1
- AMSL 1A Elementary Sign Language .................................. 3

Total Units .................................................. 18

Option 2: K-12 Special Education Focus

Learning Outcomes

Upon completion of this certificate, students will be able to:

- Understand and describe stages of school-age and adolescent child growth and development, including brain development, sensory motor development, language development, cognitive development, physical development and social-emotional development.
- Examine the role of families and communities in the lives of children and youth, including secure relationships, community resources, diverse family structures and the development of a community commitment to social justice.
- Describe developmentally appropriate practice and diverse philosophical approaches in K-12 settings.
- Understand and describe differentiated teaching strategies for creating inclusive K-12 classrooms and engaging children with diverse learning styles, strengths and needs.
- Describe sensory and learning challenges and identify strategies to address them.
- Demonstrate an understanding of various special needs and describe appropriate interventions.

Course Units

- CDEV 67 Child, Family Community .................................. 3
- CDEV 97 School-Age Child: Growth and Development ........ 3
- CDEV 150 Orientation to K-12 Education ............................ 3
- CDEV 120 Special Education K-12 .................................... 3

Required Electives (6 units from the following)

- CDEV 96 Understanding Children with Difficult Behaviors in Early Childhood Programs .................................................. 3
- CDEV 4IT Early Care for Children with Autism ......................... 1
- CDEV 99 Sensory Processing Disorder in Children .................. 1
- CDEV 121 Children with AD/HD ........................................ 1
- CDEV 122 Social Emotional Disturbance ............................. 1
- CDEV 123 Learning Disabilities .......................................... 1
- CDEV 124 Individualized Education Plans ............................ 1
- CDEV 125 Children’s Mental Health .................................... 1
- AMSL 1A Elementary Sign Language .................................. 3

Total Units .................................................. 18

Introduction to Child Development Careers Noncredit Certificate

Entry level jobs in child development are available for English language learners and those with lower levels of basic skills. In-home caregivers, nannies, family childcare providers and teacher aides are often recruited based on proficiency in languages other than English, cultural competency and a genuine desire to work with young children.

Parents, individuals exploring careers with children and current non-credit students benefit when child observation opportunities in college-level program are paired with vocational ESL course and basic skills level courses that focus on the specific vocabulary and language needs of those working with children.

This paired certificate between the ESL, Transitional Studies and Child Development Departments allows for non-credit students to enroll in courses that facilitate direct interactions with children, exposure to children in group settings and observations of developmental ages and stages paired with language and literacy development in English.

Learning Outcomes

Upon successful completion of this program a student will be able to:

- Orally describe five key components of group setting for young children.
- Utilize 50 common English vocabulary words used in the CDEV field.
- Define several differences between the ages and stages of development in young children.
- Assess self-interest in continuing coursework in the field.

This non-credit certificate functions as the first rung of the career ladder for those interested in working with children. The next step would include enrollment in bi-lingual credit CDEV courses paired with ESL classes or credit classes paired with basic skills level courses and then the full complement of credit instruction leading to certification.

Courses Required for the Certificate of Completion in Introduction to Child Development

Course Hours

- CDEV 8101 State Preschool Program ................................. 72
- or CDEV 8100 Child Observation ........................................ 54
- or CDEV 8002 Parents and Infants ...................................... 54
- or CDEV 8003 Infant Development ...................................... 54
- AND
- ESLV 3833 Vocational ESL for Child Development ............. 90
- or ESLV 3834 Vocational ESL for Child Dev ....................... 90
- or ESLV 4833 Vocational ESL for Child Dev ....................... 45
- or TRST 1322 Academic Reading and Writing ................. 90

Total Hours .................................................. 99-162

Announcement of Courses

Child Development

Credit, Degree Applicable Courses:

CDEV 11B. Pediatric Preventive Health Education (0.5)
Lec-8 (total hrs) P/NP Available
Introduction in recognition and management of preventive health practices, prevention health policies and injury prevention in the child care setting. Course fulfills the partial requirement of AB243 mandated Health and Safety Training established by State EMS Authority for child care providers. Qualified participants are awarded a CCSF Pediatric Preventive Health Education Training certificate of completion. CSU
Formerly HLTH 11B

CDEV 11C. First Aid Care for III Children (0.5)
Lec-8 (total hrs)
Identification, transmission, control and care for common childhood illnesses and communicable diseases. Childcare first aid practices
and procedures for the management of well children with mild illnesses, chronic health conditions and special needs. A City College of San Francisco First Aid Care for Ill Children certificate of attendance will be awarded to those who qualify. Course fulfills the partial continuing education requirement of the AB 243 mandated Health and Safety Training established by the State EMS Authority for Childcare Providers. CSU

Formerly HLTH 11C

CDEV 11D. Child Care Disaster Prep (0.5)
Lec-8 (total hrs) P/NP Available

Students enrolled in this course assessed a $5 lab/material fee for CPR and First Aid cards and certifications.

Training for childcare personnel on how to develop their own program plan for disaster management and emergency preparedness. Instruction in preparing for and effectively dealing with, and recovery from emergency and crisis situations. A City College of San Francisco Childcare Disaster Preparedness certificate of attendance will be awarded to those who qualify. Fulfills the partial continuing education requirement of the AB 243 mandated Health and Safety Training established by the State EMS Authority for Childcare Providers. CSU

Formerly HLTH 11D

CDEV 11E. Child Passenger Safety (0.5)
Lec-8 (total hrs) P/NP Available

Students enrolled in this course assessed a $5 lab/material fee for CPR and First Aid cards and certifications.

Training for students in the fields of Health and/or Child Development, childcare providers and child safety advocates on Child Passenger Safety covering the legal, practical and policy aspects of safely transporting children. Includes an overview of Child Passenger Safety regulations, appropriate selection and installation of restraint systems, resources and development of an agency child transportation policy. CSU

Formerly HLTH 11E

CDEV 41-42-43. Selected Topics in Child Development (.5-1-2-3)
Lec-1, 2, 3, field trips P/NP available

Investigation in depth of selected topics in Child Development. CSU

CDEV 41B. Issues in Child Development-The Mentor Teacher Seminar
CDEV 41C. Issues in Child Development-The Mentor Director Seminar
CDEV 41D. The Child Development Permit and Professional Growth Advising
CDEV 41E. Starting A Large Family Child Care or Center
CDEV 41F. Serving Children with Special Needs in Family Childcare
CDEV 41G. Communicating with Families in Family Child Care
CDEV 41H. Environments in Family Childcare
CDEV 41I. Advanced Business Practices in Family Childcare
CDEV 41J. Infant/Toddler Development in Family Childcare
CDEV 41K. Infant/Toddler Curriculum in Family Childcare
CDEV 41L. Advocacy and Professional Standards
CDEV 41M. Substitute Teaching in ECE Programs
CDEV 41N. Music and Movement in Family Child Care
CDEV 41O. Outdoor Learning in Family Child Care
CDEV 41P. Mixed Ages in Family Child Care
CDEV 41Q. Advancing Careers in Family Child Care
CDEV 41R. Recruiting Infants into Family Child Care
CDEV 41S. Learning Activities in Family Child Care
CDEV 41T. Early Care for Children with Autism
CDEV 41U. Dual Language Learning in Early Childhood
CDEV 41V. Exploring Math in Family Child Care
CDEV 41W. Exploring Science in Family Child Care

CDEV 44. Environ Rating Scale Family CC (1)
Lec-1

Overview of the Family Child Care Environmental Rating Scale (FCCERS) for Family Child Care Providers in multi-age groupings. Family Child Care Providers face increasing mandated use of standardized environmental rating scales. This course is designed to support current practitioners in using the Family Child Care Environment Rating Scale-Revised Edition (FCCERS-R) in family child care programs. CSU

CDEV 45. ITERS & ECERS Rating Scales (1)
Lec-1

Early Care and Education programs face increasing mandated use of standardized environmental rating scales. This course is designed to support current practitioners in using the Early Childhood Environment Rating Scale-Revised Edition (ECERS-R) and the Infant Toddler Environmental Rating Scale-Revised Edition (ITERS-R). CSU

CDEV 46. Teacher-Child Interactions in Early Care and Education Using the Classroom Assessment Scoring System (CLASS) (1)
Lec-16 (total hrs)

Overview of the Classroom Assessment Scoring System (CLASS) with emphasis on the importance of adult-child interactions for development and learning outcomes and the analysis of classroom practice.

CDEV 53. Child Growth and Development (3)
Lec-3

ADVISE: ESL 130 or ENGL 91 or placement in ESL 140 or ENGL 92

Major physical, psychosocial, and cognitive/language developmental milestones for children, both typical and atypical, from conception to adolescence, with an emphasis on interactions between maturation and change and environmental factors. Developmental theory, investigative research methodologies, observation of children, evaluation of individual difference and analysis of development at various stages. CSU/UC /C-ID CDEV 100

CDEV 61. Infant/Toddler Growth and Development (3)
Lec-3

ADVISE: ESL 130 or ENGL 91 or placement in ESL 140 or ENGL 92

Physical/sensory-motor, social-emotional, and cognitive/language development of prenatally throughout the first three years will be studied with an emphasis on interactions between genetic and environmental factors. Brain development research and major developmental theories are guidance for practice. Caring adults as a foundation for all development will be emphasized. CSU

CDEV 62. Infant/Toddler Care in Group Settings (3)
Lec-3

ADVISE: ESL 130 or ENGL 91 or placement in ESL 140 or ENGL 92

Introduction to relationship-based care in infant/toddler programs supported by current brain development research. Curriculum planning is based on observation, meeting infants/toddlers' needs and providing positive guidance. Focus is on primary care, continuity of care, individualized care in small groups. CSU
CDEV 64. Introduction to Stress and Coping in Early Childhood and Elementary School Programs (3)
Lec-3
Advise: ESL 130 or ENGL 91 or placement in ESL 140 or ENGL 92
Overview of theories, issues, concerns and concepts related to the origins of stress; exploration of stress reduction techniques and coping strategies designed for young children and teachers in early childhood and elementary school programs. CSU

CDEV 65. Orientation to ECE Principles and Practice (3)
Lec-3
Advise: ESL 130 or ENGL 91 or placement in ESL 140 or ENGL 92
Principles of developmentally appropriate practices applied to programs and environments; the key role of relationships, constructive adult-child interactions, and teaching strategies in supporting development across all domains for all children. Historical roots of early childhood programs and the evolution of professional practices promoting advocacy, ethics and professional identity. CSU/C-ID ECE 120

CDEV 66. Introduction to Early Childhood Curriculum (3)
Lec-3
Advise: ESL 130 or ENGL 91 or placement in ESL 140 or ENGL 92
Appropriate curriculum and environments for children from birth to age 6. Teachers’ roles in supporting development and joy of learning for all children using observation and assessment and emphasizing the essential role of play through language, literacy, social/emotional learning, physical/motor activity, sensory learning, art, creativity, math and science. CSU/C-ID ECE 130

CDEV 67. The Child, the Family, and the Community (3)
Lec-3
Advise: ESL 130 or ENGL 91 or placement in ESL 140 or ENGL 92
An examination of the developing child in a societal context focusing on the interrelationship of family, school and community and emphasizing historical and socio-cultural factors. The processes of socialization and identity development will be highlighted, showing the importance of respectful, reciprocal relationships that support and empower families. CSU/UC /C-ID CDEV 110

CDEV 68. Interactions with Children (3)
Lec-3
Advise: ESL 130 or ENGL 91 or placement in ESL 140 or ENGL 92
Children’s interactions and their relationship with teachers; dynamics of social interaction in the context of child growth and development; motivation and management of children’s social behavior; working in childcare settings; current trends in care. CSU

CDEV 70. Family Childcare (1)
Lec-1
Overview of the operation and development of a family childcare home business. Information on California licensing regulations, operational procedures, and marketing efforts. CSU

CDEV 71. Elementary Supervised Field Experience (3)
Lec-1, conf-2, work-5
Advise: ESL 130 (or placement in ESL 140), or placement in ENGL 92
Repeat: CDEV 71, 72, 75, 78, 111, 112, and 113 combined, maximum credit: 16 units
Supervised work experience in group programs for elementary-age children. Observation and evaluation of school-age children, planning group activities and the role of adults in elementary schools will be examined. This course will fulfill the pre-admission field experience requirement for CSU Credential Programs for future elementary teachers. CSU

CDEV 72. Supervised Field Experience in Early Childhood (3)
Lec-1, conference-2, work-5
Prereq.: CDEV 53, 65, 66 and 67
Advise: ESL 130 (or placement in ESL 140), or placement in ENGL 92
Repeat: CDEV 71, 72, 75, 78, 111, 112, and 113 combined, maximum credit: 16 units
A demonstration of early childhood teaching competencies under guided supervision. Practical classroom experiences linking theory and practice, professionalism, and comprehensive understanding of children and families. Child centered, play-oriented teaching, learning, assessment and curriculum emphasized as students design, implement and evaluate experiences for development and learning for all young children. CSU/C-ID ECE 210

CDEV 73. Observing and Assessing Young Children (3)
Lec-3
Advise: ESL 130 or ENGL 91 or placement in ESL 140 or ENGL 92
This course focuses on the appropriate use of assessment and observation strategies to document development, growth, play and learning to join with families and professionals in promoting children’s success. Recording strategies, rating systems, portfolios, and multiple assessment tools are explored. CSU/C-ID ECE 200

CDEV 74. Children with Special Needs (3)
Lec-3, field trips
Advise: ESL 130 or ENGL 91 or placement in ESL 140 or ENGL 92
Early childhood teachers and paraprofessionals will explore the development strengths and needs of young children 0-5 with special needs and inclusion strategies and techniques for partnering with families. CSU

CDEV 75. High School Supervised Field Experience (3)
Lec-1, conf-2, work-5
Advise: ESL 130 (or placement in ESL 140), or placement in ENGL 92
Repeat: CDEV 71, 72, 75, 78, 111, 112, and 113 combined, maximum credit: 16 units
This course provides supervised fieldwork in high school or middle school classrooms with children or youth. Lab hours in actual classrooms will be combined with lectures covering observation, evaluation and curriculum planning strategies, the role of the adult and the student-learner. An overview of the California Curriculum Content Standards will be included. This course will fulfill the pre-admissions field experience requirement for CSU/UC Credential Programs for future secondary teachers. CSU/UC

CDEV 76. Supporting LGBT Families in Educational Settings (3)
Lec-3
Advise: CDEV 67
Analysis of issues and challenges faced by lesbian, gay, bisexual and transgender (LGBT) families in educational settings and exploration of the role of educators and educational programs in creating inclusive environments. CSU
CDEV 76=LGBT 76

CDEV 77. Diverse LGBT Issues in ECE (3)
Lec-3
Prereq.: CDEV 76
Building upon CDEV 76, students will create inclusive curriculum for children, develop workshop sessions for caregivers/staff, learn about
diverse religious and cultural experiences in lesbian, gay, bisexual and transgender (LGBT) communities, examine the relationships between culture, religion and LGBT issues, and develop skills to engage in dialogue about controversial issues. CSU

CDEV 78. Supervised Field Experience in Community Youth Organizations (3)
Lec-1, conf.-2, work experience-5
Advise: ESL 130 (or placement in ESL 140) or placement in ENGL 92
Repeat: CDEV 71, 72, 75, 78, 111, 112, and 113 combined, maximum credit: 16 units
Supervised work experience in youth serving agencies to make connections between theory and practice. Observation and evaluation of school-age children and youth, planning group activities and the role of adults in youth programs will be examined in this course. This course fulfills the requirement for the Community Youth Certificate. CSU

CDEV 79. Youth Program Development (3)
Lec-3
Advise: ESL 130 (or placement in ESL 140) or placement in ENGL 92
Students will explore the various aspects of programming for youth ages 9-18 including curriculum planning, observation, evaluation and assessing developmental needs. Youth settings and programs will be examined emphasizing the cultivation of an assets based model of youth development and leadership principles. This course fulfills the requirement for the Community Youth Certificate. CSU

CDEV 81. Early Literacy Development - Preschool Child (1)
Lec-17.5 (total hrs)
Advise: ENGL 93 or 94; or ESL 160 or 82 or placement in ENGL 96 or ESL 170
Strategies in preschool to develop language, pre-reading and pre-writing skills. Selecting books and materials; engaging children in shared literary experiences, promoting skills and early experiments with print. Issues and strategies for second language learners. CSU

CDEV 85. Relationship-based Infant/Toddler Care (3)
Lec-3
Principles and practices of relationship-based care that support infant/toddler social-emotional development, learning during routine care and play activities, and development of language and communication. The parent-provider partnership is explored as key to understanding children and keeping them connected to the family and culture. CSU

CDEV 86. Advanced Supervised Field Experience in the Early Childhood Setting (3)
Lec-1, conf.-2, work-5, field trips
Prereq.: CDEV 72
Advise: ESL 130 or ENGL 91 or placement in ESL 140 or ENGL 92
Building upon CDEV 72, students will further their practical teaching experience in the early childhood setting. Explores intentional teaching, personalizes students’ teaching experiences and expands their reflective, self-evaluative abilities. CSU

CDEV 87. Promoting Social and Emotional Competence in Young Children (3)
Lec-3
Advise: ESL 130 or ENGL 91 or placement in ESL 140 or ENGL 92
Students will learn strategies to promote children’s social and emotional development and tools to address challenging behaviors and mental health needs. Course includes interrelated levels of practice in developing positive relationships with children, families and colleagues; creating supportive environments; utilizing social and emotional teaching strategies to provide intensive, individualized interventions. CSU

CDEV 90. Early Childhood Education Administration I (3)
Lec-3
Advise: ESL 130 or ENGL 91 or placement in ESL 140 or ENGL 92
A course focusing on the business and administrative aspects of operating early childhood education programs. Explores regulatory requirements including legal issues to analyze impact on center operations and specific management tools used to reflect upon current business practices. CSU

CDEV 91. Early Childhood Education Administration II (3)
Lec-3
Advise: ESL 130 or ENGL 91 or placement in ESL 140 or ENGL 92
Administration, supervision and management of early childhood programs. Emphasis on human relations including staffing; family involvement; and developing communication guidelines for director/teacher, teacher/teacher, teacher/family and managing the daily operations of program. CSU

CDEV 92. Health, Safety, and Nutrition in Early Childhood Programs (3)
Lec-3
Advise: ESL 130 or ENGL 91 or placement in ESL 140 or ENGL 92
Introduction to laws, regulations, standards, curriculum, policies and procedures related to health safety and nutrition for all children. Components that ensure physical health, mental health and safety for children and staff and the importance of collaboration with families and health professionals. Focus on integrating concepts into planning and program development. CSU/C-ID ECE 220

CDEV 93. Cultural Diversity in Early Childhood Education (3)
Lec-3
Advise: ESL 130 or ENGL 91 or placement in ESL 140 or ENGL 92
Theoretical and practical implications of social identity, oppression and privilege for young children, families, programs, and teaching. Strategies for culturally and linguistically appropriate anti-bias approaches supporting all children in a diverse society. Self-examination and reflection on social identity, stereotypes and bias, social and educational access, media and schooling. CSU/C-ID ECE 230

CDEV 94. Literacy Development in Early Childhood (3)
Lec-3
An integrated approach to emerging language and literacy in the early years based on the needs and interests of the children. Emphasis on how teachers can support whole language learning and literacy development with consideration of the child’s home language and culture. CSU

CDEV 95. School-Age Childcare Curriculum (3)
Lec-3
Advise: ESL 130 or ENGL 91 or placement in ESL 140 or ENGL 92
Understanding child development and family concerns essential in planning a developmentally appropriate school-age child care program. Explores relationships with children and families, age appropriate activities, positive guidance and planning the environment. CSU
CDEV 96. Understanding Children with Difficult Behaviors in Early Childhood Programs (3)
Lec-3
Prereq: CDEV 53 Advise: ESL 130 or ENGL 91 or Placement in ESL 140 or ENGL 92
Causes of difficult behavior in young children enrolled in group settings. Emphasis on recent research in brain development, neuropsychology and nutrition. Necessary changes in attitudes and responses of the involved adults. CSU

CDEV 97. School Age Child Growth and Development (3)
Lec-3
Advise: ESL 130 or ENGL 91 or Placement in ESL 140 or ENGL 92
Human growth and development, ages five to twelve, and early and mid-adolescence, covering physical, cognitive, language, and social development. Developmental theories and issues affecting the lives of school age children in contemporary society. Required for the Certificate of Achievement in Child Development: Youth Worker and School Age Childcare. CSU

CDEV 98. Sensory-Motor Development and Activities in Early Childhood Programs (3)
Lec-3, field trips
Prereq: Completion/concurrent enrollment in CDEV 53
Overview of sensory motor development in young children; developmentally appropriate sensory motor activities and experiences; and the relationship of physical, cognitive, and social-emotional development to brain development in young children. CSU

CDEV 99. Sensory Processing Disorder in Children (1)
Lec-16 (total hrs)
Advise: CDEV 53
Overview of issues related to Sensory Processing Disorder in young children, with an emphasis on early identification and intervention strategies. The class will explore how children with autism, developmental dyspraxia, ADHD and other neurodevelopmental disabilities are affected by Sensory Processing Disorder (SPD). CSU

CDEV 100. Violence and Its Impact on Children and Their Families (3)
Lec-3
P/NP available
An Exploration of violence and its impact on the physical and psychological well-being of children, families, early childhood teachers and others. Emphasis is on early relationships and how they affect a child's worldview, plus practitioner self-care and multi-cultural awareness.
CSU

CDEV 101. Intro to Violence Intervention (3)
Lec-3
An overview of violence prevention strategies that are appropriate for early childhood programs. This course focuses on developing skills of educators to respond to families and children who experience high levels of stress and chronic violence. CSU

CDEV 105. Supervising Adults in Early Childhood Programs (2)
Lec-3 (12 wks)
Prereq: CDEV 90 or 91
Methods and principles of supervising adults in early childhood classrooms. Emphasis on the role of the experienced teacher who functions as the supervisor to center staff. Explores the head teacher's relationship to new teachers while simultaneously addressing the needs of children, parents and other staff. CSU

CDEV 106. Exploring Science in Early Childhood Education (3)
Lec-3
Early childhood teachers will explore materials and teaching strategies that support young children's interest in and understanding of science and the natural world. CSU

CDEV 107. Introduction to Child Nutrition (3)
Lec-3
Overview of child nutrition issues, with an emphasis on practical skills and approaches to influence positive eating behaviors that promote optimal health and nutrition. Topics include basic nutrition principles, planning healthy meals and snacks, food safety, childhood obesity, physical activity, nutrition education, child nutrition programs and food assistance resources. CSU
CDEV 107=HLTH 177

CDEV 108. Communicating with Parents and Guardians (3)
Lec-48 (total hrs)
Advise: ESL 130 or ENGL 91 or Placement in ESL 140 or ENGL 92
An overview of the importance of communication in childcare and school settings. Family needs, differences, challenges and expectations are stressed, with special attention paid to cultural, racial, economic, gender and family structure differences and their impacts on communication strategies. The value of positive parent-teacher relationships in the provision of quality childcare and education is analyzed, and communication techniques and strategies are explored.
CSU

CDEV 108A. Practical Mathematics I (3)
Lec-3, conf-1
Concepts, techniques and applications of arithmetic and elementary algebra emphasizing applications to practical problems. Interactive and traditional problem solving methods. Class interactive group exercises applying mathematical techniques to various applications and real world problems.
CDEV 108A=ET 108A=BTEC 108A

CDEV 108B. Practical Mathematics II (3)
Lec-3, conf-1
Concepts, techniques, and applications of intermediate algebra and introductory trigonometry emphasizing real world applications. Interactive group exercises and traditional lecture - problem-solving methods. Demonstration of mathematical concepts by showing how they are applied to various fields such as medical, business, industrial, and scientific. Emphasis on problem solving and the application of mathematics to real world problems. CSU
CDEV 108B=ET 108B

CDEV 110. Jumpstart and Preschool Children (3)
Lec-3, field trips
Intensive practice in observations, interactions and set-up of pre-school environments that support literacy and language development. Lectures, readings, films and discussions on how to work with young children. CSU

CDEV 114. Work Experience in Child Development (1-3)
Work-5, 10, 15
P/NP Only
Prereq: CDEV 71 or 72 or 75 or 78 or 110
Repeat: Maximum of 6 units of WRK EXP
This course will provide on or off-campus experience in early childhood/child development, K-12 classroom, after-school or youth work
settings. The focus will be on providing practical experience in the methods and principles of teaching in early childhood and school-age classrooms. Emphasis will be placed on the role of the teacher in the field experience setting. CSU

CDEV 120. Special Education K–12 (3)

Lec-3

Advis: ESL 130 or ENGL 91 or Placement in ESL 140 or ENGL 92

Introduction to basic issues in special education K–12 including laws, Individual Education Plans (IEPs), collaboration strategies, common disabilities, inclusion strategies, behavior management and curriculum adaptation. CSU

CDEV 121. Children with AD/HD (1)

Lec-1

Advis: ESL 130 or ENGL 91 or Placement in ESL 140 or ENGL 92

Explore behaviors, strengths, and needs of children with AD/HD and develop teaching strategies that support them and their families. Conventional and alternative approaches to diagnosis and treatment as well as prevention and inclusion strategies will be explored. CSU

CDEV 122. Social Emotional Disturbance (1)

Lec-1

Advis: ESL 130 or ENGL 91 or Placement in ESL 140 or ENGL 92

This course will explore the definitions of social-emotional/behavioral disturbance (SED), educational implications of the diagnosis of SED, the understanding of behavior from brain development, sensory, and emotional perspectives; and prevention/intervention strategies for supporting children diagnosed with SED. CSU

CDEV 123. Learning Disabilities (1)

Lec-1

Advis: ESL 130 or ENGL 91 or Placement in ESL 140 or ENGL 92

Explore common learning disabilities including dyslexia and other visual and auditory processing disorders. Identify multi-sensory strategies for teaching children with learning disabilities; learn how to adapt curriculum and create an inclusive learning environment; and become aware of community resources. CSU

CDEV 124. Individualized Education Plans (1)

Lec-1

Advis: ESL 130 or ENGL 91 or Placement in ESL 140 or ENGL 92

Learn about Individualized Education Programs and Plans (IEPs) and Individualized Family Service Plans (IFSPs) for children with special needs, including developing procedures, setting goals and objectives, and collaborating between parents and colleagues. CSU

CDEV 125. Children’s Emotional Development (1)

Lec-1

Advis: ESL 130 or ENGL 91 or Placement in ESL 140 or ENGL 92

Learn about emotional development of children and strategies for building emotional competence and supporting children’s social-emotional development. Emphasis on fostering social-emotional coping strategies for children and teachers. CSU

CDEV 150. Orientation to Education (3)

Lec-3

Advis: ESL 130 or ENGL 91 or Placement in ESL 140 or ENGL 92

This course will provide an opportunity for students to explore the teaching profession as a career. Various settings for teaching, with specific emphasis on K–12 opportunities. California state requirements for becoming a credentialed teacher, the educational preparation involved and the steps to securing field experience and a teaching position. History of education in America will be presented, and an overview of the roles of the teacher will be covered. Students will also assess their individual strengths as they relate to the demands of the profession and identify the developmental needs of children in group settings. CSU/UC

EL 51A. ESL for Child Development (3)

Lec-3

Prereq.: Placement in ESL 52 and 54; or 130 or higher or completion of ESL 42 and 44; or 48 or 120; may be taken concurrently with either CDEV 65 or 66, or alone

Repeat: max. 9 units

Support class for non-native speakers of English taking Child Development courses. Reading strategies to successfully manage CDEV course load; writing strategies to successfully complete CDEV class reports and tests. Vocabulary building in CDEV terminology. CSU

Noncredit Courses:

Infancy and Early Childhood

CDEV 8002. Parents and Infants (45 hrs)

Informal lecture and discussion on infant development during the first seven months of life and issues of concern to new parents. Covers characteristics of normal development, daily routines and feeding practices, and impact of the infant on the family.

CDEV 8003. Infant Development (45 hrs)

Informal discussion on the growth and development of infants 8-14 months of age in an enriched play environment. Topics covered include physical, emotional, social and cognitive growth, influence of environment on development, feeding concerns, and the infant’s impact on family.

Preschool and School-Age Children

CDEV 8100. Child Observation (45 hrs)

An exploration of child growth and development through observation and interaction with preschool children; child rearing practices; effective parenting; positive decision making in family life; utilization of community resources.

CDEV 8101. The Child Development Lab School (54 hrs)

A family-focused study of child growth and development and family resources utilizing laboratory child development facilities. Practice in utilizing teaching techniques while interacting with young children. Provide educational opportunities and community service resource information for students and parents.

CDEV 8104. Parent Participating Class (270-306 hrs)

An exploration of early childhood development with an emphasis on parent/child relationships, community resources and parent/child communication. Discussion of the developmental needs of children 2-5 years. Parents attend 5-17 hours per week.

CDEV 8112. The Preschool Child in Child Care (54 hrs)

Study of child growth and development in laboratory setting. Provides a laboratory learning environment for observing children, three to five years old.
CDEV 8117. Current Issues in Childcare (90-450 hrs)
Classes designed for parents and guardians of children enrolled in childcare programs. Each class focuses on a specific aspect of childcare affecting parents/guardians of preschool and school-age children. Topics include the relationship of the childcare program to the family and how childcare relates to the needs of children.

Parenting
CDEV 8202. Foster Parenting (18 hrs)
The role of the foster parent. Emphasis on human development from birth through adolescence. Topics include separation and grieving; drug and sexual education for adolescents; the role of foster parents and biological parents; community resources including the agency and placement worker.

CDEV 8206. Parenting in the Business Community (45-54 hrs)
General principles of human development, birth through adolescence. Emphasis on issues for working parents, family dynamics, and community resources for childcare. (Classes may be available on-site at large business or at the college).

Chinese
Office: Art 202
Phone Number: (415) 239-3223
Web Site: www.ccsf.edu/forlang

Announcement of Curricula

Chinese (Mandarin) Major (AA)

Program Information. The Chinese program provides instruction in developing a student’s ability to communicate in Chinese, both written and oral, through the intermediate level and to gain a knowledge of Chinese cultures throughout the world. The program is designed to meet transfer goals as well as personal development and career growth. Students must complete the curriculum with final grades of C or higher in their major preparation.

Degree Curriculum. The Degree Curriculum in Chinese is a two-year course of study designed to build a strong language foundation as well as expose students to Chinese cultural content and some literature. Students who complete the curriculum are better prepared to transfer to the CSU and UC systems as well as other universities with the intent of majoring or minoring in Chinese.

Learning Outcomes
Upon completion of this degree, students will be able to:

- Demonstrate fluency to interact in Chinese in a normal and spontaneous fashion at an intermediate level.
- Understand and react to authentic materials and current media at an intermediate level.
- Demonstrate understanding of geography and cultural differences in the Chinese-Speaking world.
- Display an intermediate level of proficiency in speaking, understanding, reading and writing in Chinese to perform successfully in upper division work.

Courses Required for the Certificate of Accomplishment in Chinese (Mandarin)
The Certificate of Accomplishment in Chinese (Mandarin) provides students, prospective employers and others with documented evidence of persistence and academic accomplishment in the language. The certificate requires completion of 15 units in Chinese (Mandarin). Each course must be completed with a final grade of “C” or higher. At least 9 units must be selected from the core list. The remaining 6 units may be selected from the elective units.

Learning Outcomes
Upon completion of this certificate, students will be able to:

- Understand the main points of standard speech on familiar matters encountered in work, school, leisure, etc.
- Understand texts which consist mainly of high-frequency everyday or job-related language.
- Deal with most situations likely to arise while traveling in an area where the language is spoken.
- Write simple connected text on topics which are familiar or of personal interest or personal letters describing experiences and impressions.

Courses Required for the Certificate of Accomplishment in Chinese (Mandarin)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHIN 1</td>
<td>Elementary Chinese</td>
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<tr>
<td>or CHIN 1A-1B</td>
<td>Elementary Chinese</td>
<td>3-5</td>
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<tr>
<td>CHIN 2</td>
<td>Continuation of Elementary Chinese</td>
<td>5</td>
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<tr>
<td>or CHIN 2A-2B</td>
<td>Continuation of Elem Chinese</td>
<td>3-5</td>
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<tr>
<td>CHIN 3</td>
<td>Intermediate Chinese</td>
<td>5</td>
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<tr>
<td>or CHIN 3A-3B</td>
<td>Intermediate Chinese</td>
<td>3-5</td>
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<tr>
<td>CHIN 4</td>
<td>Continuation of Intermed Chinese</td>
<td>5</td>
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<tr>
<td>or CHIN 4A-4B</td>
<td>Cont of Intermediate Chinese</td>
<td>3-5</td>
</tr>
<tr>
<td>CHIN 5</td>
<td>Chinese Characters for Beginners</td>
<td>3</td>
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<tr>
<td>CHIN 16</td>
<td>Chinese Characters for Beginners</td>
<td>3</td>
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<td>CHIN 17</td>
<td>Cont of Chinese Chars. for Beginners</td>
<td>3</td>
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<tr>
<td>CHIN 19</td>
<td>49 Major Achievement</td>
<td>3</td>
</tr>
<tr>
<td>CHIN 39</td>
<td>49 Major Achievement</td>
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Elective Courses

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<thead>
<tr>
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<tbody>
<tr>
<td>CHIN 12A</td>
<td>Beg Conversational Mandarin</td>
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<tr>
<td>CHIN 12B</td>
<td>Cont of Beg Conversational Mandarin</td>
<td>3</td>
</tr>
<tr>
<td>CHIN 12C</td>
<td>Intermed Conversational Mandarin</td>
<td>3</td>
</tr>
<tr>
<td>CHIN 14A</td>
<td>Mandarin/Skpr of Other Lang.</td>
<td>3</td>
</tr>
<tr>
<td>CHIN 14B</td>
<td>Mandarin/Skpr of Other Lang.</td>
<td>3</td>
</tr>
</tbody>
</table>
CHIN 14C Intermediate Conversational Mandarin
for Chinese Speaking Students ................. 3
CHIN 39 or 49 Maj Achieve/Chin Thought & Cul ....... 3
Total Units ........................................... 15

Announcement of Courses

Students of beginning Mandarin are directed to consider CHIN 1, 1A, 12A, 14A, 16.
A placement test in Chinese is available for guidance in selecting the appropriate course. For information, call 239-3223.

Credit, Degree Applicable Courses:

CHIN 1. Elementary Chinese (5)
Lec-5, lab-2 P/NP available
Prereq: For CHIN 1B: CHIN 1A or demonstration of CHIN 1A exit skills
Advisement: Eligible for ENGL 93 or 94; or ESL 160 or 82 or placement in ESL 170 or completion of any City College or University Foreign Language course
Beginner's course. Grammar, composition, and reading. Practice in speaking and understanding Mandarin. CSU/UC
CHIN 1A+1B = CHIN 1

CHIN 2. Continuation of Elementary Chinese (5)
Lec-5, lab-2 P/NP available
Prereq: CHIN 1 or 1B or demonstration of CHIN 1B exit skills
Second semester course. Continuation of the study of grammar, composition, and reading. Practice in speaking and understanding Mandarin. CSU/UC
CHIN 2A+2B = CHIN 2

CHIN 3. Intermediate Chinese (5)
Lec-5, lab-2 P/NP Available
Prereq: CHIN 2 or 2B or demonstration of CHIN 2/2B exit skills.
CHIN 3A. Intermediate Chinese (3)
Lec-3, lab-1 P/NP Available
Prereq: CHIN 2 or 2B or demonstration of CHIN 2/2B exit skills.
CHIN 3A+3B = CHIN 3

CHIN 3B. Intermediate Chinese (3)
Lec-3, lab-1 P/NP Available
Prereq: CHIN 3A or demonstration of CHIN 3A exit skills.
CHIN 3A+3B = CHIN 3

CHIN 4. Continuation of Intermediate Chinese (5)
Lec-5, lab-1 P/NP available
Prereq: CHIN 3 or demonstration of CHIN 3 exit skills
Fourth semester course. Grammar, composition and reading. Practice in speaking and understanding Mandarin. Understanding of Chinese culture. CSU/UC
CHIN 4A+4B = CHIN 4

CHIN 4A-4B. Continuation of Intermediate Chinese (3-3)
Lec-3, lab-1 P/NP available
Prereq: For CHIN 4A: CHIN 3 or 3B or demonstration of CHIN 3/3B exit skills
Prereq: For CHIN 4B: CHIN 4A or demonstration of CHIN 4A exit skills
Grammar, composition and reading. Practice in speaking and understanding Mandarin. CSU/UC
CHIN 4A+4B = CHIN 4

CHIN 10A. Beginning Conversational Cantonese (3)
Lec-3, lab-1 P/NP available
Recommended for all beginning students. Not recommended for native speakers of Cantonese.
Beginner's course. Extensive oral training in Cantonese. Emphasis on practical vocabulary and idiom rather than on formal grammar and literature. Students will learn romanization with tone markings rather than Chinese characters. CSU

CHIN 10B. Continuation of Beginning Conversational Cantonese (3)
Lec-3, lab-1 P/NP available
Prereq: CHIN 10A or demonstration of CHIN 10A exit skills.
Not recommended for native speakers of Cantonese.
Second semester course. Continuation of extensive oral training in Cantonese. Emphasis on practical vocabulary and idiom rather than on formal grammar and literature. Students will learn romanization with tone markings rather than Chinese characters. CSU

CHIN 10C. Intermediate Conversational Cantonese (3)
Lec-3, lab-1 P/NP available
Prereq: CHIN 10B or demonstration of CHIN 10B exit skills.
Not recommended for native speakers of Cantonese.
Third semester course. Continuation of extensive oral training in Cantonese. Designed for students who wish to continue acquiring more advanced skills of the spoken language with a minimum of formal grammar. Students will learn romanization with tone markings rather than Chinese characters. CSU

CHIN 10D. Continuation of Intermediate Conversational Cantonese (3)
Lec-3, lab-1 P/NP available
Prereq: CHIN 10C or demonstration of CHIN 10C exit skills.
Not recommended for native speakers of Cantonese.
Fourth semester course. Continuation of extensive oral training in
Cantonese. Designed for students who wish to continue acquiring more advanced skills of the spoken language with a minimum of formal grammar. Students will learn romanization with tone markings rather than Chinese characters. CSU

CHIN 12A. Beginning Conversational Mandarin (3)
Lec-3, lab-1 P/NP available
Not recommended for native speakers of Mandarin nor to speakers of other Chinese languages. These students should consider CHIN 14A, Conversational Mandarin for Speakers of Other Chinese Dialects: Level I. Extensive oral training in Mandarin. Emphasis on practical vocabulary, pronunciation, and idiomatic usage. Designed for students who wish to acquire basic skills of spoken Mandarin rather than reading and writing in Chinese characters. CSU

CHIN 12B. Continuation of Beginning Conversational Mandarin (3)
Lec-3, lab-1 P/NP available
Prereq.: CHIN 12A or 1A or demonstration of CHIN 12A or 1A exit skills.
Not recommended for native speakers of Mandarin nor to speakers of other Chinese languages. These students should consider CHIN 14B, Conversational Mandarin for Speakers of Other Chinese Dialects: Level II. Second semester course. Continuation of Beginner's course in Mandarin. Extensive oral training in Mandarin. Emphasis on practical vocabulary, pronunciation and idiomatic usage. Designed for students who wish to acquire basic skills of spoken Mandarin rather than reading and writing in Chinese characters. CSU

CHIN 12C. Intermediate Conversational Mandarin (3)
Lec-3, lab-1 P/NP available
Prereq.: CHIN 12B or CHIN 1 or 1B or demonstration of CHIN 12B, 1 or 1B exit skills.
Recommended for all students with limited background in Chinese. Not recommended for native speakers of Mandarin.
Third semester course. Continuation of extensive oral training in Mandarin. Emphasis on practical vocabulary, pronunciation and idiomatic usage. Designed for students who wish to acquire more advanced skills spoken Mandarin with a minimum of formal grammar rather than reading and writing in Chinese characters. CSU

CHIN 14A. Conversational Mandarin for Speakers of Other Chinese Dialects: Level I (3)
Lec-3, lab-1 P/NP available
Recommended for all beginning students of Mandarin who can speak at least one and for students who have some knowledge of Chinese. Not recommended for native speakers of Mandarin.
Beginner's course in Mandarin. Emphasis on practical vocabulary, pronunciation, and idiomatic usage. Designed for students who wish to acquire basic skills of spoken Mandarin rather than formal grammar and literature. CSU

CHIN 14B. Intermediate Conversational Mandarin for Chinese Speaking Students (3)
Lec-3, lab-1 P/NP available
Prereq.: CHIN 14A or demonstration of CHIN 14A exit skills
Recommended for all students who can speak at least one Chinese dialect. Recommended for Chinese speaking students and for students who have some knowledge of Chinese. Not recommended for native speakers of Mandarin.
Continuation of oral training in Mandarin. Emphasis on practical vocabulary, pronunciation, and idiomatic usage. Designed for students who wish to acquire basic skills of spoken Mandarin rather than formal grammar and literature. CSU

CHIN 14C. Intermediate Conversational Mandarin for Chinese Speaking Students (3)
Lec-3, lab-1 P/NP available
Prereq.: CHIN 14B or demonstration of CHIN 14B exit skills
Recommended for all students who can speak at least one Chinese dialect. Recommended for Chinese speaking students and for students who have some knowledge of Chinese. Not recommended for native speakers of Mandarin. May not be offered every semester.
Continuation of extensive oral training in Mandarin. Emphasis on practical vocabulary, pronunciation and idiomatic usage. Designed for students who wish to continue acquiring skills of spoken Mandarin rather than formal grammar and literature. CSU

CHIN 16. Chinese Characters for Beginners (3)
Lec-3 P/NP available
A beginner's course, taught in English.
Recommended for all students with limited or no background in written characters. Recommended to be taken concurrently with CHIN 1, CHIN 1A/1B, or CHIN 12 series, or CHIN 10 series.
An intensive study of 300 commonly used characters to enhance reading and writing Chinese. CSU/UC

CHIN 17. Continuation of Chinese Characters for Beginners (3)
Lec-3 P/NP available
Prereq.: CHIN 16 or demonstration of CHIN 16 exit skills
A continuation course, taught in English.
Open to all students with limited or no background in written characters. Recommended to be taken concurrently with CHIN 1, 2A/B, or CHIN 12 series, or CHIN 10 series.
An intensive study of additional 300 commonly used characters to enhance reading and writing Chinese. CSU/UC

CHIN 31A-31B. Intermediate Mandarin Chinese for Bilingual Students (3-3)
Lec-3, lab-1 P/NP available
Prereq.: Oral fluency in at least one Chinese dialect other than standard Mandarin and knowledge of approximately 800-1000 Chinese characters
Chinese 31A is not a prerequisite for Chinese 31B. These courses may be taken non-sequentially.
These courses are designed for bilingual students who are effective in oral communication in at least one Chinese dialect other than standard Mandarin, but need formal training in both receptive and productive skills in Mandarin.
Intensive training in written and spoken Mandarin with emphasis on reading and composition. Linguistic ability in both English and Chinese are used as a basis for increasing vocabulary and enhancing reading and writing skills through short stories, poems, essays and composition. Advanced training in written and spoken Mandarin. CSU/UC

CHIN 39. Major Achievements of Chinese Thought and Culture (3)
Lec-3
Advisory: ENGL 96 or Placement in ENGL 1A
No knowledge of Chinese required. Not recommended for students who are enrolled in or who have completed CHIN 49.
A consideration of the humanistic tradition of China and the major achievements of Chinese culture as reflected in language, literature, art, religion and daily life. CSU/UC
Announcement of Curricula

General Information
The Cinema Department is ideally situated in the San Francisco Bay Area, which is home to one of the country’s most vibrant film cultures and traditions. Our program is unique in the breadth of its course offerings, the quality of its instruction, and the accessibility of its equipment. As part of one of the largest, most diverse community colleges in the country, the Cinema Department is an exciting and rewarding place to study film.

The Cinema department is equipped to fulfill a wide range of professional and academic goals. Production and studies classes include, but are not limited to: cinematography and lighting, screenwriting, directing, producing, editing, sound for motion picture, feature and documentary production, film history, aesthetics and genre/auteur studies.

Students work with evolving technologies and state of the art equipment that emphasizes hands-on training and portfolio production. Film studies courses provide a historical view of film in our culture through the examination of aesthetic and technical changes in the medium. The knowledge and experience acquired in the program will prepare students to pursue their goals in the motion picture industry or transfer to an institution of higher learning.

Our dedicated faculty and staff consist of award-winning filmmaking professionals who create an environment that encourages creativity, technical proficiency, and critical thinking.

Each year students in the Cinema Department produce CITY SHORTS, a high-profile film festival. This public event provides students an opportunity to showcase their work and celebrate with the community.

Learning Outcomes
• Apply basic principles of film production and industry practice
• Analyze different film forms and genres
• Demonstrate skills in celluloid and digital technology
• Demonstrate storytelling skills
• Identify film history movements

Career Opportunities
• Production Assistant
• Grip and Lighting Technician
• Camera Operator
• Film and Video Editor
• Motion Picture Director
• Producer
• Production Manager
• Screenwriter
• Sound Recordist
• Sound Mixer
• Festival Curator

Cinema Production Major (AS)
The Associate in Science Degree in Cinema Production is intended for students who are interested in pursuing a career in film production. In the first semester, students may enroll concurrently in the following courses: CINE 21, 24, 25, 30, 60, and 75.

Learning Outcomes
Upon completion of this degree, students will be able to:
• Apply basic principles of film production and industry practice
• Analyze different film forms and genres
• Demonstrate skills in celluloid and digital technology
• Demonstrate storytelling skills

Courses Required for the Major in Cinema Production

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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<tbody>
<tr>
<td>First Semester</td>
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<tr>
<td>CINE 21 Film Studies</td>
<td>3</td>
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<tr>
<td>CINE 24 Basic Film Production</td>
<td>4</td>
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<tr>
<td>CINE 25 Narrative Filmmaking</td>
<td>3</td>
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<tr>
<td>CINE 60 Sound for Motion Pictures</td>
<td>3</td>
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<tr>
<td>Second Semester</td>
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<tr>
<td>CINE 30 Production Planning</td>
<td>3</td>
</tr>
<tr>
<td>CINE 54 Cinematography and Lighting</td>
<td>3</td>
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<tr>
<td>CINE 56 Introduction to Digital Film Editing</td>
<td>3</td>
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<tr>
<td>Third Semester</td>
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<tr>
<td>CINE 75 Screenwriting</td>
<td>3</td>
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<tr>
<td>or CINE 72 Non-Fiction Scriptwriting</td>
<td>3</td>
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<tr>
<td>CINE 61 Sound for Motion Pictures II</td>
<td>3</td>
</tr>
<tr>
<td>or CINE 74 Advanced Cinematography and Lighting</td>
<td>3</td>
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<tr>
<td>or CINE 76 Advanced Digital Film Editing</td>
<td>3</td>
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<tr>
<td>or CINE 90 Film and Digital Finishing</td>
<td>3</td>
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<tr>
<td>CINE 131 Directing Motion Pictures</td>
<td>3</td>
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<tr>
<td>or CINE 126 Documentary Filmmaking</td>
<td>3</td>
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<tr>
<td>Fourth Semester</td>
<td></td>
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<tr>
<td>CINE 124A Film Production Workshop</td>
<td>3</td>
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<tr>
<td>or CINE 126 Documentary Filmmaking</td>
<td>3</td>
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<tr>
<td>Total Units</td>
<td>37</td>
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</table>

Credit, Degree Applicable Courses:
CINE 18. American Cinema (3)
Lec-3, field trips P/NP available
An introductory course in film studies, bringing Hollywood filmmaking into clear focus as an art form, as an economic force, and as a system of representation and communication. Explores how Hollywood films work technically, artistically, and culturally to reinforce and challenge America's national self image. CSU/UC Formerly FILM 18.

CINE 19. New Political Documentary and Emerging Media (3)
Lec-3 P/NP available
Examine some of the best current political documentaries and explore how emerging technologies have revolutionized documentary cinema practice. Using the films, critical writings, and original projects, students will investigate the relevance and impact of documentary filmmaking in the context of social networks, blogs, games, cell phones, and 3d virtual communities. CSU
CINE 20A. Film History: Evolution of Film Expression (3)
Lec-2, lab-2 P/NP available
History of cinema as a unique expressive medium, from 19th century origins to mid-20th century. Aesthetics of silent and sound films, relation of film techniques to content, films in social/historical context and in relation to other arts and popular culture. Screenings in class for study and analysis. CSU/UC
Formerly FILM 25.

CINE 20B. Film History: Contemporary Film Expression (3)
Lec-2, lab-2 P/NP available
History of cinema as unique expressive medium from the mid 20th century to the present. The post WWII film renaissance: movements, genres and changing technologies; the expansion of filmmaking to newly represented people, places and ideas; cinema in the digital age. CSU/UC
Formerly FILM 20B.

CINE 21. Introduction to Film Studies (3)
Lec-3 P/NP available
An introductory course that addresses film production and film theory through the critical analysis of motion pictures. The course covers popular and technical approaches to cinema including filmmaking techniques like directing, cinematography and editing, and visual aesthetics. CSU/UC
Formerly FILM 21.

CINE 22. The Documentary Tradition (3)
Lec-3
An introductory course that addresses non-fiction film history, methods, and practices. This is a survey course that covers a wide range of documentary film issues and approaches including ethics and principles, objectivity, and point of view. CSU/UC
Formerly FILM 22.

CINE 23. Selected Topics in Film Studies (3)
Lec-3 P/NP available
Advised: CINE 18 OR 20A OR 20B OR 21
An in depth study of a significant subject area in Film History and Film Studies. Topics may include genre studies (e.g., the Western), national cinemas (e.g., Italian Neorealism), auteur studies (e.g., Hitchcock) or a specific time period (e.g., Pre-code Cinema). Screenings in class appropriate to the designated topic. CSU/UC
Formerly FILM 23.

CINE 23A. Films of Alfred Hitchcock. CSU/UC
CINE 23B. Focus on Film Noir. CSU/UC

CINE 24. Basic Film Production (4)
Lec-4 P/NP available
The course offers instruction in basic film production, including fundamentals of digital and analog camera operation, basic editing principles, and an overview of lighting and sound. In-class group shoots and off-campus individual films, in-class screening and critique of student films. Each student completes at least two individual films. CSU/UC
Formerly FILM 24.

CINE 25. Narrative Filmmaking (3)
Lec-3, field trips P/NP available
Prereq: Completion/concurrent enrollment in CINE 24
Basic motion picture editing. Discussion and demonstration of narrative and non-narrative editing techniques and aesthetics. Emphasis

CINE 26. Sound for Motion Pictures II (3)
Lec-4, lab-3 P/NP available
Prereq: Completion/concurrent enrollment in CINE 25
Explore non-narrative filmmaking techniques stressing personal expression through individual production of short films in a historical context. Projects include utilization of a range of different experimental techniques and will reference films screened and discussed in a class. CSU

CINE 27. Introduction to Digital Film Editing (3)
Lec-3, lab-3 P/NP available
Prereq: CINE 24
Advanced motion picture editing. Discussion and demonstration of film and digital editing techniques from rough cut to answer print using 16mm sync and non-sync formats. CSU
Formerly FILM 27.

CINE 28. Experimental Filmmaking (3)
Lec-3, field trips P/NP available
Prereq: Completion/concurrent enrollment in CINE 24 and 25
An overview of sound recording and design with a focus on hands-on, practical approaches. Sound recording techniques using a variety of
microphones and decks; sound editing and design using digital audio workstations including synth sound, dialogue, sound effects, music, and mixing. Film screenings, lectures, demonstrations and field trips. CSU
Formerly FILM 60.

CINE 61. Sound for Motion Pictures II (3)
Lec-3, field trips
Prereq.: CINE 60
Advanced work for filmmakers in sound recording, editing, design and mixing for motion pictures. Demonstrations of professional film location sound equipment, digital sound editing workstations, and film sound mixing studios. Film screenings and field trips to complement class lectures, discussions, exercises, demonstrations, group and individual work projects. CSU

CINE 72. Nonfiction Scriptwriting (3)
Lec-3
An introductory course in developing research and interviewing skills, and scripting abilities for nonfiction cinema. Emphasis on investigation techniques using different professional script writing models will be covered. The historical importance of nonfiction films and their influence on new media platforms will also be explored. CSU

CINE 74. Advanced Cinematography and Lighting (3)
Lec-3, field trips
Prereq.: CINE 54
Advanced operations with motion picture camera, lighting and grip equipment as they apply to different film forms (narrative, documentary, experimental), genres and styles. In-class and outside class group assigned filming exercises. Film screenings and field trips to complement class lectures, demonstrations and discussions. CSU
Formerly FILM 74.

CINE 75. Screenwriting (3)
Lec-3, field trips
An introductory course that addresses writing for visual media and, in particular, cinema. Professional format, film grammar and aesthetics are emphasized as these skills are then utilized in creating original and well-researched screenplays. CSU
Formerly FILM 75.

CINE 76. Advanced Digital Film Editing (3)
Lec-3, lab-3, field trips
Prereq.: CINE 24, 25, and 56 or BCST 144
Advanced film editing techniques using current digital nonlinear film editing systems within the cinematic discipline. CSU
Formerly FILM 76.

CINE 85. Advanced Screenwriting (3)
Lec-3
Prereq.: CINE 75
An advanced inquiry into the art of investigating, structuring and writing original screenplays. Mastery of researching and developing authentic characters, as well as generating solid story plot devices using professional screenplay style will be emphasized. Different film genres and story techniques will also be explored. CSU
Formerly FILM 85.

CINE 90. Film and Digital Finishing (3)
Lec-3, field trips
Prereq.: CINE 24 and 25; and Completion of or Concurrent Enrollment in CINE 54
Survey of state of the art practices and technologies in celluloid and digital film finishing and laboratory work, including timing, color correction, film to tape transfer and tape to film transfer, taught through lectures, field trips, and hands-on exercises. Class meets primarily off campus at a local laboratory facility. CSU
Formerly FILM 90.

CINE 124A. Film Production Workshop (3)
Lec-3, field trips
Prereq.: CINE 54, 56 and 60
Advising: CINE 30, 61, 74, 75 and 76
This is an advanced production course that refines and expands skills developed in prior CCSF Cinema classes. It is a requirement for the major. This course focuses on the planning and development of an original film idea, and on crew skills. CINE 124A meets concurrently with CINE 124B. CSU/UC
Formerly FILM 124A.

CINE 124B. Film Production Workshop (3)
Lec-3, lab-4, field trips
Prereq.: CINE 124A
Advising: CINE 30 and CINE 61 and CINE 74 and CINE 75 and CINE 76
Additional practical experience in two principal areas of film production, at least one of which will generate some synchronized sound; complete a self-generated film or digital video project, or working as part of a production unit, with an emphasis on professional production methodology and quality. CSU/UC
Formerly FILM 124B.

CINE 126. Documentary Filmmaking (3)
Lec-3, field trips
Prereq.: CINE 24
Basic production skills for a short 16mm or video documentary film, from writing a proposal to making a successful answer print, including the use of sync sound. Screenings of films and discussions explore the nature, limits, aesthetics, and ethics of documentary filmmaking. CSU
Formerly FILM 126.

CINE 131. Directing Motion Pictures (3)
Lec-3, P/NP available
Prereq.: CINE 24 and 25; and Completion of or Concurrent Enrollment in CINE 54
The function of the film director from script to screen through development and execution of single-camera-style projects. Emphasis is on script analysis, previsualization planning and blocking, crew management and working with actors. CSU
Formerly FILM 131.

CINE 136. Special Effects (3)
Lec-3
Prereq.: CINE 24 and 25; and BCST 119 or CS 100M
A survey of the evolution of the motion picture special effects art, from its optical printer and animation stand origins, up to the digital techniques used in the motion picture industry today. Traditional special effects techniques such as travel matte, blue screen, rotoscope, animation and compositing are taught digitally, using Motion, After Effects, Final Cut Pro and other software. CSU
Formerly FILM 136.

CINE 170. Film/Video Work Experience (2)
Conf-1, work-10
Prereq.: Consent of CINE Work Experience Coordinator
Repeat: Maximum credit: 8 units
Supervised, paid or unpaid work in the film/video industry or related projects. Jobs usually arranged by the student, subject to faculty
approval. Job experiences at CCSF, e.g., issuing film equipment or projecting for film history classes, are within the scope of this learning experience. CSU
Formerly FILM 170.

CINE 175A. Film/Video Independent Study (2)
Ind st-5 P/NP available
Prereq.: CINE 56, 60, and 124A/B; and CINE 30, 75, or 126
Individual film/video projects or participation in group productions including personal filmmaking, scriptwriting, serving as crew on other students’ films, and similar situations, subject to faculty approval.
Work progress supervised by faculty. CSU
Formerly FILM 175A.

CINE 175B. Film/Video Independent Study (2)
Ind st-5 P/NP available
Prereq.: CINE 56, 60, and 124A/B; and CINE 30, 75, or 126
Continuation of projects-in-progress from CINE 175A or begin new film/video projects. CSU
Formerly FILM 175B.

Classics
See English

Computer Networking and Information Technology
Office: Science 147
Phone Number: (415) 452-5323
Web Site: www.ccsf.edu/cnit

Announcement of Curricula

General Information
For students who wish to transfer to a four-year college, or who want computer training that will lead to employment, the Computer Networking and Information Technology Department offers certificate programs. Areas of study include computer technical support, networking, and security.

Learning Outcomes
Students who complete vocational and occupational department certificates demonstrate technical and professional competencies that meet industry standards for employment, and are prepared for industry-recognized external certification exams.

Transfer to Other Colleges and Universities. Students who complete the two-year Associate in Science degree program may choose to continue their education and earn a Bachelor’s degree. City College of San Francisco has transfer agreements with many of the California State University and University of California campuses.

Students who are interested in transferring after completion of the two-year degree program should consult the “Transfer Information” section of this catalog and discuss their plans with their program advisor or counselor.

Computer Networking and Information Technology Major (AS)
The Associate of Science degree with a major in Computer Networking and Information Technology (CNIT) provides students with a solid foundation of skills, knowledge and hands on experience with the core areas of the field of Computer Networking and Information Technology as well as current trends and technologies used in the computer industry. The topics covered in this major include Computer Hardware, Computer Network Administration, Network Security and the basics of Internet and Web development, as well as an option in one of the following areas: Computer Technical Support, Internet and Web Development Techniques, Network Security, Wireless Networks, Cisco Networking, or Microsoft Windows Administration. This degree qualifies students for employment in entry-level network administration, computer technical support or web development positions.

Learning Outcomes
Upon completion of this degree, students will be able to:

- Evaluate computer hardware components and design a functional computer system
- Demonstrate the use of network devices, network operating systems and networking models and their related protocols
- Develop and maintain a basic web site using web development industry standards
- Explain the basics of network security systems
- Demonstrate competency in one of the required optional areas:
  - Computer Technical Support: Troubleshoot and repair defective computer systems
  - Internet and Web Development Techniques: Recognize and use appropriate web development technologies to promote or enhance the work environment
  - Network Security: Develop strategies for network defense using firewalls, routers, switches, antivirus, anti-spyware tools, and hacking techniques
  - Wireless Networks: Evaluate components to prepare and install wireless networks
  - Cisco Networking: Configure and operate Cisco Local and Wide Area Networking hardware and software
  - Microsoft Windows: Install and support a Microsoft Windows networking environment including Windows Server, SQL Server database and Windows Desktop edition

Courses Required for the Major in Computer Networking and Information Technology

Core Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CNIT 103</td>
<td>Computer Hardware</td>
<td>3</td>
</tr>
<tr>
<td>CNIT 106</td>
<td>Introduction to Networks</td>
<td>3</td>
</tr>
<tr>
<td>or CNIT 201E</td>
<td>Networking Fundamentals</td>
<td>3</td>
</tr>
<tr>
<td>CNIT 131</td>
<td>Internet Basics and Beginning HTML</td>
<td>3</td>
</tr>
<tr>
<td>CNIT 120</td>
<td>Network Security</td>
<td>3</td>
</tr>
</tbody>
</table>

Option in Computer Technical Support

Required

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CNIT 104</td>
<td>Operating Systems Technologies</td>
<td>3</td>
</tr>
<tr>
<td>CNIT 105</td>
<td>Computer Technical Support</td>
<td>3</td>
</tr>
<tr>
<td>CNIT 345</td>
<td>Windows 7 Tech Support</td>
<td>3</td>
</tr>
<tr>
<td>CNIT 103L</td>
<td>Computer Hardware Lab</td>
<td></td>
</tr>
<tr>
<td>or CNIT 104L</td>
<td>Operating Systems Tech Lab</td>
<td>1</td>
</tr>
<tr>
<td>or CNIT 105L</td>
<td>Computer Tech Support Lab</td>
<td></td>
</tr>
</tbody>
</table>

Total Units: 22

Option in Internet and Web Development Techniques

Required

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CNIT 132</td>
<td>Intermediate HTML and XHTML</td>
<td>3</td>
</tr>
<tr>
<td>CNIT 133</td>
<td>Interactive Web Pages, Java Script, and AJAX</td>
<td>3</td>
</tr>
<tr>
<td>CNIT 134</td>
<td>Server Side Technologies: ASP .NET</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Units: 21
Option in Network Security

Required
- CNIT 121 Computer Forensics .................................. 3
- CNIT 122 Firewalls ................................................. 3
- CNIT 123 Ethical Hacking & Network Defense ........... 3

Total Units ......................................................... 21

Option in Wireless Networks

Required
- CNIT 107 Wireless LANs ........................................ 3
- CNIT 113 Tech. of Smartphones & Mobile Devices .... 3
- CNIT 108 Wireless Networks Advanced .................... 3

Total Units ......................................................... 21

Option in Cisco Networking

Required
- CNIT 203E LAN Switching and Wireless .................. 3
- CNIT 204E Accessing the WAN .................. 3

Total Units ......................................................... 21

Option in Microsoft Windows

Required
- CNIT 342 Windows Server Administration .......... 3
- CNIT 343 Windows Server Network Infrastructure .... 3
- CNIT 345 Windows 7 Tech Support or CNIT 351 SQL Server Administration ........ 3

Total Units ......................................................... 21

Certificate Curricula

The certificate programs are designed to meet the needs of students who want 1) to obtain entry-level employment, 2) to advance in their current positions, or 3) to change careers. Certificate programs enable students to demonstrate specialization in areas such as computer technical support, networking, security, and web site development techniques.

Requirements for the Certificate of Accomplishment or Achievement.
A student may obtain the Certificate of Accomplishment or Achievement by completing each of the courses offered in the certificate programs as listed below with a grade of “C” or better.

Several certificate programs are available. Each program prepares a student for a different career path. Additional information is available from the Department Chairperson.

Advanced Cybersecurity Certificate*

This program is pending state approval.
Please refer to the online version of the Catalog.

Computer Technical Support Certificate

This certificate includes instruction in the support of a typical workplace computer environment including hardware, operating systems, and application programs. Students in this program practice diagnostic troubleshooting, technical and logical problem solving, end-user training, and customer relations skills. Students completing this certificate program will be qualified for entry-level computer technical support, IT and help desk positions.

Learning Outcomes

Upon completion of this certificate, students will be able to:
- Evaluate components and configure a functional computer system
- Troubleshoot and repair defective computer systems
- Configure and diagnose basic network connectivity
- Demonstrate correct use of office productivity applications

Courses Required for the Certificate of Achievement in Computer Technical Support

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CNIT 100 Intro to Computers Using PCs ............. 3</td>
<td></td>
</tr>
<tr>
<td>CNIT 101 Operating Systems I - Windows ............ 3</td>
<td></td>
</tr>
<tr>
<td>CNIT 102 Operating Systems II - Command Line ...... 3</td>
<td></td>
</tr>
<tr>
<td>CNIT 103 Computer Hardware ........................... 3</td>
<td></td>
</tr>
<tr>
<td>CNIT 104 Operating Systems Technologies .......... 3</td>
<td></td>
</tr>
<tr>
<td>CNIT 105 Computer Technical Support .............. 3</td>
<td></td>
</tr>
<tr>
<td>CNIT 106 Intro to Networks ............................ 3</td>
<td></td>
</tr>
<tr>
<td>CNIT 197 Internship and Work Experience or CS 198A or CNIT 103L Computer Hardware Lab or CNIT 104L Operating Systems Tech Lab or CNIT 105L Computer Tech Support Lab ........... 1</td>
<td></td>
</tr>
</tbody>
</table>

Total Units ..................................................... 22

Students must complete each course with a grade of “C” or higher. A grade of Pass/No Pass cannot be applied towards CNIT degrees or certificates.

Computer Technician Certificate

This certificate includes instruction and practice in the identification, installation, and configuration of hardware devices to build, maintain, upgrade, and improve performance of a computer system. This course prepares students for CompTIA’s A+ exam, a certification equivalent to six months’ work experience as a computer technician. Students completing this certificate program will be qualified for entry-level computer technician and technical support positions.

Learning Outcomes

Upon completion of this certificate, students will be able to:
- Identify, install and configure hardware devices
- Build, maintain and upgrade computer systems
- Improve performance of computer systems
- Prepare for industry certification exam equivalent to 6 months’ work experience as a computer technician

Courses Required for the Certificate of Accomplishment in Computer Technician

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CNIT 101 Operating Systems I - Windows ............ 3</td>
<td></td>
</tr>
<tr>
<td>CNIT 102 Operating Systems II - Command Line ...... 3</td>
<td></td>
</tr>
<tr>
<td>CNIT 103 Computer Hardware ........................... 3</td>
<td></td>
</tr>
<tr>
<td>CNIT 104 Operating Systems Technologies .......... 3</td>
<td></td>
</tr>
<tr>
<td>CNIT 105L Computer Hardware Lab .................... 1</td>
<td></td>
</tr>
<tr>
<td>CNIT 104 Operating Systems Technologies .......... 3</td>
<td></td>
</tr>
<tr>
<td>CNIT 197 Internship or Work Experience ............ 1</td>
<td></td>
</tr>
</tbody>
</table>

Total Units ..................................................... 14

Students must complete each course with a grade of “C” or higher. A grade of Pass/No Pass cannot be applied towards CNIT degrees or certificates.

Cybersecurity Certificate

This certificate includes instruction in threats to networked computers and devices, and defense techniques. Students completing this certificate program will be qualified for employment as networking professionals at security-conscious companies and be able to prepare
for the Comp TIA Security+ exam and the E-C Council Certified Ethical Hacker exam.

**Learning Outcomes**

Upon completion of this certificate, students will be able to:

- Describe common Cybersecurity threats and defenses, prioritize them, and properly implement defenses such as firewalls and intrusions defense systems
- Analyze systems for evidence of abuse or intrusions
- Perform basic penetration tests and security audits

**Courses Required for the Certificate of Accomplishment in Cybersecurity**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CNIT 40 DNS Security</td>
<td>1</td>
</tr>
<tr>
<td>CNIT 106 Introduction to Networks or CNIT 201C Introduction to Cisco Networks</td>
<td>3</td>
</tr>
<tr>
<td>CNIT 120 Network Security</td>
<td>3</td>
</tr>
<tr>
<td>CNIT 121 Computer Forensics</td>
<td>3</td>
</tr>
<tr>
<td>CNIT 122 Firewalls</td>
<td>3</td>
</tr>
<tr>
<td>CNIT 123 Ethical Hacking</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Units</strong></td>
<td><strong>16</strong></td>
</tr>
</tbody>
</table>

Students must complete each course with a grade of “C” or higher. A grade of Pass/No Pass cannot be applied towards CNIT degrees or certificates.

**Fundamentals of Networking Certificate**

This certificate provides a solid core of the concepts and terminology, and introduction and overview of all aspects of computer networking, including components and principles of local and wide area networking and the Internet. Students who complete this certificate will be ready to undertake further study and advance to more specific industry training in order to be qualified for entry-level positions in network administration.

**Learning Outcomes**

Upon completion of this certificate, students will be able to:

- Define the major hardware components of computers and network devices
- Describe the role of operating systems including network operating systems
- Compare and contrast the OSI and TCP/IP networking models and their related protocols
- Create a simple web site using HTML and upload it on a server
- Explain the role of switches and routers in LANs and WANs

**Courses Required for the Certificate of Accomplishment in Fundamentals of Networking**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CNIT 103 Computer Hardware</td>
<td>3</td>
</tr>
<tr>
<td>CNIT 104 Operating Systems Technologies</td>
<td>3</td>
</tr>
<tr>
<td>CNIT 106 Introduction to Networks or CNIT 201E Network Fundamentals</td>
<td>3</td>
</tr>
<tr>
<td>CNIT 131 Internet Basics and Beginning HTML</td>
<td>3</td>
</tr>
<tr>
<td>CNIT 342 Windows Server Administration</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Units</strong></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

Students must complete each course with a grade of “C” or higher. A grade of Pass/No Pass cannot be applied towards CNIT degrees or certificates.

**Fundamentals of Technical Support Certificate**

This certificate includes instruction in introductory technical support skills. Students will learn the fundamentals of problem-solving technical support issues related to end-user computer applications, hardware and operating systems. Students completing this certificate program will be qualified for employment in entry-level computer technical support positions.

**Learning Outcomes**

Upon completion of this certificate, students will be able to:

- Recognize technical support skills required by the IT industry
- Identify and solve computer-related issues
- Support and maintain computer applications, hardware and operating systems
- Provide basic ROI and Project Management skills

**Courses Required for the Certificate of Accomplishment in Fundamentals of Technical Support**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CNIT 100 Intro to Computers Using PCs</td>
<td>3</td>
</tr>
<tr>
<td>CNIT 103 Computer Hardware</td>
<td>3</td>
</tr>
<tr>
<td>CNIT 104 Operating Systems Technologies</td>
<td>3</td>
</tr>
<tr>
<td>CNIT 105 Computer Technical Support or CNIT 345 Windows 7 Tech Support</td>
<td>3</td>
</tr>
<tr>
<td>CNIT 197 Work Experience</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total Units</strong></td>
<td><strong>13</strong></td>
</tr>
</tbody>
</table>

Students must complete each course with a grade of “C” or higher. A grade of Pass/No Pass cannot be applied towards CNIT degrees or certificates.

**Mobile Web Development Certificate**

*This program is pending state approval.

Please refer to the online version of the Catalog.

**Network Security Certificate**

This certificate includes instruction in the measures that must be taken to detect and prevent network security mistakes and vulnerabilities, and includes descriptions of common attacks and methods to configure the operating system, servers, routers, firewalls, and email. Students completing this certificate program will be qualified for employment in entry-level network security positions and be able to prepare for CompTIA Security+ exam.

**Learning Outcomes**

Upon completion of this certificate, students will be able to:

- Explain the basics of network security
- Define confidentiality, integrity, availability, and non-repudiation (CIAN)
- Recognize viruses and worms, their differences and how to harden computer systems
- Apply strategies for network defense using firewalls, routers, switches, antivirus, and anti-spyware tools
- Protect the IT environment using hacking techniques
- Discover hidden data in memory and hard drive using forensics rules, tools and techniques

*
Courses Required for the Certificate of Accomplishment in Network Security

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CNIT 106 Introduction to Networks or CNIT 201E Network Fundamentals</td>
<td>3</td>
</tr>
<tr>
<td>CNIT 120 Network Security</td>
<td>3</td>
</tr>
<tr>
<td>CNIT 122 Firewalls</td>
<td>3</td>
</tr>
<tr>
<td>CNIT 123 Ethical Hacking</td>
<td>3</td>
</tr>
<tr>
<td>CNIT 124 Advanced Ethical Hacking or CNIT 121 Computer Forensics</td>
<td>3</td>
</tr>
<tr>
<td>or CNIT 125 Information Security Prof Practices</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Units</strong></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

Students must complete each course with a grade of “C” or higher. A grade of Pass/No Pass cannot be applied towards CNIT degrees or certificates.

Routing and Switching (Cisco) Certificate

This certificate includes instruction and practice in the theory, design, configuration, and operation of simple Local and Wide Area Networks. Students completing this certificate program will be qualified for employment in entry-level positions in network administration and be able to prepare for the Cisco Certified Network Associate (CCNA) certification exam.

Learning Outcomes

Upon completion of this certificate, students will be able to:

- Compare and contrast the OSI and TCP/IP networking models and their related protocols
- Explain the importance of addressing and naming schemes of various layers of data
- Compare and configure various internal routing protocols
- Analyze, configure and troubleshoot switch configurations including LANs and VLANs
- Describe and configure a variety of WAN protocols in routers
- Define basic network security issues and possible solutions

Courses Required for the Certificate of Achievement in Routing and Switching (Cisco)

<table>
<thead>
<tr>
<th>Course/Routers track</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CNIT 103 Computer Hardware</td>
<td>3</td>
</tr>
<tr>
<td>CNIT 201E Network Fundamentals</td>
<td>3</td>
</tr>
<tr>
<td>CNIT 202E Routing Protocols and Concepts</td>
<td>3</td>
</tr>
<tr>
<td>CNIT 203E LAN Switching and Wireless</td>
<td>3</td>
</tr>
<tr>
<td>CNIT 204E Accessing the WAN</td>
<td>3</td>
</tr>
<tr>
<td>CNIT 120 Network Security</td>
<td>3</td>
</tr>
<tr>
<td>CNIT 342 Windows Server Administration</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Units</strong></td>
<td><strong>21</strong></td>
</tr>
</tbody>
</table>

Students must complete each course with a grade of “C” or higher. A grade of Pass/No Pass cannot be applied towards CNIT degrees or certificates.

Web Site Development Techniques Certificate

This certificate includes instruction and practice in the development, configuration and operation of web sites. Students completing this certificate program will be qualified for employment in entry-level positions in web site development and administration.

Learning Outcomes

Upon completion of this certificate, students will be able to:

- Develop and maintain web sites according to industry standards
- Recognize and use appropriate Web 2.0 technologies to promote or enhance the work environment
- Add interactivity to web pages via scripting programs and/or server-side technologies

Courses Required for the Certificate of Accomplishment in Web Site Development Techniques

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CNIT 131 Internet Basics and Beginning HTM or CNIT 131H Intro to HTML and CSS</td>
<td>1 or 3</td>
</tr>
<tr>
<td>CNIT 132 Intermediate HTML and XHTML</td>
<td>3</td>
</tr>
<tr>
<td>CNIT 133 Interactive Web Pages: JavaScript &amp; AJAX</td>
<td>3</td>
</tr>
<tr>
<td>CNIT 134 Server-side Tech: XML &amp; ASP.NET</td>
<td>3</td>
</tr>
<tr>
<td>CNIT 135A XML-Extensible Markup Language or CNIT 129 Web 2.0 Internet Technology</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Units</strong></td>
<td><strong>13 - 15</strong></td>
</tr>
</tbody>
</table>

Students must complete each course with a grade of “C” or higher. A grade of Pass/No Pass cannot be applied towards CNIT degrees or certificates.

Windows Networking Certificate

This certificate includes instruction and practice in the theory, design, configuration, and operation of local and wide area networks using Microsoft Windows servers. Students completing this certificate program will be qualified for employment in entry-level positions in network management and technical support of Windows networks.

Learning Outcomes

Upon completion of this certificate, students will be able to:

- Define various components of Windows Server
- Install Windows Server
- Implement and manage active directory infrastructure using advanced techniques
- Install and maintain SQL Server database in a Windows environment
- Support Windows Desktop edition

Courses Required for the Certificate of Accomplishment in Windows Networking

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CNIT 106 Local Area Networks or CNIT 201E Networking Fundamentals</td>
<td>3</td>
</tr>
<tr>
<td>CNIT 342 Windows Server Administration</td>
<td>3</td>
</tr>
<tr>
<td>CNIT 343 Windows Server Network Infrastructure or CNIT 351 SQL Server Administration</td>
<td>3</td>
</tr>
<tr>
<td>CNIT 345 Windows 7 Technical Support</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Units</strong></td>
<td><strong>12</strong></td>
</tr>
</tbody>
</table>

Students must complete each course with a grade of “C” or higher. A grade of Pass/No Pass cannot be applied towards CNIT degrees or certificates.

Wireless Networking Certificate

This certificate includes instruction in the description, installation, and configuration of network devices for wireless communication, focusing on issues of performance and security. Students completing this certifi
cate program will be qualified for employment in entry-level positions in the administration of wireless networks and to begin preparation for the Certified Wireless Network Administrator (CWNA) and Certified Wireless Security Professional (CWSP) industry certification exam.

**Learning Outcomes**

Upon completion of this certificate, students will be able to:

- Configure and diagnose basic network connectivity
- Evaluate components of and prepare a wireless network
- Install a wireless network
- Troubleshoot a wireless network

**Courses Required for the Certificate of Accomplishment in Wireless Networking**

**Course** | **Units**
---|---
CNIT 106 Introduction to Networks or CNIT 201E Networking Fundamentals | 3
CNIT 107 Wireless LANs | 3
CNIT 108 Wireless Networks, Advanced | 3
CNIT 120 Network Security | 3
CNIT 113 Tech. of Smartphones & Mobile Devices | 3

**Total Units** | 15

Students must complete each course with a grade of "C" or higher. A grade of Pass/No Pass cannot be applied towards CNIT degrees or certificates.

**Announcement of Courses**

**Credit, Degree Applicable Courses:**

**CNIT 10. Careers in Computer Networking & Information Technology (1)**

Lec-1, lab-1, field trips | P/NP available

Introduction to new technologies and employment opportunities in computer networking and information technology. Guest speakers currently working in the field describe the goals, working conditions, pay levels, and training required to succeed in the field today. Students perform hands-on projects with new technologies and techniques. CSU

**CNIT 100. WiFi Basics (1)**

Lec-3, lab-3 | P/NP available

Understand wireless networking for homes and small offices. An overview of important topics, including non-technical explanations, a review of currently available equipment, and system installation. A major emphasis on basic measures to protect the data and secure the system. CSU

**CNIT 101. Operating Systems I - Windows (3)**

Lec-3, lab-3 | ADVISE: CNIT 100

A computer literacy course using IBM-compatible computers. Prepares students to use computers to write papers, organize information, and use e-mail. Overview of computer components, hardware and software. Fundamentals of the Windows and other operating systems and applications such as word processing, spreadsheets, database, and e-mail and the Internet. Students use computers to complete their class assignments. CSU/UC

**CNIT 102. Operating Systems II - Command Line (3)**

Lec-3, lab-3 | ADVISE: CNIT 101

An advanced course covering the use of the MS-DOS command line interface. This course is especially for students planning to earn a certificate in Windows Hardware, or for advanced Windows users. Use of DOS commands and utilities. A detailed examination of batch files, CONFIG.SYS, AUTOEXEC.BAT, redirection and piping. Use of the DOS editor. CSU

Formerly CNIT 112 or 165.

**CNIT 103. Computer Hardware (3)**

Lec-3, lab-3 | P/NP available

ADVISE: CNIT 100 or 101 or 102

This course provides the knowledge and skills needed to install hardware, configure, repair, and maintain a computer system in a typical office environment. Topics include hardware components and peripherals, assembly, upgrading, and basic troubleshooting methodology. CSU

**CNIT 103L. Computer Hardware Lab (1)**

Lab-3 | P/NP available

ADVISE: CNIT 103

A project-oriented hands-on introduction to hardware identification, maintenance, upgrade, diagnosis, and troubleshooting. Designed to...
provide practice with concepts, techniques and procedures covered in CNIT 103. Teamwork will be emphasized. CSU

CNIT 104. Operating Systems Technologies (3)
Lec-3, lab-2  
Prereq.: CNIT 103
This course provides the knowledge and skills to select and install system software, and to diagnose and troubleshoot system problems due to software configuration. Covers all aspects of the operating system, configuration files, drivers, and resource allocation. Topics include computer architecture and the interaction of hardware and software, documentation, command line operations, use of utilities for diagnostics and for configuration, and editing the Registry. CSU

CNIT 104L. Operating Systems Technologies Lab (1)  
Lab-3  
Prereq.: CNIT 104  
P/NP available
A project-oriented hands-on introduction to the technical requirements of computer software: installation, configuration, modification, and troubleshooting. Designed to provide hands-on familiarity and practice with concepts, techniques and procedures covered in CNIT 104. Troubleshooting and teamwork will be emphasized. CSU

CNIT 105. IT Customer Support (3)
Lec-3, Lab-3  
Prereq.: CNIT 104  
Advisement: CNIT 105
Overview of the concepts and procedures associated with operating a technical support center or help desk call center, with particular emphasis on technologies that can facilitate the work and generate statistics. Extensive simulated and hands-on experience, role-playing and problem solving to practice good customer service and communication skills. CSU

CNIT 105L. Computer Technical Support Lab (1)  
Lab-3  
Advisement: CNIT 105
Introduction to hardware diagnosis and troubleshooting, and software maintenance, upgrading, and problem-solving; including the opportunity to work with real Help Desk software to log calls, and, at times, real end-user problems; and to work with a variety of real hardware problems in a simulated Service Center. Designed to provide hands-on practice with hardware and software, techniques and procedures covered in CNIT 105. Teamwork will be emphasized. CSU

CNIT 106. Introduction to Networks (3)  
Lec-3, lab-2  
Advisement: CNIT 100 or 101
An analysis of technologies for connecting computers and computer related devices into networks. This course covers the terminology and the major components of networks: architecture, topologies, hardware components, connections, protocols, network operations, network administration, support, and troubleshooting. Wide Area Networks (WANs) are also covered. Follows the objectives of the CompTIA Net+ certification exam. CSU

CNIT 107. Wireless LANs (3)  
Lec-3  
Advisement: CNIT 106 or 106C or 201E or 340
Knowledge and skills needed to select, install and configure wireless networks, including: fundamentals and standards of wireless communication, installation of network access point, and installation, configuration and management of typical products. Also included: common applications, monitoring the network, security, troubleshooting, upgrade and modification. Students in this course should be familiar with LAN Technologies. CSU

CNIT 108. Wireless Networks, Advanced (3)  
Prereq.: CNIT 107
Knowledge and skills to design, install, configure, manage, and maintain wireless networks, including: advanced fundamentals of wireless communication, current and developing standards and protocols, boosting signal strength, detecting and extending signals, troubleshooting common problems, monitoring the network, security issues, and research and analysis of proposed and developing security solutions. Follows the objectives for the Certified Wireless Network Administrator (CWNA) Examination. CSU

CNIT 109. Wireless Security (3)  
Lec-3, lab-3  
Prereq.: CNIT 106 or 120 or 107 or 108
Provides knowledge, skills, and procedures to address the wireless attacks on a computer network, to identify and eliminate known vulnerabilities in wireless networks, and to implement solutions to protect data and to keep the systems running. Known and common attacks on wireless systems are examined and discussed, and levels of security and developing standards are examined. Follows the objectives of the Certified Wireless Security Professional (CWSP) industry certification. CSU

CNIT 113. Technology of Smartphones and Mobile Devices (3)
Lec-3, lab-3  
Prereq.: CNIT 100  
Advisement: CNIT 100
Overview of mobile device technologies with an emphasis on smartphones. This course will introduce the technologies behind smartphones including the cellular networks, operating systems, browsers, hardware, and security. Topics include device selection, international network considerations, security, malware, and data back-up.

CNIT 120. Network Security (3)
Lec-3  
Advisement: CNIT 106 or 106C or 201E
Knowledge and skills required for Network Administrators and Information Technology professionals to be aware of security vulnerabilities, to implement security measures, to analyze an existing network environment in consideration of known security threats or risks, to defend against attacks or viruses, and to ensure data privacy and integrity. Terminology and procedures for implementation and configuration of security, including access control, authorization, encryption, packet filters, firewalls, and Virtual Private Networks (VPNs). CSU

CNIT 121. Computer Forensics (3)
Lec-3, lab-3  
Prereq.: CNIT 120
The class covers forensics tools, methods, and procedures used for investigation of computers, techniques of data recovery and evidence collection, protection of evidence, expert witness skills, and computer crime investigation techniques. Includes analysis of various file systems and specialized diagnostic software used to retrieve data. Prepares for part of the industry standard certification exam, Security+, and also maps to the Computer Investigation Specialists exam. CSU
CNIT 122. Firewalls (3)  
Lec-3, lab-3  
PREREQ.: CNIT 106 or 120  
P/NP available  
Learn how hackers attack computers and networks, and how to protect Windows and Linux systems. Legal restrictions and ethical guidelines will be taught and enforced. Students will perform many hands-on labs, both attacking and defending, using port scans, footprinting, buffer overflow exploits, SQL injection, privilege escalation, Trojans, and backdoors. CSU

CNIT 123. Ethical Hacking and Network Defense (3)  
Lec-3, lab-3  
PREREQ.: CNIT 123  
P/NP available  
A class is a beginning course in the use of HTML and CSS. It will prepare students for the Certified Information Systems Security Professional (CISSP) credential, which is essential for high-level information security professionals.

CNIT 124. Advanced Ethical Hacking (3)  
Lec-3, lab-3  
PREREQ.: CNIT 123  
P/NP available  
Advanced techniques of defeating computer security, and counter-measures to protect Windows and Unix/Linux systems. Hands-on labs include Google hacking, automated footprinting, sophisticated ping and port scans, privilege escalation, attacks against telephone and Voice over Internet Protocol (VoIP) systems, routers, firewalls, wireless devices, Web servers, and Denial of Service attacks. CSU

CNIT 125. Information Security Professional Practices (3)  
Lec-3, lab-3  
PREREQ.: CNIT 123  
P/NP available  
Covers information security in depth, including access control, application security, enterprise continuity, cryptography, technical risk management, physical security, and telecommunications and network security. This class helps to prepare students for the Certified Information Systems Security Professional (CISSP) credential, which is essential for high-level information security professionals.

CNIT 126. Practical Malware Analysis (3)  
Lec-3, lab-3  
PREREQ.: CS 110A  
P/NP Available  
Learn how to analyze malware, including computer viruses, trojans, and rootkits, using basic static analysis and dynamic analysis, including IDA Pro and other tools. CSU

CNIT 129. Web 2.0 Internet Technologies (3)  
Lec-3, lab-3  
PREREQ.: CNIT 100  
P/NP available  
Overview of Web 2.0 Internet technologies. Techniques for contributing and sharing documents, photos, videos and other data using blogs, wikis, social networking, video and photo sharing websites, and other tools. CSU

CNIT 130. Introduction to Linux (1)  
Lec-3, lab-3  
P/NP Available  
PREREQ.: CS 110A or 111A or 112A or 113A or 183B.  
Creation of original server-side scripts using a variety of techniques such as: (i) Extensible Markup Language (XML) and data with Extensible Style Language (XSLT), XML schemas, and Web Services and (ii) ASP.NET server controls and its data access with ADO.NET. CSU

CNIT 131. Internet Basics and Beginning HTML (3)  
Lec-3, lab-3  
P/NP available  
Methods of using the Internet. History, design and protocol methods used on Internet including: electronic mail, mailing lists, Usenet, connection to remote computers, file transfer, World Wide Web, basic web page creation and publishing. Additional topics include: file compression and expansion, computer security, copyright and electronic commerce, and basic Unix shell commands. CSU  
Formerly CNIT 135A

CNIT 131A. XML-Extensible Markup Language (3)  
Lec-3, lab-3  
PREREQ.: CNIT 131  
P/NP available  
A class is an introduction to Extensible Markup Language (XML) and document structuring. Hands-on experience with XML documents, Document Type Definition (DTD), namespaces, data parsing with Document Object Model (DOM) and data presentation with Extensible Style Language (XSLT), XPath and Extensible Style Sheets (CSS). CSU

CNIT 131H. Introduction to HTML and CSS (1)  
Lec-12, lab-6 (total hrs)  
P/NP Available  
PREREQ.: CNIT 100  
P/NP available  
This is a beginning course in the use of HTML and CSS. It will prepare students to build simple web pages using basic HTML and CSS. Students will also learn how to use FTP client software to upload the web page files to a web server. CSU

CNIT 132. Intermediate HTML and CSS (3)  
Lec-3, lab-3  
PREREQ.: CNIT 131  
P/NP available  
A class is an introduction to Extensible Markup Language (XML) and document structuring. Hands-on experience with XML documents, Document Type Definition (DTD), namespaces, data parsing with Document Object Model (DOM) and data presentation with Extensible Style Language (XSLT), XPath and Extensible Style Sheets (CSS). CSU

CNIT 133. Interactive Web Pages - JavaScript and AJAX (3)  
Lec-3, lab-3  
P/NP available  
PREREQ.: CNIT 132  
P/NP available  
A class is a beginning course in the use of HTML and CSS. It will prepare students for the Certified Information Systems Security Professional (CISSP) credential, which is essential for high-level information security professionals.

CNIT 133A. Advanced JavaScript and AJAX (3)  
Lec-3, lab-3  
P/NP available  
PREREQ.: CNIT 133  
P/NP available  
A class is an introduction to Extensible Markup Language (XML) and document structuring. Hands-on experience with XML documents, Document Type Definition (DTD), namespaces, data parsing with Document Object Model (DOM) and data presentation with Extensible Style Language (XSLT), XPath and Extensible Style Sheets (CSS). CSU

CNIT 133M. Mobile Web w/HTML, CSS & JS (3)  
Lec-3  
P/NP Available  
PREREQ.: CNIT 133 or DEMONSTRATION OF EXIT SKILLS  
P/NP Available  
Conversion of desktop websites and an introduction to building web applications for smart phones and mobile devices with intermediate HTML and JavaScript. Includes jQuery and intermediate CSS for controlling the appearance of mobile device websites and introduction of some development platforms. CSU

CNIT 134. Server-side Technologies for the Web (3)  
Lec-3, lab-3  
P/NP Available  
PREREQ.: CNIT 133 or CS 110A or 111A or 112A or 113A or 183B.  
Creation of original server-side scripts using a variety of techniques such as: (i) Extensible Markup Language (XML) and data with Extensible Style Language (XSLT), XML schemas, and Web Services and (ii) ASP.NET server controls and its data access with ADO.NET. CSU

CNIT 195. Web Site Development Practicum (3)  
Conf-3, field trips  
P/NP Available  
PREREQ.: CS 177 or CS 130B or CS 131A or CS 155A or CS 211E or CS 232 or CNIT 133  
P/NP available  
Integrate and apply knowledge gained through CCSF coursework in a team-based environment, collaborating with students in Visual Media Design's VMD 200A: Design Studio Practicum. Work on realistic
projects with input invited from local employers. Develop, design and program a professional web site project in a team environment CSU

CNIT 195. Internship and Work Experience (1)
Conf-2, work-5
Prereq.: CNIT 132 or 104 and 106 or 201 or 241 and approval of CNIT Work Experience Coordinator
Repeat: CNIT 197 and 198 combined, max. credit: 9 units
Work experience in supervised on- or off-campus work involving the use of computers. Internship programs are joint ventures between institutions or companies in the Bay area and the Computer Networking and Information Technology Department. Students must be employed in any area including, but not limited to, help desk, hardware technician, networking technician, system administration, internet or computer operation. CSU

CNIT 198. Internship and Work Experience (2)
Conf-2, work-10
Prereq.: CNIT 132 or 104 and 106 or 240 or 201 and approval of CNIT Work Experience Coordinator
Repeat: CNIT 197 and 198 combined, max. credit: 9 units
Work experience in supervised on- or off-campus work involving the use of computers. Internship programs are joint ventures between institutions or companies in the Bay area and the Computer Networking and Information Technology Department. Students must be employed in any area including, but not limited to, help desk, hardware technician, networking technician, system administration, internet or computer operation. CSU

CNIT 199. Independent Study (1-3)
Ind st-5, 10, 15
Prereq.: CNIT 104 or 202 or 132 or 241
Large-scale individual projects in Computer Networking and Information Technology to be defined in cooperation with an instructor-supervisor. The project must be in an area not covered by other course offerings. CSU

CNIT 201C. Introduction to Cisco Networks (3)
Lec-3, lab-3
Advis: CNIT 100
Architecture, structure, functions, components, and models of the Internet and other computer networks. Use of OSI and TCP layered models to examine protocols and services. IP addressing and subnetting. Fundamentals of Ethernet concepts, media, and operations. First course of the Cisco Networking Academy Exploration series preparing for CCNET and CCNA Certifications. CSU

CNIT 201E. Network Fundamentals (3)
Lec-2, lab-3, conf-1
Advis: CNIT 100
Architecture, structure, functions, components, and models of the Internet and other computer networks. Use of the OSI and TCP layered models to examine protocols and services. IP addressing and subnetting. Fundamentals of Ethernet concepts, media, and operations. First course of the Cisco Networking Academy Exploration series preparing for the CCNA Certification. CSU

CNIT 202C. Routing and Switching Essentials (3)
Lec-3, lab-3
Advis: CNIT 201C
Architecture, components, and operations of routers and switches in a small network. Configure router and switch for basic functionality. Troubleshoot and resolve common issues with RIPv1, RIPv2, single-area OSPF, virtual LANs, and inter-VLAN routing in IPv4and IPv6 networks. Second course in Cisco Networking Academy towards CCENT and CCNA Certifications. CSU

CNIT 202E. Routing Protocols and Concepts (3)
Lec-2, lab-3, conf-1
Prereq.: CNIT 201E
Architecture, components, and operation of routers, and principles of routing and routing protocols. Analysis, configuration, verification, and troubleshooting of the primary routing protocols RIPv1, RIPv2, EIGRP, and OSPF. CSU

CNIT 203E. LAN Switching and Wireless (3)
Lec-2, lab-3, conf-1
Prereq.: CNIT 201E
LAN switch operation and implementation for small and large networks. Analysis, configuration, verification and troubleshooting of VLANs, Rapid Spanning Tree Protocol (RSTP), VLAN thinking Protocol (VTP), Inter-VLAN routing and wireless network operations. Introduction of campus network design and Layer 3 switching concepts. CSU

CNIT 204E. Accessing the WAN (3)
Lec-2, conf-1, lab-3
Prereq.: CNIT 202E and 203E
Wide Area Network (WAN) converged applications and quality of service (QoS). WAN technologies including PPP, Frame Relay, and broadband links. WAN security, including types of threats, how to analyze network vulnerabilities, general methods for mitigating common security threats and types of security appliances and applications. Principles of traffic control and access control lists (ACLs). IP addressing services implementation, including NAT, DHCP and IPv6. CSU

CNIT 271. Apache Web Server Introduction (1)
Lec-1, lab-1
Prereq.: CS 160A and CNIT 106
Introduction to setting up and configuring the Apache Web Server. The course covers how to download and install Apache, configure CGI scripting to run scripts on the server, protect document directories with authentication, and using virtual hosting to support multiple hostnames on the same server. CSU

CNIT 272. Apache Web Server Advanced (2)
Lec-2, lab-2
Prereq.: CNIT 131, 270, and 271
Advanced class on administering the Apache Web Server. Setting up complex virtual hosting, multiple types of authentication and dynamic content, adding modules to support LAMP, optimizing server performance, web server security, including SSL, and troubleshooting. CSU

CNIT 342. Windows Server Administration (3)
Lec-3, lab-3
Prereq.: CNIT 101 and 106 or 106C or 201E
Knowledge and skills required to manage accounts and resources, maintain server resources, monitor server performance, and safeguard data in Microsoft Windows Server 2008 environment. Aligned with Microsoft Certified IT Professional (MCITP) exam 70-646. CSU

CNIT 343. Windows Server Network Infrastructure (3)
Lec-3, lab-3
Prereq.: CNIT 342
Knowledge and skills that are required to manage Dynamic Domain Name Servers, configuration of Server File Systems, Dynamic Host.
Configuration Protocol (DHCP) servers, Securing Data Transmission, configuring Routing and Remote Access and maintaining and updating File Services. This course is aligned with the Microsoft Certified IT Professional (MCITP) exam 70-642. CSU

**CNIT 345. Windows 7 Technical Support (3)**

Lec-3, lab-3  
**Prereq:** CNIT 101 or Demonstration of Technical Knowledge of Windows Operation Systems  
Knowledge, skills, and hands on experience to install, configure, and maintain Windows 7 operation system. Course aligned with the "Microsoft Certified Technology Specialist: Windows 7, Configuration" certificate.

**CNIT 351. SQL Server Administration (3)**

Lec-3, lab-3  
**Prereq:** CNIT 342 or Demonstration of Technical Knowledge of Windows Server Administration  
This course is about SQL Server database management system. In this advanced course, students will gain the knowledge and skills to install and configure SQL Server and manage the day-to-day administration of a client/server database in an enterprise network environment.

**CNIT 352. Exchange Admin & Mobile Device (3)**

Lec-3, lab-3  
**Prereq:** CNIT 343  
Knowledge and skills needed to configure and manage an Exchange Server messaging environment. Provide guidelines, best practices, and considerations that will help optimize and Exchange Server deployment. Targets MCTS (Microsoft Certified Technology Specialist) Exam 70-662: Microsoft Exchange Server 2010. CSU

**CNIT 410. Installing and Configuring Windows (3)**

Lec-3, lab-3  
**Prereq:** CNIT 103  
**Advis:** CNIT 106  
Knowledge and skills required to install and configure Windows 2012 core infrastructure services. This course is aligned with the Microsoft Certified System Administrator 70-410. CSU

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**Computer Science**

**Office:** Batmale 456  
**Phone Number:** (415) 239-3655  
**Web Site:** www.ccsf.edu/cs

Announcement of Curricula

**General Information**

The Computer Science Department offers courses in computer programming, databases, Unix/Linux administration and programming, and multimedia. We have transfer and degree programs, as well as certificate programs. Our courses range from entry-level to professional development.

**Computer Science Major (AS-T)**

Associate in Science in Computer Science for Transfer. Graduates of the two-year degree program in Computer Science will have the skills in computer programming required for transfer to a four-year college. Upon successful completion of the curriculum, students receive the Associate of Science for Transfer (AS-T) degree, which gives priority admission to CSU. The degree program prepares students for transfer to four-year colleges for further study in Computer Science, as well as related areas such as Computer Engineering.

**Learning Outcomes**

Upon completion of the major, students will be able to:

- solve problems and conduct experiments in basic computer science and physics
- solve mathematical problems using discrete math and calculus
- create and program algorithmic solutions to solve problems
- meet the requirements to transfer to a four-year degree program in Computer Science

**Degree Requirements:** Students who wish to earn the Associate in Science in Computer Science for Transfer (AS-T) must complete 60 CSU transferable units with at least a 2.0 grade point average. This must include the units required for full completion of the IGETC or CSU GE curriculum and the 28 units for the major as specified below. Each course in the major must be completed with a grade of "C" or better. Courses used to meet the major requirement may also be used to meet IGETC or CSU GE requirements.

**Program Prerequisite:** This major has a program prerequisite of CS 110A/111A Introduction to Programming in C++ or Java. Students who have never done any programming are strongly advised to take CS 110A or 111A before taking CS 110B/111B, and then 110C/111C.

**Courses Required for the Major in Computer Science**

<table>
<thead>
<tr>
<th>Courses</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CS 110B Programming Fundamentals (C++)</td>
<td>3</td>
</tr>
<tr>
<td>OR CS 111B Programming Fundamentals (Java)</td>
<td>3</td>
</tr>
<tr>
<td>CS 110C Data Structures and Algorithms (C++)</td>
<td>3</td>
</tr>
<tr>
<td>OR CS 111C Data Structures and Algorithms (Java)</td>
<td>3</td>
</tr>
<tr>
<td>CS 270 Computer Architecture with Assembly Language</td>
<td>3</td>
</tr>
<tr>
<td>MATH 110A Calculus I</td>
<td>4</td>
</tr>
<tr>
<td>MATH 110B Calculus II</td>
<td>4</td>
</tr>
<tr>
<td>MATH 115 Discrete Mathematics</td>
<td>3</td>
</tr>
<tr>
<td>PHYC 4A Physics for Scientists and Engineers</td>
<td>3</td>
</tr>
<tr>
<td>PHYC 4AL Physics Laboratory for Scientists &amp; Engineers</td>
<td>1</td>
</tr>
<tr>
<td>PHYC 4B Physics for Scientists and Engineers</td>
<td>3</td>
</tr>
<tr>
<td>PHYC 4BL Physics Laboratory for Scientists &amp; Engineers</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td>28</td>
</tr>
</tbody>
</table>

**Computer Science Major (AS)**

Graduates of the two-year program in Computer Science will have the skills in computer programming required for transfer to a four-year college. Upon successful completion of the curriculum, students receive the Associate in Science (AS) degree. The degree program prepares students for transfer to four-year colleges for further study in Computer Science, as well as related areas such as Computer Engineering.

**Learning Outcomes**

Students who receive a degree in Computer Science will be able to:

- Solve problems and conduct experiments in basic computer science and physics.
- Solve mathematical problems using discrete math and calculus.
- Create and program algorithmic solutions to solve problems.
- Meet the requirements to transfer to a four-year degree program in Computer Science.
Admission. Enrollment is recommended only to students who have completed one year of high school algebra with a final grade of “C” or higher.

Course of Study. The curriculum includes instruction in the fundamentals of problem solving and analysis, programming, data structures, and architecture. Additional requirements include Calculus, Physics and Discrete Mathematics.

Transfer to Other Colleges and Universities. Students who complete the two-year Associate in Science degree program are encouraged to continue their education and earn a Bachelor’s degree. City College of San Francisco has transfer agreements with many of the California State Universities and University of California campuses. Students who are interested in transferring a program should consult the “Transfer Information” section of this catalog and discuss their plans with their program advisor or counselor. So as not to duplicate course work, it is recommended that you try to satisfy the requirements of the transfer institution as well as those of City College. If you wish to substitute another class because of specific requirements of the transfer institution you will attend, consult with the Computer Science Department Advisor. Four-year universities may have additional or different course requirements for completion of lower division. Students need to check the particular institution for their requirements. Students should pay particular attention to which different four-year schools may take one or the other track. www.assist.org can provide additional information about applicable courses for transfer.

Courses Required for the Major in Computer Science

<table>
<thead>
<tr>
<th>Courses</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CS 110A/111A Intro to Programming (C++/Java)</td>
<td>3</td>
</tr>
<tr>
<td>CS 110B/111B Prog Fundamentals I (C++/Java)</td>
<td>3</td>
</tr>
<tr>
<td>CS 110C/111C Prog Fundamentals II (C++/Java)</td>
<td>3</td>
</tr>
<tr>
<td>CS 270 Computer Arch with Assembly Language</td>
<td>3</td>
</tr>
<tr>
<td>MATH 110A Calculus I</td>
<td>4</td>
</tr>
<tr>
<td>MATH 110B Calculus II</td>
<td>4</td>
</tr>
<tr>
<td>MATH 115 Discrete Mathematics</td>
<td>3</td>
</tr>
<tr>
<td>PHYC 4A Physics for Scientists &amp; Engineers</td>
<td>3</td>
</tr>
<tr>
<td>PHYC 4AL Physics Lab for Scientists &amp; Engrs</td>
<td>1</td>
</tr>
<tr>
<td>PHYC 4BL Physics Lab for Scientists &amp; Engrs</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td>31</td>
</tr>
</tbody>
</table>

Recommended Additional Coursework: CS 160A; CS 150A, 151A, or 155A; CS 130A, 131A, or 132A; CNIT 131, 132, and 133; CS 211D or 212

Certificate Curricula

The certificate programs are designed to meet the needs of students who want 1) to obtain entry-level employment, 2) to increase their opportunities to advance in their current positions, or 3) to change the kind of work they do currently. Certificate programs make it possible for a student to demonstrate specialization in the areas such as computer programming, multimedia, and Unix/Linux administration and programming.

Requirements for the Certificate of Accomplishment or Achievement. A student may obtain the Certificate of Accomplishment or Achievement by completing each of the courses offered in the certificate program with a grade of “C” or higher.

Many certificate programs are available. Each program prepares a student for a different career path. Additional information is available from the Department degree advisor or the Department Chairperson.

Android App Programming Certificate

This certificate is designed to teach students how to program native apps (mobile device applications) to run on Android phones and tablets. Students learn the basics of programming in Java, and the specifics of how to program for Android devices. Students completing this certificate program will be qualified for employment as entry-level app developers and quality assurance technicians.

Learning Outcomes

Upon completion of this certificate, students will be able to:

- Analyze a problem and interpret technical specifications to create and program appropriate algorithmic solutions that include the use of control structures, parameters and return values.
- Design and implement abstract data types using classes, encapsulation, inheritance, polymorphism, exceptions, events, multithreading, collections and generics.
- Create User Interfaces (UIs) using controls, layout managers, adapters, menus and dialogues.
- Implement Android applications incorporating activities, services, content providers, broadcast receivers, location tracking, maps, and Internet access.
- Use SQLite for database storage, Media Player, and telephony APIs.

Students must complete each course with a grade of “C” or higher. Where applicable, grades of Pass may be used.

Courses Required for the Certificate of Accomplishment in Android App Programming

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CS 111A Intro to Programming: Java</td>
<td>3</td>
</tr>
<tr>
<td>CS 111B Programming Fundamentals: Java</td>
<td>3</td>
</tr>
<tr>
<td>CS 211S Advanced Java: Standard Edition</td>
<td>3</td>
</tr>
<tr>
<td>CS 211D Android Programming</td>
<td>3</td>
</tr>
<tr>
<td>Total</td>
<td>12</td>
</tr>
</tbody>
</table>

Recommended Additional Coursework. CS 160A, CS 142 or CNIT 131A, CNIT 113, CS 155A, CS 111C, CNIT 133M

Computer Programming: C++ Certificate

The program of study for the certificate in Computer Programming: C++ includes instruction and practice in the programming language C++, database queries, use of the Linux operating system, and a broader context of software engineering or computer architecture. This course of study prepares students for entry-level positions in software quality assurance, computer programming, and related fields.

Learning Outcomes

Upon completion of this certificate, students will be able to:

- Analyze problems and interpret technical specifications to create and program appropriate algorithmic solutions that include the use of control structures, parameters and return values.
- Design and implement abstract data types using classes, encapsulation, inheritance and polymorphism.
- Write C++ code for class declarations and implementations for array-based and linked data structures.
- Compare and contrast algorithms for efficiency.
Courses Required for the Certificate of Accomplishment in Computer Programming: C++

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CS 110A Intro to Programming: C++</td>
<td>3</td>
</tr>
<tr>
<td>CS 110B Programming Fundamentals: C++</td>
<td>3</td>
</tr>
<tr>
<td>CS 110C Data Structures &amp; Algorithms: C++</td>
<td>3</td>
</tr>
<tr>
<td>CS 100 Introduction to Computer Science</td>
<td>3</td>
</tr>
<tr>
<td>or CS 177 Software Engineering</td>
<td></td>
</tr>
<tr>
<td>or CS 270 Comp. Arch. w/ Assembly Lang</td>
<td>3</td>
</tr>
<tr>
<td>CS 150A SQL Server Databases</td>
<td>3</td>
</tr>
<tr>
<td>or CS 151A Oracle SQL Databases</td>
<td></td>
</tr>
<tr>
<td>or CS 155A MySQL Databases</td>
<td>3</td>
</tr>
<tr>
<td>CS 160A Introduction to Unix/Linux</td>
<td>2</td>
</tr>
<tr>
<td>Total Units</td>
<td>17</td>
</tr>
</tbody>
</table>

Computer Programming: Java Certificate

The program of study for the certificate in Computer Programming: Java includes instruction and practice in the programming language Java, as well as the use of an operating system and data base queries. This course of study prepares students for entry-level positions in computer programming and related fields. Additionally the course of study prepares students for the industry exam in Java programming.

Learning Outcomes

Upon successful completion of this program, a student will be able to:

- Analyze a problem and interpret technical specifications to create and program appropriate algorithmic solutions that include the use of control structures, parameters and return values.
- Design and implement abstract data types using classes, encapsulation, inheritance and polymorphism.
- Write Java code for client (interface) and implementation levels for array-based and linked data structures.
- Compare and contrast algorithms for efficiency.
- Predict the results of code using the data structures stacks, queues, trees, graphs, heaps, and hash tables with associated algorithms such as insertion, deletion, retrieval, search, and traversal.
- Write Unix commands to manipulate files, directories, their contents and their permissions.
- Write and implement Java programs that handle exceptions and events and use multithreading, collections and generics.
- Write multiple table database queries in SQL.

Courses Required for the Certificate of Accomplishment in Computer Programming: Java

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CS 111A Intro to Programming: Java</td>
<td>3</td>
</tr>
<tr>
<td>CS 111B Programming Fundamentals: Java</td>
<td>3</td>
</tr>
<tr>
<td>CS 111C Data Structures and Algorithms: Java</td>
<td>3</td>
</tr>
</tbody>
</table>

CS 160A Introduction to Unix/Linux | 2 |
CS 211S Adv Java: Standard Edition | 3 |
CS 150A SQL Server Databases
or CS 151A Oracle SQL Databases
or CS 155A MySQL Databases
or CS 211E Adv Java: Enterprise Edition | 2-3 |
Total Units | 16-17

Students must receive a grade of “C” or higher in all courses. Where available, grades of “Pass” may also be used.

Computer Programming: Visual Basic with Database Certificate

This certificate includes instruction and practice in the Visual Basic programming language and the Microsoft SQL Server database system in addition to the fundamentals of computer programming systems and database processing. This course of study prepares students for entry-level positions in database management and development in computer programming in a variety of settings.

Learning Outcomes

Upon successful completion of this program, a student will be able to:

- Analyze a problem and interpret technical specifications to create and program appropriate algorithmic solutions that include the use of control structures, subroutines and parameters, arrays, and List(of T) collections.
- Write Visual Basic code to create console applications and windows forms applications that include event handling for form controls and other programming events.
- Design and implement abstract data types using classes, encapsulation, inheritance and polymorphism.
- Create Visual Basic applications that use ADO.NET techniques to interact with SQL Server databases including updating the database.
- Design and create queries in T-SQL for accessing and updating data including inner and outer joins, aggregate queries, subqueries, analytical queries, and XML techniques.
- Create SQL Server stored procedures, user defined functions, triggers, and routines using CLR techniques.
- Design and create relations and other objects as a normalized database and implement that design.

Courses Required for the Certificate of Achievement in Computer Programming: Visual Basic with Database

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CS 112A Intro to Visual Basic .NET</td>
<td>3</td>
</tr>
<tr>
<td>CS 112B Visual Basic.NET Object Oriented</td>
<td>3</td>
</tr>
<tr>
<td>CS 112D Visual Basic.NET w/ Databases</td>
<td>3</td>
</tr>
<tr>
<td>CS 150A SQL Server Databases</td>
<td>3</td>
</tr>
<tr>
<td>CS 150P SQL Server Programming Using T-SQL</td>
<td>3</td>
</tr>
<tr>
<td>CS 159A Database Design and Modeling</td>
<td>3</td>
</tr>
<tr>
<td>Total Units</td>
<td>18</td>
</tr>
</tbody>
</table>

Students must complete each course with a grade of “C” or higher in all courses. Where applicable, grades of “Pass” may also be used.

Computing Skills for Scientists Certificate

This certificate will give working scientists an introduction to technical computing skills. Students will learn the basics of working in a Unix or Linux environment, will learn basic programming techniques using Perl, and will learn database fundamentals using MySQL. This certificate can be completed in one semester.
Learning Outcomes
Upon successful completion of this program, a student will be able to:

- Think critically and apply the scientific method
- Write Unix commands including redirection and pipes, to manipulate files, directories, their contents and their permissions.
- Create regular expressions to perform pattern matching.
- Analyze common text processing tasks and interpret technical specifications to create and program algorithmic solutions, including the use of control structures, subroutines, lists and hashes.
- Write multiple table database queries in SQL.

Courses Required for the Certificate of Accomplishment in Computing Skills for Scientists

Course | Units
--- | ---
CS 160A Introduction to Unix/Linux | 2
CS 131A Python Programming or CS 113A Introduction to Perl Programming | 3
CS 155A MySQL Databases | 3
Total Units | 8

Students must complete each course with a grade of “C” or higher. Where applicable, grades of “Pass” may also be used.

Database Programming: MySQL/Open Source Technologies Certificate

This certificate is designed to introduce students to MySQL database fundamentals and interacting with databases using both SQL queries and procedural programming experience before attempting this certificate, such as CS 110A, 111A, or 112A. This course of study prepares students for entry-level positions in database management and development.

Learning Outcomes
Upon successful completion of this program, a student will be able to:

- Design and create queries in MySQL for accessing and updating data, including inner and outer joins, aggregate queries, and subqueries.
- Analyze a problem and interpret business requirements to create and program appropriate solutions that use queries and programming components such as MySQL procedures, functions, and triggers.
- Design and create relations and other objects as a normalized database and implement that design.
- Develop applications with a programming language (PHP, Perl, Python, or Ruby) that interact with MySQL Database
- Install and configure a MySQL Database Management System and use MySQL client and utility programs to monitor system performance, manage accounts, and develop and implement backup and recovery plans.

Courses Required for the Certificate of Accomplishment in Database Programming MySQL/Open Source Technologies

Course | Units
--- | ---
CS 155A MySQL Databases | 3
CS 155B MySQL Database Administration | 3
CS 155P Programming with MySQL | 3
CS 159A Database Design and Modeling | 3

Elective Courses: Choose one of the following:
CS 130A PHP Programming | 3
CS 133A Introduction to Perl Programming | 3
CS 131A Python Programming | 3
CS 132A Ruby Programming | 3
Total | 15

Students must complete each a course with a grade of “C” or higher. Where applicable, grade of “Pass” may be used.

Database Programming: Oracle Certificate

This certificate is designed to introduce students to Oracle database fundamentals and interacting with databases using both SQL queries and procedural programming techniques. It is advised that students have at least one semester of programming experience before attempting this certificate, such as CS 110A, 111A, or 112A. This course of study prepares students for entry-level positions in database management and development.

Learning Outcomes
Upon successful completion of this program, a student will be able to:

- Design and create queries in Oracle SQL for accessing and updating data, including inner and outer joins, aggregate queries, subqueries, and analytical queries.
- Analyze a problem and interpret business requirements to create and program appropriate solutions that use queries and programming components such as PL/SQL packages, procedures, functions, triggers, exception handling, composite data types, user-defined records, and collections.
- Design and create relations and other objects as a normalized database and implement that design.
- Install and configure an Oracle Relational Database Management System, monitor system performance, and develop and implement plans for security, backup, recovery, and networking of the databases.

Courses Required for the Certificate of Accomplishment in Database Programming: Oracle

Course | Units
--- | ---
CS 151A Oracle SQL Databases | 3
CS 151B Oracle Database Administration | 3
CS 151P Oracle PL/SQL Programming | 4
CS 159A Database Design and Modeling | 3
Total | 13

Students must complete each a course with a grade of “C” or higher. Where applicable, grade of “Pass” may be used.

iPhone App Programming Certificate

This certificate is designed to teach students how to program native apps (mobile device applications) to run on iPhones, iPads, and other iOS devices. Students learn the basics of programming in Java or C++, as well as Objective C, and the specifics of how to program for iPhones. Students completing this certificate program will be qualified for employment as entry-level app developers and quality assurance technicians.

Learning Outcomes
Upon completion of this certificate, students will be able to:

- Analyze a problem and interpret technical specifications to create and program appropriate algorithmic solutions that include the use of control structures, parameters and return values.
• Design and implement abstract data types using classes, encapsulation, inheritance and polymorphism
• Develop and test Objective C classes and protocols, implementing projects using xCode
• Extend User Interface Kit (UIKit) classes to create custom view controllers
• Compare and contrast core graphics classes

Students must complete each course with a grade of “C” or higher. Where applicable, grades of Pass may be used.

Courses Required for the Certificate of Accomplishment in iPhone App Programming

Course                              Units
CS 111A Intro to Programming: Java   3
or CS 110A Intro to Programming: C++  3
CS 111B Programming Fundamentals: Java or CS 110B Programming Fundamentals: C++   3
CS 212 iPhone Programming             3
Total                                  9

Recommended Additional Coursework: CNIT 113, CS 155A, CS 111C or 110C, CNIT 133M

Linux Administration I Certificate

The program of study for this first certificate in Linux Administration will give students the skills needed to install and configure a basic Linux server in a networked environment. Besides basic command-line use, students will learn intermediate-level Linux administration skills including configuring and managing file systems, configuring and monitoring basic system security, configuring default servers and performing an automated install over the network. It is designed to prepare students for the industry-standard RHCSA certification and for entry-level positions in Linux Administration.

Learning Outcomes

Upon completion of this certificate, students will be able to:
• Analyze common text processing tasks and write Unix commands to solve them using regular expressions, redirection, and shell wildcards.
• Design and implement bash shell scripts to solve administrative tasks using repetition and conditional statements and command-line arguments.
• Analyze a Linux system using command-line tools and log information and revise its configuration to intercept runaway processes, limit exposure of the administrator’s (root) account, evaluate and solve security issues, resolve basic network connectivity issues, and control the availability of services.
• Configure default NFS, ftp and http servers and the firewall and SELinux settings to access them.
• Install entire physical or virtual machines with custom physical file systems and logical volumes and install and update packages on an existing machine.
• Design and implement a custom kickstart configuration file to perform an automated installation over NFS, http, or ftp.

Students must complete each course with a grade of “C” or higher. Where applicable, grades of “Pass” may be used.

Courses Required for the Certificate of Accomplishment in Linux Administration I

Course                              Units
CS 160A Introduction to Unix/Linux   2
CS 160B Unix/Linux Shell Scripting   2
CS 260A Linux System Administration  3
CS 260P Linux Administration Projects 1
Total Units                           8

Recommended Additional Coursework: CNIT 106, CNIT 201E, CS 113A, CS 131A.

QA, Build and Release Automation Certificate

The program of study for the certificate in QA, Build and Release Automation will give students a solid grounding in the automation of software quality assurance testing (QA), as well as systems to build and release software. Students will learn the fundamentals of: working in a Linux environment; writing shell scripts and automation scripts using Ruby or Python, and Software Engineering principles. This course of study prepares students for entry-level positions in software QA and/or Build and Release Automation.

Learning Outcomes

Upon completion of this certificate, students will be able to:
• Write Unix/Linux commands utilizing redirection, pipes, and regular expressions, including manipulation of files, directories, their contents and their permissions.
• Analyze common text processing and system tasks and interpret technical specifications to create algorithmic solutions, including the use of control structures, subroutines, lists, classes and objects.
• Implement and test software thoroughly and methodically in a team environment.
• Perform continuous integration tests on the contents of a repository.
• Implement, exercise and manage QA and regression tests for known defects and issues.
• Manage version tags and branches to build specific software versions.

Students must complete each course with a grade of “C” or higher. Where applicable, grades of Pass may be used.

Courses Required for the Certificate of Accomplishment in QA, Build and Release Automation

Course                              Units
CS 160A Introduction to Unix/Linux   2
CS 160B Unix/Linux Shell Scripting   2
CS 132A Ruby Programming or CS 131A Python Programming or CNIT 133 Interactive Web Pages-
Javascript and AJAX                    3
CS 177 Software Engineering          3
CS 178 QA, Build and Release Automation 3
Total Units                            13

Web Application Programming Certificate

The program of study for the certificate in Web Application Programming will give students a solid grounding in open source web development skills. Students will learn the fundamentals of: working in a Linux environment; developing front-end web pages using HTML and JavaScript; using MySQL databases; and server-side programming techniques using Ruby, PHP, Python, or Java. This course of study prepares students for entry-level positions developing web applications.

Courses Required for the Certificate of Accomplishment in Web Application Programming

Course                              Units
CS 160A Introduction to Unix/Linux   2
CS 160B Unix/Linux Shell Scripting   2
CS 160C Unix/Linux System Administration 3
CS 160P Linux Administration Projects 1
Total Units                            8

Recommended Additional Coursework: CNIT 106, CNIT 201E, CS 113A, CS 131A.
Learning Outcomes
Upon completion of this certificate, students will be able to:

- Write Unix/Linux commands including redirection and pipes, to manipulate files, directories, their contents and their permissions.
- Create regular expressions to perform pattern matching.
- Analyze common text processing and operating system tasks and interpret technical specifications to create and program algorithmic solutions including the use of control structures, subroutines and lists.
- Write multiple table database queries in SQL.
- Create, build and publish interactive Web pages containing text and graphic information using HTML and Javascript.
- Write object-oriented server-side web site programs that interact with databases.
- Operate effectively within a team, gaining work experience.

Students must complete each course with a grade of “C” or higher. Where applicable, grades of Pass may be used.

Courses Required for the Certificate of Achievement in Web Application Programming

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>CS 160A Introduction to Unix/Linux</td>
<td>2</td>
</tr>
<tr>
<td>CS 155A MySQL Databases</td>
<td>3</td>
</tr>
<tr>
<td>CNIT 132 Intermediate HTML and CSS</td>
<td>3</td>
</tr>
<tr>
<td>CNIT 133 Interactive Web Pages-JavaScript and AJAX</td>
<td>3</td>
</tr>
<tr>
<td>CS 130A PHP Programming</td>
<td>3</td>
</tr>
<tr>
<td>or CS 132A Ruby Programming</td>
<td></td>
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<tr>
<td>or CS 113A Intro to Perl Programming</td>
<td></td>
</tr>
<tr>
<td>or CS 111A Intro to Programming: Java</td>
<td></td>
</tr>
<tr>
<td>or CS 111B Programming Fundamentals: Java</td>
<td>3</td>
</tr>
<tr>
<td>CS 130B Advanced PHP</td>
<td>3</td>
</tr>
<tr>
<td>or CS 232 Ruby on Rails Development</td>
<td></td>
</tr>
<tr>
<td>or CS 211E Advanced Java Enterprise Edition</td>
<td></td>
</tr>
<tr>
<td>or CS 131A Python Programming</td>
<td>3</td>
</tr>
<tr>
<td>CS 195 / CNIT 195 Website Development Practicum</td>
<td></td>
</tr>
<tr>
<td>or CS 177 Software Engineering</td>
<td></td>
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<tr>
<td>or CS 198 Industry Internship</td>
<td></td>
</tr>
<tr>
<td>or CNIT 197 Internship and Work Experience</td>
<td></td>
</tr>
<tr>
<td>or CNIT 198 Internship and Work Experience</td>
<td>1-3</td>
</tr>
</tbody>
</table>

Total | 18-20 |

Recommended Additional Coursework: CNIT 131, CNIT 133M

Announcement of Courses

Credit, Degree Applicable Courses:

CS 100. Introduction to Computer Science (3)
Lec-3
P/NP available
Introduction to computer science. Emphasis is on properties of algorithms, hardware design, system software and networks, computer organization, data representation, languages, theory of computation, applications and social issues. Students learn algorithms and use programming techniques to solve problems. CSU/UC

CS 100M. Introduction to Computers Using Macintosh (3)
Lec-3
P/NP available
A computer literacy course using Macintosh computers. Prepares students to use computers to write papers, organize information, and use e-mail. Overview of computer components such as hardware, software and data. Fundamentals of the Finder and applications such as word processing, spreadsheets and the Internet. Students use computers to complete class assignments. CSU/UC

CS 101. Intro to Information Systems (3)
Lec-3
Introduction to the uses and technology of computers. Emphasis is on the vocabulary of computer systems, hardware, software, networks, data representation and manipulation, communications, the Internet, ethics and privacy issues, and developments and trends. Survey of job opportunities in the computer field and how computers are used in business, research and government. Students use a computer application (spreadsheet) as a problem-solving tool and use macros and Visual Basic for Applications to learn programming fundamentals. CSU/UC/C-ID ITIS 120

CS 110A. Intro to Programming: C++ (3)
Lec-3, conf-1
ADVISOR: MATH 40
Introduction to computer programming and problem solving. No prior programming experience required. Concepts include: problem solving techniques, algorithms, program design, control structures, functions, arrays and use of the C++ programming language. CSU/UC/C-ID COMP 112

CS 110B. Programming Fundamentals: C++ (3)
Lec-3, conf-1
Prereq: CS 110A, 111A, or demonstration of exit skills
This course covers programming fundamentals using the C++ language. Topics include pointers, arrays, structured elements, dynamic memory allocation, and Object Oriented programming. Assignments require planning, good coding practices, and documentation. CSU/UC/C-ID COMP 122

CS 110C. Data Structures and Algorithms: C++ (3)
Lec-3, conf-1
Prereq: CS 110B
A course in the analysis and design of computer algorithms and the underlying data structures using an object-oriented approach. Analysis in the timing and efficiency of algorithms. Study of lists, stacks, queues, trees, searching, sorting, and recursion. Introduction to UML, heaps, graphs, tables, hashing, and direct access files. Further study of abstract data types. CSU/UC/C-ID COMP 132

CS 111A. Intro to Programming: Java (3)
Lec-3, Conf-1
ADVISOR: MATH 40
Introduction to computer programming and problem solving. No prior programming experience required. Course concepts include: problem solving techniques, algorithms, program design, control structures, methods, arrays and use of the Java programming language. CSU/UC/C-ID COMP 112

CS 111B. Programming Fundamentals: Java (3)
Lec-3, conf-1
Prereq: CS 110A or 111A
This course covers programming fundamentals using the Java language, using an object-oriented approach to problem solving. Topics include classes, objects, references, dynamic memory allocation, inheritance, polymorphism, arrays, files, design and implementation of abstract data types, in numerical and non-numerical applications. CSU/UC/C-ID COMP 122
CS 111C. Data Structures and Algorithms: Java (3)
Lec-3, conf-1
Prereq.: CS 111B
The analysis and design of computer algorithms and their underlying data structures. Analysis of the timing and efficiency of algorithms. Study of lists, stacks, queues, trees, backtracking, searching, sorting and recursion. Introduction to graphs, hash tables, heaps, priority queues, and direct access files. Further study of abstract data types and object-oriented programming. CSU/UC/C-ID COMP 132

CS 112A. Intro to Visual Basic.NET (3)
Lec-3, conf-1
P/NP available
Advised: MATH 40
A beginning course in computer programming and problem solving using Visual Basic.NET. Students develop Windows-oriented application programs with emphasis on standard programming concepts and algorithms, interface design, and event processing using the .Net development platform. CSU/UC

CS 112B. Visual Basic.NET Object-Oriented (3)
Lec-3, conf-1
P/NP available
Prereq.: CS 112A
A continuation of CS 112A. Design and implementation of classes, objects, abstract data types, arrays, and collections. Use of inheritance, polymorphism, and structured exception handling. Development of Windows-oriented application programs with emphasis on object-oriented programming concepts and techniques. CSU

CS 112D. Visual Basic.NET w/ Databases (3)
Lec-3, conf-1
P/NP available
Prereq.: CS 112A or experience programming with Visual Basic; and CS 150A or 151A or 155A or experience writing SQL queries
Advised: CS 112B
An intermediate course in computer programming and problem solving using Visual Basic.NET and ADO.NET. Students develop Windows-oriented application programs that interface to data bases (SQL Server, Access, or Oracle) using the ADO.NET data access model. CSU

CS 113A. Introduction to Perl Programming (3)
Lec-2, conf-1
P/NP available
Advised: CS 160A
An introduction to the interpreted language called Perl, the Practical Extraction and Report Language. Recommended for anyone working with files and text. This course covers the semantics and syntax of the Perl language, and includes discussions on the practical kinds of problems that Perl can solve and provides examples. Students write stand-alone programs that perform various tasks, including text and file manipulation. CSU/UC

CS 114B. Programming Fundamentals I/C# (3)
Lec-3, conf-1
P/NP available
Prereq.: CS 110A or 111A or 112A, or similar programming experience
A continuation of the concepts and principles introduced in CS 110A or 111A. It covers programming using the C# language and the .NET/ Common Language Runtime platform. Students will learn Object Oriented software design techniques, and construct Graphical User Interface applications. CSU

CS 130A. PHP Programming (3)
Lec-3, conf-1
P/NP available
Advised: CNIT 132 or demonstration exit skills; and CS 110A or 111A or 112A or 113A; or CS 131A or similar programming experience
Introduction to the open source Web scripting language PHP. Recommended for anyone needing to build dynamic Web sites and Web applications. Semantics and syntax of the PHP language, including discussion on the practical problems that PHP solves. Students write server-side, cross-platform, HTML embedded scripts that perform various tasks, including implementing dynamic Web pages that interact with databases and files. CSU

CS 130B. Advanced PHP Programming (3)
Lec-3
P/NP available
Prereq.: CS 130A
This class covers using PHP for database connectivity to build scalable, dynamic websites. Assignments emphasize using PHP for user authentication, site personalization, content management, session tracking, and user-driven database updating. A class project demonstrates using PHP and a database (MySQL) to build a scalable, object-oriented, template-based e-commerce website. CSU

CS 131A. Python Programming (3)
Lec-3, conf-1
P/NP available
Advised: CS 110A or 111A or 113A or 130A or 112A or 161 or 160B
Introduction to the interpreted, interactive, object-oriented language Python. Recommended for anyone needing a general-purpose programming language and for those performing web site or system administration. Semantics and syntax of the Python language, including discussion on the practical problems that Python solves. Students write stand-alone programs that perform various tasks including interfacing to system calls and libraries; sending and retrieving information from web sites; and, connecting to databases. CSU/UC

CS 132A. Ruby Programming (3)
Lec-3
P/NP available
Advised: CS 110A or 111A or 113A or 130A or 112A or 161 or 160B
Recommended for anyone using the Ruby on Rails web framework, performing general-purpose programming, or web site or system administration. Solution of practical problems. Useful object-oriented design patterns. Creating stand-alone programs that interface to system calls and libraries and create a MVC (Model-View-Controller) web site that connects to databases. CSU

CS 142. Programming Techniques for XML (2)
Lec-2
P/NP available
Prereq.: CS 110A or 111A or 112A or 113A or 130A or 131A, or similar programming experience
Programming techniques for processing XML data. Comparison of programming approaches, including SAX, SAX-like, and DOM interfaces. Navigating, filtering, and modifying XML. Transformation of XML data. CSU

CS 150A. SQL Server Databases (3)
Lec-3
P/NP available
A course in the use of the SQL Server database management system to create, update and query database tables. This course covers both the syntax and the logic of the major features of the T-SQL language. The course includes a brief introduction to the programming aspects of T-SQL. CSU

CS 150P. SQL Server Programming Using T-SQL (4)
Lec-4
P/NP available
Prereq.: CS 150A or 151A or 155A, or prior SQL experience
An advanced course in the use of Microsoft SQL Server techniques. Design and develop SQL Server program units using the T-SQL.
language: stored procedures, user-defined functions, and database triggers. Create Visual Basic .NET CLR (Common Language Runtime) routines for use in SQL Server. Work with dynamic SQL and with XML data. CSU

CS 151A. Oracle SQL Databases (3)
Lec-3 P/NP available
A course in the use of Oracle database management system to create, update, and query database tables. The course covers both the syntax and the logic of the major features of the Oracle SQL language. The course includes a brief introduction to the programming aspects of PL/SQL. CSU

CS 151B. Oracle Database Administration (3)
Lec-3 P/NP available
Prereq: CS 150A or 151A
Advising: CS 160A
An advanced course in the architecture, design, configuration, installation, and maintenance of an Oracle relational database management system. Student will gain the knowledge and skills needed to administer an Oracle client/server database in an enterprise network environment. CSU

CS 151P. Oracle PL/SQL Programming (4)
Lec-4 P/NP available
Prereq: Completion of or concurrent enrollment in CS 151A or experience writing SQL
An intermediate course in the use of the PL/SQL programming language. Create and manage PL/SQL program units and data structures, stored procedures and functions, database triggers, and packages to process data using database objects. CSU

CS 155A. MySQL Databases (3)
Lec-3 P/NP available
A course in the use of MySQL database management system to create, update, and query database tables. The course covers both the syntax and the logic of the major features of the MySQL language. The course includes a brief introduction to the programming aspects of MySQL. CSU

CS 155B. MySQL Database Administration (3)
Lec-3 Prereq: CS 155A
Advising: CS 160A
Students install and configure a MySQL server and create and manage user accounts. Issues pertaining to optimization, security, privileges, tuning, troubleshooting, and performing upgrades are studied and practiced. CSU

CS 155P. Programming with MySQL (3)
Lec-3 P/NP available
Prereq: CS 155A or CS 150A or CS 151A or demonstration of exit skills
An advanced course in the use of MySQL techniques to process database objects. Design and develop MySQL program units: stored procedures, functions, and database triggers. Work with dynamic SQL and with XML data. CSU

CS 159A. Database Design and Modeling (3)
Lec-3 P/NP available
Prereq: CS 150A or 151A, or CS 150P
A course in the design of database structures and the use of database modeling tools. CSU

CS 160A. Introduction to Unix/Linux (2)
Lec-2 P/NP available
Introduction to using the Unix/Linux operating system. Unix/Linux file management and common text processing utilities including searching. CSU/UC

CS 160B. Unix/Linux Shell Scripting (2)
Lec-2 P/NP available
Prereq: CS 160A or demo of CS 160A exit skills
Analyze, design, write, test, and debug Unix shell scripts. Students learn basic scripting techniques and develop scripting skills needed for Unix/Linux System Administration courses. The bash shell is used. CSU/UC

CS 162. Linux Installation (1)
Lec-1 P/NP only
Prereq: CS 160A
The study and practice of the minimal administration skills needed to install a standard Linux or Open Source Unix distribution on a personal computer. An actual installation is performed, either on the student's own computer or on a classroom computer. Alternate sections may install different distributions. An overview is given of Unix/Linux courses for further study. CSU

CS 177. Software Engineering (3)
Lec-3 P/NP available
Prereq: CS 110A or 111A or 112A or 113A or 130A or 131A, or similar programming experience
Overview of the entire software engineering process from start to finish. Includes Analysis, Design, Development, Project Management, Testing, and Evolution. Use of industry techniques and tools including UML diagrams, version control and installation software. CSU/UC

CS 178. QA, Build and Release Automation (3)
Lec-3, lab-3 P/NP available
Prereq: CS 160B
Coreq: CS 177
Advising: CS 132A
Software quality assurance as the planned systematic set of actions that provide confidence in a software product. Automated test execution and best practices, build methods, revision control and release management, continuous integration (CI), deployment and distributed builds. CI server setup, repository creation, writing and executing test cases. CSU

CS 183A. Multimedia Tools (3)
Lec-3 P/NP available
Advising: CS 100M or CNIT 100
Hands-on survey of multimedia theory and practice. Team approach to the design and production of interactive multimedia projects. Multimedia applications, including authoring, video capture, audio capture, and animation. Multimedia hardware, including Macintosh and Windows platforms, audio and video capture cards, and peripherals. CSU

CS 183B. Flash Game Programming I (3)
Lec-3, conf-1 P/NP available
Prereq: CS 183A or VMD 156, or experience using Flash: graphic tools, built-in objects, and how to create timeline-based movies
Multimedia game programming using Macromedia Flash ActionScripting. Program design and implementation, including algorithms, data structures, control structures, style, and debugging techniques for the creation of web-based interactive games. CSU
CS 183C. Advanced Multimedia Programming (3)
Lec-3, conf-1 P/NP available
Prereq.: CS 183B
Object-oriented programming for the creation of multimedia projects. Programming games and simulations. Advanced data structures, including multidimensional arrays, queues, and stacks. Inheritance, encapsulation, and polymorphism. CSU

CS 195. Web Site Development Practicum (3)
Conf-3, field trips P/NP Available
Prereq.: CS 177 or CS 130B or CS 131A or CS 155A or CS 211E or CS 232 or CNIT 133
Integrate and apply knowledge gained through CCSF coursework in a team-based environment, collaborating with students in Visual Media Design’s VMD 200A: Design Studio Practicum. Work on realistic projects with input invited form local employers. Develop, design and program a professional web site project in a team environment. CSU CS 195 = CNIT 195

CS 198. Industry Internship (1, 2, 3, or 4)
Conf-1, work-5, 10, 15, or 20 P/NP available
Coreq: Enrollment in 7 units including this course and consent of instructor
Repeat: Maximum credit: 12 units
Internship programs are joint ventures between institutions or companies in the Bay Area and the Computer Science Department. Students are employed in areas such as computer programming; database administration, programming, or design; Unix/Linux administration or programming; multimedia programming; or other computer science related fields. CSU

CS 199. Independent Study (1-3)
Ind st-5,10,15
Prereq.: CNIT 133; CS 110C, 111C, 183B, or 260
Large-scale individual projects in computer programming to be defined in cooperation with an instructor-supervisor. Student opportunity to complete independent programming study. CSU (UC upon review) Formerly CIS 199.

CS 211D. Android Programming (3)
Lec- 3 P/NP available
Prereq.: CS 111B or Demonstration of exit skills
An advanced course in the design and development of applications for mobile devices running the Android operating system. Students will use the Android SDK to create programs including how to create User Interfaces (UIs), create location-based applications, and access web services. CSU

CS 211E. Advanced Java: Enterprise Edition (3)
Lec-3 P/NP available
Advis: CS 21IS
Advanced Java Enterprise Edition features of the Java language essential for building network and web oriented applications. Topics include networking, JDBC, RMI, Servlets, JSP, JNI, JavaBeans, XML, and ANT. CSU

CS 211G. Game Programming in Java (3)
Lec-3 P/NP available
Prereq.: Completion of or concurrent enrollment in CS 111B
Core aspects of developing games in Java. Creation and control of geometric elements and sprites, animated characters, and scrolling backgrounds. Keyboard, mouse, and joystick input techniques. Use of imported digital sound effects and images. An overview of enhancing playability by implementing Artificial Intelligence, kinematics, physics, and the element of chance. CSU

CS 211S. Advanced Java: Standard Edition (3)
Lec-3
Prereq.: CS 111B
Introduces advanced Java language features and packages that are essential for building Java Standard Edition applications. Topics include multithreading, collections, networking, and Swing classes. Helps prepare students for industry certification in Java programming. CSU

CS 211V. Graphics Programming in Java (3)
Lec-3, conf-1 P/NP available
Prereq.: CS 111B
Learn to develop data driven web applications using Ruby on Rails. The course covers all of the core aspects of the framework including Activerecord, ERB, Rails Controller classes, Action Mailer, and application testing. CSU

CS 212. iPhone Programming (3)
Lec-3, conf-1 P/NP available
Prereq.: CS 110B or CS 111B or demonstration of exit skills
An advanced course in the design and development of Graphical User Interface applications for the iPhone and iTouch platforms. Students will use XCode and Interface Builder to write Objective C applications on the iPhone SDK.

CS 232. Ruby on Rails Development (3)
Lec-3, conf-1
Prereq.: CS 132A
Advis: CNIT 132
Learn to develop data driven web applications using Ruby on Rails. The course covers all of the core aspects of the framework including Activerecord, ERB, Rails Controller classes, Action Mailer, and application testing. CSU

CS 260A. Linux System Administration (3)
Lec-3, conf-1 P/NP available
Prereq.: CS 160B or Demon of CS 160B exit skills
The administration of a Linux server. Prepares students for industry certification and entry-level employment in System Administration. Topics include process control, system monitoring, filesystem preparation and maintenance, logical volumes, encrypted filesystems, basic servers and the firewall, virtual machines, startup and shutdown, user accounts, periodic tasks, security issues and installations. CSU

CS 260B. Linux Network Administration (3)
Lec-3 P/NP Available
Prereq.: CS 260A and either CNIT 106 or CNIT 201E
Advis: CS 260P
The networking portion of the administration of a Linux server. Concepts and configuration of basic networking parameters and of various Linux networking services are discussed including DHCP, DNS, NFS, LDAP, Postfix, SSH, NIS, LDAP, Samba, and advanced Apache. Security issues are discussed. CSU

Formerly CNIT 270
CS 260P. Linux Administration Projects (1)
Lec-1, conf-1  P/NP Only
Preq: CS 260A
This is a lab course to practice Linux System Administration in preparation for the industry-standard RHCSA (RedHat Certified System Administrator) exam. Virtual machines are used. It requires a firm foundation in the material covered in CS 260A. Additional material adds depth in the areas of automated installations and security. CSU

CS 261A. Unix/Linux Systems Programming (3)
Lec-3  P/NP available
An overview of Unix/Linux system calls, the functions in the standard library, which access the lowest level resources of the Unix/Linux operating system. Emphasis is on writing programs for controlling file I/O, terminal I/O and buffering characteristics, process handling, signal handling, pipes, file locking, network-based inter-process communication using sockets, and RPC. This course provides concrete examples of the Unix/Linux system call interface using the C and/or C++ programming language. CSU

CS 267. Unix and Linux Security (3)
Lec-3  P/NP available
Prereq.: CNIT 106 or 201
Advise: CS 260B
Security issues on Unix and Linux platforms arising from networked and system operations. Vulnerabilities and weaknesses of common services are discussed and solutions and workarounds are proposed. Programmed threats and denial of service attacks and their sources are examined. Detect, neutralize, and recover from security breaches. Shell programming to simulate attacks of vulnerable network services. CSU

CS 270. Computer Architecture with Assembly Language (3)
Lec-3, conf-1  P/NP available
Prereq.: CS 110B or 111B
This course covers Computer Organization, hardware and software structure, datapath, ALU, register storage, binary representation of data and its conversion, algebra, memory organization, addressing, interrupts and virtual memory. It also compares embedded vs. general purpose systems, CISC vs. RISC architectures and includes an introduction to multiprocessing issues. CSU/UC/C-ID COMP 142

CS 280. Introduction to Parallel and Cloud Programming (3)
Lec-3, conf-1, lab-3  P/NP Available
Prereq.: CS 110B, 111B, OR DEMO OF CS 110 OR 111B EXIT SKILLS
Programming fundamentals using multiple processors or computers to solve a problem. Mechanics of computation, multi-tasking and multi-threading and object-oriented approaches to managing many computing elements working on the same problem. Programming for Cloud computation, Big Data access, and highly parallel computing hardware, e.g. multi-core processors and Graphics Processing Units. CSU

CS 311D. Advanced Android Programming (3)
Lec-3, lab-3  P/NP available
Prereq.: CS 211D
Advanced class on Android mobile phone and tablet programming. Includes more complex features such as animation, services, sensors, multi-threading, content provider, advanced debugging. Program apps using touch screen events and gestures, and telephony. CSU

Construction Management

See Architecture

Consumer Education

See Health Education

Counseling, New Student

Office: Conlan 205
Phone Number: (415) 239-3296
Web Site: www.ccsf.edu/nscd

Learning Outcomes
Upon completion of the courses of the Academic Achievement and Personal Success discipline, students will be able to:

- Navigate the educational and student support services to enhance their success.
- Make decisions related to their educational and personal goals.

Announcement of Courses

Credit, Degree Applicable Courses:

AAPS 100. Achieving an Academic Attitude (3)
Lec-3  P/NP available
This course supports the development of a successful attitude in college, through an in-depth analysis of personal, family, community, and cultural influences. The focus is to teach students performance/achievement-based competencies that encourage students to take personal responsibility in the creation of their educational action plan needed for academic success. CSU

AAPS 101. College Orientation (.5)
Lec-9 (total hours)  P/NP only
This course assists new students to identify their educational goals and chart their course to achieve success at City College. Through the course, students will also develop an understanding of the College’s policies and procedures, programs and services, expectations and requirements, as well as the campus facilities and students’ rights and responsibilities. As a result, new students will demonstrate higher levels of accomplishment and satisfaction. CSU

AAPS 102. Introduction to College (1)
Lec-18(total hrs)  P/NP only
This course is designed to aid the student’s exploration of academic programs, student services, college policies, student rights and responsibilities, graduation and transfer requirements, technology, campus resources, goal setting, and educational planning to enhance academic and personal success.

AAPS 103. Orientation to College Transfer (3)
Lec-3
An overview of the concepts and significance of factors that contribute to college transfer and success in college. Factors to be explored include social awareness, cultural identity, goal setting, educational planning, and college resources. Focus on understanding the college/university systems and on understanding of the relationship of cultural experiences and college success. CSU/UC

AAPS 104. Student Success Seminar (.5)
Lec-.5  P/NP only
This brief course is intended to help students on first- or second-semester probation to regain good academic standing. Students develop
time management and motivational strategies and learn about available college resources to help them reach academic success. Students also learn about academic policies, educational goal options and decision making skills. CSU

AAPS 1111. Orientation to Noncredit Certificate Programs (15 hrs) Emphasis placed on noncredit certificates and students application for entry-level and promotional opportunities. An overview of student support services, policies and procedures to earn noncredit certificates. Additionally, exploration of matriculation steps from noncredit to credit and opportunities related to other career majors.

**Culinary Arts and Hospitality Studies**
Office: Statler Wing 156
Phone Number: (415) 239-3152
Web Site: www.ccsf.edu/cahs

**Announcement of Curricula**
The Culinary Arts and Hospitality Studies (CAHS) Department (formerly the Hotel and Restaurant Department) includes both credit and noncredit programs.

**Credit, Associate in Science Degree** programs are offered with three distinct majors: Culinary Arts Management; Food Service Management; or Hotel Management. (See below for details about these programs).

**Noncredit Certificate Programs.** The Culinary and Service Skills Training Certificate Program, and the Baking and Pastry Certificate Program, provide short-term skills training for entry into the labor market and are offered for noncredit (no college credit). (See below for details about these programs).

**Credit, Consumer Classes.** These classes are offered for college credit and are designed for non-professionals and open to the general public. These courses are not included in the CAHS degree programs.

**General Information**
**History.** Established in 1936 as the Hotel and Restaurant Department, this was the first community college program in the United States offering training in hospitality subjects. Since then, thousands of hospitality professionals have graduated from the Program. The department is also supported by our extensive hospitality library, the Alice Statler Library.

**Culinary Arts and Hospitality Studies Mission Statement.** The Culinary Arts and Hospitality Studies Department at City College of San Francisco is designed to provide students with strong foundational and practical culinary and management skills necessary to succeed in the hospitality industry.

**Our Vision.** Equally grounded in culinary arts and management, students learn through hands-on culinary, management and academically related classes, to develop real-world skills and knowledge necessary to excel in the food service, restaurant and hospitality industry.

**Employment.** Graduates find employment in many facets of the hospitality industry including hotels, restaurants, clubs, catering companies, educational institutions and as purveyors, to name a few career possibilities.

The jobs that students receive immediately upon graduating varies greatly, depending upon which program they completed, their career goals, and practical experiences. Graduates may accept positions such as: line cook, pastry cook, baker, host, food servers, hotel reservationists, desk clerks, cashiers and night auditors; to entry level management positions, such as: assistant restaurant managers, hotel reservations manager, assistant front office manager, and purchasing agent.

Graduates progress in their careers to such positions as: Executive Chef, Restaurant and Hotel General Manager, Executive Pastry Chef, Concierge, Restaurant Owner, Food and Beverage Director, Garde Manger Chef, Sales Manager, Bakery Owner, Catering Director, Food Service Director, Sous Chef, Country Club Manager, Hotel Director of Sales and Marketing, Director of Banquets are a few higher level career possibilities.

**Associate in Science Degree Programs**
Please visit www.ccsf.edu/cahs for more information and an application.

**Accreditation.** The Culinary Arts Management Program and the Food Service Management Program are accredited by The American Culinary Federation. Upon completion of their A.S. degree major, students will also be awarded a Certificate of Completion from the Accrediting Commission of the American Culinary Federation (ACF).

**Food Safety Managers Certification.** As a pre-requisite to graduation from the Culinary Arts Management Program, or from the Food Service Management Program, students are required to successfully pass a California food safety certification examination* issued by an accredited food protection manager certification organization (SB602 & Sec 113790 of CA Health & Safety Code).

* e.g.: The National Registry of Food Safety Professionals - Food Safety Manager Certification exam or the ServSafe Food Protection Manager Certification exam, issued by the National Registry of Food Safety Professionals.

* This exam is administered through the CCSF Microbiology 51 course.

**Applicants who have already earned a college degree** (A.S./A.A., B.A./B.S., etc.) are still required to fulfill CCSF A.S. degree requirements. Students accepted to one of the CAHS degree programs and are registered in classes, request an “Evaluation of Transferred Credit”. Please see Program Advisor or CCSF Counselor for more information.

**Transfer.** Students who intend to transfer to four year universities for a baccalaureate degree should consult with our Program Advisor or Counselor for guidance on planning a program to transfer. The degree programs are designed to facilitate transferring to four year universities.

**Program Probation Policy.** Academic probation occurs when a student fails to maintain a 2.00 cumulative grade point average. Students are removed from probation when their cumulative grade point average is increased to a minimum of 2.50.

Disqualification. Students may be disqualified from the Program for any of the following reasons:
1. Receiving a final grade of “D” or “F” in any of the required major courses.
2. Remaining on probation for two consecutive semesters.
3. Receiving a final grade of “D” or “F” in a laboratory class being repeated, because of receiving an initial grade of “D” or “F”.
4. For reasons described in various sections of this catalog

Students receiving a final grade of “D” or “F” in any of the consecutive laboratory series class (CAHS 10, CAHS 10Q, CAHS 20, CAHS 30) must confer with the Program Advisor and repeat those classes before progressing to the next class in the sequence.

**Culinary Arts Management Program**

**Introduction.** An Associate in Science degree with a major in the Culinary Arts Management is offered to prepare students for a culinary career. This is a two year, four semester course of study. This program and all of the degree programs include management related course in their respective fields.

This is a rigorous, full time, day program. Students are advised to be well prepared to commit themselves to being in school 8 hours per day, 5 days a week for the duration of the Program. Students who are entering college for the first time usually take five or more semesters to complete the program.

**Accreditation.** The Culinary Arts Management Program and the Food Service Management Program are accredited by The American Culinary Federation. Upon completion of their A.S. degree major, students will also be awarded a Certificate of Completion from the Accrediting Commission of the American Culinary Federation (ACF).

**Admission and Applications.** Prior to being admitted to Culinary Arts Management Program, applicants must complete the procedure for admission to City College of San Francisco.

When applicants have been admitted to the College, they must also complete the CAHS Department’s application form, which may be obtained at the CAHS office located at Statler Wing, Room 156, by calling the office at (415) 239-3152, or by printing the application from our website: www.ccsf.edu/cahs and mailing it in.

Completed applications must be submitted by the second Monday in November for the following Spring semester and by the second Monday in April for the following Fall semester (unless these dates are displaced by a holiday). Applicants should call (415) 239-3152 for the exact deadline dates for each semester.

**Pre-requisites:**

- Applicants must have completed ESL 140 or placed in ESL 150 or higher; or completed English 91 and/or placement into English 92 or higher, based on the CCSF ESL and English placement tests. Or completed English 1A or the equivalent.
- A 2.0 grade point average on prior college or high school transcripts is advised.
- Applicants must be in good physical and mental health.

**Programs Probation.** (See the Program Probation Policy above)

Note: Applicants who have already earned a college degree (A.S./A.A., B.A./B.S., etc.) are required to fulfill CCSF A.S. degree requirements. Students should request an “Evaluation of Transfer Credit” after they are registered in classes and accepted to one of the CAHS degree programs. Please see Program Advisor or CCSF Counselor for more information.

Students are required to confer with the Program Advisor as to the specific classes necessary to complete their program and the order in which courses should be taken. Laboratory classes (CAHS 10, CAHS 10Q, CAHS 20, CAHS 30, CAHS 40W) are restricted to program majors.

**Costs.** In addition to the current applicable tuition, fees, books, and other such college expenses, students will need to purchase uniforms and kitchen tools at an approximate cost of $500.00 (a one time cost).

**Course of Study.** Students must take a core group of courses. Students in the Culinary Arts Management Program must take sequential laboratory courses in food preparation and service: CAHS 10 or CAHS 10Q, CAHS 20, CAHS 30 and the internship class CAHS 40W. Our lab courses are taught in the department's four kitchens: bake shop, quick service cafe, cafeteria, and fine dining restaurant. This program includes extensive hands-on training in the department's facilities.

Students must complete an unpaid industry internship for which they earn class credit (CAHS 40W). Students secure these internships with the assistance of the Program Advisor.

In addition, business and management course are also required to prepare students to be professionals in the culinary field.

**General education courses** (English, math, humanities, history, and diversity classes) are also required to fulfill A.S. degree requirements.

**Culinary Arts Management Major (AS)**

Students may earn an Associate in Science Degree with a concentration in Culinary Arts. These classes are offered every semester and should be taken with A.S. degree requirements.

**Learning Outcomes**

Upon completion of the Culinary Arts Management Major, students will be able to:

- Apply the concepts and techniques of sanitation, personal hygiene, and professional attire to hospitality environments.
- Demonstrate costing principles and trends to profitably operate hospitality establishments.
- Demonstrate the ability to work in variety of dining room and hospitality environments.
- Identify, describe, compare and contrast current trends in the hospitality industry.
- Demonstrate the skills and behaviors required during customer service to analyze, judge, and act in ways that contribute to guest satisfaction.
- Use industry specific technology to retrieve, create, organize, and communicate information in ways that inform and enhance individual and organizational performance.
- Apply ethical and sustainable business tenets.
- Students will be able to demonstrate the ability to work in a professional kitchen as a line and pastry cook.
- Students will be able to demonstrate an understanding of the knowledge needed to be a supervisor in the hospitality industry.

**Courses Required for the Major in Culinary Arts**

<table>
<thead>
<tr>
<th>Courses</th>
<th>Units</th>
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<tbody>
<tr>
<td>CAHS 100 Introduction to Hospitality</td>
<td>3</td>
</tr>
<tr>
<td>CAHS 10 Culinary Fundamentals I or CAHS 10Q Culinary Fundamentals I</td>
<td>5</td>
</tr>
<tr>
<td>CAHS 20 Quantity Food Prep and Supervision</td>
<td>5</td>
</tr>
<tr>
<td>CAHS 30 Restaurant Operations</td>
<td>5</td>
</tr>
</tbody>
</table>
CAHS 40W Field Work * ............................3
CAHS 21 Meat Analysis ..........................2
MB 51 Public Health Microbiology: Sanitation
Principles and Practices ............................1
SPCH 11A Basic Public Speaking
or SPCH 1A Elements of Public Speaking ............3
NUTR 51 Nutrition and Culinary Arts ................2
LBCC 96C Labor Relations in the Modern
American Workplace ................................3
CAHS 33 Procurement and Costing .................3
CAHS 42 H & R Accounting
or ACCT 1 Financial Accounting ..................3
CAHS 44 Supervisory Development
or SUVP 231 Intro to Super/Management ............3
CAHS 10 (or 10Q), 20, 30 and 40W must be taken in sequence.

* To be taken in students final semester and by consent of instructor.

Note: You must complete 12 units of A.S. degree requirements before continuing to the 2nd year.

PLUS: Students are required to take 3 units of the following courses:

CAHS 60A Sous Vide Cooking ..........................1
CAHS 60B Classic and Modern Sauces ...............1
CAHS 60C Molecular Gastronomy ....................1
CAHS 60D Pantry and Cold Kitchen ..................1
CAHS 60E Charcutterie, Forecemeats, and Pates ....1
CAHS 60F Carving .....................................1
CAHS 203 Advanced A la Minute Cooking ............4
Total Units .............................................44-45

Recommended Additional Coursework: CAHS 205, CAHS 206, CAHS 207, CAHS 209, CAHS 222.

Food Service Management Program

Introduction. The major in Food Service Management is offered to prepare students who are interested in a food related career in the "front of the house" – but NOT in the kitchen. This program focuses on food service management, such as restaurant management, catering management, banquet management, purchasing, etc.

This is a two year, four semester course of study and is a rigorous, full time, day program. Students are advised to be well prepared to commit themselves to being in school 8 hours per day, 5 days a week for the duration of the Program. Students who are entering college for the first time usually take five or more semesters to complete the Program.

Accreditation. The Food Service Management Program is accredited by The American Culinary Federation. Upon completion of their A.S. degree major, students will also be awarded a Certificate of Completion from the Accrediting Commission of the American Culinary Federation (ACF).

Admission and Applications. Prior to being admitted to Food Service Management Program, applicants must complete the procedure for admission to City College of San Francisco.

When applicants have been admitted to the College, they must also complete the CAHS Department's application form, which may be obtained at the CAHS office located at Slater Wing, Room 156, by calling the office at (415) 239-3152, or by printing the application from our website: www.ccsf.edu/cahs and mailing it in.

Completed applications must be submitted by the second Monday in November for the following Spring semester and by the second Monday in April for the following Fall semester (unless these dates are displaced by a holiday). Applicants may call (415) 239-3152 for the exact deadline dates for each semester.

Pre-requisites:
- Applicants must have completed ESL 140 or placed in ESL 150 or higher; or completed English 91 and/or placement into English 92 or higher, based on the CCSF ESL and English placement tests. Or students must have completed English 1A or the equivalent.
- A 2.0 grade point average on prior college or high school transcripts is advised.
- Applicants must be in good physical and mental health.

Program Probation. (See the Program Probation Policy above)

Note: Applicants who have already earned a college degree (A.S./A.A., B.A./B.S., etc.) are required to fulfill CCSF A.S. degree requirements. Students should request an "Evaluation of Transfer Credit" after they are registered in classes and accepted to one of the CAHS degree programs. Please see Program Advisor or CCSF Counselor for more information.

Students are required to confer with the Program Advisor as to the specific classes necessary to complete their program and the order in which courses should be taken. Laboratory classes (CAHS 10, CAHS 10Q, CAHS 208, CAHS 30, CAHS 40W) are restricted to program majors.

Costs. In addition to the current applicable tuition, fees, books, and other such college expenses, students will need to purchase uniforms and kitchen tools at an approximate cost of $500.00 (a one time cost).

Course of Study. All students must take a core group of courses which includes one semester in the kitchen and the following semesters emphasize front of the house service and management. Students in the Food Service Management Program must take sequential laboratory courses in food preparation, service and management: CAHS 10 or CAHS 10Q, CAHS 208, CAHS 30 and the internship class CAHS 40W.

This program includes extensive hands-on training in the department's facilities. Our lab courses are taught in the department's four kitchens, bake shop, quick service cafe, cafeteria, and fine dining restaurants. CAHS 208 is held at the Educated Palate restaurant at the CCSF Downtown Center. All other classes may be taken at the Ocean/Phelan campus.

Students must complete an unpaid industry internship for which they earn class credit (CAHS 40W). Students secure these internships with the assistance of the Program Advisor.

Note: The first semester of this program requires the same classes as the first semester of the Culinary Arts Program.

General education courses (English, math, humanities, history, and diversity classes) are also required to fulfill A.S. degree requirements.

Food Service Management Major (AS)

Students may earn an Associate in Science Degree with a major in Food Service Management. These classes should be taken with A.S. degree requirements.

Learning Outcomes

Upon completion of the Food Service Management Major, students will be able to:
- Apply the concepts and techniques of sanitation, personal hygiene, and professional attire to hospitality environments.
- Demonstrate costing principles and trends to profitably operate hospitality establishments.
Prior to being admitted to Hotel Management Program, applicants must complete the procedure for admission to City College of San Francisco.

When applicants have been admitted to the College, they must also complete the CAHS Department’s application form, which may be obtained at the CAHS Department office located at Statler Wing, Room 156, by calling the office at (415) 239-3152, or by printing the application from our website: www.ccsf.edu/cahs and mailing it in. Completed applications must be submitted by the second Monday in November for the following Spring semester and by the second Monday in April for the following Fall semester (unless these dates are displaced by a holiday). Applicants may call (415) 239-3152 for the exact deadline dates for each semester.

Pre-requisites:

- Applicants must have completed ESL 140 or placed in ESL 150 or higher; or completed English 91 and/or placement into English 92 or higher, based on the CCCS ESL and English placement tests. Or students must have completed English 1A or the equivalent.
- A 2.0 grade point average on prior college or high school transcripts is advised.
- Applicants must be in good physical and mental health.

Program Probation. (see the Program Probation Policy above)

Note: Applicants who have already earned a college degree (A.S./A.A, B.A./B.S., etc.) are required to fulfill CCCS A.S. degree requirements. Students should request an “Evaluation of Transfer Credit” after they are registered in classes and accepted to this program. Please see Program Advisor or CCCS Counselor for more information.

Students are required to confer with the Program Advisor as to the specific classes necessary to complete their program and the order in which courses should be taken.

Costs. In addition to the current applicable tuition, fees, books, and other such college expenses, students will need to purchase uniforms for the CAHS 208 Catering and Events class at an approximate cost of $100.

Course of Study. Students are required to take all the classes listed in the Hotel Management Curriculum below along with requirements for an A.S. degree.

Classes for this program are held at three CCCS locations: Ocean/Phelan campus, Southeast center, and the Downtown center. However, most of the classes are held at the CCCS Ocean/Phelan campus.

Students must complete an unpaid industry internship for which they earn college credit (CAHS 40W). Students secure these internships with the assistance of the Program Advisor.

General education courses (English, math, humanities, history, and diversity classes) are also required to fulfill A.S. degree requirements.

Hotel Management Major (AS)

Students may earn an Associate in Science Degree with a major in Hotel Management. These classes should be taken with A.S. degree requirements.

Learning Outcomes

Upon completion, students will be able to:

- Apply the concepts and techniques of sanitation, personal hygiene, and professional attire to hospitality environments.
- Demonstrate costing principles and trends to profitably operate hospitality establishments.
Courses Required for the Major in Hotel Management

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>CAHS 100 Introduction to Hospitality</td>
<td>3</td>
</tr>
<tr>
<td>MABS 60 Intro to Computer Appl. for Business</td>
<td>3</td>
</tr>
<tr>
<td>LBCS 96C Labor Relations in the Modern American Workplace</td>
<td>3</td>
</tr>
<tr>
<td>CAHS 35 Hotel Front Office Operations</td>
<td>3</td>
</tr>
<tr>
<td>SUPV 233 Human Resources Management</td>
<td>3</td>
</tr>
<tr>
<td>CAHS 32 Hospitality Marketing</td>
<td>3</td>
</tr>
<tr>
<td>BSEN 74 Business Correspondence</td>
<td>3</td>
</tr>
<tr>
<td>CAHS 208 Catering and Events</td>
<td>4</td>
</tr>
<tr>
<td>SPCH II Basic Public Speaking or SPCH IA Elements of Public Speaking</td>
<td>3</td>
</tr>
<tr>
<td>CAHS 34 Hospitality Law</td>
<td>3</td>
</tr>
<tr>
<td>CAHS 42 H&amp;R Accounting or ACCT 1 Financial Accounting</td>
<td>3-4</td>
</tr>
<tr>
<td>CAHS 43 Principles of Hotel Administration</td>
<td>3</td>
</tr>
<tr>
<td>CAHS 44 Supervisory Development or SUPV 231 Intro to Super/Management</td>
<td>3</td>
</tr>
<tr>
<td>CAHS 40W Field Work*</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total Units: 43 - 44**  

* This class is to be taken in the final semester of the program, with consent of the instructor.

Announcement of Courses

NOTE: Some lecture courses are not offered every semester. Consult the Time Schedule for the times these courses will be offered.

Credit, Degree Applicable Courses:

CAHS 10. Culinary Fundamentals I (5)  
Lec-4, lab-2.5  
**Prereq:** Admission to the Culinary Arts and Hospitality Management Programs; ESL 140 or ENGL 91; Placement in ESL 150 or ENGL 92  
Fundamentals of commercial food preparation for hotels, restaurants and bakeries. Skills for handling of professional kitchen equipment, tools and machinery through practical application. Preparation of breakfast, salads, sandwiches, artisans breads, breakfast pastries, cookies, plated desserts, cakes pies and tarts. Practice of sanitation and safety techniques; kitchen terminology; mathematics related to recipe conversions and measurements; organizational skills, accuracy and speed; introduction to food and customer service, including set-up, serving and clean-up. CSU

CAHS 10Q. Culinary Fundamentals I (5)  
Lec-4, lab-20  
**Prereq:** Admission to the Culinary Arts and Hospitality Program as a degree-candidate student; ESL 140 or ENGL 91; Placement in ESL 150 or ENGL 92  
Fundamentals of commercial food preparation for the hospitality industry. Skills for handling professional kitchen tools and equipment through practical application. Preparation of various hot and cold savory dishes and various baked goods. Practice of food sanitation, safety techniques, kitchen mathematics and terminology, organizational skills, and introduction to customer service. CSU

CAHS 20. Culinary Fundamentals II (5)  
Lec-4, lab-20  
**Prereq:** CAHS 10 or 10Q  
**Advise:** Math E or EI or BSMA H or J  
Advanced principles of food preparation and service. Emphasis is on classical French cooking and its foundation for modern styles of cuisine. Students will practice classical and modern cooking in a variety of dining outlets, employing all standard cooking techniques, producing various stocks and sauces, butchery and gardemanger. CSU

CAHS 21. Meat Analysis (2)  
Lec-2, field trips  
**Prereq:** ESL 140 or ENGL 91; Placement in ESL 150 or ENGL 92  
**Advise:** Completion/concurrent enrollment in CAHS 20  
This class will focus on the fabrication of beef, pork, veal, lamb, poultry and fish; proper cuts and their uses; recognition of the quality of meat and cooking methods used for various cuts of meats. Knowledge necessary for proper purchasing of meats in order to maintain the proper percentage of profit in a restaurant operation. CSU

CAHS 30. Restaurant Operations (5)  
Lec-5, lab-15  
**Prereq:** CAHS 20  
This course focuses on front-of-house operation such as food and beverage service, management, equipment/technologies and customer service for restaurants, cafeterias and quick service business models. A key component of the course is intensive hands-on training in the three college food service outlets: The cafeteria, quick service outlet and fine dining restaurant. CSU

CAHS 32. Hospitality Marketing (3)  
Lec-3  
**Prereq:** ESL 140 or ENGL 91; Placement in ESL 150 or ENGL 92  
Fundamentals of marketing in the hospitality industry, including research, sales, advertising, public relations, and other concepts related to hospitality marketing. CSU

CAHS 33. Procurement and Costing (3)  
Lec-3, field trips  
**Prereq:** ESL 140 or ENGL 91; Placement in ESL 150 or ENGL 92  
A study of the best practices for the sourcing, procurement, and costing of products, equipment, and services for use in the foodservice industry. CSU

CAHS 34. Hospitality Law (3)  
Lec-3  
**Prereq:** ESL 140 or ENGL 91; Placement in ESL 150 or ENGL 92  
An in-depth study of the law as it pertains to hotels, restaurants, bars, and private clubs. Emphasis on innkeeper/guest relationship, food service liability, responsible alcoholic beverage service, employment law, compliance with Americans with Disabilities Act and civil rights, and building, health and safety codes. CSU
CAHS 35. Hotel Front Office Operations (3)
Lec-1, lab-3, field trips
Prereq.: ESL 140 or ENGL 91; placement in ESL 150 or ENGL 92
This course provides an overview of the relationship between the Front Office of a hotel and departments within a hotel. The course also examines the various elements of front office procedures paying particular attention to effective management, planning, human resources management, and guest satisfaction. CSU

CAHS 40W. Work Experience (3)
Lec-1, work-15
Prereq.: Evidence of passing a CA Food Safety Manager Certification exam administered by an accredited food protection manager certification organization (e.g., ServSafe or National Registry of Food Safety Professionals) per SB 602 & CA HEALTH & SAFETY CODE; and approval of CAHS Work Experience Coordinator/Instructor.
Off campus laboratory training in hotels, restaurants and other allied areas. This course is designed to provide practical experience in the branch of the industry to which the student shows to be best adapted or in which the student desires additional training beyond that given in prior classes. CSU

CAHS 42. Hotel and Restaurant Accounting (3)
Lec-3
Prereq.: ESL 140 or ENGL 91; placement in ESL 150 or ENGL 92
An overview of hotel and restaurant accounting; emphasis on understanding what “the numbers” mean and how to apply them in making decisions in the operation of a hotel or restaurant. CSU

CAHS 43. Principles of Hotel Administration (3)
Lec-3
Prereq.: ESL 140 or ENGL 91; placement in ESL 150 or ENGL 92
The physical aspects of hotel operations, including development, classification, and organization. Procedures for emergencies, check cashing, use of credit cards, and collection of accounts receivable. Protection of hotel property against damage and theft by guests. Fundamentals of taxes, leases, and insurance as they apply to the hotel and restaurant industry. CSU

CAHS 44. Supervisory Development (3)
Lec-3
Prereq.: ESL 140 or ENGL 91; placement in ESL 150 or ENGL 92
A practical approach to the understanding of supervision and management. The role of the supervisor/manager within the organization and the greater community. Principles of supervision, correction and improvement; conflict and cooperation; communication, responsibilities of the labor management team within the organization and the community. Case studies of personnel and general human relations problems in the hospitality industry. CSU

CAHS 51-52-53. Selected Topics in the Hospitality Industry (1-2-3)
Lec-1,2-3, field trips P/NP available
Prereq.: ESL 140 or ENGL 91; placement in ESL 150 or ENGL 92
Investigation in-depth of selected topics in the hospitality industry. Current issues and innovations; expansion of subjects covered in introductory courses and exploration of new topics. CSU

CAHS 60. Selected Topics in Culinary Arts (1-2-3)
Lec-1, 2, 3
Prereq.: ESL 140 or ENGL 91 or placement in ESL 150 or ENGL 92; and CAHS 10 or 10Q; and CAHS 20
In-depth investigation of selected topics in the culinary field. Current innovations and trends in the culinary field; expansion of subjects covered in introductory courses and exploration of new topics. CSU

CAHS 60A. Sous Vide Cooking (1)
CAHS 60B. Classic & Modern Sauces (1)
CAHS 60C. Molecular Gastronomy (1)
CAHS 60D. Pantry and Cold Kitchen (1)
CAHS 60E. Charcuterie, Forcemeat, and Pates (1)
CAHS 60F. Carving (1)
CAHS 60I. Advanced Pastry Doughs, Batters, and Creams (1-3)
CAHS 60M. Chocolate and Confections (1-3)
CAHS 60N. Mousses; Cake and Desserts (1-3)
CAHS 60O. Wedding Cakes (1-3)

CAHS 100. Introduction to Hospitality (3)
Lec-3
Prereq.: ESL 140 or ENGL 91 or placement in ESL 150 or ENGL 92
A comprehensive examination of the hospitality industry, including hotels, restaurants, clubs, and the travel and tourism sectors. Emphasis on organizational structures, departments, job classifications, and career paths within each sector. Lecture and discussions are enhanced by industry guest speakers and industry visits. CSU

Evening Courses
The following courses are offered only in the evening and may not be offered each semester. Consult the Class Schedule for the times these courses will be offered.

CAHS 203. Advanced A la Minute Cooking (4)
Lec-1, lab-9
Prereq.: ESL 140 or ENGL 91; placement in ESL 150 or ENGL 92
Intended for CAHS degree-candidate students and culinary professionals. Food preparation and methods of cooking and serving at the state-of-the-art CCSF Downtown Center restaurant. Students will practice advanced methods of food preparation and service under conditions, which simulate a restaurant environment. CSU

CAHS 205. Introduction to Wine and Its Sensory Evaluation (3)
P/NP available
Prereq.: Minimum age of 21; ESL 140 or ENGL 91; placement in ESL 150 or ENGL 92
An introduction to the history, geography, production, and the methods of sensory evaluation of wine; emphasis on the grape varietals and wine types produced and/or consumed in the United States. CSU

CAHS 206. Ethnic Cuisines (3)
Lec-3, field trips P/NP available
Prereq.: ESL 140 or ENGL 91; placement in ESL 150 or ENGL 92
Intended for CAHS degree-candidate students and culinary professionals. An advanced culinary course that familiarizes the student with one or more major cuisines of Asia, the Mediterranean, and Latin American; will explore history of basic ingredients, cooking methods, terminology of cuisine. CSU

CAHS 207. Techniques of Healthy Cooking (3)
Lec-3
Prereq.: ESL 140 or ENGL 91; placement in ESL 150 or ENGL 92
Intended for CAHS degree-candidate students and culinary professionals. Special attention paid to health problems associated with the “typical” American diet, the various food guide pyramids, comparing and contrasting cultural diets, moderate daily guidelines, and the search for an optimal diet. CSU
CAHS 208. Catering and Events (4)
Lec-3, lab-5, field trips  P/NP available
Prereq.: ESL 140 or ENGL 91; placement in ESL 150 or ENGL 92
Advisory: CAHS 10 and 20 or industry experience
Aspects of on-premise and off-premise catering. Includes five, unique catered events planned, prepared and staffed by students, such as banquets, barbecues, movable feasts, coffee breaks, dinner theater, theme parties, and tea parties. CSU

CAHS 209. Restaurant Analysis (3)
Lec-3
Prereq.: ESL 140 or ENGL 91; placement in ESL 150 or ENGL 92
The theoretical and practical foundations necessary to start a new restaurant, purchase an existing restaurant, or enter into a restaurant operating lease or management contract. Targeted to final year students in the Hotel and Restaurant Department's Foodservice Management track and to industry professionals. CSU

CAHS 212. Beverage Management (3)
Lec-3
This course covers the basics of beverage management for hotels, restaurants, and bars. Topics covered will include alcoholic and non-alcoholic beverage production methods and proper service, creation of wine and other beverage lists, costing, bar design and equipment, hiring, management, and the fundamentals of mixology.

CAHS 244. Foods and Fitness (3)
Lec-3, lab-1, field trips  P/NP available
Survey of nutrient needs in different stages of the life cycle. Includes food and meal patterns appropriate for specialized dietary needs. Current controversies surrounding common health problems and dietary interrelationships. Analysis of weight control dietary regimes, nutritional assessment of individual's food intake. Evaluation of nutritional needs in relationship to various athletic sports and fitness and necessary diet food modifications. CSU

CAHS 245. Food Study I (3)
Lec-2, lab-3, field trips
Elementary food preparation methods and techniques. Emphasis on cost-effective seasonal food selection, purchasing, and nutritious meal planning; food storage; preservation concepts; elementary nutrition. Skills necessary for prevention and correction of cooking errors. Full student laboratory participation. CSU

CAHS 246. Food Study II (3)
Lec-2, lab-3
Special occasion food planning and preparation. Principles and procedures involved in food selection, preparation, and storage; use of specialized cooking equipment; attractive presentations and table service. Full student food preparation. CSU

CAHS 247. Food and Culture (2)
Lec-1, lab-3, field trips
Hands-on food preparation of the cuisine of multiple cultures. Topics covered: food in relation to historical, geographical, and social customs; principles of international food preparation and evaluation of specialized equipment. CSU/UC

Culinary and Service Skills Training
Noncredit Certificate

Introduction. The CSST program provides short-term culinary and service skills training for entry into the labor market. While generally designed for those interested in attaining a certificate, these classes also work well for professionals interested in refining their skills as well as non-professionals who are not certificate candidates.

Program Advisory. Strong verbal and written skills, and the ability to lift 50 pounds. Classes are taught through a combination of lecture and hands-on training in the Educated Palate restaurant. Each certificate requires two semesters (approximately nine months) of training. These courses prepare students for entry-level work in restaurant and hotel kitchens and dining rooms.

Admissions. Procedures for noncredit enrollment CSST Program:

a. File a CCSF noncredit student application either online or at the Downtown center.

b. Meet with a Downtown center counselor for CSST Program information, placement test dates, and instructions on how to enroll.

c. Take the following placement tests (if you have not yet taken any ESL or TRST courses):
   - Non credit English (CASAS) or Non credit ESL, and
   - Non credit math test (CASAS)

CASAS testing is available at Downtown, John Adams, and Southeast centers. Non credit ESL testing is available at all City College locations except Southeast and Evans centers. The following link can be used to find the noncredit testing schedule: http://www.ccsf.edu/NEW/en/future-students/future_noncredit-students.html

d. Bring testing information to Downtown center counselor to receive enrollment instructions.

e. CSST Program enrollment will begin the first day of noncredit enrollment.

Length of Program. Two semesters (1,020 hours)

Learning Outcomes

Upon completion of this certificate, students will be able to:

- Students will be able to apply the concepts and techniques of sanitation, personal hygiene, and professional attire to hospitality environments.
- Students will be able to demonstrate costing principles and trends to profitably operate hospitality establishments.
- Students will be able to demonstrate the ability to work in a variety of dining room and hospitality environments.
- Students will be able to identify, describe, compare and contrast current trends in the hospitality industry.
- Students will be able to demonstrate the skills and behaviors required during customer service to analyze, judge, and act in ways that contribute to guest satisfaction.
- Students will be able to use industry specific technology to retrieve, create, organize, and communicate information in ways that inform and enhance individual and organizational performance.
- Students will be able to develop and apply ethical and sustainable business tenets.
- Students will be able to demonstrate foundational knowledge and technical skills required for success in the culinary and hospitality industry

Courses Required for the Certificate of Completion in Culinary and Service Skills Training

Core Course  Hours
CSST 9660 Food Tech & Dining Service-Section 1 . . .  510
Requirements for the Certificate of Completion. A certificate will be awarded after successful completion of both courses with the grade of “C” or better and a minimum of 80% attendance.

Baking and Pastry Noncredit Certificate

Learning Outcomes

Upon completion of this certificate, students will be able to:

- Students will be able to apply the concepts and techniques of sanitation, personal hygiene, and professional attire to hospitality environments.
- Students will be able to demonstrate costing principles and trends to profitably operate hospitality establishments.
- Students will be able to demonstrate the ability to work in a variety of dining room and hospitality environments.
- Students will be able to identify, describe, compare and contrast current trends in the hospitality industry.
- Students will be able to demonstrate the skills and behaviors required during customer service to analyze, judge, and act in ways that contribute to guest satisfaction.
- Students will be able to use industry specific technology to retrieve, create, organize, and communicate information in ways that inform and enhance individual and organizational performance.
- Students will be able to develop and apply ethical and sustainable business tenets.
- Students will be able to demonstrate the ability to work in a professional bakery and/or baking department.
- Students will be able to demonstrate the ability to work in a professional bakery and/or baking department.

Length of Program. Two semesters (1,020 hours)

Courses Required for the Certificate of Completion in Baking and Pastry

Core Courses Hours
CSST 9650 Introduction to Baking Pastry ............. 510
CSST 9651 Advanced Baking and Pastry ............. 510
Total Hours ................................... 1,020

Requirements for the Certificate of Completion. A certificate will be awarded after successful completion of both courses with the grade of “C” or better and a minimum of 80% attendance.

Announcement of Courses

Non-Credit Courses:

Culinary and Service Skills Training

CSST 9650. Introduction to Baking and Pastry (510 hrs)
Students will develop the skills necessary for an entry-level position in the baking and pastry industry. Topics include: safety and sanitation, bakeshop terminology, proper use of equipment, weights and measures, ingredients and their functions, baker’s math, baking methods and the development of basic skills. Students learn through a combination of lecture, demonstrations and extensive hands-on practice producing breads, pastries and desserts for our student-run restaurant, and adjoining coffee shop.

CSST 9651. Advanced Baking and Pastry (510 hrs)
PREREQ.: CSST 9650
Students will develop and improve upon the basic skills and common techniques used in the baking and pastry industry. Topics include: meringues, petits fours and miniatures, mousses and Bavarians, frozen desserts, chocolate and candy, fancy and display cakes, yeast- raised products using preferments, hydrocolloids, bakers’ math, troubleshooting.

CSST 9660. Food Tech & Dining Service-Section I (510 hrs)
This is the first course of a two semester sequence focusing on dining room operations which provides students with the basic skills required for entry-level work in professional restaurant service and operations. A key component of the course is intensive hands-on training in the Educated Palate restaurant.

CSST 9661. Food Tech & Dining Service-Section II (510 hrs)
This is the second course of a two semester sequence leading to a certificate in Food Technology and Dining Services. The course provides students with the basic skills required for entry-level work in professional kitchens. The curriculum includes intensive hands-on training providing food for the Educated Palate Restaurant, demonstrations, readings and lectures on a variety of culinary topics.

Culinary Arts Basic Training

CABT 9000. Introduction to Culinary Fundamentals (150 hrs)
PREREQ: COMPLETION OF ESLN 3600 OR PLACEMENT INTO ESLN 3700. COMPLETION OF TRST LEVEL 2 MATH AND READING/WRITING, OR PLACEMENT INTO TRST LEVEL 3 MATH AND READING/WRITING.
Introduction to kitchen basics, such as equipment use, safety, and sanitation. In addition, this course focuses on culinary fundamentals such as knife skills, classic cooking methods and preparation, vocabulary and basic kitchen math.

For more information about our noncredit program, please call: 415.267.6555 or www.ccsf.edu/cahs

Custodial

See Automotive/Motorcycle, Construction, and Building Maintenance

Dental Assisting

Office: Cloud 304F
Phone Number: (415) 239-3479
Web Site: www.ccsf.edu/dad

Announcement of Curricula

Degree Curriculum

Training in the curriculum in Dental Assisting is designed to prepare students for employment as Registered and Certified Dental Assistants in private practice, specialty dentistry, hospitals, clinics and dental schools. Positions to which graduates may advance with experience and further training include those of dental product sales representative, insurance auditor, manager, supervisor, educator, and RDAE. This program includes instruction in intra-oral dental functions and direct patient care/chairside experience in dental schools, clinics and private offices and public dental care facilities in San Francisco and the Daly City/South San Francisco area. Students who have completed their training satisfactorily are qualified to take the state licensure examination to become Registered Dental Assistants and the national examination to become Certified Dental Assistants.

Accreditation. The program in Dental Assisting is accredited by the American Dental Association’s Commission on Dental Accreditation, a specialized accrediting body recognized by the Council on Postsecondary Accreditation and by the United States Department
of Education, and is accredited by the California Board of Dentistry, Department of Consumer Affairs, State of California.

**Course of Study.** The two-year course of study includes instruction in traditional four-handed dental assisting techniques and in the legally allowed intra-oral functions delegated to a registered dental assistant. Courses in dental anatomy, dental materials, radiography, and preventive dentistry are prerequisites to clinical instruction. The clinical phase of the curriculum utilizes the School of Dentistry at the Arthur A. Dugoni School of Dentistry at the University of the Pacific, San Francisco; affiliated hospital clinics; and selected private dental offices.

**Associate in Science Degree.** The curriculum is designed so that students may satisfy the requirements for graduation from the College and receive the degree of Associate in Science.

**Information Regarding Admission.** Requests concerning admission should be addressed as follows: Department Chair, Dental Assisting, Box C-4, City College of San Francisco, 50 Phelan Avenue, San Francisco, California 94112.

**Consideration for Admission to the Curriculum.** The curriculum in Dental Assisting, offered to new applicants in the fall semester only, is open to all interested students who fulfill the following admission requirements:

1. Be in good physical and mental health.
2. Eligibility for admission to CCSF. (See in this catalog the Admission to College - Admission open to individuals 18 years of age or older, high school graduates and others).
3. Complete the Program's application and health history forms and submit to the Dental Assisting Program's office.
4. For the two year program, the student must complete ESL 150 or ENGL 91, and BIO 9 or higher. In addition, students must satisfy the keyboard requirement of 45 wpm. This requirement may be met by successfully completing a computer or typing class, or a typing test can be administrated at the Program's office. The course for the typing skill does not need to be met at college level. Proof of successful completion of a computer or typing class will be acceptable at any level. These classes may be taken concurrently with the Dental Assisting classes.

**Advanced Placement.** Applicants who have been admitted to the curriculum and who have previous education or experience in dental assisting may apply for credit and advanced placement in the curriculum. However, such applicants should first have completed the science, English and keyboard requirements.

**Bases for Disqualification.** Students who receive a final grade lower than C in any dental assisting course will be disqualified from continuing in the curriculum. Students who receive a final grade lower than C will be permitted to repeat a course only once and must achieve a grade of "C" at all evaluation periods. Students who repeat a course and who do not achieve a grade of "C" at an evaluation period will be disqualified from continuing in the curriculum. Students may also be disqualified for safety and other reasons consistent with College policy.

**Major in Dental Assisting.** Students who have satisfied the requirements for graduation from the College and who have completed the curriculum will receive the Major in Dental Assisting.

**Eligibility for the Certification Examination and CA Licensure.** Graduates who receive a Major or a Certificate of Achievement are eligible to take the Certification Examination given by the Dental Assisting National Board and the Licensure Examinations to become a Registered Dental Assistant given by the Dental Board of California.

**Dental Assisting Major (AS)**

**Learning Outcomes**

Upon completion of this degree, students will be able to:

- Demonstrate various techniques of sterilization & disinfection and apply infection control and safety guidelines in the dental setting.
- Demonstrate safe working habits with the knowledge in Occupational Safety and Health Administration Hazard Communication Standard.
- Prepare for the state and national licensure exams in order to perform Registered and Certified Dental Assistant Functions authorized by legal provisions.
- Demonstrate Together Everyone Achieves More (TEAM) through frequent group exercises and activities.
- Display soft skills and critical thinking strategies through various group activities.

**Courses Required for the Major in Dental Assisting**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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<tbody>
<tr>
<td><strong>First Semester</strong></td>
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<tr>
<td>DENT 51 Applied Dental Science</td>
<td>4</td>
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<tr>
<td>DENT 55A Dent Roentgenography</td>
<td>2</td>
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<tr>
<td>DENT 62 Dent Assisting in Practice</td>
<td>3</td>
</tr>
<tr>
<td>Additional graduation requirements</td>
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<tr>
<td><strong>Second Semester</strong></td>
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<tr>
<td>DENT 55B Dental Roentgenography</td>
<td>2</td>
</tr>
<tr>
<td>DENT 57 Dental Office Management</td>
<td>3</td>
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<tr>
<td>Additional graduation requirements</td>
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<tr>
<td><strong>Third Semester</strong></td>
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<tr>
<td>DENT 52 Dental Materials and Procedures</td>
<td>3</td>
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<tr>
<td>DENT 53 Intro to Chairside Assist</td>
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<td>Additional graduation requirements</td>
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<tr>
<td><strong>Fourth Semester</strong></td>
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<tr>
<td>DENT 54 Appl Dental Sciences</td>
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<tr>
<td>DENT 67 Advanced Dental Procedures</td>
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<tr>
<td>DENT 70 Clinical Chairside Assist</td>
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<tr>
<td>DENT 110A Coronal Polish</td>
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<tr>
<td>Additional graduation requirements</td>
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<tr>
<td><strong>Total Units</strong></td>
<td>33.5</td>
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</table>

**Certificate Curriculum**

The program of study for the Certificate of Achievement in Dental Assisting is designed to prepare students to take the licensing examination to be a Registered Dental Assistant as administered by the Dental Board of California and also to take the national certification examination to be a Certified Dental Assistant as administered by the Dental Assisting National Board. This course can be completed in two semesters (after completing prerequisites).

**Accreditation.** The curriculum is accredited by the Commission on Dental Accreditation of the American Dental Association and is approved by the Board of Dental Examiners, Department of Consumer Affairs, State of California.

**Information Regarding Admission.** Requests concerning admission should be addressed as follows: Department Chair, Dental Assisting, Box C-4, City College of San Francisco, 50 Phelan Avenue, San Francisco, California 94112.

**Consideration for Admission to the Curriculum.** The curriculum in Dental Assisting is open to all interested students who fulfill the following requirements:
Dental Assisting Certificate

Students may obtain the Certificate of Achievement in Dental Assisting by completing the following courses with an average final grade of "C" or higher:

Courses Required for the Certificate of Achievement in Dental Assisting

<table>
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<tr>
<th>Course</th>
<th>Units</th>
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<tbody>
<tr>
<td>First Semester</td>
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<td>DENT 62 The Dental Assistant in Practice</td>
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<td>Second Semester</td>
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<tr>
<td><strong>Total Units</strong></td>
<td><strong>33.5</strong></td>
</tr>
</tbody>
</table>

Announcement of Courses

Credit, Degree Applicable Courses:

DENT 51. Applied Dental Science I (4)
Lec-3, lab-3
Coreq.: DENT 55A and 62
Dental terminology, anatomy and physiology, mechanisms for transmitting disease and controlling/decreasing resistance to infection; oral embryology, histology, pathology, morphology. Preliminary oral examination; charting conditions - hard/soft tissues; taking/recording vital signs, cavity detector, etc. Sterilization/disinfection, infection control procedures and infectious disease process. Lab fee is required. CSU

DENT 52. Dental Materials and Procedures (3)
Lec-2, lab-3
Prereq.: Completion/concurrent enrollment in DENT 51 and 55A
Coreq.: DENT 53
The study of the materials and their safe handling that are employed in dentistry for the fabrication of dental appliances and tooth restorations and the manipulation of these materials. Introduction to intra-oral tasks delegated to the qualified registered dental assistant, which are related to operative dentistry such as liners, cementation & facebow registration. Lab Fee is required. CSU

DENT 53. Introduction to Chairside Assisting (3)
Lec-2, lab-3
Prereq.: Completion/concurrent enrollment in DENT 51, 55A and 62
Coreq.: DENT 52
Instruction in the role of the chairside assistant, preparing the patient for dental treatment, positioning of the patient, operator and assistant for four-handed dentistry, preparation and placement of topical anesthetic agents, selection/preparation of local anesthetic agents, placement and removal of rubber dams, oral evacuation and retraction; instrument identification and grasps/transfers/tripex syringe/HVE usage, handpiece and equipment maintenance, hand and rotary instrument identification, placement and removal of matrix retainers, placement of sedative restorations. Amalgam, composite, fixed crown and bridge and endodontic instruments, tray set ups and procedures. Fabrication of aluminum and acrylic temporary crowns. Lab fee is required. CSU

Dental Assisting Certificate

Students may obtain the Certificate of Achievement in Dental Assisting by completing the following courses with an average final grade of "C" or higher:

Learning Outcomes

Upon completion of this certificate, students will be able to:

- Demonstrate various techniques of sterilization & disinfection and apply infection control and safety guidelines in the dental setting.
- Demonstrate safe working habits with the knowledge in Occupational Safety and Health Administration Hazard Communication Standard.
- Prepare for the state and national licensure exams in order to perform Registered and Certified Dental Assistant Functions authorized by legal provisions.
- Demonstrate Together Everyone Achieves More (TEAM) through frequent group exercises and activities.
- Display soft skills and critical thinking strategies through various group activities.

Students may obtain the Certificate of Achievement in Dental Assisting by completing the following courses with an average final grade of "C" or higher:

1. Be in good physical and mental health.
2. Eligibility for admission to CCSF. (See in this catalog the Admission to College - Admission open to individuals 18 years of age or older, high school graduates and others).
3. File with the Office of Admissions and Records a completed application for admission to City College (for dates, see in this catalog the “Calendar of Instruction”). Students must also complete the Program’s application and health history forms and submit to the Dental Assisting Program's office.
4. For the one year program, the student must have completed ESL 150 or ENGL 91 or higher, and BIO 9 or higher. In addition, students must satisfy the keyboard requirement of 45 wpm. This requirement may be met by successfully completing a computer or typing class, or a typing test can be administered at the Program’s office. The course for the typing skill does not need to be met at college level. Proof of successful completion of a computer or typing class will be acceptable on any level.

Advanced Placement. Applicants who have been admitted to the curriculum and who have previous education or experience in dental assisting may apply for credit and advanced placement in the curriculum. However, such applicants should first have completed the science, English and keyboard requirements.

Basis for Disqualification. Students who receive a final grade lower than C in any dental assisting course will be disqualified from continuing in the curriculum. Students who receive a final grade lower than C will be permitted to repeat a course only once and must achieve a grade of "C" at all evaluation periods. Students who repeat a course and who do not achieve a grade of "C" at an evaluation period will be disqualified from continuing in the curriculum. Students may also be disqualified for safety and other reasons consistent with College policy.

Eligibility for the Certification Examination and Licensure Examinations. Graduates who complete the Major or the Certificate of Achievement in Dental Assisting are eligible to take the Certification Examination given by the Dental Assisting National Board and the Licensure Examinations to become a Registered Dental Assistant given by the California Board of Dentistry.

Dental Assisting Certificate

Students may obtain the Certificate of Achievement in Dental Assisting by completing the following courses with an average final grade of "C" or higher:

Learning Outcomes

Upon completion of this certificate, students will be able to:

- Demonstrate various techniques of sterilization & disinfection and apply infection control and safety guidelines in the dental setting.
- Demonstrate safe working habits with the knowledge in Occupational Safety and Health Administration Hazard Communication Standard.
- Prepare for the state and national licensure exams in order to perform Registered and Certified Dental Assistant Functions authorized by legal provisions.
- Demonstrate Together Everyone Achieves More (TEAM) through frequent group exercises and activities.
- Display soft skills and critical thinking strategies through various group activities.

Students may obtain the Certificate of Achievement in Dental Assisting by completing the following courses with an average final grade of "C" or higher:
DENT 54. Applied Dental Science II (2)
Lec-2
Prereq.: DENT 53, 55A, and 62
Coreq.: DENT 55B, 67, and 70
Experiences are provided to review the student’s knowledge of microbiology, disease transmission, and altering resistance to infection. Preventive dentistry, nutrition and application of the skills necessary for a preventive therapist are provided. Oral pathological conditions, the use of drugs, and dental therapeutics related to dental office emergencies are discussed. CSU

DENT 55A. Dental Roentgenography (2)
Lec-1, lab-3
Coreq.: DENT SI and 62
Instruction in the basic principles of radiography, history, protection, and safety guidelines. Physics and biological effects of radiation, for the patient's and operator's protection and comfort. Types of receptors, exposure and autoprocessing techniques on manikins. Composition and preparation of solutions. The relationship of dental anatomy and facial structures to the exposure and mounting of films. Quality of the films. Lab Fee is required. CSU

DENT 55B. Dental Roentgenography (2)
Lec-1, lab-3, field trips
Prereq.: DENT 55A
Instruction in the advanced techniques of dental radiography, anatomical landmarks, dental anatomy pertaining to dental radiography, anatomy and processing faults. Emphasis is on evaluation of the quality of the films both intra and extra oral. Experiences in exposing full mouth and bitewing radiographs for diagnosis by dentists. Students must provide/recruit their patients. Advanced education and knowledge of panoramic and digital techniques and other related radiographic equipment. Lab Fee is required. CSU

DENT 57. Dental Office Management (3)
Lec-3
Prereq.: DENT 51, 55A, and 62
Coreq.: DENT 55B
Instruction in the non-clinical functions which dental auxiliaries are required to perform with emphasis on financial arrangements, collection techniques, insurance processing and maintenance of office records, account receivable transactions, office mail, inventory, purchasing, accounts payable, payroll, disbursements, tax records, marketing and group practice. Use of computers to perform basic dental office management. CSU

DENT 62. The Dental Assistant in Practice (3)
Lec-2, lab-3, field trips
Coreq.: DENT 51 and 55A
The dental health team, ethics/jurisprudence HIPAA, history of dentistry, home care instruction including whitening, applied psychology, communication skills; verbal and written (telephone/fax/computer) communication, the special patient, appointment control, recall systems and the administrative assistant, use of Dentrix software for office functions. Lab Fee is required. CSU

DENT 67. Advanced Dental Procedures (4)
Lec-3, lab-3
Prereq.: DENT 51, 52, 53, 55A, and 62
Coreq.: DENT 54, 55B, 57 and 70
Instruction in the specialties of dentistry including advance endodontics, periodontics, orthodontics, oral surgery, removable prosthodontics and pediatric dentistry as well as the armamentarium required in each specialty. Development of preclinical skills in the extended functions which are required of the Registered Dental Assistant. Students are required to meet standards of competency for each required task including coronal polishing and ultrasonic removal of cement from orthodontic bands. Mannequins and patients will be used in instruction. Lab fee is required. CSU

DENT 70. Clinical Chairside Assisting (7)
Lec-33, lab-260.5 (total hrs.) P/NP only
Prereq.: Certification of Cardiopulmonary Resuscitation (CPR); Approved by American Heart Association or American Red Cross for Healthcare Provider;
Coreq.: Completion/concurrent enrollment in DENT 54, 55B, 57 and 67
Clinical instruction and practice in four-handed procedures. Emphasis on general and specialty dentistry (oral surgery, periodontics, endodontics, orthodontics, prosthodontics) and the intra-oral tasks assigned to the Registered Dental Assistant. Development of professional attitude (ethics/jurisprudence) in dental assisting. Building skills in the use of dental materials and equipment. Evaluation of clinical experience, career placement opportunities, and skills building in communication, sealant placement (Students must provide/recruit their patients) in accordance with the CDB requirements, and the taking of a mock Registered Dental Assisting Practical Examination. Lab fee is required. CSU

DENT 110A. Coronal Polish—An Approved Course of Expanded Function from the Dental Board of California (0.5)
Lec-6, lab-8 (14 total hrs.) P/NP available
This course is designed and approved to meet the Dental Board of California’s regulation for Coronal Polish. This course includes lecture and clinical hours. The students will be taught and use techniques for removal from the clinical crown the following: pellicle, plaque, and extrinsic stain. The students will be required to provide their own patients and follow program’s sterilization, and infection control policies. CSU

Disabled Students Courses
Office: Learning Resources 323
Phone Number: (415) 452-5481
Web Site: www.ccsf.edu/dspss

General Information
It is recommended that students with disabilities meet with a DSPS counselor.

All courses that begin with DSPS are designed for, but not limited to, individuals with disabilities.

Learning Outcomes
DSPS courses are designed to meet the functional limitations of students with disabilities and as such all are highly individualized and some may be designed to address specific disabling conditions. By completion of course or courses in Disabled Students Programs and Services, students will be able to do one or more of the following:

- Express themselves through a variety of verbal and non-verbal modalities.
- Demonstrate adaptive strategies that support educational activities and student success.
- Apply life skills learned to enhance their integration into the community.
Announcement of Courses

Credit, Non-Degree Applicable Courses:

Title 5, Section 56029 of the California Code of Regulations allows DSPS students the option of repeating the following courses multiple times with the consent of the DSPS Department.

DSPS M. Diagnostic Learning (2)
Lec-1, lab-3  P/NP only
Coreq.: Enrollment in at least one other CCSF course
An individualized course designed for students who have learning disabilities. Learning strengths are reinforced and compensatory strategies are taught to overcome weaknesses. Similar in content to DSPS O except that DSPS M is for those who require more intensive assistance.

DSPS O. Diagnostic Learning (1)
Lab-3  P/NP only
Coreq.: Enrollment in at least one other CCSF course
An individualized course designed for students who have learning disabilities. Focus is on instruction and practice of compensatory strategies to overcome learning weaknesses. Students are assisted in the lab using the strategies on assignments from their classes.

DSPS Q. Main Idea Strategies for Reading and Writing (1)
Lec-1  P/NP Only
Designed for students with learning disabilities who are in English L, 90/91, 92, 93, 94, or ESL 130-160, or in courses involving reading and writing. Improvement of reading comprehension and basic written expression. Prerequisite language and reasoning skills necessary for identifying the main idea in addition to textbook reading study skills.

DSPS S. Strategies for Problem Solving (2)
Lec-2 (9 wks)  P/NP only
Practical application of analytical and creative problem-solving process strategies (goal setting, learning styles, decision-making, etc.) designed for students with learning disabilities, but open to others. Reinforces student accountability. Major assignments, quiz, and final project are comprehensive, subjective, interactive, and conceptually-based rather than based on retention of facts.

DSPS W. Survival Writing Skills (1.5)
Lec-1, lab-1.5  P/NP only
Advise: Completion of ENGL 91 or ESL 140; or placement in ENGL 92 or ESL 150
Introduction to and practice in using scaffolding and structured formats for essential personal and job-related survival writing for basic academic (expository writing principles, writing effective summaries), employment (job application short answers, cover letters, emails, etc.), and personal (business and private correspondence) applications. Practical writing forms in real-life situations are emphasized.

Noncredit Courses

DSPS 4014. Accessible Arts and Crafts (90-108 hrs)
Arts and crafts adapted for all disabilities. Introduces basic art concepts and crafts skills. Students create projects using materials and processes increasingly more challenging as the course progresses and their abilities develop. Adaptive equipment and techniques introduces as needed. May lead to exhibition of student art work.

DSPS 4017. Accessible Theatre Arts (36-54 hrs)
Designed for students with disabilities. Students explore and develop abilities in creative self-expression. Through participation in a variety of dramatic experiences, students increase their range of physical expression, develop creative verbal self-expression and learn to work collaboratively with others. Process may lead to dramatic productions.

DSPS 4021. Computer-Special Methods (36-54 hrs)
Introduction to basic computer skills using common office suite applications. Designed for persons with disabilities. Course employs adaptive equipment, alternate commands, accessibility tools, small steps, slow pace and repetition as needed by each student.

DSPS 4022. Computer Skills – Disabled (180 hrs)
Introduction to microcomputer applications for disabled students who desire entry-level clerical work. Introduces word processing, spreadsheet and database concepts using popular business software through lecture, lab and individualized instruction. Students create, edit, manipulate and print their own documents. May include the use of adaptive equipment such as screen enlargement or voice output.

DSPS 4023. Job Search Skills (72-108)
Course designed for students with disabilities. The class emphasizes exploration of individual skills and interests, work options, communication skills and appropriate work behaviors. Small group work on developing attitudes, self-confidence, and competencies to locate, secure and retain employment.

DSPS 4028. Coping with Acquired Brain Injury (108 hrs)
Students with a mild acquired brain injury learn about the impact of brain injuries on learning, relationships, and emotions. Strategies to improve memory, organization, planning, reasoning, and communication are presented. Activities involve following directions, problem-solving, time management, verbal and written skills.

DSPS 4035. Accessible Computer Laboratory (36-135 hrs)
A laboratory course designed for students with disabilities. Individualized instruction in and ongoing use of adaptive computer software and equipment for academic, vocational or personal use. Also computer-assisted instruction in Internet, email, business software, basic skills and cognitive development.

DSPS 4038. Community Living Skills (52.5-140 hrs)
Using lecture, demonstration, roleplaying discussion exercise, field experience and the expressive arts, students with disabilities will develop and utilize skills needed for successful participation in the community.

DSPS 4042. Active Job Search
Designed for all students with disabilities who are job ready and need placement services and advanced job search strategies. Tailoring resumes, cover letters, and applications. Interviewing techniques and job search planning/management. Field experiences to local businesses, employers, and organizations may also be required.

DSPS 4050. Life Skills for the Disabled (90-270 hrs)
Designed for students identified as developmentally delayed learners who want to improve their basic life skills for vocational purposes and
are unable to benefit from instruction offered in regular classes. Small group instruction is offered in money handling skills, computer basics, community resources, and personal responsibility in preparation for entry level jobs and daily living. Students with reading levels below third grade may experience difficulty. Designed to be completed in two years (as long as the student is making measurable progress).

**DSPS 4051. Quick Computer Accessibility (12 hrs)**

Very quick course in elementary computer, email, and Internet searches for jobs and housing designed for persons recovering from drug or alcohol addiction.

**DSPS 4305. High School Level Learning Strategies (90–180 hrs)**

**ADVICE: CONCURRENT ENROLLMENT IN A TRANSITIONAL STUDIES HIGH SCHOOL COURSE (TRST 1200 OR HIGHER)**

A course in learning strategies designed for students with disabilities who are taking high school level classes. Students learn about their unique learning styles and apply newly-learned strategies to their course assignments in reading, writing, and/or math. May be repeated.

### Blind/Visually Impaired

**DSPS 4101. Communication for the Blind (72–90 hrs)**

This class gives persons with visual disabilities the opportunity to interact with peers and participate in structured discussions, games and activities that improve or maintain skills in the areas of communication, problem-solving, memory, self-advocacy and self-expression and “brain fitness”.

### Deaf/Hard of Hearing

**DSPS 4210. Lipreading (36–54 hrs)**

Instruction and practice in lipreading, communication breakdown strategies, stress reduction, creative problem solving, and assertiveness. Acquaints students with assistive listening devices and available services. Supportive group environment. Appropriate for mild to severe hearing impairment.

### Earth Sciences

**Announcement of Curricula**

**Degree Curricula**

**Earth Science Major (AS)**

Earth science is the integrated study of the biological, chemical, physical, and geological processes at work on Earth. Synthesis of multiple disciplines is required for understanding and helping to solve problems that humans face as they interact with the Earth and its natural processes, such as climate change, flooding rivers and coasts, hurricanes, and oceanic and atmospheric circulation.

Earth science, an interdisciplinary science, requires expertise in basic physical, chemical, and biological sciences, with a solid foundation in geology, meteorology, and oceanography. It requires skill in problem solving, analysis, scientific inquiry, and communication. Students completing the Associate in Science in Earth Science will be prepared for upper division studies in earth sciences and for transfer to an earth science program at a four-year college. This major will also help prepare students to advise and educate others about issues requiring knowledge of how the earth works. To accomplish these goals, majors will complete transferable lower-division courses in earth science, math, chemistry, and physics.

Through the core units of the earth science major, students will gain the scientific knowledge necessary to investigate problems and ideas presented in upper division earth science courses. The laboratory work will train students to use current laboratory technologies, equipment and techniques to engage in the research process using scientific methods and to investigate research questions safely.

Earth science majors will be able to take most or all of their lower division courses at CCSF before they transfer, but should see a counselor to confirm their program of study. Additional courses might be required to transfer to particular institutions. The earth science major is suitable for students planning to transfer into programs in earth and environmental sciences. Future career areas for which this major is good training include:

- High school and middle school science teaching;
- Technical support for firms engaged in environmental engineering, environmental monitoring and protection, natural resource analysis and management, hazardous materials and ecological remediation, computer mapping, etc.;
- Technical support to city, county, state, and other governmental agencies charged with land use and other planning;
- Preparation for graduate education in such fields as resource management, environmental public policy, and environmental law;
- Science writing, editing, and librarianship;
- Interpretation for park systems, nature centers, museums, and other areas requiring natural science field skills and natural history communication skills;
- Business and entrepreneurship.

**Program Goals and Objectives.** The earth science major is designed to clearly demonstrate the breadth of expertise required by earth scientists and to prepare students for the advanced courses and projects that lie ahead should they transfer to a bachelor’s major in earth sciences at a four-year college. This major will also help prepare students to advise and educate others about issues requiring knowledge of how the earth works.

**Learning Outcomes**

Upon completion of the major, students will be able to:

- Understand how scientists think and be able to think, analyze, and discuss issues with similar rigor, skepticism, and evidential support; includes understanding the dynamic nature and limits of scientific knowledge.
- Work successfully in groups.
- Collect data, measure, analyze results, form hypotheses from data, test hypotheses especially as relates to earth science phenomena.
- Recognize complex problems and develop strategies for understanding and solving them (where possible with current methods).
- Participate in field work including making observations at outcrops, understanding the difference between observations and interpretations, taking field notes they have to use; developing
the “eyes of an earth scientist;” especially as relates to earth science phenomena.

- Evaluate the results of humans attempting to redirect or change the forces of nature; and understand the role each person plays in the politics and economics of this problem especially as relates to earth science phenomena.
- Recognize the interdisciplinary nature of science and synthesize ideas from physics, chemistry, biology, and geology to evaluate earth science phenomena.

Courses Required for the Major in Earth Science

Core Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEOL 10 + 10L</td>
<td>Physical Geology + Lab.</td>
<td>5</td>
</tr>
<tr>
<td>OCAN 1 + 1L</td>
<td>Oceanography + Lab</td>
<td>5</td>
</tr>
<tr>
<td>CHEM 101A</td>
<td>General College Chemistry</td>
<td>4-5</td>
</tr>
<tr>
<td>or CHEM 103A General Chemistry for Engineering</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>MATH 110A</td>
<td>Calculus I</td>
<td>3-4</td>
</tr>
<tr>
<td>or MATH 100A Short Calculus I</td>
<td>3-4</td>
<td></td>
</tr>
</tbody>
</table>

One of the following physics options:

- PHYC 2A + 2AL Introductory Physics + Lab. | 4 |
- PHYC 2B + 2BL Introductory Physics + Lab | 4 |
- OR |
- PHYC 4A + AL Introductory Physics + Lab | 4 |
- PHYC 4B + 4BL Introductory Physics + Lab | 4 |

Elective courses (choose two of the following):

- GEOL 11 Historical Geology | 3 |
- PALE 1 Introduction to Paleontology | 4 |
- GEOG/GIS 110 Introduction to GIS | 3 |
- GEOG 1 + 1L Physical Geography+ Lab | 4 |
- GEOL 18 Geology of California | 3 |
- ASTR 1 Cosmic Evolution | 3 |
- BIO 100A General Biology | 5 |
- BIO 100B General Biology (BIO 100A is a prereq) | 5 |
- GEOL 30 Environmental Geology | 3 |

Total Units | 31 to 37 |

*NOTE: Students who want to increase their opportunities should choose Physics 4A/B series instead of 2A/B (especially if they plan to continue or work in a physics- or chemistry-related field of earth science).

Recommended activities:

- Enroll in the Earth Sciences Club
- Become part of the Earth Sciences Mentoring Program (see Department website for details).
- Enroll in as many of the choices described above as possible, as many transfer programs will require both.

Geology Major (AS)

Geology is the study of the materials of which the Earth is made (inside and out – rocks, minerals, water, oil, natural gas, and magmas), the structures that are produced (Earth layers, mountains, volcanoes, basins), the processes acting upon them (earthquakes, volcanism, landslides, floods, magnetic fields), and the evolution of Earth and its materials over time (Earth formation, early history, ice ages, and current climate change).

Geology courses are recommended for anyone interested in understanding and living with the natural world around us and in making informed decisions on matters pertaining to interactions between natural Earth processes and society.

Geology, an interdisciplinary science, requires expertise in chemistry, physics, mathematics, computer science, and critical thinking. It requires skill in problem solving, analysis, scientific inquiry, and communication. Students completing the Associate's Degree in Geology will be prepared for upper division studies in geology and for transfer to a geology program at a four-year college. To accomplish this goal, majors will complete transferable lower-division courses in geology, math, chemistry, and physics.

Geology majors will be able to take most or all of their lower division courses at CCSF before they transfer, but should see a counselor to confirm their program of study. Additional courses might be required to transfer to particular institutions. The geology major is suitable for students planning to transfer into programs in the geology, oceanography, earth sciences, and environmental sciences.

Through the core units of the geology major, students will gain the scientific knowledge necessary to investigate problems and ideas presented in upper division geology courses. The laboratory work will train students to use current laboratory technologies, equipment and techniques to engage in the research process using scientific methods and to investigate research questions safely.

Program Goals and Objectives. The geology major is designed to clearly demonstrate the breadth of expertise required by geologists and to prepare students for the advanced courses and projects that lie ahead should they transfer to a bachelor's major in geology at a four-year college.

Learning Outcomes

Upon completion of the major, students will be able to:

- Understand how scientists think and be able to think, analyze, and discuss issues with similar rigor, skepticism, and evidential support; includes understanding the dynamic nature and limits of scientific knowledge.
- Work successfully in groups.
- Collect data, measure, analyze results, form hypotheses from data, test hypotheses especially as relates to geologic phenomena.
- Recognize complex problems and develop strategies for understanding and solving them (where possible with current methods).
- Participate in field work including making observations at outcrops, understanding the difference between observations and interpretations, taking field notes they have to use; developing the “eyes of a geologist;” especially as relates to geologic phenomena.
- Evaluate the results of humans attempting to redirect or change the forces of nature; and understand the role each person plays in the politics and economics of this problem especially as relates to geologic phenomena.
- Recognize the interdisciplinary nature of science and synthesize ideas from physics, chemistry, biology, and geology to evaluate geologic phenomena.

Courses Required for the Major in Geology

Core Course

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEOL 10 Physical Geology</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>GEOL 10L Physical Geology Lab</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>CHEM 101A General College Chemistry</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>CHEM 101B General College Chemistry</td>
<td>5</td>
<td></td>
</tr>
</tbody>
</table>
Oceanography majors will be able to take most or all of their lower division courses in oceanography, biology, math, chemistry, and physics. Oceanography majors will be able to take the BIO 100A + B option instead of geology.

Courses Required for the Major in Oceanography

Core Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>OCAN 1 Oceanography</td>
<td>3</td>
</tr>
<tr>
<td>OCAN 1L Oceanography Lab</td>
<td>2</td>
</tr>
<tr>
<td>CHEM 101A General College Chemistry</td>
<td>5</td>
</tr>
<tr>
<td>MATH 110A Calculus I</td>
<td>4</td>
</tr>
<tr>
<td>MATH 110B Calculus II</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 4A Physics for Scientists and Engineers</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 4B Physics for Scientists and Engineers</td>
<td>1</td>
</tr>
<tr>
<td>PHYS 4BL Physics Laboratory for Scientists and Engineers</td>
<td>3</td>
</tr>
</tbody>
</table>

Elective courses (choose one of the following two courses):

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 101B General College Chemistry</td>
<td>5</td>
</tr>
<tr>
<td>MATH 110C Calculus III</td>
<td>4</td>
</tr>
</tbody>
</table>

Choose one of the following sets of courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEOL 10 + 10L Physical Geology + Lab</td>
<td>5</td>
</tr>
<tr>
<td>BIO 100A + BIO 100B General Biology</td>
<td>10</td>
</tr>
</tbody>
</table>

Total Units: 35 - 41

*NOTE: Students who want to major in biological oceanography should take the BIO 100A + B option instead of geology.
Recommended activities:

- Enroll in the Earth Sciences Club.
- Become part of the Earth Sciences Mentoring Program (see Department website for details).
- Enroll in both the geology and biology classes as many transfer programs will require both.
- Enroll in Math 110C.
- Enroll in a computer class, such as Geog/GIS 110.

Certificate Curriculum

**Geographic Information Systems (GIS) Certificate**

Students will develop in-depth knowledge of the fundamental concepts and practice of Geographic Information Systems (GIS) and learn hands-on problem-solving skills doing real-world GIS application projects. Students will be able to apply this knowledge and hands-on skills to various fields including, but not limited to, planning, engineering, geography, criminology, real estate, biotech, public utilities, transportation, forestry, ecology, resource management, emergency response, business/marketing.

**Learning Outcomes**

Upon completion of this certificate, students will be able:

- Apply GIS technology to evaluate real-world problems, and communicate the GIS project process and results in written and graphic media at a professional level.
- Locate, assess, and retrieve spatial data and knowledge across the GIS technical community to apply to GIS projects.
- Draw upon the underlying theory behind GIS technology (including projections and spatial databases) to optimize application of the technology and extend it into new areas.

Requirements for the Certificate of Accomplishment. Students may obtain the Certificate of Accomplishment in Geographic Information Systems (GIS) by completing the following courses with a grade of "C" or higher in each course. A minimum of two of the courses must be taken at City College of San Francisco.

**Courses Required for the Certificate of Accomplishment in Geographic Information Systems (GIS)**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEOG/GIS 110 Introduction to GIS</td>
<td>3</td>
</tr>
<tr>
<td>GEOG/GIS 111 GIS Analysis and Modeling</td>
<td>3</td>
</tr>
<tr>
<td>GEOG/GIS 112 GIS Software Technology</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Units</strong></td>
<td><strong>9</strong></td>
</tr>
</tbody>
</table>

**Announcement of Courses**

**General Information**

The Earth Sciences Department offers day and evening courses that advance students toward degrees in both the natural and social sciences. Credit earned is transferable, and most courses satisfy specific graduation requirements at four-year universities. For more information, visit our website: [www.ccsf.edu/Earth](http://www.ccsf.edu/Earth).

**Credit, Degree Applicable Courses:**

**Geography**

GEOG 1. Physical Geography (3)

Lec-3, field trips

An introduction to the Earth’s physical environment. Processes and patterns of weather and climate, the development of landforms, plant and animal distributions, and the interpretation of maps. Attention given to the physical environment and natural hazards of California and the Bay Area. CSU/UC/C-ID GEOG 110; C-ID GEOG 115 (GEOG1+GEOG 1L)

GEOG 1L. Physical Geography Laboratory (1)

Lab-3, field trips

Prereq: Completion/concurrent enrollment in GEOG 1

The study of weather and climate, tectonic processes, and landforms. Emphasis on the interpretation of weather maps, climatic data, aerial photographs, and topographic maps. CSU/UC/C-ID GEOG 111; C-ID GEOG 115 (GEOG1+GEOG 1L)

GEOG 4. Cultural Geography (3)

Lec-3, field trips

An introduction to patterns in the contemporary human landscape. Topics include dynamics of population growth, migration, systems of agriculture, the legacy of colonialism, uneven economic development, the historical development and spread of religion and language. CSU/UC/C-ID GEOG 120

GEOG 7. Economic Geography (3)

Lec-3, field trips

An introduction to economic geography. Topics include patterns and processes of urbanization, industrialization, and the interconnected global economy. Contemporary issues such as international business and changing patterns of manufacturing in the United States. CSU/UC

GEOG 31. Introduction to Environmental Science (3)

Lec-3, field trips P/NP Available

Prereq: ENGL 92 or higher

An examination of the scientific and research evidence regarding the causes, consequences, and proposed solutions to environmental and natural resource issues. Study of sustainability and potential solutions from different academic fields including the natural sciences, social sciences and engineering. CSU/UC

GEOG 31 = BIO 31 = SUST 31

GEOG 41-42-43. Current Topics in Earth Sciences (1-2-3)

Lec-1-2-3, field trips P/NP available

One and two-unit courses are less than a semester in duration.

Exploration of topics of current interest in the Earth Sciences. CSU (UC upon review)

GEOG 41-42-43 = GEOL 41-42-43

GEOG 41A. Climate Change. CSU/UC

GEOG 41A = GEOL 41A

GEOG 49. National Parks—Their Geology and Geography (3)

Lec-3, field trips P/NP available

A survey of the national parks and monuments with emphasis on the western United States. An introduction to their discovery and development; appreciation of their particular beauties, natural phenomena, and historic significance. CSU

GEOG 91-92-93. Geography Work Experience (1-2-3)

Work-5,10,15 P/NP available

Prereq: Approval of GEOG Work Experience Coordinator

Repeat: GEOG/GEOL 91, 92, and 93 combined, max. credit: 6 units

Off-campus work may include employment or volunteer service in a geography-related setting (e.g., laboratory, museum, park) under the
supervision of a qualified professional or faculty member. On-campus work consists of instruction and experience in the preparation, care, and maintenance of equipment, materials, training aids, and specimens used in the Earth Sciences Department. CSU

GEOG 110. Introduction to GIS (3)
Lec-2.5, lab-1.5
A primer course for GIS technology. History, structure, uses, and current trends of GIS, related fundamental concepts, basic query and cartography operations using an industry-standard GIS software such as ESRI's ArcGIS™. CSU/UC/C-ID GEOG 110
GEOG 110 = GIS 110

GEOG 111. GIS Analysis and Modeling (3)
Lec-2.5, lab-1.5
Prereq.: GIS/GEOG 110
Foundational use of GIS software. GIS database design, data collection, sophisticated analysis. Production of professional maps. Interface customization. Hands-on training using industry-standard GIS software (ESRI's ArcView™ version 9). Introduces Global Positioning Systems (GPS) as they relate to GIS. CSU
GEOG 111 = GIS 111

GEOG 112. GIS Software Technology (3)
Lec-2.5, lab-1.5
Prereq.: GIS/GEOG 110
Hands-on training in advanced application of GIS technology. Network modeling, suitability analysis, web GIS, mobile GIS, software customization using Visual Basic for Applications (VBA) on ESRI's ArcView™ version 9 platform. CSU
GEOG 112 = GIS 112

Geology

GEOL 10. Physical Geology (3)
Lec-3, field trips
Introduction to the basic concepts of physical geology, including Earth's origins and internal structure, plate tectonics, mountain building, earthquakes, minerals, rocks, volcanoes, geologic time, weathering, erosion, coastal processes, landslides, rivers, glaciers, and ice ages. Emphasis on geologic features of western North America. CSU/UC/C-ID GEOL 100; C-ID GEOL 101 (GEOL10+GEOL 10L)

GEOL 10L. Physical Geology Lab (2)
Lec-1, lab-3, field trips
Prereq.: MATH 40 or ET 108B or Demonstration of Exit Skills; and completion/concurrent enrollment in GEOL 10
Laboratory fee of $5 required.
Introduction to the materials of the Earth with emphasis on the identification and interpretation of common minerals and rocks (especially those common to California); interpretation of topographic, geologic, and structural maps; and an analysis of Plate Tectonics processes. CSU/UC/C-ID GEOL 100L; C-ID GEOL 101 (GEOL10+GEOL 10L)

GEOL 11. Historical Geology (3)
Lec-3, field trips
Origin of the Earth and its development through geologic time. The formation and destruction of mountain ranges and ocean basins. The evolution of plants and animals as seen through the fossil record. Emphasis on the geologic history of North America. CSU/UC/C-ID GEOL 110

GEOL 18. Geology of California (3)
Lec-3, field trips
Introduction to California geology. Rocks and minerals, geologic features, and economic geology. The geologic history and importance of each natural province of California. CSU/UC/C-ID GEOL 200

GEOL 19. Geology of the West (3)
Lec-3
Introduction to the geology of the western portion of North America through field trips that emphasize physical and historical geology as reflected by present geologic features. Localities can include Yosemite National Park, Lassen National Park, Mono Basin, Lake Tahoe, etc. CSU

GEOL 20. Exploring the West (3)
P/NP available
Introduction to the geology of the western portion of North America through field trips that emphasize physical and historical geology as reflected by present geologic features. Localities can include Yosemite National Park, Lassen National Park, Mono Basin, Lake Tahoe, etc. CSU

GEOL 20A. Long Valley Geology
GEOL 20B. Sierra Nevada Geology
GEOL 20C. Death and Owens Valley Geology

GEOL 21-22-23. Geology of the Bay Area (1-2-3)
Lec-1-2-3, field trips
P/NP available
Introduction to the geology of the San Francisco Bay Area through introductory lectures followed by field trips that emphasize the physical, historical, engineering, and economic geology of the region. CSU

GEOL 21A. San Francisco Coastal Geology
GEOL 21B. San Francisco Geology
GEOL 21C. The San Andreas Fault System

GEOL 25. Introduction to Gems (3)
P/NP available
Fundamentals of the optical, chemical, and physical properties of gems including their historical, economic, and cultural importance. Use of basic and advanced lab techniques for studying gems. CSU

GEOL 26. Exploring the West (3)
Lec-3
The study of the nature and dynamics of Earth's near-surface environment (waters, atmosphere, soils, and landforms) and human interactions with it. Topics include climate and climate change, natural hazards (earthquakes, volcanoes, floods), resource management (mining, fossil fuels, groundwater), pollution (water quality and air pollution), monitoring, and political and human influences. CSU/UC/C-ID GEOL 130; C-ID GEOL 131 (GEOL30+GEOL 30L)

GEOL 27. Environmental Geology Lab (1)
Lab-3, field trips
Prereq.: Completion of or concurrent enrollment in GEOL 26
An introduction to the fundamentals of Environmental Geology through laboratory work in hazards and resource assessment, regional planning as relates to these assessments, and the nature and dynamics of Earth's near-surface environment (water, atmosphere, soils, and landforms) and human interactions with it. CSU/UC/C-ID GEOL 130L; C-ID GEOL 131 (GEOL30+GEOL 30L)

GEOL 41-42-43. Current Topics in Earth Sciences (1-2-3)
P/NP available
One and two-unit courses are less than a semester in duration. Exploration of topics of current interest in the Earth Sciences. CSU (UC upon review)
GEOL 41-42-43 = GEOG 41-42-43

GEOL 41A. Climate Change. CSU/UC
GEOL 41A = GEOG 41A
Learning Outcomes
Upon completion of courses in Economics, students will be able to:

- Identify, analyze, apply and evaluate basic economic concepts, principles and methods.
- Identify, analyze, apply, compare and evaluate important economic models and theories.
- Identify and analyze important economic problems and issues, and identify and evaluate relevant economic policy alternatives.
- Identify and analyze the historical development of the U.S. economy, important economic institutions and the relationship between economic conditions, developments, institutions and policies and social, cultural and political developments.
- Identify, analyze and evaluate important historical, cultural, and economic factors in the differing economic activities of people in the United States of different races and ethnicities, and identify, analyze, apply, and evaluate alternative theories and related policy recommendations regarding economic inequality based on race and ethnicity.
- Identify, analyze and evaluate important historical, cultural, and economic factors in the differing economic activities of women in the United States, including women of different races, ethnicities, and sexual orientations, and identify, analyze, apply, and evaluate alternative theories and related policy recommendations regarding economic inequality based on gender, race, ethnicity, and sexual orientation.
- Identify, develop, apply and interpret the important concepts and methods of descriptive and inferential statistics relevant for economics, the other social sciences and statistical analysis in general.

Announcement of Courses
(See also courses in “Business Administration” and “Business.”)

Credit, Degree Applicable Courses:
ECON 1. Principles of Macroeconomics (3)
Lec-3 P/NP available
Prereq.: MATH 40 or ET 108B or Demonstration of Exit Skills; or Placement in MATH 90
Advised: MATH 60
General principles, terminology, and methodology of economics with emphasis on macroeconomics. Economic organization and institutions, markets, national income analysis, business cycles, models of aggregate economic analysis, macroeconomic equilibrium, money and banking, fiscal and monetary policy, economic growth, fundamentals of international economics. CSU/UC

ECON 2. Principles of Microeconomics (3)
Lec-3 P/NP available
Prereq.: ECON 1 and MATH 40 or Demonstration of Exit Skills; or Placement in MATH 60
Advised: MATH 60
General principles and terminology of economics, with emphasis on microeconomics. Supply and demand theory, utility, elasticity, production, costs, revenues, market structures, income distribution, market failures and government policy, and international trade. CSU/UC

ECON 3. Principles of Microeconomics (3)
Lec-3 P/NP available
Prereq.: ECON 1 and MATH 40 or Demonstration of Exit Skills; or Placement in MATH 60
Advised: MATH 60
General principles and terminology of economics, with emphasis on microeconomics. Supply and demand theory, utility, elasticity, production, costs, revenues, market structures, income distribution, market failures and government policy, and international trade. CSU/UC

ECON 5. Introductory Statistics (4)
Lec-5 P/NP available
Prereq.: MATH 92, 60, or Demonstration of MATH 60 exit skills or 2nd Year HS Algebra
Introduction to statistical method, with emphasis on the analysis of statistical data—their gathering, classification, presentation, and interpretation. Empirical and theoretical frequency distributions with emphasis on measures of central tendency and variation, probability,
sampling, estimation, hypotheses testing, correlation and regression
analysis, and nonparametric statistics. CSU/UC

ECON 6. International Economics (3)  
Lec-3  
Introduction to the general principles, terminology, and methods
of international economics, with emphasis on international trade.
Examine several alternative models of international trade as well as
foreign exchange markets, currency/financial crisis, globalization,
unfair trade practices, regional integration, and the impact of trade on
economic growth. CSU/UC

ECON 10. Economic History of the United States (3)  
Lec-3  
P/NP available
A survey of the economic development of the United States from
colonial times to the present, with emphasis on the relationship of
economic activities to social and political development. CSU/UC

ECON 25. Women in the Economy (3)  
Lec-3  
P/NP available
An introduction to women's roles in the U.S. economy, including varying
experiences related to race, ethnicity, and class. Examines women's occupa-
tions and earnings; women's household activities and how they affect
paid work; women as consumers; public policy regarding women's work
and poverty; and current special topics. Applies and contrasts mainstream
and political economic theories within a feminist perspective.
Meets American Cultures requirement at UC, Berkeley. CSU/UC

ECON 30. Economics of the African American Community (3)  
Lec-3  
P/NP available
An introduction to the principles of Black political economy. Black em-
ployment, employment discrimination, Black capitalism, the Black under-
class, homelessness, and community economic development.
Examination of the empirical link between race, class and income distri-
bution. CSU/UC

Engineering and Technology
Office: Science 148  
Phone Number: (415) 239-3505  
Web Site: www.ccsf.edu/engtech

Announcement of Curricula
General Information
Engineering and industrial practice in the United States is based to a
considerable extent on the team concept. Engineers, scientists, experts
in management and production, and others coordinate their work with
that of technicians, draftpersons, and workers with varying degrees of
skill in order to complete particular projects. To meet the varying
needs of students and industry, the Engineering and Technology
Department at City College of San Francisco offers an Engineering
Program along with two Engineering Technology programs to train
engineers. The programs are designed so that students may satisfy the
requirements for graduation from the College and receive a degree of
Associate in Science. In addition, the Engineering Technology
programs provide a good foundation for transfer to a bachelor degree
program in engineering technology or industrial technology.

Courses in the Engineering Department are identified according to
the following headings: Computer Aided Drafting (CAD), Electronics
(ELEC), Engineering (ENGN), Engineering Technology (ET), Welding
(WELD), and Geographic Information System (GIS).

Engineering Major (AS)
General Information
The Associate in Science Degree in Engineering offers students the
skills to design functional products and systems based on a founda-
tion formed from engineering, physical science, and mathematics
coursework. Graduates generally transfer to four-year institutions as
juniors where they can major in a variety of engineering disciplines:
computer, electrical, electronics, mechanical, civil, industrial, chemical,
or manufacturing. Others seek employment as engineering technicians or
engineers.

Engineering students on the transfer track are encouraged to complete
additional general education college requirements so they may earn the
AS in Engineering as they transfer to a four-year institution.

The degree program is based upon the recommendation of the
Engineering Liaison Committee which represents the University of
California, California State Universities, private universities, and com-

munity college engineering schools and departments.

Upon completion of this degree, students will develop an understand-
ing of the fundamental principles of the major fields of engineering.
Students will develop problem solving skills that will enable them
to solve a variety of practical engineering problems using the latest
software tools such as word processing, spreadsheets, computational
frameworks, computer aided design, and computer programming
languages.

Learning Outcomes
Upon completion of this degree, students will be able to:

- Employ problem solving skills in basic engineering, physics, and
  chemistry topics.
- Demonstrate math skills through differential equations.
- Compose, prepare, and communicate engineering, analyses,
  reports and presentation using applicable software.
- Design and conduct experiments and numerical simula-
tions, analyze, and interpret general scientific and engineering
  information.

Beginning courses in engineering require a foundation in algebra,
geometry, advanced algebra, trigonometry, chemistry, physics, and
mechanical drawing. The equivalents to these courses may be taken at
City College.

Courses Required for the Major in Engineering

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGN 10A Intro to Engn: The Profession</td>
<td>1</td>
</tr>
<tr>
<td>ENGN 10B Intro to Engn: Softwr Tools &amp; Desgn</td>
<td>2</td>
</tr>
<tr>
<td>MATH 110A Calculus I</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 101A or 103A General Chemistry</td>
<td>4 or 5</td>
</tr>
</tbody>
</table>

Subsequent Semesters

Additional Major Requirements:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGN 20 &amp; 20L Circuit Analysis &amp; Lab</td>
<td>4</td>
</tr>
<tr>
<td>ENGN 38 Intro to Comp for Engrs</td>
<td>3</td>
</tr>
<tr>
<td>MATH 110B Calculus II</td>
<td>4</td>
</tr>
<tr>
<td>MATH 110C Calculus III</td>
<td>4</td>
</tr>
<tr>
<td>MATH 125 Diff Equations</td>
<td>3</td>
</tr>
<tr>
<td>PHYC 4A &amp; 4AL Mech and Relativity</td>
<td>4</td>
</tr>
<tr>
<td>PHYC 4B &amp; 4BL Elect &amp; Magnetism</td>
<td>4</td>
</tr>
<tr>
<td>PHYC 4C &amp; 4CL Waves, Optics, &amp; Thermo</td>
<td>4</td>
</tr>
</tbody>
</table>

Total Units: 41–42
Consult the catalog for specific requirements and courses available to satisfy the graduation requirements for the Associate in Science Degree. So as not to duplicate course work, it is recommended that you try to satisfy the requirements of the transfer institution as well as those of City College.

If you wish to substitute another class because of specific requirements of the transfer institution you will attend, consult with the Engineering Department Advisor.

NOTE: Four-year universities may have additional course requirements for completion of lower division. Consult the Transfer Center and the Engineering Advisor for additional information. Other technical courses that transfer in engineering include CHEM 101B; ENGN 1A, 1B, 24, 36, 37, 45; MATH 115, 120, 130; PHYC 4D and 4DL.

**Biotechnology Major (AS)**

In the biotechnology curriculum, a two-year course of study, the Engineering and Technology Department offers students specialized training for employment as bio-technicians engaged in research, design, manufacturing, operation, maintenance, testing, or sales related to this field. All students in this field of study complete the required core courses. Specialization is offered from the second through the fourth semester course work and will lead to a certificate of accomplishment concurrently. The program advisers work closely with each student to assure normal progress. Upon successful completion of the curriculum, students receive the Associate in Science degree with Biotechnology as the Major.

**Training in the Major.** Training in the first year is designed to provide students with a sound working knowledge of the applied principles of mathematics, chemistry and biology and introductory biotechnology. In the second year, students complete more advanced courses in biotechnology.

**Employment.** Students who complete the curriculum satisfactorily are qualified for positions as quality control, research and development, and bio-manufacturing technicians in hundreds of pharmaceutical and biotechnology companies in the Bay Area.

**Major.** Students who complete the curriculum with final grades of C or higher in the major technical courses receive the Associate in Science degree in Biotechnology.

**Four-year Degree Preparation.** Besides preparing students who complete this curriculum for careers in the biotechnology industries, the students can also transfer to universities to pursue a BS degree, most likely in industrial technology with focus on biotechnology. The department currently has a formal articulation agreement with California State University at Fresno. Please contact the program advisor (239-3505 Science room 148) for details.

**Learning Outcomes**

Upon completion of courses in biotechnology major, students will be able to:

- Employ the principles of proper documentation handling in experimental data collection and recordkeeping including proper methods of laboratory report development and presentation using a computer for data analysis and report generation.
- Perform common laboratory-based mathematical operations and apply critical thinking in data analysis including statistical and graphical analysis in the interpretation of experimental results.

**Courses Required for the Major in Biotechnology**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>First Semester</strong></td>
<td></td>
</tr>
<tr>
<td>BTEC 10A Practical Math I or ET 108A Practical Math I or an equivalent math course</td>
<td>3</td>
</tr>
<tr>
<td>BIO 11 The Science of Living Organisms</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 32 Intro to Medical Chemistry</td>
<td>4</td>
</tr>
<tr>
<td>Technical BTEC courses</td>
<td>4</td>
</tr>
<tr>
<td><strong>Subsequent Semesters</strong></td>
<td></td>
</tr>
<tr>
<td>ET 108B Practical Math II or an equivalent math course</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 40 Advanced Medical Chemistry and Biotechnology</td>
<td>4</td>
</tr>
<tr>
<td>SPCH 12 or ET 107 Communication and Language Skills</td>
<td>3</td>
</tr>
<tr>
<td><strong>Technical Elective Courses for the Major in Biotechnology</strong></td>
<td></td>
</tr>
<tr>
<td>A minimum of 24 units must be taken from the list below</td>
<td></td>
</tr>
<tr>
<td>BTEC 5 Briefings in Biotechnology</td>
<td>1</td>
</tr>
<tr>
<td>BTEC 10 Research Skills for Career</td>
<td></td>
</tr>
<tr>
<td>Opportunities in Biology</td>
<td>2</td>
</tr>
<tr>
<td>BTEC 12A GLP and GMP Principles</td>
<td>1</td>
</tr>
<tr>
<td>BTEC 12B GMP Compliance</td>
<td>1</td>
</tr>
<tr>
<td>BTEC 14A Biotechnology Laboratory</td>
<td>2</td>
</tr>
<tr>
<td>BTEC 14B Biotechnology Internship</td>
<td>2</td>
</tr>
<tr>
<td>BTEC 15 Organizing a Scientific Conference</td>
<td>2</td>
</tr>
<tr>
<td>BTEC 21A Mammalian Cell Culture</td>
<td>2</td>
</tr>
<tr>
<td>BTEC 21B Fluorescent Cell Technology</td>
<td>2</td>
</tr>
<tr>
<td>BTEC 21C Stem Cell Technology</td>
<td>3</td>
</tr>
<tr>
<td>BTEC 22 Immunoassay: ELISA</td>
<td>1</td>
</tr>
<tr>
<td>BTEC 23 Western Blotting Techniques</td>
<td>1</td>
</tr>
<tr>
<td>BTEC 24 Introduction to PCR</td>
<td>1</td>
</tr>
<tr>
<td>BTEC 25 Analytical PCR Technology</td>
<td>1</td>
</tr>
<tr>
<td>BTEC 93 Biotechnology Work Experience</td>
<td>1</td>
</tr>
<tr>
<td>BTEC 101 Fermentation and Protein Purification</td>
<td>5</td>
</tr>
<tr>
<td>BTEC 115 Recombinant DNA Biotechnology</td>
<td>5</td>
</tr>
<tr>
<td>BTEC 120 Molecular and Cell Biotechnology</td>
<td>5</td>
</tr>
<tr>
<td>BTEC 221 Biotech Process Instrumentation</td>
<td>2</td>
</tr>
<tr>
<td>BTEC 222 Biotech Calibration and Validation</td>
<td>1</td>
</tr>
<tr>
<td>BTEC 223 Introduction to Environmental Monitoring</td>
<td>1</td>
</tr>
</tbody>
</table>

**Total Units** | **49**

Up to 6 units of course work may be taken from related areas with the approval of the program advisor. These courses may include courses from related departments such as Biology.

**Engineering Technology Program**

**General Information**

In the Engineering Technology Programs, City College trains students for employment as engineering technicians - persons who work with or under the directions of engineers and perform duties requiring a
combination of the theoretical knowledge of an engineer and some of the skills of a craftsman. The College offers two-year curricula in engineering technology in two fields: Electronics Engineering Technology and Mechanical Engineering Technology. The curricula in these fields comprise the Engineering Technology Programs. Students should be aware that any change in major, such as a change from one technical curriculum to another or from one program to another, requires additional time for the completion of their revised educational objectives.

Prerequisites. High school prerequisites are one-year courses in elementary and advanced algebra, geometry, trigonometry, mechanical drawing, and physics. A one-year course in high school chemistry is highly recommended for students intending to transfer to a bachelor degree program in Engineering Technology. Students who have not completed the required high school courses may take them at City College of San Francisco.

Students should possess a minimum level of competency in English communication skills. The completion of English as a Second Language 79 is recommended.

Broad Preparation for Employment. Because emphasis in the Program is on both fundamental engineering theory and basic industrial practices, graduates may qualify for employment in many fields: CAD operator, production planning and control, manufacturing, testing, inspection, sales, installation, maintenance, or servicing.

Each curriculum in engineering technology includes courses in subjects common to all branches of engineering. In general, these subjects include the following: graphics, mathematics, orientation to engineering, and physics. Through this related study, students obtain a better understanding of the work in their majors and develop a broad technical background.

General Education. The curricula also include instruction in general education so that students may satisfy the College graduation requirements in this area.

Associate in Science Degree and Major. The Engineering Technology Program is designed so that students may satisfy the requirements for graduation from the College. Students who satisfy these requirements complete any of the curricula with final grades of C or higher in their major technical courses also receive the Associate in Science degree in Electronic Engineering Technology or Mechanical Engineering Technology. The Major may be considered a recommendation by the faculty of the Engineering and Technology Department which, in conjunction with the Career Development and Placement Center, will aid the graduate in finding a position.

Transfer to Other Colleges and Universities. Students in the Engineering Technology Programs may either enter industry upon graduation or transfer to a four-year institution to earn a bachelor's degree in engineering technology. Several campuses of the California State University such as the Sacramento, Long Beach, and Pomona campuses, as well as private institutions, such as DeVry University, offer graduates this opportunity. Engineering Technology students may also choose to transfer to a bachelor degree program in industrial technology offered at several campuses of the California State University, such as the San Francisco, San Jose, Fresno, and Chico campuses. The time required for completion of curricula open to graduates at these schools is normally two additional years. Students who intend to transfer should consult their advisers and the section in this catalog entitled “Transfer Information.”

Common Core. All students in Engineering Technology initially enroll in common core courses.

### Electronic Engineering Technology Major (AS)

#### General Information
The Major in Electronic Engineering Technology offers students training for employment in industries utilizing analog and digital systems, microprocessors and communication electronics. The major is designed to be a two-year course of study in which students work closely with Engineering and Electronics faculty to develop the skills needed for work in the electronics industry. Upon successful completion of the curriculum, students receive the Associate in Science Degree in Electronic Engineering Technology.

Training in the first year is designed to provide students with a sound working knowledge of the theory of direct-and alternating-current circuits (common to both electrical and electronic applications). Students also study the basic principles of amplifiers, solid-state devices, digital techniques, circuits, and systems. In the second year, the student completes courses in advanced electronics, including microprocessors, communication systems (i.e. radios), and non-sinusoidal circuits.

Students who complete the curriculum satisfactorily are qualified for positions as technicians engaged in research and development, manufacturing, testing, installing, and maintaining electronic equipment. Graduates may advance after obtaining experience and further training to become production supervisors, sales engineers, field engineers, and test engineers.

#### Learning Outcomes
Upon completion of this degree, students will be able to:

- Demonstrate an ability to apply current knowledge and adapt to emerging applications of mathematics, science, engineering and technology.
- Employ knowledge and hands-on competence in the application of circuit analysis and design, associated software, analog and digital electronics, and microcomputers to the building, testing, operation, and maintenance of electronic systems.
- Employ knowledge and hands-on competence in the applications of physics to electronics circuits in a rigorous mathematical environment.
- Demonstrate technical and communication skills effectively in a group environment.

Students must complete each course with a grade of “C” or higher in order to be awarded the Associate in Science Degree in Electronic Engineering Technology.

#### Courses Required for the Major in Electronic Engineering Technology

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGN 10A Intro to Engn: The Profession</td>
<td>1</td>
</tr>
<tr>
<td>ET 50 Technical Mathematics</td>
<td>4</td>
</tr>
<tr>
<td>ET 104 Intro to Engineering Drawing &amp; Manuf.</td>
<td>3</td>
</tr>
<tr>
<td>ELEC 101 Electronics I: Elec Measure &amp; Passive Cir</td>
<td>4</td>
</tr>
<tr>
<td>PHYC 2A/2AL Introductory Physics</td>
<td>4</td>
</tr>
</tbody>
</table>

#### Specialization Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYC 2B/2BL Introductory Physics</td>
<td>4</td>
</tr>
<tr>
<td>MATH 100A Short Calculus I</td>
<td>3</td>
</tr>
<tr>
<td>SPCH 12 Fundamentals of Oral Comm or equivalent</td>
<td>3</td>
</tr>
<tr>
<td>ELEC 102A Elec II: Basic Active Analog Circ &amp; Meas</td>
<td>3</td>
</tr>
</tbody>
</table>

The core required courses are identical to the core required for the Mechanical Engineering Technology Major.
Learning Outcomes

- Become production supervisors, sales engineers, or advance a mechanical or research technician, or junior test engineer. Graduates who complete the curriculum satisfactorily are qualified for positions such as an estimator-designer, assistant operating engineer, mechanical or research technician, or junior test engineer. Students may advance after obtaining experience and further training to become production supervisors, sales engineers, field engineers, and test engineers.

**Mechanical Engineering Technology Major (AS)**

**General Information**

The Major in Mechanical Engineering Technology offers students specialized training for employment as engineering technicians engaged in design, research, testing, or sales. The major is designed to be a two-year course of study in which students work closely with Engineering and Engineering Technology faculty to develop the skills needed for work in various engineering related industries. Specialization options are offered from the second through the fourth semester. Upon successful completion of the curriculum, students receive the Associate in Science Degree in Mechanical Engineering Technology.

Training in the first year is designed to provide students with a sound working knowledge of the principles of engineering drawing, applied mathematics, electrical circuits, physics, manufacturing methods, and computers. In the second year, students have the option to focus on computer-aided design (CAD), advanced manufacturing (CAM), heating ventilation and air-conditioning (HVAC), or engineered plumbing systems.

Students who complete the curriculum satisfactorily are qualified for positions such as an estimator-designer, assistant operating engineer, mechanical or research technician, or junior test engineer. Graduates may advance after obtaining experience and further training to become production supervisors, sales engineers, field engineers, and test engineers.

**Learning Outcomes**

Upon completion of this degree, students will be able to:

- Demonstrate technical and communication skills effectively in a group environment.

Students must complete each course with a grade of “C” or higher in order to be awarded the Associate in Science Degree in Mechanical Engineering Technology.

**Courses Required for the Major in Mechanical Engineering Technology**

(The core required courses are identical to the core required for the Electronics Engineering Technology Major)

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGN 10A Intro to Engn: The Profession</td>
<td>1</td>
</tr>
<tr>
<td>ET 50 Technical Mathematics</td>
<td>4</td>
</tr>
<tr>
<td>ET 104 Intro to Engn Drawing &amp; Manufacturing</td>
<td>3</td>
</tr>
<tr>
<td>ELEC 101 Electronics I: Elec Measure &amp; Passive Circuits</td>
<td>4</td>
</tr>
<tr>
<td>PHYC 2A/2AL Introductory Physics</td>
<td>4</td>
</tr>
</tbody>
</table>

**Subsequent Courses**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYC 2B/2BL Introductory Physics</td>
<td>4</td>
</tr>
<tr>
<td>MATH 100A Short Calculus I</td>
<td>3</td>
</tr>
<tr>
<td>SPCH 12 Fundamentals of Oral Comm or equivalent</td>
<td>3</td>
</tr>
</tbody>
</table>

**Specialization Courses**

**Option in Computer Aided Drafting**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAD 180 Intro to Technical Drawing</td>
<td>1</td>
</tr>
<tr>
<td>CAD 181 Intro to Comp Aided Drafting-CAD I</td>
<td>3</td>
</tr>
<tr>
<td>CAD 182 Intermed Comp Aided Drafting-CAD II</td>
<td>3</td>
</tr>
</tbody>
</table>

Choose three courses from the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAD 183 Adv Comp Aided Drafting-3D Modeling</td>
<td>3</td>
</tr>
<tr>
<td>CAD 184 Structural CAD Drafting</td>
<td>3</td>
</tr>
<tr>
<td>CAD 187 HVAC/Pipe CAD Design</td>
<td>3</td>
</tr>
<tr>
<td>CAD 188 Adv Comp Aided Draf-Custom &amp; Auto LISP</td>
<td>3</td>
</tr>
<tr>
<td>CAD 190 Adv Comp Aided Draf-Intro to Solid Works</td>
<td>3</td>
</tr>
<tr>
<td>CAD 191 Adv Comp Aided Draf-Rend &amp; Animation</td>
<td>3</td>
</tr>
<tr>
<td>CAD 192 Adv Comp Aided Draf-CAD Based Multim</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total Units Required**

<table>
<thead>
<tr>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>42</td>
</tr>
</tbody>
</table>

**Option in HVACR and Engineered Plumbing Systems**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ET 135A Fundamentals of Air-Cond &amp; Refrigeration</td>
<td>2</td>
</tr>
<tr>
<td>ET 135B Fundamentals of Air-Cond &amp; Refrigeration</td>
<td>2</td>
</tr>
<tr>
<td>ET 135C Fundamentals of Air-Cond &amp; Refrigeration</td>
<td>2</td>
</tr>
<tr>
<td>ET 139A Engineered Plumbing Systems</td>
<td>3</td>
</tr>
<tr>
<td>ET 139B Engineered Plumbing Systems</td>
<td>3</td>
</tr>
<tr>
<td>ET 139C Engineered Plumbing Systems</td>
<td>3</td>
</tr>
</tbody>
</table>

Choose 6 units from the following Technical Elective Courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGN 24 Design Graphics</td>
<td>3</td>
</tr>
<tr>
<td>ENGN 38 Computers in Engineering</td>
<td>3</td>
</tr>
<tr>
<td>ET 86 Intro to Comp-Aided Manufacturing-CAM I</td>
<td>2</td>
</tr>
<tr>
<td>WELD 140 Manufacturing Processes</td>
<td>3</td>
</tr>
<tr>
<td>WELD 144 Welding Processes</td>
<td>2</td>
</tr>
<tr>
<td>WELD 145 Intermediate Welding Processes</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>47</td>
</tr>
</tbody>
</table>

Up to 6 units of course work can be taken from courses not on the above technical elective list with approval of an engineering advisor. These could include electronics courses, engineering courses or courses in other departments.
Engineering-Related Occupations
Certificate Curricula

General Information

Admission. Enrollment in these curricula is open to those who:
1. Want to add to their knowledge of and skills in engineering-related occupations, and
2. Want to improve their competence in these fields in order to prepare for advancement. Students are required to satisfy prerequisites before admission in certain courses in the curricula; however, instructors will accept equivalent experience in lieu of various prerequisites.

Application for Certificate. To apply for a certificate in one of the curricula below, contact the Engineering and Technology Department office, Science Hall, Room 148, phone (415) 239-3505.

Heating, Ventilation, Air Conditioning and Refrigeration Certificate
The Heating, Ventilation, Air Conditioning and Refrigeration (HVACR) program at City College of San Francisco offers instruction, theory, and training in design and repair of HVACR equipment. The program combines theory with practical hands-on training designed to simulate the work environment and skills needed to excel in this challenging field. The program prepares students for employment in the field and provides an opportunity for currently employed personnel to achieve a level of HVACR certification.

Students completing the program will be qualified for employment as HVACR installers, mechanics and technicians.

Learning Outcomes
Upon completion of this certificate, students will be able to:
- Demonstrate understanding of and ability to work in a cGMP (current Good Manufacturing Practices) compliant environment.
- Demonstrate skills in culturing and maintaining mammalian cells including stem cells.
- Perform basic mathematical operations as applied to chemistry and biology.
- Apply knowledge of basic molecular and cellular biology to the biomanufacturing process.
- Demonstrate proper techniques used for production and purification of biologics.

The requirements for the certificate are completion of the following courses with a grade of “C” or higher.

Courses Required for the Certificate of Accomplishment in Air-Conditioning and Refrigeration

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ET 135A Fund. of Air-Cond. and Refrig</td>
<td>2</td>
</tr>
<tr>
<td>ET 135B Fund. of Air-Cond. and Refrig</td>
<td>2</td>
</tr>
<tr>
<td>ET 135C Fund. of Air-Cond. and Refrig</td>
<td>2</td>
</tr>
<tr>
<td>ET 139C Engr’d. Plumbing Systems</td>
<td>3</td>
</tr>
<tr>
<td>Total Units</td>
<td>9</td>
</tr>
</tbody>
</table>

Biomanufacturing Certificate
Over the past several years an important change has been taking place in the biotechnology sector. Biotech companies are shifting their focus from exclusively research and development to a mix of drug production and research. This change has been precipitated by a rapidly increasing collection of FDA-approved biotech pharmaceuticals. The San Francisco Bay area has the highest concentration of biotech companies in the world.

The shift towards increasing production of biotech products created a demand for a new set of skills among entry-level workers in the field. The requirements for the certificate in biomanufacturing described here will prepare students for entry into the field as a bio-process technician, media prep technician, pharmaceutical materials specialist, or pharmaceutical manufacturing technician.

The biomanufacturing certificate program is open to anyone. High school algebra (or ET 108B), biology and chemistry are recommended. For more information, call 415-239-3627.

Learning Outcomes
Students in the Biomanufacturing certificate program will be prepared to work at a biotech company or an academic research lab as a technician in fermentation and protein purification. Upon completion of the certificate, students will be able to:
- Demonstrate understanding of and ability to work in a cGMP (current Good Manufacturing Practices) compliant environment.
- Demonstrate skills in culturing and maintaining mammalian cells including stem cells.
- Perform basic mathematical operations as applied to chemistry and biology.
- Apply knowledge of basic molecular and cellular biology to the biomanufacturing process.
- Demonstrate proper techniques used for production and purification of biologics.

The requirements for the certificate are completion of the following courses with a grade of “C” or higher.

Courses Required for the Certificate of Accomplishment in Biomanufacturing

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO 11 The Science of Living Organisms</td>
<td>4</td>
</tr>
<tr>
<td>BTEC 102 Bioreactor Technology</td>
<td>2.5</td>
</tr>
<tr>
<td>BTEC 103 Protein Purification</td>
<td>2.5</td>
</tr>
<tr>
<td>CHEM 32 Intro to Medical Chemistry</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 40 Introduction to Chemical Principles</td>
<td>4</td>
</tr>
<tr>
<td>Total Units</td>
<td>17</td>
</tr>
</tbody>
</table>

Recommended elective courses are: GEN 10; M B 12; BTEC 5, 12A, 12B, 21A
Biomedical Equipment Technician (BMET) Certificate

Students in Biomedical Equipment Technician (BMET) will develop in-depth knowledge of the fundamental concepts and practice in the use, maintenance, and repair of medical equipment such as heart-lung machines, dialysis machines, medical imaging machines, and defibrillators. Unlike electrocardiograph and electroencephalograph technicians, who specialize in one type of equipment, biomedical equipment technicians (BMET) will be familiar with many different medical devices. Biomedical equipment technicians work in hospitals and research organizations. They also work for manufacturers’ sales departments and for research and development departments. Most technicians work under the direction of biomedical or clinical engineers.

Learning Outcomes

Upon completion of the certificate, students will be able to:

- Identify and evaluate biomedical equipment in terms of engineering design, operations, and safety and the impact on human physiological systems.
- Describe and summarize medical equipment management program policies and regulatory compliance.
- Describe, verify, and troubleshoot medical equipment used in operating rooms, imaging systems, respiratory systems, anesthesia systems, and cardiac monitoring systems.
- Identify, diagnose, and repair medical communication network.

Students may obtain the Certificate of Accomplishment in Biomedical Equipment Technician (BMET) by completing the following courses with a grade of “C” or higher in each course. A minimum of two thirds of the courses must be taken at City College of San Francisco. Besides the courses listed below, an introductory course in AC/DC Electricity such as ELEC 101 or equivalent is required, which serves as a prerequisite for several BMET courses.

Courses Required for the Certificate of Accomplishment in Biomedical Equipment Technician

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANAT 14 Introduction to Human Anatomy and Physiology</td>
<td>4</td>
</tr>
<tr>
<td>BMET 250 Introduction to Biomedical Instrumentation</td>
<td>3</td>
</tr>
<tr>
<td>BMET 251 Introduction to Medical Equipment Management</td>
<td>3</td>
</tr>
<tr>
<td>BMET 252 Biomedical Instrumentation - Surgical Equipment</td>
<td>1</td>
</tr>
<tr>
<td>BMET 253 Biomedical Instrumentation - Medical Imaging Equipment</td>
<td>1</td>
</tr>
<tr>
<td>BMET 254 Biomedical Instrumentation - Respiratory Equipment</td>
<td>1</td>
</tr>
<tr>
<td>BMET 255 Biomedical Instrumentation - Anesthesia Equipment</td>
<td>1</td>
</tr>
<tr>
<td>BMET 256 Biomedical Instrumentation - Medical Equip. Networking</td>
<td>1</td>
</tr>
<tr>
<td>BMET 257 Biomedical Instrumentation - Equipment Monitoring</td>
<td>1</td>
</tr>
<tr>
<td>Total Units</td>
<td>16</td>
</tr>
</tbody>
</table>

Biotechnology Certificate

The biotechnology certificate program is designed to prepare students to work at a biotech company as a technician in quality control, research and development, or biomanufacturing. The biotechnology certificate is designed for students that have earned the biomanufacturing certificate or have a strong grasp of algebra, biology, and chemistry from previous academic or work experience. Call the Biotechnology Hotline at (415) 239-3627 for more information.

Students in the Biotechnology Certificate will be prepared to work at a biotech company or academic research institution.

Learning Outcomes

Upon completion of the certificate, students will be able to:

- Define and use SI units.
- Describe and apply molecular biology techniques in a project-related, step-wise manner, properly utilize materials, and properly operate and care for the standard laboratory equipment used in biotechnology research and assay laboratory techniques.
- Employ the principles of proper documentation handling in experimental data collection and record keeping including proper methods of laboratory report development and presentation using a computer for data analysis and report generation.
- Apply critical thinking in data analysis including statistical and graphical analysis, and in the interpretation of experimental results.

The requirements for the certificate are completion of the following courses with a grade of “C” or higher.

Courses Required for the Certificate of Accomplishment in Biotechnology

Students must complete the following courses with a grade of “C” or better:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BTEC 22 Immunoassay: ELISA</td>
<td>1</td>
</tr>
<tr>
<td>BTEC 24 Introduction to PCR</td>
<td>1</td>
</tr>
<tr>
<td>BTEC 15 Recombinant DNA Biotechnology (fall)</td>
<td>5</td>
</tr>
<tr>
<td>BTEC 120 Molecular and Cell Biotechnology (spring)</td>
<td>5</td>
</tr>
<tr>
<td>Total Units</td>
<td>12</td>
</tr>
</tbody>
</table>

The following courses are recommended but not required: M B 12, BTEC 93, BTEC 21A.

Bioprocess Instrumentation and Control Certificate

Process and control equipment in the biotech industry must be constantly maintained, repaired, upgraded, and validated. Instrumentation technicians are normally generalists, yet certification and FDA requirements require more industry specific specialization in the biotech field.

The set of skills acquired through this curriculum may be broadly applied in biotech companies throughout the San Francisco Bay area and beyond.

Learning Outcomes

Students in the Bioprocess Instrumentation and Control Certificate will be prepared to work at a biotech company or other industries, such as food, beverages, and petroleum, in which process control plays an important role. Upon completion of the certificate, students will be able to:
• Demonstrate knowledge of cGMP and GLP compliance.
• Prepare validation protocols for biotechnology equipment.
• Diagram and measure process control.
• Evaluate process control equipment.

The requirements for the certificate are completion of the following courses with a grade of "C" or higher.

Courses Required for the Certificate of Accomplishment in Bioprocess Instrumentation and Control

The one-year certificate in bioprocess instrumentation and control described here requires completion of the following courses with a grade of "C" or better:

Courses | Units
--- | ---
ET 108B Practical Math I or MATH 40 Elementary Algebra or a higher level math class | 3
BTEC 12A GLP and GMP Principles | 1
BTEC 12B GMP Compliance | 1
BTEC 221 Biotech Process Instrumentation | 2
BTEC 222 Biotech Calibration and Validation | 1
Total Units | 8

Recommended elective courses are: ELEC 101; BTEC 5; BTEC 101

Biotechnology Lab Assistant Certificate

Over the past several years the biotech industry has grown tremendously and this has generated an increasing number of entry-level positions. In turn there is now a large demand for workers who are qualified for these positions. This entryway certificate program is designed to give a rigorous and engaging introduction to the biosciences while strengthening the math and language skills needed for success in these entry level positions. Our one-year Laboratory Assistant Certificate will prepare students for jobs as media prep technicians, laboratory aids or laboratory safety monitors. No previous experience or coursework in science is necessary, and you will gain valuable work experience in an internship as a lab assistant.

Learning Outcomes

Students in the Biotechnology Lab Assistant Certificate will be prepared to work at a biotech company or academic research lab as a Laboratory Assistant. Upon completion of the certificate, students will be able to:

• Demonstrate knowledge of cGMP (current Good Manufacturing Practices) and GLP (Good Laboratory Practices) compliance.
• Perform basic mathematical operations in the context of chemistry and biology.
• Document, write, communicate and perform laboratory protocols.
• Prepare to interview for a laboratory assistant position.
• Demonstrate proficiency in the laboratory techniques commonly used in the biotechnology industry.

The requirements for the certificate are completion of the following courses with a grade of "C" or higher.

Courses Required for the Certificate of Accomplishment in Biotechnology Lab Assistant

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>First Semester</td>
<td></td>
</tr>
</tbody>
</table>
| BTEC 10 Research Skills for Career Opp. in Biology | 2
| BTEC 108A Practical Mathematics I | 3
| BTEC 107 Language Skills for Technicians | 3
| BTEC 14A Biotechnology Laboratory Techniques | 2

Second Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
</table>
| BTEC 12A GLP and GMP Principles | 1
| BTEC 12B GMP Compliance | 1
| BTEC 14B Biotechnology Internship | 4
| Total units | 16

Genomics Technology Certificate

The Genomics Technology Certificate program is designed to prepare students for employment in the research areas of genomics and proteomics. Students will gain relevant bioinformatics skills to access, query, and analyze various types of biological and clinical data from public databases, along with molecular biology laboratory skills needed to generate the data. Students will also receive an introduction to the technical computing skills needed to perform the above tasks.

The Genomics Technology Certificate is designed for students that have earned the Biomanufacturing or Biotechnology certificate or have a strong grasp of algebra, biology, and chemistry from previous academic or work experience.

Learning Outcomes

Upon completion of the certificate, students will be able to:

• Retrieve and analyze sequences and structures from public databases using bioinformatics tools such as BLAST, genome browsers, multiple sequence alignment programs, and molecular graphics programs.
• Compare the genome organization of model organisms by assessing their size and complexity of the coding and non-coding regions using data available from new generation DNA sequencing.
• Combine bioinformatics tools and molecular biology techniques to perform common tasks such as PCR or restriction enzyme analysis.
• Describe how genomics is applied to solve practical problems including diagnostics, forensics, drug discovery, and personal genomics.
• Use basic computer skills to store and manipulate small amounts of bioinformatics data.

The requirements for the certificate are completion of the following courses with a grade of "C" or better.

Courses Required for the Certificate of Accomplishment in Genomics Technology

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
</table>
| BTEC 201 Introduction to Bioinformatics | 2
| BTEC 202 Advanced Bioinformatics and Genomics | 2
| BTEC 115 Recombinant DNA Biotechnology | 5
| BTEC 24 Introduction to PCR | 1
| BTEC 25 Analytical PCR Technology | 1
| CS 160A Introduction to the UNIX Operating System | 2
| Total units | 13

Recommended elective courses: CSI13A

Stem Cell Technology Certificate

Students in the Stem Cell Technology certificate program will be prepared to work at a biotech company or an academic research lab as a technician in mammalian cell culture or adult and embryonic stem cell culture.
Learning Outcomes

Upon completion of the certificate, students will be able to:

- Demonstrate proper aseptic technique in laminar flow hood and laboratory bench
- Demonstrate skills in culturing and maintaining mammalian cells including stem cells
- Demonstrate and apply knowledge of fluorescent markers and stains in cell biology research
- Demonstrate and apply knowledge of methods of quantitating and analyzing cellular proteins
- Demonstrate and apply knowledge of methods of quantitating and analyzing cellular nucleic acids

The Stem Cell Technology certificate is designed for students that have earned the Biomanufacturing or Biotechnology certificate or have a strong grasp of algebra, biology, and chemistry form precious academic or work experience. The following courses (or the equivalent) are strongly recommended: One semester of elementary algebra (MATH 40 or 840 or ET 108B) or completion of a higher level math class, two semesters of chemistry (CHEM 32 and 40) or (CHEM 101A and 208A) and one semester of biology (BIO 11) or (BIO 100A). The certificate can be completed in 2 semesters. Students must complete the following courses with a grade of “C” or higher

**Courses Required for the Certificate of Accomplishment in Stem Cell Technology**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BTEC 21A Mammalian Cell Culture</td>
<td>2</td>
</tr>
<tr>
<td>BTEC 21B Fluorescent Cell Technology</td>
<td>2</td>
</tr>
<tr>
<td>BTEC 21C Stem Cell Technology</td>
<td>3</td>
</tr>
<tr>
<td>BTEC 22 Immunoassay: ELISA</td>
<td>1</td>
</tr>
<tr>
<td>BTEC 23 Western Blotting Techniques</td>
<td>1</td>
</tr>
<tr>
<td>BTEC 24 Introduction to PCR</td>
<td>1</td>
</tr>
<tr>
<td>BTEC 25 Analytical PCR Technology</td>
<td>1</td>
</tr>
<tr>
<td>Total Units</td>
<td>11</td>
</tr>
</tbody>
</table>

**Recommended Additional Coursework:** M B 12; GEN 10, 11; BIO 91

**Engineered Plumbing Systems Certificate**

This certificate includes instruction in the design and sizing of a wide variety of plumbing systems and the application of basic fluid flow principles. These skills are necessary in the design of domestic water, rainwater, sanitary drainage, fire protection, fuel gas, compressed air, hydronic and steam heating systems. Students completing this certificate program will be qualified to work alongside engineers as a plumbing systems designer.

**Learning Outcomes**

Upon completion of this certificate, students will be able to:

- Apply basic principles of plumbing systems to the design of drain, waste, vent, hot water, cold water and fuel gas systems.
- Interpret plumbing codes and regulations and apply the codes in a practical way.
- Calculate system and equipment sizes based on engineering principles for plumbing systems including building utilities, medical gas, compressed air, decorative pools, swimming pools water treatment, waste water treatment, automatic fire sprinklers.
- Propose solutions to problems dealing with basic principles of fluid flow including the general energy equation, friction losses, pressure on submerged surfaces, buoyant forces, flow measure-ment, pump and fan performance characteristics and flow of real fluids in open and closed conduits.
- Employ standard practices in fire protection system design.

Students must complete each course with a grade of “C” or higher. Students must complete 2 of 3 courses at City College of San Francisco.

**Courses Required for the Certificate of Accomplishment in Engineered Plumbing Systems**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ET 139A Engineered Plumbing Systems</td>
<td>3</td>
</tr>
<tr>
<td>ET 139B Engineered Plumbing Systems</td>
<td>3</td>
</tr>
<tr>
<td>ET 139C Engineered Plumbing Systems</td>
<td>3</td>
</tr>
<tr>
<td>Total Units</td>
<td>9</td>
</tr>
</tbody>
</table>

**Environmental Control Technology Certificate**

Environmental Control Technology is a hands-on program offering theoretical, technical, and problem-solving skills essential for employment in the heating, ventilation, & air conditioning (HVAC) industry and the refrigeration industry. Students completing the suggested curriculum can seek employment as refrigeration technicians, HVAC technicians, and building engineers/technicians.

**Learning Outcomes**

Upon completion of this certificate, students will be able to:

- Operate and maintain mechanical heating and cooling systems in buildings
- Ensure that HVAC equipment operates safely, economically, and within established limits
- Monitor meters, gauges, and computerized controls
- Manually control equipment and make adjustments using hand and power tools
- Routinely check safety devices, record data in logs, and identify any potential problems.

Students may obtain the Certificate of Accomplishment in Environmental Control Technology by completing the following courses with a grade of “C” or higher in each course. Students must complete at least 6 of the 10 courses at City College of San Francisco.

**Courses Required for the Certificate of Accomplishment in Environmental Control Technology**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ET 108A Practical Mathematics I</td>
<td>3</td>
</tr>
<tr>
<td>ELEC 101 Electronics I: Electronic Meas &amp; Passive Circ</td>
<td>3</td>
</tr>
<tr>
<td>ENRG 140 Principles in Environmental Control</td>
<td>1</td>
</tr>
<tr>
<td>ENRG 141 Blueprint Reading for HVAC</td>
<td>1</td>
</tr>
<tr>
<td>ENRG 142 Codes and Standards for HVAC</td>
<td>1</td>
</tr>
<tr>
<td>ENRG 143 Motors and Drives in HVAC</td>
<td>1</td>
</tr>
<tr>
<td>ENRG 144 Fundamentals of Air Conditioning</td>
<td>1</td>
</tr>
<tr>
<td>ENRG 145 HVAC Duct System Design</td>
<td>1</td>
</tr>
<tr>
<td>ENRG 146 Refrigeration Installation and Troubleshoot</td>
<td>1</td>
</tr>
<tr>
<td>ENRG 147 Energy Management and Efficiency</td>
<td>1</td>
</tr>
<tr>
<td>Total Units</td>
<td>14</td>
</tr>
</tbody>
</table>

**Sustainability Certificate**

The Sustainability Certificate Program is designed for working professionals, business owners, and students working towards a degree who wish to understand and apply sustainability concepts to their existing or future educational pathways and careers.

**Learning Outcomes:**

Students in the Sustainability Certificate Program (SUST) will acquire in-depth knowledge of human impacts on the environment as well
as principles and practices to promote environmental protection, economic viability, and social equity in their careers and given fields of interest. Upon completion of the certificate, students will be able to:

- Analyze the scientific evidence underlying environmental and resource issues and relate the findings to their political, social, and historical context.
- Compare and contrast the pivotal role that energy occupies in modern society and the ongoing tension between sustainability and energy provisioning and management.
- Analyze the science and mechanisms, and appraise the benefits and negatives attributed to the most promising renewable energy sources as well as the most prevalent sources of energy in use today.
- Critically evaluate proposed solutions to environmental and resource issues especially for their integration of environmental, economic and social goals.
- Apply principles and practices of sustainability to their lifestyle choices and chosen professions.

Participants may obtain the certificate by completing the following courses at City College of San Francisco with a grade of “C” or higher in each course. The certificate can be awarded in as early as two semesters or can be completed over several years.

Courses Required for the Certificate of Accomplishment in Sustainability

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO 31 Introduction to Environmental Science</td>
<td>3</td>
</tr>
<tr>
<td>ENRG 3 Introduction to Alternative Energy</td>
<td>3</td>
</tr>
<tr>
<td>GNBS 125 Green and Sustainable Business</td>
<td>3</td>
</tr>
<tr>
<td>SUST 91 Applied Research in Sustainability</td>
<td>2</td>
</tr>
<tr>
<td>Elective Courses: Choose 6 units from the following:</td>
<td></td>
</tr>
</tbody>
</table>

Biological Department

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECOL 10 Introduction to Ecology</td>
<td>3</td>
</tr>
<tr>
<td>BIO 26 Habitat Restoration Field Studies</td>
<td>1</td>
</tr>
<tr>
<td>BIO 30 Ecology and the Human Environment</td>
<td>3</td>
</tr>
<tr>
<td>BIO 80C Topics in Biology-Agroecology</td>
<td>1-3</td>
</tr>
<tr>
<td>ECOL 20 Introduction to Ecology with Laboratory/Field Study</td>
<td>4</td>
</tr>
</tbody>
</table>

Business Department

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>GNBS 127 Green and Sustainable Organization</td>
<td>3</td>
</tr>
</tbody>
</table>

Earth Sciences Department

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEOG 1 Physical Geography</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 4 Cultural Geography</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 7 Economic Geography</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 41A Current Topics in Earth Science: Climate Change</td>
<td>1</td>
</tr>
<tr>
<td>GEOL 30 Environmental Geology</td>
<td>3</td>
</tr>
<tr>
<td>GEOL 30L Environmental Geology Lab</td>
<td>1</td>
</tr>
</tbody>
</table>

Engineering and Technology Department

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BTEC 5 Briefings In Biotechnology</td>
<td>1</td>
</tr>
<tr>
<td>BTEC 223 Introduction to Environmental Monitoring</td>
<td>1</td>
</tr>
<tr>
<td>ENRG 3L Introduction to Alternative Energy Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>ENRG 130 Residential Energy and Efficiency Measures</td>
<td>2</td>
</tr>
</tbody>
</table>

Social Sciences Department

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>POLS 22 Environmental Politics and Policy</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Units .................................................. 17

Basic Electronics Certificate

The Certificate in Basic Electronics includes instruction in the fundamental principles of electronics. Students will be able to apply this knowledge and understanding to perform tests, troubleshooting and repair of analog and digital electronic circuits and instruments. Students will be instructed in the building of circuits that demonstrate an understanding of basic electronics device principles. Students will also learn how to develop procedural methods in troubleshooting and repair of analog and digital circuits and instruments.

Learning Outcomes

Upon completion of the Basic Electronics Certificate, students will be able to:

- Construct electronic circuits from schematics and demonstrate their function.
- Verify circuit performance using typical electronic test and measurement equipment following industry accepted procedures.
- Perform calculation as relates to circuit components and parameters.
- Integrate discrete and IC components into functioning end products.
- Resolve schematic and build errors. Document and describe steps taken.

Students may obtain the Certificate of Accomplishment in Basic Electronics by completing the following courses with a grade of “C” or higher in each course. A minimum of two of the courses must be taken at City College of San Francisco.

Courses Required for the Certificate of Accomplishment in Basic Electronics

<table>
<thead>
<tr>
<th>Courses</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ET 50 Technical Math</td>
<td>4</td>
</tr>
<tr>
<td>ELEC 101 Electronics I: Electronic Measurements</td>
<td>3</td>
</tr>
<tr>
<td>ELEC 102A Electronics II: Basic Act Ana Cir</td>
<td>3</td>
</tr>
<tr>
<td>ELEC 102B Electronics II: Basic Digi Cir &amp; Meas</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Units .................................................. 13

Intermediate Electronics Certificate

The Certificate in Intermediate Electronics provides more advanced electronics instruction building upon foundations provided in the Basic Electronics Certificate. Students will be instructed in the implementation of projects utilizing industry standard electronic devices, learning their associated functions and principles. With these additional skills and knowledge, the student will be able to resolve common software, hardware, and interface errors in electronic systems of increasing complexity.

Learning Outcomes

Upon completion of the Intermediate Electronics Certificate, students will be able to:

- Construct electronic circuits using discrete and IC components from schematics and demonstrate its function.
- Resolve and verify circuit performance using typical electronic test and measurement equipment following industry accepted procedures.
- Confirm and determine circuit parameter and component values via related rules and calculation.
- Design and merge analog and digital technology in modern radio circuits.
- Describe a digital design, implement and test it using design software tools.
- Understand the basic architecture of a computer system and program a micro-controller to interface to electrical and electromechanical devices.

Students may obtain the Certificate of Accomplishment in Intermediate Electronics by completing the following courses with a grade of “C” or higher in each course. A minimum of two of the courses must be taken at City College of San Francisco.

**Courses Required for the Certificate of Accomplishment in Intermediate Electronics**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ELEC 103A Electronics III: Inter Ana Cir &amp; Meas</td>
<td>3</td>
</tr>
<tr>
<td>ELEC 103B Electronics III: Inter Digi Cir &amp; Meas</td>
<td>3</td>
</tr>
<tr>
<td>ELEC 104A Electronics IV: Ana &amp; Digi Comm</td>
<td>3</td>
</tr>
<tr>
<td>ELEC 104B Electronics IV: Micro-control Intf.</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Units</strong></td>
<td><strong>12</strong></td>
</tr>
</tbody>
</table>

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**Computer Aided Design (CAD)-Architectural Certificate**

This certificate includes instruction in technical drawing and the use of software tools to create 2-dimensional and 3-dimensional models. Students will gain significant practice in creating models through extensive lab work using industry standard software tools. This certificate program provides skills valuable to architects, construction trades, and engineers in industries where high quality technical drawings are needed.

**Learning Outcomes**

Upon completion of this certificate, students will be able to:

- Effectively and efficiently create architectural drawings using CAD and illustration software programs.
- Demonstrate the drawing and illustration skills essential for employment in architectural, engineering, construction and manufacturing industries.
- Plan and evaluate which software or technique is most effective for a particular goal.
- Draw and dimension precisely as per ANSI standards.
- Demonstrate familiarity with industry standards and their purpose in technical documents and illustrations.

Students must complete each course with a grade of “C” or higher.

**Courses Required for the Certificate of Accomplishment in Computer Aided Drafting**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAD 180 Intro to Technical Drawing</td>
<td>1</td>
</tr>
<tr>
<td>CAD 181 Intro to Comp Aided Drafting</td>
<td>3</td>
</tr>
<tr>
<td>CAD 182 Inter Comp Aided Drafting</td>
<td>3</td>
</tr>
<tr>
<td><strong>Elective Courses: Choose 9 units from the following:</strong></td>
<td></td>
</tr>
<tr>
<td>CAD 183 Adv Comp Aided Drafting-3D Mod</td>
<td>3</td>
</tr>
<tr>
<td>CAD 184 Structural CAD Drafting</td>
<td>3</td>
</tr>
<tr>
<td>CAD 187 HVAC/Pipe CAD Design</td>
<td>3</td>
</tr>
<tr>
<td>CAD 188 Adv CAD-Customizing &amp; AutoLISP</td>
<td>3</td>
</tr>
<tr>
<td>CAD 190 Adv CAD-Intro to Solid Works</td>
<td>3</td>
</tr>
<tr>
<td>CAD 191 Adv CAD-Rendering &amp; Animation</td>
<td>3</td>
</tr>
<tr>
<td>CAD 192 Adv CAD-CAD Based Multimedia</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Units</strong></td>
<td><strong>16</strong></td>
</tr>
</tbody>
</table>

Students who have completed ET 104, or who can demonstrate prior drafting and drawing skills by performing at satisfactory level on a test can have CAD 180 waived from the above requirements.

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**Manufacturing and Fabrication Certificate**

This certificate program is designed to provide the student with instruction in basic welding, machining, and fabrication processes. Students completing this certificate program will be qualified for manufacturing apprenticeships or internships.

**Learning Outcomes**

Upon completion of this certificate, students will be able to:

- Weld structural steel using arc welding equipment
- Plan, design, and fabricate basic multi-part prototypes
- Safely operate machine shop and welding equipment

Students must complete each course with a grade of “C” or higher.

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAD 190 Adv. CAD-Intro to SolidWorks</td>
<td>3</td>
</tr>
<tr>
<td>CAD 191 Adv. CAD-Rendering and Animation</td>
<td>3</td>
</tr>
<tr>
<td>CAD 192 Adv. CAD-CAD Based Multimedia</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Units</strong></td>
<td><strong>16</strong></td>
</tr>
</tbody>
</table>
Managing multi-vendor medical equipment maintenance in compliance with state regulatory requirements and standards of hospital and health organizations is covered in this course. CSU

BMET 252. Biomedical Instrumentation - Surgical Equipment (1)
Lec-9, lab-27 (total hrs)
Prereq.: BMET 250
This short course is a part of a series of courses covering biomedical instrumentation. Course contents include the theories of operation, circuit analyses, troubleshooting techniques, and medical applications of a variety of medical devices commonly found in Operating Rooms (ORs). CSU

BMET 253. Biomedical Instrumentation - Medical Imaging Equipment (1)
Lec-9, lab-27 (total hrs)
Prereq.: BMET 250
This short course is a part of a series of courses covering biomedical instrumentation. Course contents include the theory of operation, circuit analysis, troubleshooting techniques, and medical applications of a variety of medical imaging systems. CSU

BMET 254. Biomedical Instrumentation - Respiratory (1)
Lec-9, lab-27 (total hrs)
Prereq.: BMET 250
This short course is a part of a series of courses covering biomedical instrumentation. This course focuses on respiratory care equipment - its theory of operation, internal circuitry, troubleshooting techniques, maintenance, calibrating, and medical application in Intensive Care Units and Operating Rooms. CSU

BMET 255. Biomedical Instrumentation - Anesthesia Equipment (1)
Lec-9, lab-27 (total hrs)
Prereq.: BMET 250
This short course is a part of a series of courses covering biomedical instrumentation. This course focuses on anesthesia care equipment - its theory of operation, internal circuitry, troubleshooting techniques, maintenance, calibrating, and medical application in Intensive Care Units and Operating Rooms. CSU

BMET 256. Biomedical Instrumentation - Medical Equipment Networking Overview (1)
Lec-9, lab-27 (total hrs)
Prereq.: BMET 250
This short course is a part of a series of courses covering biomedical instrumentation. This course focuses on medical device networking, its relationship with hospital communication protocols, and identifying and troubleshooting linked multiple systems. CSU

BMET 257. Biomedical Instrumentation - Cardiologic Equipment Monitoring (1)
Lec-9, lab-27 (total hrs)
Prereq.: BMET 250
This short course is a part of a series of courses covering biomedical instrumentation. This course focuses on patient cardiological monitoring - real-time as well as diagnostic monitoring - order to perform systems level troubleshooting. CSU

Biotechnology

Credit, Degree Applicable Courses:
BTEC 5. Briefings in Biotechnology (1)
Lec-18 (total hrs) P/NP Available
Underlying principles of molecular biology and the laboratory procedures involved in the biotechnology industry. Examples of new

Courses Required for the Certificate of Accomplishment in Geographic Information Systems (GIS) Certificate

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEOG/GIS II Introduction to GIS</td>
<td>3</td>
</tr>
<tr>
<td>GEOG/GIS III Intermediate GIS Applications</td>
<td>3</td>
</tr>
<tr>
<td>GEOG/GIS II Advanced GIS</td>
<td>3</td>
</tr>
<tr>
<td>Total Units</td>
<td>9</td>
</tr>
</tbody>
</table>

Learning Outcomes

Students will develop an understanding of the fundamental concepts and practice of Geographic Information Systems (GIS) and will be able to apply this knowledge and hands-on skills to various fields including, but not limited to, planning, engineering, geography, criminology, real estate, biotech, public utilities, transportation, forestry, ecology, resource management, emergency response, business/marketing.

Requirements for the Certificate of Accomplishment: Students may obtain the Certificate of Accomplishment in Geographic Information Systems (GIS) by completing the following courses with a grade of "C" or higher in each course. A minimum of two of the courses must be taken at City College of San Francisco.

Courses Required for the Certificate of Accomplishment in Geographic Information Systems (GIS)

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEOG/GIS II Introduction to GIS</td>
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<tr>
<td>GEOG/GIS III Intermediate GIS Applications</td>
<td>3</td>
</tr>
<tr>
<td>GEOG/GIS II Advanced GIS</td>
<td>3</td>
</tr>
<tr>
<td>Total Units</td>
<td>9</td>
</tr>
</tbody>
</table>

Biomedical Equipment Technology

Credit, Degree Applicable Courses:
BMET 250. Introduction to Biomedical Instrumentation (3)
Lec-3
Prereq.: ANAT 14 and ELEC 101
A study of biomedical instrumentation and equipment used in the health care field emphasizing critical care applications. Bioelectric potentials will be examined and analyzed with electrocardiographs, electroencephalographs, and similar equipment. Other subjects reviewed include but are not limited to: blood pressure, flow and heart sounds, operation principles of transducers, patient monitors, equipment defibrillators and pacers. CSU

BMET 251. Introduction to Medical Equipment (3)
Lec-3, field trips
Prereq.: BMET 250
Managing multi-vendor medical equipment maintenance in compliance with state regulatory requirements and standards of hospital and health organizations is covered in this course. CSU

BMET 252. Biomedical Instrumentation - Surgical Equipment (1)
Lec-9, lab-27 (total hrs)
Prereq.: BMET 250
This short course is a part of a series of courses covering biomedical instrumentation. Course contents include the theories of operation, circuit analyses, troubleshooting techniques, and medical applications of a variety of medical devices commonly found in Operating Rooms (ORs). CSU

BMET 253. Biomedical Instrumentation - Medical Imaging Equipment (1)
Lec-9, lab-27 (total hrs)
Prereq.: BMET 250
This short course is a part of a series of courses covering biomedical instrumentation. Course contents include the theory of operation, circuit analysis, troubleshooting techniques, and medical applications of a variety of medical imaging systems. CSU

BMET 254. Biomedical Instrumentation - Respiratory (1)
Lec-9, lab-27 (total hrs)
Prereq.: BMET 250
This short course is a part of a series of courses covering biomedical instrumentation. This course focuses on respiratory care equipment - its theory of operation, internal circuitry, troubleshooting techniques, maintenance, calibrating, and medical application in Intensive Care Units and Operating Rooms. CSU

BMET 255. Biomedical Instrumentation - Anesthesia Equipment (1)
Lec-9, lab-27 (total hrs)
Prereq.: BMET 250
This short course is a part of a series of courses covering biomedical instrumentation. This course focuses on anesthesia care equipment - its theory of operation, internal circuitry, troubleshooting techniques, maintenance, calibrating, and medical application in Intensive Care Units and Operating Rooms. CSU

BMET 256. Biomedical Instrumentation - Medical Equipment Networking Overview (1)
Lec-9, lab-27 (total hrs)
Prereq.: BMET 250
This short course is a part of a series of courses covering biomedical instrumentation. This course focuses on medical device networking, its relationship with hospital communication protocols, and identifying and troubleshooting linked multiple systems. CSU

BMET 257. Biomedical Instrumentation - Cardiologic Equipment Monitoring (1)
Lec-9, lab-27 (total hrs)
Prereq.: BMET 250
This short course is a part of a series of courses covering biomedical instrumentation. This course focuses on patient cardiological monitoring - real-time as well as diagnostic monitoring - order to perform systems level troubleshooting. CSU

Biotechnology

Credit, Degree Applicable Courses:
BTEC 5. Briefings in Biotechnology (1)
Lec-18 (total hrs) P/NP Available
Underlying principles of molecular biology and the laboratory procedures involved in the biotechnology industry. Examples of new
products, processes, and prospects for the future in medicine, environmental restoration, forensics, and agriculture. Implications for society and governmental regulations. Features lectures by scientists currently working in the biotechnology industry. CSU

Underlying principles of molecular biology and the laboratory procedures involved in the biotechnology industry. Examples of new products, processes, and prospects for the future in medicine, environmental restoration, forensics, and agriculture. Implications for society and governmental regulations. Features lectures by scientists currently working in the biotechnology industry. CSU

Formerly BIO 72B.

BTEC 6. Basics of Cell Culture (1)
Lec-9, lab-27 (total hrs) P/NP available
Advis: BTEC 5
Introduction to cell culture and stem cell biology and techniques. Topics include aseptic techniques, counting cells, cell/stem cell culture maintenance, transfection, cytotoxicity, fluorescence labeling and stem cell differentiation. Practical experience includes use of common laboratory equipments such as micropipettes, centrifuges, inverted and fluorescent microscopes. CSU

BTEC 10. Research Skills for Career Opportunities in Biology (2)
Lec-1, lab-3, field trips P/NP available
Introduction to the skills and concepts necessary to work in the biotechnology industry, allied health or other biology-related fields. Basic concepts and lab skills will be taught at the college. Formerly BIO 72B.

BTEC 12A. GLP and GMP Principles (1)
Lec-18 (total hrs), field trips P/NP available
General overview of Food and Drug Administration regulations as they pertain to the biotechnology field. The course will emphasize cGLP, cGMP and SOP practices that pertain to biopharmaceutical laboratory and manufacturing facilities. CSU

BTEC 12B. GMP Compliance (1)
Lec-18 (total hrs), field trips P/NP available
Prereq: BTEC 12A
Detailed discussion of the systems (procedures and documents) required to achieve compliance with the FDA Good Manufacturing Practice regulations as they relate to biopharmaceutical manufacturing. CSU

BTEC 14A. Biotechnology Laboratory Techniques (2)
Lec-1.5, lab-1.5
Prereq: Completion/concurrent enrollment in BTEC 10
A laboratory focused introduction to laboratory techniques needed for entry-level positions in the biotechnology industry, especially in the research field. CSU

BTEC 14B. Biotechnology Internship Support(4)
Lec-4, field trips
Prereq: BTEC 14A
Coreq: BTEC 93
This class provides the necessary tools for students placed in biotechnology-related internships in Bay Area bioscience laboratories and companies. Types of internships may include, but are not limited to, glassware washers, laboratory assistants, animal technicians, biomanufacturing technicians, calibration technicians, environmental health and safety technicians, quality control or assurance technicians. CSU

BTEC 15. Organizing a Scientific Conference (2)
Lec- 32, lab-16 (total hrs) P/NP Only
Prereq: BTEC 14A
This class provides students with an overview of Bay Area Biotech companies and institutes and the skills to network with professionals. Students will use these skills to organize and run a scientific conference with poster presentations, professional workshops and seminars where they will connect with Biotech professionals and other students. CSU

BTEC 21A. Mammalian Cell Culture (2)
Lec-36, lab-18 (total hrs), field trips P/NP available
Advis: BIO 11 or 101A; and CHEM 32 or 40 or 101A; and MATH 40 or ET 108A
Introduction to techniques for culturing mammalian cells, including media preparation, sterile technique, freezing, thawing, subculturing, and maintaining cells. Theory includes the selection of media, maintaining sterile conditions, preventing contamination, as well as cellular responses to DNA damage and gene expression. Practical experience includes the proper use and care of equipment for culturing cells. CSU

Formerly BTEC 21.

BTEC 21B. Fluorescent Cell Technology (2)
Lec-36, lab-18 (total hrs), field trips P/NP available
Prereq: BTEC 21 or 21A
Introduction to advanced techniques in the study of normal and mutant tissue culture cells including organelle visualization with various fluorophores, transfection with fluorescent markers, and immunostaining. In depth coverage of the theory behind and use of fluorescent microscopy and current research methods using fluorescent technology, including apoptosis assays and immunohistochemistry, DNA microarrays and FACS analysis. CSU

BTEC 21C. Stem Cell Technology (3)
Lec-48, lab-24 (total hrs), field trips P/NP available
Prereq: BTEC 21B
A general introduction to the principles of stem cell biology. Topics include embryonic stem cells in early development, adult stem cells, potential applications of stem cell culture and ethical issues involved in stem cell research. Emphasis on laboratory techniques including proper use and care of equipment, flow cytometry, isolation of mouse adult stem cells, and culture of mouse embryonic stem cells. CSU

BTEC 21D. Introductory Stem Cell Technology Internship Support (4)
Lec-4
Prereq: BTEC 21C
Coreq: BTEC 93
Provides the necessary tools for students placed in off-campus stem cell biology internships in companies and research laboratories. Types of internships may include, but not be limited to, differentiation of pluripotent stem cells, FACS analysis, primary cell culture, propagation of iPSC cells, immunolocalization, microarray analysis, and tumor cell characterization. CSU

BTEC 21E. Advanced CIRM Internship Support (4)
Lec-4
Prereq: BTEC 21D
Coreq: BTEC 93
Advanced of complex analysis and enhanced scientific presentation skills necessary for continuing students placed in off-campus stem cell biology internships. Types of internships may include, but are not limited to, differentiation of pluripotent stem cells, FACS, cell culture, propagation of iPSC cells, immunolocalization, microarray analysis and tumor cell characterization. CSU
BTEC 22. Immunoassay: ELISA (1)
Lec-14, lab-10 (total hrs), field trips P/NP available
Underlying principles of immunoassay with focus on ELISA. Examples of new procedures, technical advances, past, present and future prospects in the pharmaceutical, biotechnology and clinical laboratory settings will be discussed. Implications for society and governmental regulations will be addressed. Course will feature hands on exercises emphasizing all aspects of ELISA. CSU

BTEC 23. Western Blotting Techniques (1)
Lec-16, lab-8 (total hrs), field trips P/NP available
Underlying principles of immunoblots with focus on Western blotting. Examples of new procedures, technical advances, past, present and future prospects in the pharmaceutical, biotechnology and clinical laboratory settings will be discussed. Implications for society and governmental regulations will be addressed. Course will feature hands-on laboratory exercises emphasizing all aspects of Western blotting. CSU

BTEC 24. Introduction to PCR (1)
Lec-16, lab-8 (total hrs), field trips P/NP available
An introduction to the theoretical aspects and laboratory techniques of the Polymerase Chain Reaction (PCR). Students gain practical experience performing PCR as well as experimenting with optimization of the reaction. Applications of PCR used in DNA fingerprinting, diagnostic medicine, genome mapping, evolutionary relationship determination, and epidemiology will be discussed. CSU

BTEC 25. Analytical PCR Technology (1)
Lec-16, lab-8 (total hrs), field trips P/NP available
Prereq.: Completion of BTEC 24 or demonstration of BTEC 24 exit skills
A course in the theory and practice of current polymerase chain reaction (PCR) analytical methods. Students will gain laboratory experience in performing techniques such as reverse transcriptase PCR (RT-PCR), real-time PCR, inverse PCR, construction of oligonucleotide DNA microarrays, site-directed mutagenesis, and strategies for cloning genes from organisms lacking genome projects. Experimental optimization will be emphasized. CSU

BTEC 26EX. Southern and Northern Blotting (.5)
Lec-16, lab-8 (total hrs), field trips P/NP available
Advise: BIO 110 or 101A or 65
An advanced course in molecular biology techniques that extends on topics covered in Biology 65. Students will become proficient in the skills of Southern and Northern blotting. Students will isolate nucleic acid (DNA and RNA), prepare them for the appropriate agarose gel electrophoresis protocols, prepare DNA probes, set-up nucleic acid hybridizations, and complete and interpret non-radioactive Southern and Northern blots. CSU

BTEC 93. Biotechnology Work Experience (1, 2, 3, 8)
Work exp.-5, 10, 15 or 40 hrs P/NP available
Repeat: max. 16 units
Students will be able to get work experience through internships while working towards their A.S. in biotechnology. This valuable industry experience will help train them for future jobs in biotechnology. In addition, they will apply their skills gained from previous biotechnology courses to real life laboratory situations. CSU

BTEC 101. Fermentation and Protein Purification (5)
Lec-4, lab-4, field trips P/NP available
Prereq.: CHEM 32
Skills needed to serve as a technician in biotechnology production.

BTEC 102. Bioreactor Technology (2.5)
Lec-34, lab-34 (total hrs), field trips P/NP Available
Prereq.: BIO 11 or BTEC 10
Skills needed to serve as a technician in biotechnology production. Students grow and monitor bacterial and yeast cultures emulating the large-scale production used in industry. Cleaning, sterilization, aseptic inoculation, operation and monitoring of fermenters and bioreactors. Current Good Manufacturing Practices (cGMP), Current Good Laboratory Practices (cGLP) and Standard Operating Procedures (SOP) will be emphasized. CSU

BTEC 103. Protein Purification (2.5)
Lec-34, lab-34 (total hrs), field trips P/NP Available
Prereq.: CHEM 32 and BIO 11 or BTEC 10
Advise: BTEC 102 or BTEC 120
An introduction to protein purification techniques including sample preparation, column chromatography, and analysis of purification. Hands on training with manual and automated FPLC chromatography systems used in industry and research laboratories. Purification analysis includes gel electrophoresis, specific activity, and mass balance calculations. CSU

BTEC 107/ET 107. Language Skills for Technicians (3)
Lec-3, conf-1
Introductory level lecture course covering basic scientific language and concepts of biology and chemistry, and the academic study skills needed to succeed in science courses. An orientation to the field of biotechnology and professional opportunities. CSU

BTEC 108A. Practical Mathematics I (3)
Lec-3, conf-1
Concepts, techniques and applications of arithmetic and elementary algebra emphasizing applications to practical problems. Interactive and traditional problem solving methods. Class interactive group exercises applying mathematical techniques to various applications and real world problems.

BTEC 115. Recombinant DNA Biotechnology (5)
Lec-3, lab-6, field trips P/NP available
Advise: BIO 11
An in-depth coverage of recombinant DNA/genetic engineering concepts and principles with a strong emphasis on the laboratory procedures involved in DNA manipulation. CSU

BTEC 120. Molecular and Cell Biotechnology (5)
Lec-3, lab-6 P/NP available
Advise: BIO 11
A thorough introduction to the principles and techniques of molecular and cell biology. This is a required course for the Biotechnology Technician Preparation curriculum. CSU

Formerly BIO 65.
BTEC 201. Introduction to Bioinformatics (2)
Lec-36 (total hrs)  P/NP available
Prereq.: CAD 181, BIO 111 or BIO 100A; CHEM 31 or CHEM 40;
Introduction to genomics and the tools, techniques and databases used
in bioinformatics. Topics include molecular biology, genome sequence
acquisition, online databases and software used in biotechnology.
Hands-on practice includes web programs for aligning sequences,
comparing DNA or protein sequences, retrieving genomic and clinical
data. Emphasis is on online bioinformatics databases. CSU

BTEC 202. Advanced Bioinformatics and Genomics (2)
Lec-36 (total hours)  P/NP available
Prereq.: BTEC 201
Advanced topics in genomics and bioinformatics including applications
to problems such as human disease, forensics, and agriculture.
Topics include integrated genomic databases, protein alignments, pro-
tein families, protein structure, proteomics, and microarrays. Critical
background material in molecular and cell biology will be presented in
the course. CSU

BTEC 221. Biotech Process Instrumentation (2)
Lec-1, lab-3
Prereq.: ET 108A/BTEC 108A/CDEV 108A or MATH 40 or demonstra-
tion of ET 108A or MATH 40 exit skills
An introduction to the theory and application of process control and
instrumentation as applied to the Biotechnology Industry, Survey of
Reliability. Data Loggers. CSU

BTEC 222. Biotech Calibration and Validation (1)
Lec-9, lab-27 (total hours)
Prereq.: BTEC 221
An introduction to the theory and application of calibration and vali-
dation as applied to the Biotechnology Industry. CSU

BTEC 223. Introduction to Environmental Monitoring (1)
Lec-0.5, lab-1.5, field trips  P/NP available
Study of regulations, protocols and procedures for collection and stor-
age of air, soil and liquid samples. Quality assurance/quality control,
safety, site selection, sample storage and preservations. Practical expe-
rience includes use of portable instruments and immunoassay kits for
chemical contaminant. Microbiological laboratory techniques for
analysis of soil and water samples. CSU

Computer Aided Drafting (CAD)

Credit, Degree Applicable Courses:

CAD 180. Introduction to Technical Drawing (1)
Lec.-5, lab.-1.5
Introduction to engineering and technical drawing techniques, the
systems of drawings and their applications in drafting, and the basic shape
description of products. Technical sketching; dimensioning; sections
and applications of orthographic projection standards in technical
documents. CSU

CAD 181. Introduction to Computer Aided Drafting - CAD I (3)
Lec-2, lab-2
Prereq.: CAD 180, or ET 104, or 1 yr HS drafting or consent of
instructor

Students must have an understanding of orthographic projec-
tion, isometric drawing techniques and dimensioning

according to ANSI standards.

Introduction to CAD hardware and software operations and their
applications in drafting; basic shape description, display, editing, 
dimensioning and plotting. CSU/UC

Formerly ET 181.

CAD 182. Intermediate Computer-Aided Drafting - CAD II (3)
Lec-2, lab-2
Prereq.: CAD 181 or demonstration of CAD 181 exit skills
(equivalent course work or 100 hrs of AutoCAD industrial
work experience in basic AutoCAD)

Industrial application of AutoCAD drafting editor on large-scale
projects. Various topics include model layout, plotting to scale, blocks,
external referenced files, attributes and extraction of “non-graphic”
data stored within the drawing files, the control of display to reduce
regeneration time, three-dimensional coordinate system, 3D wire-
frame and surface modeling, the operation of various hardcopy output
devises including pen plotting and printer plotting. CSU

Formerly ET 182.

CAD 183. Advanced Computer Aided Drafting - 3D Modeling (3)
Lec-2, lab-2
Prereq.: CAD 181 or demonstration of CAD 181 exit skills
(equivalent course work or 200 hrs of AutoCAD industrial
work experience)

Introduction to three-dimensional (3D) modeling, application of com-
puter aided drafting software for the creation of wireframe, surface,
and solid modeling. CSU

Formerly ET 183C.

CAD 184. Structural CAD Drafting (3)
Lec-2, lab-2
Prereq.: ARCH 214, CAD 181 or demonstration of CAD 181 exit
skills (equivalent course work or 200 hrs of AutoCAD indus-
trial work experience)

Structural design theory. Use of Computer Aided Drafting (CAD) to
generate steel and concrete details. CSU

Formerly ET 184.

CAD 187. HVAC/Pipe CAD Design (3)
Lec-2, lab-2
Prereq.: ARCH 214 or CAD 181 or equivalent training
HVAC and Piping system design theory. Introduction to computer
generated documents to specify HVAC (Heating, Ventilation and Air
Conditioning) and piping systems layout and details. This course will
have a mechanical design emphasis, introducing terms and component
equipment common to these systems. Emphasis will be placed on the
standards used for process pipe and HVAC industry drawings. Design
theory will include the determination of equipment sizes. CSU

Formerly ET 187.

CAD 188. Advanced Computer Aided Drafting – Customizing and
AutoLISP (3)
Lec-2, lab-2
Prereq.: CAD 181 or demonstration of CAD 181 exit skills
(equivalent course work or 100 hours of AutoCAD industrial
work experience)

An introduction to the customization and automation of AutoCAD for
the application to any specific discipline. Emphasis is on the improve-
m ent of drawing productivity by enhancing AutoCAD’s capabilities.
The course will include creating various menus, creating custom
macros, instruction on the use of existing AutoLISP programs and
introduction to programming in AutoLISP. CSU
CAD 190. Advanced Computer Aided Drafting - Introduction to SolidWorks (3)
Lec-2, lab-2
Overview of extending CAD-based graphics into 3-dimensional parametric modeling, realistic rendering, animation of assemblies, and exploded views. Introduction to related software (such as SolidWorks and Inventor). Experience creating a computer-generated physical 3D model using a state-of-the-art 3D printer. CSU

CAD 191. Advanced Computer-Aided Drafting - Rendering and Animation (3)
Lec-2, lab-2
Prereq.: CAD 181 or demonstration of CAD 181 exit skills (equivalent course work or 100 hrs of AutoCAD industrial work experience)
Introduction to computer generated rendered images and animation. CSU
Formerly ET 183D.

CAD 192. Advanced Computer Aided Drafting - CAD Based Multimedia (3)
Lec-2, lab-2
Prereq.: CAD 181 or equivalent course work or 100 hours of industrial work experience in basic AutoCAD
Overview of extensions of CAD-based graphics into various types of media, including illustration, rendering, animation, and output to an interactive presentation, print, and web page design. CSU

Electronics

Credit, Degree Applicable Courses:
ELEC 101. Electronics I: Electronic Measurements and Passive Circuits (3)
Lec-2, lab-2
Prereq.: ET 108A/BTEC 108A/CDEV 108A or MATH 35 or demonstration of ET 108A or MATH 35 exit skills
This course covers the construction and analysis of basic electronic circuits including capacitors and inductors. The student will learn to use the multi-meter to measure DC and AC voltages and currents in resistive series/parallel circuits and the oscilloscope to measure AC and pulsed waveforms, and phase and time delay measurements. The student will also learn the use of computer simulation software to analyze circuits. CSU

ELEC 102A. Electronics II: Basic Active Analog Circuits and Measurements (3)
Lec-2, lab-2
Prereq.: ELEC 101 or demonstration of ELEC 101 exit skills
This course covers diode characteristics, DC power supplies, bipolar transistors, simple one-stage amplifiers, constant current sources, and transformers. The student will learn the intermediate use of the oscilloscope and multi-meter. There will be an emphasis on electronic projects. CSU

ELEC 102B. Electronics II: Basic Digital Circuits & Measurements (3)
Lec-2, lab-2
Prereq.: ELEC 101 or demonstration of ELEC 101 exit skills
This course covers Boolean logic concepts, flip-flops, memory, counters and clocks, display decoders and timers. The student will learn the analysis of digital logic principles by building and testing basic functional digital electronics kits. CSU

ELEC 103A. Electronics III: Intermediate Analog Circuits and Measurements (3)
Lec-2, lab-2
Prereq.: ELEC 102A and 102B or demonstration of ELEC 102A and 102B exit skills
This course is an introduction to modern analog electronic circuits, including field effect transistor basics, analog amplifiers, and operational amplifiers. CSU

ELEC 103B. Electronics III: Intermediate Digital Circuits and Measurements (3)
Lec-2, lab-2
Prereq.: ELEC 102A and 102B or demonstration of ELEC 102A and 102B exit skills
This course covers hardwired digital logic systems and is an introduction to programmable logic devices. CSU

ELEC 104A. Electronics IV: Analog and Digital Communications Electronics (3)
Lec-2, lab-2
Prereq.: ELEC 102A and 102B or demonstration of ELEC 102A and 102B exit skills
This course covers analog and digital communications systems, antennas, and serves as an introduction to microwave signals. CSU

ELEC 104B. Electronics IV: Micro-controller Interfacing (3)
Lec-2, lab-3
Prereq.: ELEC 102A and 102B or demonstration of ELEC 102A and 102B exit skills
This course covers micro-controller interfacing, driver programs, input sensors and output electrical and electro-mechanical devices. CSU

ELEC 221. Biotech Process Instrumentation (2)
Lec-1, lab-3
Prereq.: ET 108A or MATH 40 or demonstration of ET 108A or MATH 40 exit skills

Energy

Credit, Degree Applicable Courses:
ENRG 3. Introduction to Alternative Energy (3)
Lec-3
Advise: Concurrent enrollment in ENRG 3L
An introduction to the theory, applications, and usefulness of various alternative energies as they relate to the future of our civilization and the environment. Topics will include solar thermal energy, solar photovoltaics, bioenergy, fuel cells, hydroelectric power, wave energy, and wind energy. CSU/UC

ENRG 3L. Introduction to Alternative Energy Laboratory (1)
Lab-3
Coreq.: ENRG 3
A project-oriented, hands-on course to introduce students to renewable energies. CSU/UC

ENRG 130. Residential Energy and Efficiency Measures (2)
Lec-1, lab-3
P/NP available
This introductory course provides a general overview of residential energy use. It briefly covers residential energy related systems and how
building energy efficiencies may be improved. CSU
ENRG 130=CNST 130

ENRG 140. Principles in Environmental Control (1)
Lec-9, lab-27 (total hrs)
Prereq.: Completion or concurrent enrollment in ET 108A
and ELEC 101
Introduction to fundamentals of electricity and electronics as applied
to Heating, Ventilation, and Air Conditioning (HVAC) operations.
Covers Ohm’s law, power and electrical instruments, basic electrical
AC and DC circuits, electrical and mechanical devices, and electrical
and electronic controls. CSU

ENRG 141. Blueprint Reading for HVAC (1)
Lec-9, lab-27 (total hrs)
Prereq.: ENRG 140 and ET 108A
Basic techniques for reading and interpreting typical design docu-
ments, drawings, and specifications. Emphasis will be given on
interpreting Heating, Ventilation, and Air Conditioning (HVAC)
mechanical and electrical drawings, symbols, and abbreviations. CSU

ENRG 142. Codes and Standards for HVAC (1)
Lec-9, lab-27 (total hrs)
Prereq.: Completion of or concurrent enrollment in ET 108A
Introduction to national, state, and local regulations and standards that
govern the design, installation, and operation of Heating, Ventilation,
and Air Conditioning (HVAC) systems. Topics will also cover the code
development process, its adoption, and its enforcement by local build-
ing authorities. CSU

ENRG 143. Motors and Drives in HVAC (1)
Lec-9, lab-27 (total hrs)
Prereq.: Completion of or concurrent enrollment in ET 108A
and ELEC 101
Introduction to the application of motors and drives used in com-
mercial and industrial Heating, Ventilation, and Air Conditioning
(HVAC). Covers the theory and applications of different types of
motors and drives, including electric and magnetic Variable Frequency
Drives (VFD) for improved efficiency control and energy savings. CSU

ENRG 144. Fundamentals of Air Conditioning-Heating and Cooling
(1)
Lec-9, lab-27 (total hrs)
Prereq.: ENRG 140
Advise: ET 135A, 135B, or 135C
Introduction to residential and light commercial heating and cooling
air conditioning equipment. Emphasis will be on reading electrical
diagrams, understanding sequences of operation of systems, perform-
ing service diagnosis procedures, and carrying out maintenance and
repair. CSU

ENRG 145. HVAC Duct System Design (1)
Lec-9, lab-27 (total hrs)
Prereq.: Completion or concurrent enrollment in ET 108A
and ENRG 144
Advise: ET 135A, 135B, or 135C
Introduction to duct system installations of residential and light
commercial HVAC systems. Topics include proper procedures for
air system distribution and balance, mechanical devices, ventilating
equipment, filtration systems, flue pipes, and duct pipes (flex, square
and rigid). CSU

ENRG 146. Refrigeration Installation and Troubleshooting (1)
Lec-9, lab-27 (total hrs)
Prereq.: ELEC 101
Coreq.: ET 135C
Introduction to installation and troubleshooting practices on refrig-
eration equipment. Covers electrical diagrams, service diagnostic
procedures, maintenance, troubleshooting and repair, system charging,
leak testing, evacuating and recovering methods, and safety practices.
CSU

ENRG 147. Energy Management and Efficiency in Environmental
Control (1)
Lec-9, lab-27 (total hrs)
Prereq.: ENRG 140 and completion of or concurrent enroll-
ment in ET 108A
Advise: CNIT 100 or similar skills, ENRG 141
Introduction to energy auditing and management. Covers life cycle
costing and improvement of energy efficiency through simulations of
building heating, cooling, lighting, ventilating, and other energy flows.
The class introduces energy analysis software tools such as EnergyPlus,
Cal Arch, and DOE-2. SCU

Credit, Degree Applicable Courses:
ENGN 1A. Measurements and Plane Surveying (3)
Lec-2, lab-3
Prereq.: MATH 95 or ET 50 or equivalents (e.a. concur.)
Theory and practice in linear and angular measurements. Equipment
and methods used in common surveying measurements. Treatment of
errors in measurements in surveying and other areas of engineering.
CU/UC

ENGN 1B. Plane Surveying (3)
Lec-2, lab-3
Prereq.: ENGN 1A
Theory and practice of various engineering surveying techniques
including control surveys, practical astronomy, triangulation, topo-
graphic surveys, route surveys, land surveys, GPS surveys, stadia
methods, state plane coordinates, photogrammetry, error analysis,
curve layouts, and EDM methods. CSU

ENGN 10A. Intro. to Engineering: The Profession (1)
Lec-2
The history and development of engineering as a profession.
Engineering disciplines, educational requirements, transfer school
information, success strategies, professional ethics, current and pro-
jected activities in the various branches of engineering. CU/UC

ENGN 10B. Intro. to Engineering: Software Tools and Design (2)
Lec-1, lab-3
Prereq.: MATH 55; 92; and 95
This course introduces the student to team oriented engineering
design and problem solving processes as well as the use of computers
in the solution of a wide variety of engineering problems. The course
makes use of a variety of software applications including commercial
spreadsheets such as Microsoft Excel and a graphics program such as
Matlab in solving problems. Throughout the course, emphasis will be
given to technical communications, teamwork, engineering design and
problem solving methodologies. CSU/UC
ENGN 20. Introduction to Circuit Analysis (3)
Lec-3
Prereq.: ENGN 10B, MATH 110C and PHYC 4B, both of which may be taken concurrently and concurrent enrollment or completion of ENGN 20L
Introduction to circuit analysis to determine the natural, forced and complete responses of zero, first and second-order networks and systems. Standard circuit-analysis techniques will be covered including Kirchhoff's Laws, loop and nodal analysis, Thévenin and Norton’s Theorems, generalized impedance and admittance techniques and phasor methods. CSU/UC ENGR 12

ENGN 20L. Introduction to Circuit Analysis Laboratory (1)
Lab-3
Prereq.: ENGN 10B; concurrent enrollment or completion of ENGN 20
Laboratory experiments in circuit analysis. CSU/UC

ENGN 24. Design Graphics (3)
Lec-2, field trips
Prereq.: ET 50 or MATH 95; and ET 104; or demonstration of their exit skills
Introduction to technical sketching, engineering graphics and design; development of visualization skills by using computer aided drafting (CAD) software in conjunction with orthographic projection problems; emphasis on computer aided design and graphical analytical methods of solutions to three-dimensional problems. CSU/UC

Lec-3
Prereq.: ENGN 10B; PHYC 4A; and MATH 110C, which may be taken concurrently
An introductory course in applied mechanics (Statics); designed to meet the professional needs of students majoring in engineering. CSU/UC

ENGN 37. Engineering Mechanics - Dynamics (3)
Lec-3
Prereq.: ENGN 10B, 36
An introductory course in Dynamics including both Kinematics (the description of a rigid body's position, velocity and acceleration) and Kinetics (the relationship between the forces acting on a rigid body and its velocity and acceleration). Also includes the topics of work, energy, impulse and momentum. CSU/UC

ENGN 38. Introduction to Computing for Engineers (3)
Lec-3, conf-1
Prereq.: ET 51 or MATH 100A or completion/concurrent enrollment in MATH 110A
Engineering problem-solving using computer programming. Problem-solving strategies, algorithm development and structured programing design. Solution of a variety of engineering problems from evaluating a simple function to modeling and simulation. Applications from mechanical, electrical and civil engineering. CSU/UC

ENGN 45. Materials Science (3)
Lec-2, lab-3
Prereq.: Completion of ENGN 10B, CHEM 101A or 103A, PHYC 4A-4AL
Advised: Completion/concurrent enrollment in CHEM 101B and PHYC 4B-4BL
An introductory course in the fundamental science of materials used by engineers. Emphasis is placed on understanding the structure and properties of materials. Standard material properties are defined and explained. The processing and applications of materials are also covered. Finally, a strategy is developed for the selection and use of these materials. CSU/UC

ENGN 48L. Introduction to Engineering & Technology - Laboratory (1)
Lab-3
P/NP available
This is a project-oriented, hands-on course to introduce students to the practices and methodologies used in Engineering and Technology. Work will be in four areas: electronics, computer aided drafting, mechanical construction and fabrication and technical mathematics. CSU

ENGN 91. Applied Engineering Project (1)
Conf-1, work 10-20
Prereq.: ENGN 10A, ENGN 10B
On and off campus college project and research work experience with an external community partner or a CCSV faculty in the field of engineering and technology, subject to approval of and under the supervision of the course instructor. CSU

ENGN 99. Materials and Fabrication Shop (1)
Lab-3
P/NP available
A project-oriented, hands-on course to introduce students to the practices and methodologies used in fabricating architectural models or execution of three-dimensional designs using wood, metals and plastics. Students learn shop and cleanup procedures, safety procedures, and proper use of equipment and tools. CSU

ENGR 99=ARCH 99

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Engineering Technology

Credit, Degree Applicable Courses:

ET 50. Technical Applicable Courses:
Lec-4
Prereq.: ET 108B/CDEV 108B; or MATH 90/92 and 95
Applied mathematics designed to develop ability to solve problems. Practical application of algebra, geometry, and trigonometry to basic problems in the applied sciences, including the study of alternating current circuitry with emphasis on periodic functions, vector analysis, logarithms, and exponential functions. CSU

ET 51. Advanced Technical Mathematics (4)
Lec-4
Prereq.: ET 50
Instruction in applied mathematics and physical science designed to develop student's ability to solve fundamental engineering problems in mechanics and electronics. Introduction to analytical geometry, statistics, and calculus. CSU

ET 86. Introduction to Computer-Aided Manufacturing - CAM I (2)
Lec-1, lab-3
Prereq.: ET 104
Introduction to computer numerical control, training in G and M codes. Hands-on training on the CNC machines. Testing, debugging, and running programs. Includes processes used to describe product geometry in computer terms, modern practices in tolerancing, HVAC and piping. CSU

ET 104. Introduction to Engineering Drawing and Manufacturing (2)
Lec-1, lab-3
Fundamental drafting techniques including sketching, orthographic projection and dimensioning. Development of detailed drawings
Electrical, electronic, and mechanical) for the fabrication of individual projects. Sheet metal shop practices; use of hand tools; measurement and layout techniques. Printed circuit board design and fabrication. Machine tools and machine shop operations. CSU

ET 107/BTEC 107. Language Skills for Technicians (3)
Lec-3, conf-1
Introductory level lecture course covering basic scientific language and concepts of biology and chemistry, and the academic study skills needed to succeed in science courses. An orientation to the field of biotechnology and professional opportunities. CSU

ET 107/BTEC 107

ET 108A. Practical Mathematics I (3)
Lec-3, conf-1
Concepts, techniques and applications of arithmetic and elementary algebra emphasizing applications to practical problems. Interactive and traditional problem solving methods. Class interactive group exercises applying mathematical techniques to various applications and real world problems.

ET 108A=CDEV 108A=BTEC 108A

ET 108B. Practical Mathematics II (3)
Lec-3, conf-1
Concepts, techniques, and applications of intermediate algebra and introductory trigonometry emphasizing real world applications. Interactive group exercises and traditional lecture - problem-solving methods. Demonstration of mathematical concepts by showing how they are applied to various fields such as medical, business, industrial, and scientific. Emphasis on problem solving and the application of mathematics to real world problems. CSU

ET 108B=CDEV 108B

ET 122S. Lead in Construction, Supervisor/Contractor (1.5)
Lec-32, lab-9 (total hrs), field trips P/NP available
Preparation for interim certification as CA lead in construction supervisor/contractor. Lead uses, sources, characteristics, hazards, and safety; PPE and hygiene; monitoring, regulations and work practices; insurance and liability; record keeping; contract preparations, specifications, and administration; community relations. CSU

ET 122W. Lead in Construction, Worker (1)
Lec-22, lab-12 (total hrs), field trips P/NP available
Preparation for interim certification as CA lead in construction worker. Lead uses, sources, characteristics, hazards, and safety; PPE and hygiene; monitoring, regulations, and work practices. CSU

ET 135A. Fundamentals of Air-Conditioning and Refrigeration (2)
Lec-1.5, lab-1.5
One of a series of three courses [See also ET 135B and 135C.]
Designed to accommodate engineering students with varying backgrounds and work experience who wish to learn the basic concepts of air-conditioning and refrigeration. Emphasis on practical engineering problems.
The psychometrics of air and water-vapor mixtures, basic elements of air-conditioning, and psychometric processes. Use of psychometric instruments and psychrometric chart graphical analysis of the processes. CSU

ET 135B. Fundamentals of Air-Conditioning and Refrigeration (2)
Lec-1.5, lab-1.5
One of a series of three courses. [See also ET 135A and 135C.]
Cooling loads, heat transfer equipment, air handling equipment, and the design of air-conditioning systems. Application of air-conditioning equipment, components, and control system of the air-conditioning system in the laboratory. Instruments and instrumentation for measuring air flow. CSU

ET 135C. Fundamentals of Air-Conditioning and Refrigeration (2)
Lec-1.5, lab-1.5
One of a series of three courses. [See also ET 135A and 135B.]
The refrigeration cycle, refrigeration systems, heat transfer components, and control systems. Laboratory work in operational characteristics; analysis of refrigeration system; and methods of measuring pressure, temperature, and flow rates within the system. CSU

ET 139A. Engineered Plumbing Systems (3)
Lec-3
Flow of liquids in domestic water, rainwater and fuel gas piping systems, sanitary drainage piping and sizing drainage systems, flow of air in vent piping, sewer systems. Study of national and local codes, specifications and case problems. CSU

ET 139B. Engineered Plumbing Systems (3)
Lec-3, field trips
Pressurized water, automatic fire sprinkler, wet and dry standpipe, fuel gas in buildings. Centrifugal pumps, national and local plumbing and fuel gas codes, specifications and case problems. CSU

ET 139C. Engineered Plumbing Systems (3)
Lec-3
Review of plumbing, engineering design, codes, and specifications. Special projects in the field of plumbing engineering design. Copper system design. CSU

Environmental Monitoring & Assessment Program

Credit, Degree Applicable Courses:
EMAP 22X. Foundations of Environmental Monitoring (3)
Lec-3, lab-3, field trips P/NP Available
Prereq: MATH 40 or ET/BTEC 108A or placement in MATH 60 Advise: BIO 11; and CHEM 32 or 40
Introductory course in environmental field monitoring provides exposure and understanding of environmental field sampling and monitoring techniques for chemical and microbiological contaminants that impact the environment. Theoretical and practical experience is offered with emphasis on regulatory requirements governing sampling and field analysis of water, soil and air matrices. CSU

EMAP 22X=BIO 224X=GEOL 35X

EMAP 24X. Environmental Field Instrumentation (2)
Lec-1, lab-3, field trips P/NP Available
Prereq: MATH 40 or ET/BTEC 108A or placement in MATH 60
A study of instrumentation, sensors, and equipment used in environmental monitoring. The course also exposes the student to a variety of analytical techniques and instruments utilized in environmental analysis. It is designed to couple theory of equipment operation with a basic understanding of how to meaningfully collect and present data. CSU

EMAP 24X=GEOL 36X
**Geographic Information Systems**

**Credit, Degree Applicable Courses:**

**GIS 110. Introduction to GIS (3)**
Lec-2.5, lab-1.5  
**Prereq.: CNIT 100**
A primer course for GIS technology. History, structure, uses, and current trends of GIS, related fundamental concepts, basic query and cartography operations using an industry-standard GIS software such as ESRI's ArcGIS™. CSU/UC

**GIS 111. GIS Analysis and Modeling (3)**
Lec-2.5, lab-1.5  
**Prereq.: GIS/GEOG 110**
Foundational use of GIS software. GIS database design, data collection, sophisticated analysis. Production of professional maps. Interface customization. Hands-on training using industry-standard GIS software (ESRIs ArcView™ version 9). Introduces Global Positioning Systems (GPS) as they relate to GIS. CSU

**GIS 112. GIS Software Technology (3)**
Lec-2.5, lab-1.5  
**Prereq.: GIS/GEOG 110**
Hands-on training in advanced application of GIS technology. Network modeling, suitability analysis, web GIS, mobile GIS, software customization using Visual Basic for Applications (VBA) on ESRI's ArcView™ version 9 platform. CSU

**Sustainability**

**SUST 31. Introduction to Environmental Science (3)**
Lec-3, field trips  
**Prereq.: ENGL 92 or higher**
An examination of the scientific and research evidence regarding the causes, consequences, and proposed solutions to environmental and natural resource issues. Study of sustainability and potential solutions from different academic fields including the natural sciences, social sciences and engineering. CSU/UC

**SUST 91. Applied Research in Sustainability (3)**
Conf-1, work-10-20  
**Prereq.: BIO 31, ENRG 3, GNBS 125**
Repeat: Maximum credit: 12 units
On and off campus college work and research experience with a community partner in the field of sustainability, subject to approval of and under the supervision of an instructor. CSU

**Technology**

**Credit, Degree Applicable Courses:**

**TECH 199X. Technical Knowledge Synthesis**
Lec-.25, lab-.75  
**P/NP only**
Coreq: Concurrent enrollment in final semester or technical certificate program
This short course teaches students to integrate and communicate specialized knowledge and skills acquired in certificate training programs. To better equip students for technical occupations, this course introduces the bigger picture thinking and strategies for presenting sophisticated technical information to a variety of audiences. UC

**Welding**

**Credit, Degree Applicable Courses:**

**WELD 140. Manufacturing Processes (3)**
Lec-.1.5, lab-.4.5
Elementary machine-tool practice, with special emphasis on the use of the lathe engine, horizontal and vertical milling machines, and drill press. CSU

**WELD 144. Welding Processes (2)**
Lec-.1.5, lab-.1.5
Classroom instruction and laboratory practice in joining metal by welding. This course is designed to provide the safe and operational uses of the basic welding processes including oxy/fuel welding, plasma cutting and physical testing of welds. This course provides students with cutting and welding skills relevant to industry standards, welding certification requirements and general purposes. CSU

**WELD 145. Intermediate Welding Processes (3)**
Lec-.1.5, lab-.4.5  
**Prereq.**: WELD 144
Classroom instruction and laboratory practice in joining metal by intermediate and advanced welding techniques. This course is designed to provide the safe and operational uses of the intermediate welding processes. This course provides students with cutting and welding skills relevant to industry standards, welding certification requirements and general purposes. Emphasis is on preparation for meeting State Welding Certification requirements. CSU

**WELD 146. Manufacturing Blueprint Reading (3)**
Lec-3
This course introduces basic skills in reading blueprints for both fabrication and manufacturing. Related math and the uses of measuring tools will be covered in this course. Weld symbols, basic lines and views, basic joints for welded fabrications are introduced. CSU

**WELD 147. Welding Inspection Technology (4)**
Lec-4
Introduction into welding codes, terminology, metallurgy, procedures, processes; welder qualification; high-strength bolting; the basics of
destructive and non-destructive examination. Includes related math, the use of measuring tools and weld symbols. GSU

Noncredit Courses:
TIWE 9676. Combination Welding
Adviser: TRST 4601
Lab/lecture course designed to prepare students for entry into the trade as combination welders. Emphasizes safety, certification preparation, and relevant theory as it applies to industry. Students will weld a variety of metals using a combination of welding processes such as: gas, stick (smaw), MIG, TIG, innershield, along with metal cutting and gouging.

English
Office: Batmale 556
Phone Number: (415) 239-3406
Web Site: www.ccsf.edu/english

English Major (AA-T)
Associate in Arts in English for Transfer. CCSF’s English major offers a wide variety of language, literature, and writing courses—18 GE transferable units—to serve students with diverse goals, including transfer to UC, CSU, or other four year colleges. English majors will be able to complete most or all of their lower division preparation at CCSF before they transfer but should see a counselor to confirm their program of study.

By taking 6 units of Core Reading and Composition Courses, students will learn techniques to produce clear, precise prose by integrating writing, reading, and research. The required 6 units of Core Surveys of literature in English will ensure students have a broad familiarity with different eras of literary history; the required 3 units of Core Genre courses will provide a deeper understanding of literary forms. An additional requirement of 3 units of Specialized Literature Courses provides students with an opportunity for more focused study. If students anticipate careers in law, education, communication, writing, government, advertising, or business, the English major should serve them well.

Learning Outcomes
- Demonstrate knowledge of and familiarity with genres, themes, and contexts of variety of works of literature.
- Demonstrate knowledge of and familiarity with methods of interpreting literature across genres.
- Assess, evaluate, and analyze ideas expressed in text or in spoken language.
- Create (write or present) coherent arguments that exhibit clear prose and synthesize diverse bodies of knowledge.
- Conceptualize, write, workshop, present for feedback, revise and edit an original text.

Degree Requirements. Students who wish to earn the Associate in Arts in English for Transfer (AA-T) must complete 60 CSU transferable units with at least a 2.0 grade point average. This must include the units required for full completion of the IGETC or CSU GE curriculum and the 18 units for the major as specified below. Each course in the major must be completed with a grade of “C” or better. Courses used to meet the major requirement may also be used to meet IGETC or CSU GE requirements.

Courses Required for the Major in English
Group 1: Core Reading and Composition Courses-6 units
Course | Units
--- | ---
ENGL 1A University-Parallel Reading & Comp. | 3
ENGL 1B University-Parallel Reading & Comp. | 3

Group 2: Core Surveys-6 units
ENGL 30A Survey of American Literature, part 1 | 3
ENGL 30B Survey of American Literature, part 2 | 3
ENGL 46A Survey of Literature in English, part 1 | 3
ENGL 46B Survey of Literature in English, part 2 | 3
ENGL 46C Survey of Literature in English, part 3 | 3

Note: Group 2 courses not used toward the 6 required units may be used to fill Group 3 or Group 4 requirements.

Group 3: Core Genre Courses-3 units
ENGL 43 Introduction to the Study of Poetry | 3
ENGL 52 Shakespeare | 3
ENGL 53 Introduction to the Study of Drama | 3

Note: Group 3 courses not used toward the 3 required units may be used to fill Group 4 requirement.

Group 4: Specialized Literature Courses-3 units
CLAS 35 Tragic Dramas of Greece | 3
ENGL 1C Advanced Composition | 3
ENGL 20 Modern British and Amer Literature | 3
ENGL 36 African Amer Literature-A Survey | 3
ENGL 44A-44B Survey of World Literature, Past & Present | 3
ENGL 48A-Q Selected Topics | 3
ENGL 50 Myth and Literature | 3
ENGL 55 Survey of Gay & Lesbian Literature | 3
ENGL 57 Survey of Women’s Literature | 3
ENGL 58 Contemporary Women’s Writing | 3

Total Units | 18

Announcement of Courses
CCSF English placement testing is required prior to enrollment in English courses. Students may be excused from taking the English Placement Test and may demonstrate their eligibility for ENGL 1A or 1B or 1C by filing an English Placement Test Waiver Form and submitting proof of one of the following to the Matriculation Office, Conlan Hall, Rm 204;

1. University of California Analytical Writing Placement Exam score of 8 or higher - Eligibility: English 1A
2. Completion of a U.C. course satisfying the U.C. Entry Level Writing Requirement (e.g. Subject A Course) - Eligibility: English 1A
3. International Baccalaureate Exam scores:
   IB High Level English A Exam score of 5 or higher – Eligibility: English 1A
   IB Standard Level English Exam with score of 6 – Eligibility: English 1A
4. Any of the following SAT scores:
   SAT Verbal (before 4/95): 510 - Eligibility: English 1A
   SAT Verbal (after 4/95): 590 - Eligibility: English 1A
   SAT II Writing Subject Test: 660 - Eligibility: English 1A
   SAT Reasoning Test, Writing Section: 680 - Eligibility: English 1A
5. ACT Combined English/Writing Test with score of 30 or higher
   - Eligibility: English 1A

6. Advanced Placement Test Exam in English Literature
   Score of 3 - Eligibility: English 1B/1C; Exemption 1A
   Score of 4 - Eligibility: English 1B/1C; Exemption 1A
   Score of 5 - Exemption 1A and 1B/1C

Caution: Not all schools and programs accept AP scores for transfer credit. Students are responsible for checking the appropriate policies and requirements.

7. Advanced Placement Test Exam English Language
   Score of 3 - Eligibility: English 1B/1C; Exemption 1A
   Score of 4 - Eligibility: English 1B/1C; Exemption 1A
   Score of 5 - Eligibility: English 1B/1C; Exemption 1A

Completion (with "C" or higher) of English 1A - College Level Reading and Composition course or the equivalent - Eligibility: English 1B/1C; Exemption 1A

The sequence of composition courses is ENGL 92, 93, 96, 1A, 1B, 1C. The number of ENGL courses that a student is required to complete depends upon his placement level and educational goal.

A final grade of D or F does not allow the student to progress to the next level in the composition sequence.

Students for whom English is a second language should take the ESL Placement Test. Non-native English speakers with proficient English skills can be placed into the general English sequence through this test.

The chair of the English Department or designee rules on all matters of equivalency of ENGL 1A and 1B courses completed at out-of-state colleges, universities, or private institutions.

For information about challenging English placement see the Testing Office's retake policy (http://www.ccsf.edu/NEW/en/future-students/future-credit-students/take-a_placementtest/test_retake_policy.html) or meet with the English Eligibility Coordinator in Batmale 514 to schedule a written essay challenge exam. Access the English Eligibility website at https://sites.google.com/a/mail.ccsf.edu/eligibility/.

Credit, Non-Degree Applicable Courses:
ENGL K. Phonics for Spelling and College Reading Development (3)
Lec-3, conf-1, lab-1  P/NP only
Prereq: English Placement Test, completion of ESL 120, or placement in ESL 130 or higher
Advis: ENGL L or ENGL 9 may be taken concurrently

Designed to improve reading fluency and spelling through a concentration on patterns of English phonics and use of word attack strategies for decoding college-level vocabulary.

ENGL L. Foundation for College Reading and Studying (3)
Lec-3, conf-1, lab-1  P/NP Available
Prereq: ESL 130; or placement in ESL 140 or ENGL L
Advis: Completion/concurrent enrollment in ENGL K

Not recommended for students who have completed ENGL 9, 19, 96 or higher.

This course presents a basic understanding of and practice in reading comprehension, vocabulary, and study skills, and teaches awareness of reading processes. This course will also introduce students to college essay writing in preparation for ENGL 91.

ENGL W. Writing with a Computer (1)
Lab-20 (total hrs)  P/NP available
Advis: Typing experience

No previous computer experience required.

Learning to write compositions on a computer. Emphasis on composition and on editing and revision. Techniques for producing papers without the time-consuming rewriting of the entire work.

ENGL 9. Reading and Study Skills II (3)
Lec-3, conf-1, lab-1  P/NP available
Prereq: ENGL L or higher or ESL 140 or higher
Coreq: Not recommended for students who are currently enrolled in English L, 19, or 91. Not recommended for students who have completed English 19. Not recommended for students currently enrolled in English 96 or higher.

This course presents a basic grounding and practice in reading comprehension, vocabulary, and study skills. The emphasis is on comprehending short selections and increasing awareness of reading processes.

ENGL 91. Introduction to Basic Reading and Writing (6)
Lec-6, lab-1.5
Prereq: Completion of ENGL L or placement in ENGL 90 or 91

This course presents a basic grounding and practice in reading, writing, and study skills. The emphasis is on learning reading and writing processes and reading short selections which form the basis of the writing assignments. This 6 unit course emphasizes both composition and reading skills and fulfills the prerequisite for English 92.

ENGL 92. Basic Reading and Writing II (3)
Lec-3, lab-1
Prereq: ENGL 91 or Placement in ENGL 92
Advis: Completion/concurrent enrollment in ENGL 9
Credits earned in ENGL 92 do not satisfy the graduation requirements in written composition (Area B).

English 92 expands on the basic reading and writing skills practiced in English 91. Emphasis is on reading and rereading multiple texts, the connections between reading and writing essays, and the development of essay writing and revision skills.

ENGL 93. Introduction to Academic Writing and Reading
Lec-3, lab-1
Prereq: ENGL 92 or ESL 160, or placement in ENGL 93
Credits earned in ENGL 93 do not satisfy the graduation requirements in written composition (Area B).

Advis: Completion/concurrent enrollment in ENGL 9 or 19
Training and practice in academic essay writing and analytical reading. Emphasis is on learning to read and write pre-collegiate argumentative prose.

ENGL 95X. Academic Reading and Writing Intensive (6)
Lec-6, field trips
Prereq: ENGL 91 or ESL 160; or placement in ENGL 92

English 95X is an intensive course in the accelerated pathway merging English 92 and 93 in one semester to prepare students for English 96. Emphasis is on reading multiple academic texts, synthesizing ideas, and developing text based essays and revising. As part of the accelerated pathway, workload in this course is intensive and recommended for highly motivated students.

Credit, Degree Applicable Courses:
ENGL 96. Academic Writing and Reading (3)
Lec-3, lab-1
Prereq: ENGL 93 or 94, or placement in ENGL 96

College-level training and practice in critical reading and in writing argumentative essays. Emphasis is on reading and writing analytically and developing research and documentation skills.
ENGL 1A. University-Parallel Reading and Composition (3)
Lec-3, lab-1
Prereq.: ENGL 96 or placement in ENGL 1A (through CCSF English Placement Testing or the English Placement Test Waiver process)
University-parallel reading, writing, and critical thinking with a major research component. Reading, writing, and research assignments are based predominately on non-fiction texts. CSU/UC/C-ID ENGL 100

ENGL 1B. Reading, Writing, & Critical Thinking About Literature (3)
Lec-3
Prereq.: ENGL 1A
University-parallel reading, writing, and critical thinking applied to literature, including poetry, drama, and fiction. Students will write essays employing methods of literary analysis, research, and critical thinking. CSU/UC

ENGL 1C. Advanced Composition (3)
Lec-3, field trips
Prereq.: ENGL 1A
An advanced composition course that helps students hone a style appropriate for upper-division work which integrates the close reading of non-fiction and the writing of expository and argumentative essays. Focus on sharpening critical thinking skills, analyzing and evaluating texts, and writing text-based prose. CSU/UC

ENGL 14. Literary Magazine (3)
Lec-3
Prereq.: ENGL 96
P/NP available
This class teaches students the basics of producing a literary magazine. Students gain experience in writing, editing and copy editing with a focus on careful reading and written evaluations of literary and artistic works. Students develop aesthetic judgment and create a professional journal with a different literary vision each semester. CSU

ENGL 16. Academic Writing Workshop (3)
Lec-3
Prereq.: ENGL 92 or ESL 160; or placement in ENGL 93 or ESL 170
P/NP only
Recommended for students eligible for ENGL 1A.
ENGL 16 does not satisfy any part of the graduation requirement in written composition; completion of ENGL 16 does not qualify a student for ENGL 1A.
Practice in developing strategies for college level thesis-based analytical and argumentative essays. Useful for students who wish to improve their knowledge and understanding of basic English grammar and those who want to tutor English/ESL.
This course teaches the rules of English grammar and sentence-combining techniques to help students understand and fix common grammatical errors and write more sophisticated sentences. CSU

ENGL 17. Writing Workshop for English 1A (1.5)
Lec-1.5
Prereq.: Placement in ENGL 1A or completion of ENGL 96
P/NP only
Practice in developing strategies for ENGL 1A level academic essays, including thesis-based analytical and argumentative essays, research, timed writing, and summarizing. Useful for students who wish additional preparation before taking English 1A. CSU

ENGL 19. Advanced Academic Reading (3)
Lec-3, lab-1
P/NP available
Advised: Completion/concurrent enrollment in ENGL 93 or ENGL 9 or higher
This course provides students practice in critical reading of college-level texts, including analysis of various text structures. Students will enhance their awareness of different reading processes. CSU

ENGL 20. Modern British and American Literature (3)
Lec-3
Prereq.: ENGL 96 or placement in ENGL 1A
Consideration of works of significant authors in the United States and the British Commonwealth since 1900. CSU/UC

ENGL 26. English Grammar and Sentence Combining (3)
Lec-3, lab-1
P/NP available
Advised: Completion/concurrent enrollment in ESL 150 or higher
Recommended for students who want to improve their knowledge and understanding of basic English grammar and those who want to tutor English/ESL.
This course teaches the rules of English grammar and sentence-combining techniques to help students understand and fix common grammatical errors and write more sophisticated sentences. CSU

ENGL 30A. American Literature, Beginnings to Civil War (3)
Lec-3
Prereq.: ENGL 96 or placement in ENGL 1A
P/NP available
ENGL 30A surveys American literature from its Native and European beginnings to the Civil War. It is designed to introduce students to the analysis of a variety of texts forming and critiquing the idea of America and a national literature. CSU/UC/C-ID ENGL 130

ENGL 30B. American Literature: 1865-Present (3)
Lec-3
Prereq.: ENGL 96 or placement in ENGL 1A
ENGL 30B is a course surveying American literature from the Civil War to the present. It is designed to introduce students to significant stories, novels, poetry and drama. CSU/UC/C-ID ENGL 135

ENGL 35A. Introduction to Writing Fiction (3)
Lec-3, field trips
P/NP Available
Prereq.: ENGL 96 or placement in ENGL 1A
In this introduction to the fundamentals of short story writing, students develop story writing skills by studying elements of fiction in published works, engaging in writing exercises, and learning to participate in a workshop. CSU/UC

ENGL 35B. Intermediate Fiction Writing (3)
Lec-3, field trips
P/NP Available
Prereq.: ENGL 35A
In this intermediate fiction workshop, students expand their skills writing, reading, and critiquing short stories, as well as share their writing with peers in a workshop setting. CSU/UC

ENGL 35C. Introduction to Writing Poetry (3)
Lec-3, field trips
P/NP Available
Prereq.: ENGL 35A
In this beginning poetry writing course, students will read, listen to, and analyze poetry in order to apply basic poetic techniques to their work. Students will write poetry, both in and out of class, and will workshop with their peers in a supportive environment. CSU/UC

ENGL 35D. Intermediate Poetry Writing (3)
Lec-3, field trips
P/NP Available
Prereq.: ENGL 35C
In this intermediate poetry workshop, students expand their skills in writing, reading, and critiquing poetry, as well as share their writing with peers in a workshop setting. CSU/UC
ENGL 35L. Introduction to Literary Magazine (3) Lec-3, field trips P/NP Available
This class teaches students the basics of producing a literary magazine. Students gain experience in writing, copy editing, and production while developing the aesthetic judgment and the skills for taking on greater editorial and production responsibilities in the future. CSU

ENGL 35M. Intermediate Literary Magazine (3) Lec-3, field trips P/NP Available
PREREQ.: ENGL 35L
The class teaches students intermediate to advanced editorial and project management skills involved in publishing a literary magazine, from managing submissions and reading groups to coordinating with the Graphics Arts Department on design and layout, to promoting the magazine. CSU

ENGL 36. African American Literature—A Survey (3) Lec-3 P/NP available
PREREQ.: ENGL 96 or PLACEMENT in ENGL 1A
Reading and analysis of formal and informal literary expressions of African Americans from slavery till the present. CSU/UC

ENGL 43. Introduction to Poetry (3) Lec-3 P/NP available
PREREQ.: ENGL 96 or PLACEMENT in ENGL 1A
Across time and cultures, poetry is one of the most powerful ways to communicate thought and emotion and celebrate the beauty of language. This class helps students understand, appreciate, and analyze a wide range of poems, from canonical works to contemporary popular forms. CSU/UC

ENGL 44A-44B. Survey of World Literature, Past & Present (3-3) Lec-3 ENGL 44A IS NOT PREREQUISITE TO 44B.
PREREQ.: ENGL 96 or PLACEMENT in ENGL 1A
ENGL 44A. Survey of World Literature, Part I: Ancient Medieval, and Early Modern. CSU/UC
ENGL 44B. Survey of World Literature, Part II: Early Modern to Present. CSU/UC

ENGL 46A-46B-46C. Survey of Literature in English (3-3-3) Lec-3 P/NP available
PREREQ.: ENGL 1A
Required for a university major in English.
No part of ENGL 46 series is prerequisite to any other part.
ENGL 46A. Survey of Literature in English, Part 1: Beowulf through Milton. CSU/UC
ENGL 46B. Late-Seventeenth to Mid-Nineteenth Century. CSU/UC
ENGL 46C. Mid-Nineteenth through the Twentieth Century. CSU/UC

ENGL 48. Selected Topics (3 ea.) Lec-3 P/NP available
PREREQ.: ENGL 96 or PLACEMENT in ENGL 1A
Not recommended for students who are enrolled in or who have completed the same ENGL 49 topic. No part of the ENGL 48 series is a prerequisite to any other part.
Investigation of a major author or authors, a literary movement, theme, or genre. Exploration of the topic through lectures, films, and class discussion leading to a critical analysis of the literature in expository writing and in independent student projects.
ENGL 48B. Detective Fiction. CSU/UC
ENGL 48C. Science Fiction and Fantasy. CSU/UC

ENGL 48K. The Bible as Literature. CSU/UC

ENGL 50. Myth and Literature (3) Lec-3
ADVISE: ENGL 96 or PLACEMENT in ENGL 1A
Study of classical mythology, its central themes and personalities, and its relation to Western literature. At option of the instructor, the course will include study of other mythologies related to this literature. CSU/UC

ENGL 52. Shakespeare (3) Lec-3
PREREQ.: COMPLETION of ENGL 96 or PLACEMENT in ENGL 1A
ADVISE: COMPLETION of ENGL 1B or another ENGLISH LITERATURE ELECTIVE
A survey of Shakespeare's plays and poetry that emphasizes his growth as a literary artist and the social and artistic forces which shaped his work in the Elizabethan/Jacobean periods. Students learn strategies for textual analysis and interpretation, engage in in-depth discussion, write critical essays, and develop analytical and creative projects. CSU/UC

ENGL 53. The Development of the Drama in English: Medieval to Early Modern (3) Lec-3 P/NP available
PREREQ.: ENGL 96 or ELIGIBILITY for ENGL 1A
The development of the drama in English, from the medieval through the nineteenth century. Students study plays from major historical periods, Medieval, English Renaissance, through the nineteenth century, with emphasis on critical works on various methods of examining and evaluating the dramatic form. CSU/UC

ENGL 55. Survey of Gay and Lesbian Literature (3) Lec-3 P/NP available
PREREQ.: ENGL 96 or PLACEMENT in ENGL 1A
A survey of gay and lesbian literature drawing on examples that present material relevant to present day experience. CSU/UC

ENGL 57. Survey of Women's Literature (3) Lec-3 P/NP available
PREREQ.: ENGL 96 or PLACEMENT in ENGL 1A
A survey of literature written in English by women over the last four hundred years, emphasizing nineteenth- and early twentieth-century novels, poetry, and drama by major as well as rediscovered authors prior to 1970. CSU/UC

ENGL 58. Contemporary Women's Writing (3) Lec-3, field trips P/NP available
PREREQ.: ENGL 96/ or PLACEMENT in ENGL 1A
An exploration of contemporary women's writing: fiction, poetry, and drama written in English by contemporary women form diverse social, cultural and ethnic backgrounds. CSU/UC

Classics

Announcement of Courses
Credit, Degree Applicable Courses:
CLAS 35. Tragic Dramas of Greece (3) Lec-3 P/NP available
PREREQ.: ENGL 96 or PLACEMENT in ENGL 1A
An intensive consideration of the tragic dramas of Greece from a literary standpoint. CSU/UC
English as a Second Language

Office: Batmale 616
Phone Number: (415) 239-3003
Web Site: www.ccsf.edu/esl

Announcement of Curricula

Credit Programs

Advanced Academic English as a Second Language Certificate

The Certificate of Accomplishment in Advanced Academic ESL provides students, prospective employers, and others with documented evidence of persistence and academic accomplishment in ESL. Each course must be completed with a final grade of “C” or higher. Where available, grades of Pass may be used.

Learning Outcomes

Upon completion of this certificate, students will be able to:

- Demonstrate comprehension of an ability to read critically a variety of genres of authentic texts.
- Demonstrate ability to write expository essays and academic summaries
- Demonstrate ability to use various grammatical structures to establish sequence and coherence
- Speak with increasing confidence, fluency, and control in formal and informal oral communication
- Recognize and correct pronunciation and speech problems that impede successful communication

Courses Required for the Certificate of Accomplishment in Advanced Academic English as a Second Language

<table>
<thead>
<tr>
<th>Core Courses</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ESL 160 High-Advanced Academic ESL</td>
<td>4</td>
</tr>
<tr>
<td>ESL 79 Advanced Speaking and Pronunciation</td>
<td>3</td>
</tr>
<tr>
<td>Electives (Choose one):</td>
<td></td>
</tr>
<tr>
<td>ESL 66 Advanced Listening and Reading</td>
<td>3</td>
</tr>
<tr>
<td>ESL 69 Accent Improvement</td>
<td>2</td>
</tr>
<tr>
<td>ESL 85 Advanced Editing and Grammar Review</td>
<td>2</td>
</tr>
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<td>Total Units</td>
<td>9-10</td>
</tr>
</tbody>
</table>

ESL for Health Professionals Certificate*

*This program is pending state approval.

Please refer to the online version of the Catalog.

Announcement of Courses

Credit Courses

Initial recommended placement in the credit ESL program is based on results of 1) the ESL Placement Examination 2) a writing sample, and 3) consultation with the student; for continuing students, successful completion of courses with letter grades requires a grade of “C” or higher. Credit ESL courses are not intended for native speakers of English.

Credit, Non-Degree Applicable Courses:

ESL 20. Health Professions: Communication and Careers - A (6)
Lec-6  P/NP available
Prereq: ESL 120 or Placement in ESL 130
Advising: Background in Healthcare

Designed for health care professionals in all health fields with low-intermediate English language proficiency. Integrated language skills on themes such as career options and requirements in healthcare, patient-centered communication techniques, interaction patterns among health co-workers and teams, assertive communication, health care systems and traditions, and cultural diversity in health care contexts in the U.S.

See also ESL 3842.

ESL 23. Health Professions: Communication and Careers - B (6)
Lec-6  P/NP available
Prereq: ESL 120
Advising: Background in Healthcare

Designed for health care professionals in all health fields with intermediate English language proficiency. Integrated language skills on themes such as job resumes and interview in healthcare, interaction patterns on health care team, discussion of treatment options with patients, exploration of alternative health perspectives, and communication strategies among culturally diverse patients and health workers. These courses do not need to be taken in sequence.

See also ESL 3843.

ESL 26. Health Professions: Communication and Careers - C (6)
Lec-6  P/NP available
Prereq: ESL 120
Advising: Background in Healthcare

Designed for health care professionals in all health fields with upper intermediate English language proficiency. Integrated language skills
on themes such as phone and email communication in health care settings, strategies for communicating with special-needs patients, handling and resolving conflict with co-workers, understanding legal and ethical issues in health care, and researching racial and cultural health disparities. These courses do not need to be taken in sequence. See also ESLV 3844.

ESL 75. Intermediate Editing and Grammar Review (2)
Lec-3 P/NP only
Prereq.: Completion of ESL 130 with a grade of “C” or higher or placement in ESL 140 or higher
Advising: Concurrent enrollment in ESL 140 or 150
Review and practice of advanced grammatical patterns in academic writing, with a focus on the paragraph level; application of editing/proofreading strategies and skills to improve the quality and accuracy of written college work. Recommended for ESL 140 or 150 students who want additional practice in these skills.

ESL 85. Advanced Editing and Grammar Review (2)
Lec-3 P/NP only
Prereq.: Completion of ESL 150 or ENGL 92 with a grade of “C” or higher or placement in ESL 160 or above
Advising: Concurrent enrollment in ESL 160, ENGL 96
Review and practice of advanced grammatical patterns in academic writing for students whose native language is not English; application of editing/proofreading strategies and skills to improve the quality and accuracy of written college work. Recommended for ESL 160 or 82 or ENGL 93 or 96 students whose first language is not English who want additional practice in these skills.

ESL 110. Introductory Academic ESL (6)
Lec-6
Prereq.: Placement in ESL 110
Intended to be taken concurrently with ESL Listening/Speaking.
Introduction to academic reading materials, skills and strategies. Builds vocabulary and knowledge through practice in reading non-fiction and fiction texts. Practice in writing simple pre-academic paragraphs, reports and short answers. Study of high-beginning level vocabulary and grammar.

ESL 112. Introductory Listening/Speaking (2)
Lec-3 P/NP available
Prereq.: Placement in ESL 112
Introduction to pre-college listening and speaking skills and strategies. Oral communication activities and brief oral presentations with vocabulary and grammatical structures appropriate to the high-beginning level. Equivalent to the former ESL 32 (Listening/Speaking).

ESL 120. Low-Intermediate Academic ESL (6)
Lec-6
Prereq.: Placement in ESL 120 or 42 or completion of ESL 110
Intended to be taken concurrently with ESL Listening/Speaking.
Pre-academic reading skills and strategies. Increase vocabulary and knowledge through practice in reading non-fiction and fiction texts. Practice in writing basic academic paragraphs, reports and short answers. Low-intermediate level vocabulary and grammar study. Language skills integrated on the basis of academic tasks and content. Equivalent to the former ESL 48 or ESL 42 and 44 (Reading/Writing).

ESL 120R. Low-Intermediate Academic ESL (3)
Lec-3
Pre-college reading skills and strategies. Low-intermediate level vocabulary. Formerly ESL 120B

ESL 120W. Low-Intermediate Academic ESL (3)
Lec-3
Pre-college practice in writing academic paragraphs, short essays and reports. Low-intermediate level vocabulary and grammar study. Formerly ESL 120A

ESL 122. Low-Intermediate Listening/Speaking (2)
Lec-3 P/NP available
Prereq.: Placement in ESL 122 or completion of ESL 112
Pre-college listening and speaking skills and strategies. Oral communication activities and oral presentations with vocabulary and grammatical structures appropriate to the low-intermediate level. Equivalent to the former ESL 46 (Listening/Speaking).

ESL 130. Intermediate Academic ESL (6)
Lec-6
Prereq.: Placement in ESL 130 or completion of ESL 120; or 120A or 120B
Intended to be taken concurrently with ESL Listening/Speaking.
Intermediate academic reading skills and strategies, with simple, yet authentic academic and literary reading passages used to support written composition work. Practice in writing single- and multi-paragraph texts. Intermediate level vocabulary and grammar study. Language skills integrated on the basis of academic tasks and content. Equivalent to the former ESL 58 or and 54 (Reading/Writing).

ESL 132. Intermediate Listening/Speaking (2)
Lec-3 P/NP available
Prereq.: Placement in ESL 132 or completion of ESL 122
Introduction to academic listening and speaking skills and strategies. Oral communication activities and oral presentations with vocabulary and grammatical structures appropriate to the intermediate level.

ESL 142. High-Intermediate Listening/Speaking (2)
Lec-3 P/NP available
Prereq.: Placement in ESL 142 or completion of ESL 132
Academic and professional listening and speaking skills and strategies. Focus on oral communication activities, oral presentations and listening competency with vocabulary and grammatical structures appropriate to the high-intermediate level.

Credit, Degree Applicable Courses:
ESL 49. Pronunciation (2)
Lec/conf-3, lab-1 P/NP available
Prereq.: Placement in ESL 120 or 42 or completion of ESL 110
Systematic practice in American English sounds and speech segmentals and suprasegmentals, for improved reading and oral communication, especially listening and pronunciation. Recommended for ESL 120, 130, and 140 students with pronunciation problems. CSU

ESL 51A. ESL for Child Development (3)
Lec-3 P/NP available
Prereq.: Placement in ESL 130 or higher or completion of ESL 120 or 42; may be taken concurrently with either CDEV 65 or 66.
English as a second language support for Child Development (CDEV) 65 and 66 for limited English speakers. Reading strategies to successfully manage CDEV course load; writing strategies to successfully complete CDEV class reports and tests. Vocabulary building in child development terminology. Instructor will conduct periodic conferences with CDEV instructors on student progress and achievement. CSU
ESL 66. Advanced Listening and Reading (3)
Lec-3
Prereq.: Placement in ESL 140 or 150 or 160 or completion of ESL 130
ESL students do intensive work on academic skills and strategies in the areas of listening in mainstream classroom lectures, reading a variety of text types in different academic content areas, and note-taking and test-taking. This course is especially designed for students who already possess time-management and native-language academic skills. CSU

ESL 69. Accent Improvement (2)
Lec-3, lab-1  P/NP available
Prereq.: Placement in ESL 140 or completion of ESL 130
Students with severe pronunciation problems should enroll in ESL 49 before taking ESL 69
Improvement in standard American English pronunciation with emphasis on accent reduction, by improving overall clarity, voice quality, and physical presentation. Recommended for ESL 140, 150, 160 students with pronunciation problems. CSU

ESL 79. Advanced Speaking and Pronunciation (3)
Lec-3  P/NP available
Prereq.: Placement in ESL 150 or completion of ESL 140
Adviser: ESL 69 or ESL 142
Practice in effective communication in everyday, academic, and professional situations through the use of individual and group presentations, oral reports and summaries, debates and discussions, in conjunction with pronunciation exercise. CSU

ESL 140. High-Intermediate Academic ESL (6)
Lec-6
Prereq.: Placement in ESL 140 or completion of ESL 130
Intended to be taken concurrently with ESL Listening/Speaking.
High-intermediate academic reading skills and strategies, with authentic reading passages from a variety of genres used to support written composition work. Practice in writing summaries, short answers, and expository essays. High-intermediate level vocabulary and grammar study. Language skills integrated on the basis of academic tasks and content. CSU/UC
Equivalent to the former ESL 68 or 62 (Reading/Writing).

ESL 150. Advanced Academic ESL (5)
Lec-5.5, Lab-1
Prereq.: Placement in ESL 150 or completion of ESL 140
Advanced academic reading skills and strategies, with authentic reading texts of a variety of genres used to support written composition work. Practice in writing summaries, expository essays and essay tests. Advanced level vocabulary and grammar study. Language skills integrated on the basis of academic tasks and content. CSU/UC

ESL 160. High-Advanced Academic ESL (4)
Lec-4.5, Lab-1
Prereq.: ESL 150 or Placement in ESL 160
Advanced academic reading skills and strategies. Practice in various forms of composition and research necessary for college academic work. High-advanced level vocabulary and grammar study. Language skills integrated on the basis of academic tasks and content. CSU/UC

ESL 170. ESL College Reading and Composition (3)
Lec-3
Prereq.: ESL 160 or Placement in ESL 170
Advanced academic reading skills and strategies, with an emphasis on critical reading of expository prose. Practice in various forms of composition and research necessary for college work, with attention to the development of grammatical accuracy and a college writing style. CSU/UC

Announcement of Curricula

Noncredit Programs

Learning Outcomes
Upon completion of the noncredit ESL program, non-native speakers of English will have the language skills necessary to achieve a variety of social, academic, and vocational goals. Skills include ability to: 1) understand oral communication in a variety of contexts; 2) speak on a variety of topics in social and work-related contexts, 3) use increasingly complex grammatical patterns, 4) use word analysis, vocabulary development strategies and reading strategies to read and comprehend authentic texts on familiar topics, and 5) write a variety of correspondence and produce coherent short pieces of writing. Learners acquire the basic language, social, and problem-solving skills to participate as responsible citizens and competitive workers.

General Programs
ESL Literacy
ESL Beginning Low 1
ESL Beginning Low 2
ESL Beginning Low 1-2 Intensive
ESL Beginning 1-4 Multilevel
ESL Beginning Low Conversation
ESL Beginning Low Focus Skills
ESL Beginning High 3
ESL Beginning High 4
ESL Beginning High 3-4 Intensive
ESL Beginning High Focus Skills
ESL Computer Assisted Intermediate
ESL Intermediate Low 5
ESL Intermediate Low 6
ESL Intermediate Low 5-6 Intensive
ESL Intermediate Low Focus Skills
ESL Intermediate 5-8 Multi-level
ESL Intermediate High 7
ESL Intermediate High 8
ESL Intermediate High 7-8 Intensive
ESL Intermediate High Conversation
ESL Intermediate High Focus Skills
ESL Intermediate High Reading
ESL Advanced Low 9

Vocational ESL Programs
ESL/ABE for Automotive Technology
ESL Beginning Workplace Skills
ESL for Health Professionals
Beginning Low VESL Communication
Beginning Low VESL for Housekeeping Workers
Beginning VESL for Construction Workers
Beginning VESL for Janitorial Workers
Beginning VESL for the Hospitality Industry
Intermediate VESL for Biotech Workers
Intermediate VESL for Child Development Workers
Intermediate VESL for Clerical Workers
Intermediate VESL for Construction Workers
Intermediate VESL for Health Workers
Intermediate VESL for Hospitality Workers
Intermediate VESL for Job Searching
Intermediate VESL for Printing Workers
Intermediate VESL for Transit Operators
Vocational ESL Office Training

General Programs

ESL Literacy Noncredit Certificate

These courses in English as a Second Language will provide language skills for students with little or no English language skills.

Learning Outcomes

Upon completion of this certificate, students will be able to:

- Recognize a limited range of simple spoken isolated words, phrases and questions.
- Demonstrate ability to copy letters of the alphabet, numbers and isolated words and phrases.
- Engage in very limited conversation.

Students may obtain a Certificate of Completion in ESL Literacy upon successful completion of any of the following courses.

Courses Required for the Certificate of Completion in ESL Literacy

<table>
<thead>
<tr>
<th>Courses</th>
<th>Hours</th>
</tr>
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<tbody>
<tr>
<td>ESLF 3000 Native Language Literacy</td>
<td>180</td>
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<tr>
<td>ESLN 3010 ESL Literacy A</td>
<td>180</td>
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<tr>
<td>ESLN 3015 ESL Literacy A-A</td>
<td>90</td>
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<tr>
<td>ESLN 3016 ESL Literacy A-B</td>
<td>90</td>
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<td>ESLN 4015 ESL Literacy A</td>
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<td>ESLN 3020 ESL Literacy B</td>
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<td>Total Hours</td>
<td>45-180</td>
</tr>
</tbody>
</table>

ESL Beginning Low 1 Noncredit Certificate

These courses in English as a Second Language will provide language skills for students with little or no English language skills.

Learning Outcomes

Upon completion of this certificate, students will be able to:

- Recognize a range of frequently used spoken words, phrases, simple learned expressions and questions in familiar contexts.
- Demonstrate ability to communicate survival needs using very simple learned phrase and sentences and begin to engage in social communication.
- Construct limited meaning from simple print materials on familiar topics.
- Demonstrate ability to print numbers, letters, a limited number of basic sight words and previously learned simple sentences and phrases.

Students may obtain a Certificate of Completion in ESL Beginning Low 1 upon successful completion of any of the following courses.

Courses Required for the Certificate of Completion in ESL Beginning Low 1

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ESLN 3100 Beginning Low 1</td>
<td>180</td>
</tr>
<tr>
<td>ESLN 3105 Beginning I-A</td>
<td>90</td>
</tr>
<tr>
<td>ESLN 3106 Beginning I-B</td>
<td>90</td>
</tr>
<tr>
<td>Total Hours</td>
<td>90-180</td>
</tr>
</tbody>
</table>

ESL Beginning Low 2 Noncredit Certificate

These courses in English as a Second Language develop and expand Beginning Low 1 English skills.

Learning Outcomes

Upon completion of this certificate, students will be able to:

- Demonstrate a good understanding of commonly used spoken words, phrases, simple learned expressions and questions in familiar contexts.
- Employ simple learned phrases and sentences to engage in limited social situations using familiar basic conversations.
- Construct limited meaning from simplified reading materials on familiar topics.
- Demonstrate ability to write basic personal information lists and simple messages.

Students may obtain a Certificate of Completion in ESL Beginning Low 2 upon successful completion of any of the following courses.

Courses Required for the Certificate of Completion in ESL Beginning Low 2

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ESLN 3200 Beginning Low 2</td>
<td>180</td>
</tr>
<tr>
<td>ESLN 3205 Beginning 2-A</td>
<td>90</td>
</tr>
<tr>
<td>ESLN 3206 Beginning 2-B</td>
<td>90</td>
</tr>
<tr>
<td>Total Hours</td>
<td>90-180</td>
</tr>
</tbody>
</table>

ESL Beginning Low 1-2 Intensive Noncredit Certificate

This is an ESL Beginning Low accelerated study certificate. These courses in English as a Second Language develop and expand Beginning Low English skills.

Learning Outcomes

Upon completion of this certificate, students will be able to:

- Recognize a range of frequently used spoken words, phrases, simple learned expressions and questions in familiar contexts.
- Demonstrate ability to communicate survival needs using very simple learned phrase and sentences and begin to engage in social communication.
- Construct limited meaning from simple print materials on familiar topics.
- Demonstrate ability to print numbers, letters, a limited number of basic sight words, phrases, and simple sentences.

Students may obtain an ESL Beginning Low 1-2 Intensive Noncredit ESL Certificate of Completion upon successful completion of any course.
Courses Required for the Certificate of Completion in ESL Beginning
1-2 Intensive

<table>
<thead>
<tr>
<th>Courses</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ESLN 3150 Beginning Low 1-2 Intensive</td>
<td>180</td>
</tr>
<tr>
<td>ESLN 4150 Beginning Low 1-2 Intensive-A</td>
<td>90</td>
</tr>
<tr>
<td>ESLN 4151 Beginning Low 1-2 Intensive-B</td>
<td>90</td>
</tr>
<tr>
<td><strong>Total Hours</strong></td>
<td><strong>90-180</strong></td>
</tr>
</tbody>
</table>

ESL Beginning 1-4 Multi-Level
Noncredit Certificate

This certificate is designed to meet the needs of students with various levels of Beginning English proficiency. These courses in English as a Second Language develop and expand basic English skills.

Learning Outcomes

Upon completion of this certificate, students will be able to:

- Demonstrate general understanding of spoken English from common activities in familiar contexts.
- Determine the meaning of new words in simple written material by applying basic word analysis and vocabulary development skills.
- Produce sentences and short notes related to common and personal topics.

Students may obtain an ESL Beginning 1-4 Multi-level Noncredit ESL Certificate of Completion upon successful completion of any of the following courses.

Courses Required for the Certificate of Completion in ESL Beginning
1-4 Multi-Level

<table>
<thead>
<tr>
<th>Courses</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ESLN 3140 Beginning 1-4 Multi-level</td>
<td>180</td>
</tr>
<tr>
<td>ESLN 3145 Beginning 1-4 Multi-level-A</td>
<td>90</td>
</tr>
<tr>
<td>ESLN 3146 Beginning 1-4 Multi-level-B</td>
<td>90</td>
</tr>
<tr>
<td><strong>Total Hours</strong></td>
<td><strong>90-180</strong></td>
</tr>
</tbody>
</table>

ESL Beginning Low Conversation
Noncredit Certificate

This certificate develops speaking skills for Beginning Low ESL students. Students practice communicating survival and personal needs using very simple learned phrases and sentences. These courses in English as a Second Language expand Beginning Low English skills.

Learning Outcomes

Upon completion of this certificate, students will be able to:

- Compose simple questions to request basic factual or personal information.
- Respond to simple questions with short-phrase answers.
- Demonstrate ability to ask for and respond to requests for simple clarification
- Engage in simple conversational exchanges on limited and familiar topics using learned phrases.
- Demonstrate ability to give simple commands and express caution using short phrases.

Students may obtain an ESL Beginning Low Conversation Certificate of Completion upon successful completion of any two courses.

Courses Required for the Certificate of Completion in ESL Beginning
Low Conversation

<table>
<thead>
<tr>
<th>Courses</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ESLF 3127 Speaking-Beginning Low</td>
<td>90</td>
</tr>
<tr>
<td>ESLF 3144 Pronunciation-Beginning</td>
<td>90</td>
</tr>
<tr>
<td>ESLF 4127 Beginning Low Conversation</td>
<td>45</td>
</tr>
<tr>
<td>ESLN 3205 Beginning Low 2 (90A)</td>
<td>90</td>
</tr>
<tr>
<td>ESLN 3206 Beginning Low 2 (90B)</td>
<td>90</td>
</tr>
<tr>
<td><strong>Total Hours</strong></td>
<td><strong>135-180</strong></td>
</tr>
</tbody>
</table>

ESL Beginning Low Focus Skills
Noncredit Certificate

Beginning Low skills are emphasized for students who want focused practice in listening, speaking, reading and writing. These courses in English as a Second Language develop and expand Beginning Low English skills.

Learning Outcomes

Upon completion of this certificate, students will be able to:

- Demonstrate a good understanding of commonly used spoken words, phrases, simple learned expressions and questions in familiar contexts.
- Employ simple learned phrases and sentences to engage in limited social situations using familiar basic conversations.
- Recognize and read numbers, letters and sub-parts of familiar words.
- Construct limited meaning from simplified reading materials on familiar topics.
- Demonstrate ability to write basic personal information, lists and simple messages.

Students may obtain an ESL Beginning Low Focus Skills Noncredit ESL Certificate of Completion upon successful completion of any two courses.

Courses Required for the Certificate of Completion in ESL Beginning
Low Focus Skills

<table>
<thead>
<tr>
<th>Courses</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ESLF 3129 Writing-Beginning Low</td>
<td>90</td>
</tr>
<tr>
<td>ESLF 3126 Listening-Beginning Low</td>
<td>90</td>
</tr>
<tr>
<td>ESLF 3128 Reading-Beginning Low</td>
<td>90</td>
</tr>
<tr>
<td>ESLF 3127 Speaking-Beginning Low</td>
<td>90</td>
</tr>
<tr>
<td><strong>Total Hours</strong></td>
<td><strong>180</strong></td>
</tr>
</tbody>
</table>

ESL Beginning High 3 Noncredit Certificate

These courses in English as a Second Language develop and expand Beginning Low 2 English skills.

Learning Outcomes

Upon completion of this certificate, students will be able to:

- Demonstrate limited understanding of spoken English from learned topics and familiar contexts.
- Determine ability to speak English about basic needs and routine activities in simple conversations.
- Recognize words in familiar contexts using visual clues and previously learned material, demonstrating limited comprehension of simplified reading material.
- Produce grammatically correct sentences related to common and personal topics.
Students may obtain a Certificate of Completion in ESL Beginning High 3 upon successful completion of any of the following courses.

**Courses Required for the Certificate of Completion in ESL Beginning High 3**

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ESLN 3300 Beginning High 3</td>
<td>180</td>
</tr>
<tr>
<td>ESLN 3305 Beginning High 3-A</td>
<td>90</td>
</tr>
<tr>
<td>ESLN 3306 Beginning High 3-B</td>
<td>90</td>
</tr>
<tr>
<td>Total Hours</td>
<td>90-180</td>
</tr>
</tbody>
</table>

**ESL Beginning High 4 Noncredit Certificate**

These courses in English as a Second Language develop and expand Beginning High 4 English skills.

**Learning Outcomes**

Upon completion of this certificate, students will be able to:

- Demonstrate limited understanding of spoken English from learned topics and familiar contexts.
- Demonstrate ability to speak English about basic needs and routine activities in simple conversations.
- Demonstrate limited comprehension of simplified reading material.
- Produce grammatically correct sentences related to survival and personal topics using appropriate language structures and forms appropriate for Beginning High level 4.

Students may obtain a Certificate of Completion in ESL Beginning High 4 upon successful completion of any two of the following courses.

**Courses Required for the Certificate of Completion in ESL Beginning High 4**

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ESLN 3400 Beginning High 4</td>
<td>180</td>
</tr>
<tr>
<td>ESLN 3340 Beginning High 3-4 Multi-level</td>
<td>180</td>
</tr>
<tr>
<td>ESLN 3405 Beginning High 4-A</td>
<td>90</td>
</tr>
<tr>
<td>ESLN 3406 Beginning High 4-B</td>
<td>90</td>
</tr>
<tr>
<td>Total Hours</td>
<td>180-360</td>
</tr>
</tbody>
</table>

**ESL Beginning High 3-4 Intensive Noncredit Certificate**

This is a Beginning High accelerated study certificate. These courses in English as a Second Language develop and expand Beginning High English skills.

**Learning Outcomes**

Upon completion of this certificate, students will be able to:

- Demonstrate general understanding of spoken English with some unfamiliar words well enough to participate in simple conversations.
- Relate information about basic needs and routine activities in basic conversations in routine social situations.
- Recognize words on familiar topics and construct limited meaning from some authentic material dealing with everyday matters.
- Produce sentences to form short loosely organized paragraphs related to survival skills and personal topics using Beginning High structures and forms appropriately.

Students may obtain an ESL Beginning High 3-4 Intensive Noncredit Certificate of Completion upon successful completion of ESLN 3350 and any of the following courses.

**Courses Required for the Certificate of Completion in ESL Beginning High 3-4 Intensive**

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ESLN 3350 Beginning High 3-4 Intensive</td>
<td>180</td>
</tr>
<tr>
<td>And any one of the following</td>
<td></td>
</tr>
<tr>
<td>ESLN 3400 Beginning High 4</td>
<td>180</td>
</tr>
<tr>
<td>ESLN 3405 Beginning High 4-A</td>
<td>90</td>
</tr>
<tr>
<td>ESLN 3406 Beginning High 4-B</td>
<td>90</td>
</tr>
<tr>
<td>Total Hours</td>
<td>270-360</td>
</tr>
</tbody>
</table>

**ESL Beginning High Focus Skills Noncredit Certificate**

Beginning High skills are emphasized for students who want focused practice in listening, speaking, reading, or writing. These courses in English as a Second Language develop and expand Beginning High English skills.

**Learning Outcomes**

Upon completion of this certificate, students will be able to:

- Use English to speak about basic needs and routine activities in simple conversations.
- Determine comprehension of beginning English level material.
- Communicate basic needs and personal topics in sentence form and organize the sentences into paragraph form.
- Utilize beginning-high basic language structures in speaking and in writing about basic needs and personal topics.

Students may obtain an ESL Beginning High Focus Skills Noncredit ESL Certificate of Completion upon successful completion of any two of the following courses.

**Courses Required for the Certificate of Completion in ESL Beginning High Focus Skills**

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ESLF 3346 ESL Listening-Beginning High</td>
<td>90</td>
</tr>
<tr>
<td>ESLF 3347 ESL Speaking-Beginning High</td>
<td>90</td>
</tr>
<tr>
<td>ESLF 4347 Conversation-Beginning High</td>
<td>45</td>
</tr>
<tr>
<td>ESLF 3011 English Through Song Lyrics</td>
<td>90</td>
</tr>
<tr>
<td>ESLF 3348 ESL Reading-Beginning High</td>
<td>90</td>
</tr>
<tr>
<td>ESLF 3349 ESL Writing-Beginning High</td>
<td>90</td>
</tr>
<tr>
<td>Total Hours</td>
<td>135-180</td>
</tr>
</tbody>
</table>

**ESL Computer-Assisted Intermediate Noncredit Certificate**

Using ESL language software and online ESL resources, students expand Intermediate level ESL listening, speaking, reading and writing skills through group computer-assisted projects. This certificate in English as a Second Language will expand English as a Second Language skills for Intermediate level ESL students.

**Learning Outcomes**

Upon completion of this certificate, students will be able to:

- Demonstrate understanding of essential points in spoken English on familiar topics and topics of interest enough to be able to participate in extended conversations.
- Demonstrate ability to communicate beyond survival needs and be able to engage in familiar and unfamiliar conversational subjects.
Students may obtain a Computer-Assisted ESL Intermediate Noncredit ESL Certificate of Completion upon successful completion of any course.

Courses Required for the Certificate of Completion in ESL Computer-Assisted Intermediate

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ESLF 3006 Computer Assisted ESL-Intermediate</td>
<td>180</td>
</tr>
<tr>
<td>ESLF 4006 Computer Assisted ESL</td>
<td>90</td>
</tr>
<tr>
<td>ESLF 5006 Computer Assisted ESL</td>
<td>45</td>
</tr>
<tr>
<td>ESLF 3821 Introduction to Computers for ESL-Intermediate</td>
<td>90</td>
</tr>
<tr>
<td>ESLF 4821 Introduction to Computers for ESL-Intermediate</td>
<td>45</td>
</tr>
<tr>
<td>ESLV 3829 Computer VESL-High Intermediate</td>
<td>90</td>
</tr>
<tr>
<td>ESLF 3005 Writing with a Computer-Intermediate</td>
<td>90</td>
</tr>
<tr>
<td>Total Hours</td>
<td>45-180</td>
</tr>
</tbody>
</table>

ESL Intermediate Low 5 Noncredit Certificate

These courses in English as a Second Language develop and expand Beginning High 5 English skills.

Learning Outcomes

Upon completion of this certificate, students will be able to:

- Demonstrate understanding of spoken English in increasingly extended conversations.
- Interpret simple short narratives and descriptive passages on familiar topics using contextual clues to differentiate between fact and opinion.
- Demonstrate ability to write an organized paragraph or message.

Students may obtain a Certificate of Completion in ESL Intermediate Low 5 upon successful completion of any of the following courses.

Courses Required for the Certificate of Completion in ESL Intermediate Low 5

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ESLN 3500 Intermediate Low 5</td>
<td>180</td>
</tr>
<tr>
<td>ESLN 3505 Intermediate Low 5-A</td>
<td>90</td>
</tr>
<tr>
<td>ESLN 3506 Intermediate Low 5-B</td>
<td>90</td>
</tr>
<tr>
<td>Total Hours</td>
<td>90-180</td>
</tr>
</tbody>
</table>

ESL Intermediate Low 6 Noncredit Certificate

These courses in English as a Second Language develop and expand Intermediate Low 5 English skills.

Learning Outcomes

Upon completion of this certificate, students will be able to:

- Comprehend spoken English containing some unfamiliar words in mostly familiar contexts.
- Demonstrate ability to participate in increasingly extended conversational exchanges about topics beyond survival needs.
- Differentiate fact from opinion in simplified reading material and some authentic material.
- Organize relevant ideas and appropriate details into one or more clearly organized short paragraphs.

Students may obtain a Certificate of Completion in ESL Intermediate Low 6 upon successful completion of any two of the following courses.

Courses Required for the Certificate of Completion in ESL Intermediate Low 6

<table>
<thead>
<tr>
<th>Courses</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ESLN 3600 Intermediate Low 6</td>
<td>180</td>
</tr>
<tr>
<td>ESLN 3560 Intermediate Low 5-6 Multi-level</td>
<td>180</td>
</tr>
<tr>
<td>ESLN 3605 Intermediate 6-A</td>
<td>90</td>
</tr>
<tr>
<td>ESLN 3606 Intermediate Low 6-B</td>
<td>90</td>
</tr>
<tr>
<td>ESLF 4567 Intermediate Low Conversation</td>
<td>45</td>
</tr>
<tr>
<td>ESLF 4569 Speaking Intermediate Low</td>
<td>45</td>
</tr>
<tr>
<td>Total Hours</td>
<td>90-360</td>
</tr>
</tbody>
</table>

ESL Intermediate Low 5-6 Intensive Noncredit Certificate

This is an Intermediate Low accelerated study certificate. These courses in English as a Second Language develop and expand Intermediate Low English skills.

Learning Outcomes

Upon completion of this certificate, students will be able to:

- Comprehend spoken English containing some unfamiliar words in mostly familiar contexts.
- Demonstrate ability to participate in increasingly extended conversational exchanges about topics beyond survival needs.
- Demonstrate ability to read simplified materials on familiar subjects and have limited success reading authentic materials.
- Compose one or more short paragraphs related to survival skills and personal topics, and complete messages with few errors.

Students may obtain an ESL Intermediate Low 5-6 Intensive Noncredit Certificate of Completion upon successful completion of ESLN 3550 and any of the following courses.

Courses Required for the Certificate of Completion in ESL Intermediate Low 5-6 Intensive

<table>
<thead>
<tr>
<th>Courses</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ESLN 3550 Intermediate Low 5-6 Intensive</td>
<td>180</td>
</tr>
<tr>
<td>And any one of the following</td>
<td></td>
</tr>
<tr>
<td>ESLN 3600 Intermediate Low 6</td>
<td>180</td>
</tr>
<tr>
<td>ESLN 3605 Intermediate Low 6 - A</td>
<td>90</td>
</tr>
<tr>
<td>ESLN 3606 Intermediate Low 6 - B</td>
<td>90</td>
</tr>
<tr>
<td>Total Hours</td>
<td>270-360</td>
</tr>
</tbody>
</table>

ESL Intermediate Low Focus Skills Noncredit Certificate

Intermediate Low skills are emphasized for students who want focused practice in listening, speaking, reading, or writing. These courses in English as a Second Language develop and expand Intermediate Low English skills.

Learning Outcomes

Upon completion of this certificate, students will be able to:

- Comprehend spoken English containing some unfamiliar words in mostly familiar contexts.
- Demonstrate ability to communicate orally in formal and informal settings on familiar topics with increasing ease and accuracy.
- Differentiate fact from opinion in simplified reading material and some authentic material.
- Organize relevant ideas and appropriate details into one or more clearly organized short paragraphs or speeches.

Students may obtain an ESL Intermediate Low Focus Skills Noncredit ESL Certificate of Completion upon successful completion of any two of the following courses.

**Courses Required for the Certificate of Completion in ESL Intermediate Low Focus Skills**

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ESLF 3566 ESL Listening-Intermediate Low</td>
<td>90</td>
</tr>
<tr>
<td>ESLF 4567 Intermediate Low Conversation</td>
<td>45</td>
</tr>
<tr>
<td>ESLF 3567 Speaking-Intermediate Low</td>
<td>90</td>
</tr>
<tr>
<td>ESLF 3568 Reading-Intermediate Low</td>
<td>90</td>
</tr>
<tr>
<td>ESLF 3569 Writing-Intermediate Low</td>
<td>90</td>
</tr>
<tr>
<td><strong>Total Hours</strong></td>
<td><strong>135-180</strong></td>
</tr>
</tbody>
</table>

**ESL Intermediate 5-8 Multi-level Noncredit Certificate**

This certificate is designed to meet the needs of students with various levels of Intermediate English proficiency. These courses in English as a Second Language develop and expand Intermediate English skills.

**Learning Outcomes**

Upon completion of this certificate, students will be able to:

- Demonstrate understanding of extended conversations with some unfamiliar vocabulary.
- Demonstrate an ability to participate in extended conversations beyond survival needs on some unfamiliar topics.
- Identify main ideas in short narrative and descriptive passages on familiar topics.
- Compose short letters and summaries of learned material.

Students may obtain an ESL Intermediate 5-8 Multi-level Noncredit ESL Certificate of Completion upon successful completion of ESLN 3580 and any of the following courses.

**Courses Required for the Certificate of Completion in ESL Intermediate 5-8 Multi-level**

<table>
<thead>
<tr>
<th>Courses</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ESLN 3580 Intermediate 5-8 Multi-level</td>
<td>180</td>
</tr>
<tr>
<td><strong>And any one of the following</strong></td>
<td></td>
</tr>
<tr>
<td>ESLF 3585 Accelerated Grammar</td>
<td>180</td>
</tr>
<tr>
<td>ESLF 3581 Vocabulary Power</td>
<td>180</td>
</tr>
<tr>
<td>ESLV 3819 Social Communication</td>
<td>90</td>
</tr>
<tr>
<td><strong>Total Hours</strong></td>
<td><strong>270-360</strong></td>
</tr>
</tbody>
</table>

**ESL Intermediate High 7 Noncredit Certificate**

These courses in English as a Second Language develop and expand ESL Intermediate High 7 English skills.

**Learning Outcomes**

Upon completion of this certificate, students will be able to:

- Interpret information from authentic material on a variety of common topics.
- Demonstrate ability to produce a practical composition or report.

Students may obtain a Certificate of Completion in ESL Intermediate High 7 upon successful completion of ESLN 3700 and any of the following courses.

**Courses Required for the Certificate of Completion in ESL Intermediate High 7**

<table>
<thead>
<tr>
<th>Courses</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ESLN 3700 Intermediate High 7</td>
<td>180</td>
</tr>
<tr>
<td><strong>And any one of the following</strong></td>
<td></td>
</tr>
<tr>
<td>ESLF 3001 ESL Women’s Issues</td>
<td>90</td>
</tr>
<tr>
<td>ESLV 3819 Social Communication</td>
<td>90</td>
</tr>
<tr>
<td>ESLF 4787 Intermediate High Conversation</td>
<td>45</td>
</tr>
<tr>
<td>ESLF 3584 Pronunciation - Intermediate</td>
<td>90</td>
</tr>
<tr>
<td><strong>Total Hours</strong></td>
<td><strong>225-270</strong></td>
</tr>
</tbody>
</table>

**ESL Intermediate High 8 Noncredit Certificate**

These courses in English as a Second Language develop and expand ESL Intermediate High 8 English skills.

**Learning Outcomes**

Upon completion of this certificate, students will be able to:

- Demonstrate understanding of essential points of discussion or speeches on familiar or unfamiliar topics.
- Demonstrate ability to communicate with appropriate syntax and control of grammatical patterns in most extended conversations and interviews.
- Demonstrate understanding of authentic reading materials on common topics and interpret the meaning of readings on specialized topics.
- Demonstrate ability to write brief compositions on previously discussed topics and exhibit control of basic grammatical patterns.

Students may obtain a Certificate of Completion in ESL Intermediate High 8 upon successful completion of any of the following courses.

**Courses Required for the Certificate of Completion in ESL Intermediate High 8**

<table>
<thead>
<tr>
<th>Courses</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ESLN 3800 Intermediate High 8</td>
<td>180</td>
</tr>
<tr>
<td>ESLF 3786 Listening-Intermediate High</td>
<td>180</td>
</tr>
<tr>
<td>ESLF 3788 Reading-Intermediate High</td>
<td>90</td>
</tr>
<tr>
<td>ESLF 3789 Writing-Intermediate High</td>
<td>90</td>
</tr>
<tr>
<td>ESLF 3584 Pronunciation - Intermediate</td>
<td>90</td>
</tr>
<tr>
<td>ESLN 3780 Intermediate High 7-8 Multilevel</td>
<td>180</td>
</tr>
<tr>
<td><strong>Total Hours</strong></td>
<td><strong>90-180</strong></td>
</tr>
</tbody>
</table>

**ESL Intermediate High 7-8 Intensive Noncredit Certificate**

This is an Intermediate High accelerated study certificate. These courses in English as a Second Language develop and expand Intermediate High English skills.

**Learning Outcomes**

Upon completion of this certificate, students will be able to:

- Identify essential points of discussion or speeches on topics in special fields of interest.
• Use appropriate syntax to communicate about a variety of topics.
• Interpret authentic reading materials on everyday subjects.

Students may obtain an ESL Intermediate High Focus Skills Noncredit Certificate of Completion upon successful completion of any two courses.

Courses Required for the Certificate of Completion in ESL Intermediate High Focus Skills

<table>
<thead>
<tr>
<th>Courses</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ESLF 3786 Listening-Intermediate High</td>
<td>90</td>
</tr>
<tr>
<td>ESLF 3791 ESL Through Story-Based Video and TV</td>
<td>90</td>
</tr>
<tr>
<td>ESLF 3789 Writing-Intermediate High</td>
<td>90</td>
</tr>
<tr>
<td>ESLV 3828 Business Writing on Micro/ESL</td>
<td>90</td>
</tr>
<tr>
<td>ESLL 3565 Strategies for Success in Credit ESL</td>
<td>90</td>
</tr>
<tr>
<td><strong>Total Hours</strong></td>
<td><strong>180</strong></td>
</tr>
</tbody>
</table>

ESL Intermediate High Focus Skills Noncredit Certificate

Intermediate High skills are emphasized for students who want focused practice in listening, speaking, reading and writing. These courses in English as a Second Language develop and expand Intermediate High English skills.

Learning Outcomes

Upon completion of this certificate, students will be able to:
• Identify essential points of discussions, speeches, or lectures.
• Utilize appropriate formality and grammatical patterns to communicate in extended conversations or interviews.
• Demonstrate understanding of authentic reading materials and interpret meaning on a variety of common topics.
• Organize and compose paragraphs or brief essays and letters, using appropriate syntax.

Students may obtain a Certificate of Completion in ESL Advanced Low 9 upon successful completion of ESLN 3900 and any of the following courses.

Courses Required for the Certificate of Completion in ESL Advanced Low 9 Noncredit Certificate

<table>
<thead>
<tr>
<th>Courses</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ESLL 3788 Reading-Intermediate High</td>
<td>90</td>
</tr>
<tr>
<td>ESLL 3800 Intermediate High 8</td>
<td>180</td>
</tr>
<tr>
<td>ESLL 3581 Vocabulary Power</td>
<td>180</td>
</tr>
<tr>
<td>ESLL 3002 Current Event</td>
<td>90</td>
</tr>
<tr>
<td><strong>Total Hours</strong></td>
<td><strong>90-180</strong></td>
</tr>
</tbody>
</table>

ESL Advanced Low 9 Noncredit Certificate

These courses in English as a Second Language develop and expand ESL Advanced Low 9 English skills.

Learning Outcomes

Upon completion of this certificate, students will be able to:
• Engage in casual and extended conversation about a variety of topics with increasing fluency and control of complex grammatical patterns.
• Demonstrate comprehension of authentic materials on abstract topics in familiar contexts as well as descriptions and narrations of factual material.
• Demonstrate ability to write compositions on familiar material using appropriate structures and forms.

Students may obtain a Certificate of Completion in ESL Advanced Low 9 upon successful completion of ESLN 3900 and any of the following courses.
Courses Required for the Certificate of Completion in ESL Advanced Low 9

<table>
<thead>
<tr>
<th>Courses</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ESLN 3900 Advanced Low 9</td>
<td>180</td>
</tr>
</tbody>
</table>

And any one of the following

- ESLA 3012 Test of English as a Foreign Language (TOEFL) 25
- ESLF 3790 Telling Stories for ESL Students 90
- ESLF 3791 ESL Through Story-Based Video and TV 90

Total Hours 205-270

Vocational ESL Programs

ESL/ABE for Automotive Technology Noncredit Certificate

This is an ESL/ABE certificate. These courses in English as a Second Language develop and expand intermediate English skills.

Learning Outcomes

Upon completion of this certificate, students will be able to:

- Demonstrate understanding of automotive terminology, instructions, and specifications.
- Identify and demonstrate safe practices in the Automotive Program.
- Identify and discuss the multicultural nature of the U.S. workplace.
- Effectively communicate with co-workers and supervisors on-the-job.

Students may obtain a Certificate of Completion in ESL/ABE for Automotive Technology upon successful completion of ESLV 3813 and any of the following courses.

Courses Required for the Certificate of Completion in ESL/ABE for Automotive Technology

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ESLV 3813 ESL/ABE for Automotive Technology</td>
<td>90</td>
</tr>
</tbody>
</table>

And any one of the following

- ESLV 3800 Communication Skills for the Workplace 90
- ESLV 4822 Workplace Communication Strategies 45
- ESLV 5822 Basic Workplace Communication 22.5

Total Hours 112.5-180

ESL Beginning Workplace Skills Noncredit Certificate

This is an ESL Beginning Workplace Skills certificate. Students further develop and expand their knowledge of beginning English skills.

Learning Outcomes

Upon completion of this certificate, students will be able to:

- Demonstrate ability to follow basic oral and written instructions to complete simple assignments and exercises.
- Demonstrate ability to type and to proofread original or adapted ESL level-appropriate personal business letter.
- Demonstrate ability to read, write, and pronounce vocabulary involved in the use of fractions, decimals, percents and measurement operations.
- Use appropriate English vocabulary, sentence structure, and mechanics to complete online job applications and to compose online resumes.

Students may obtain a Certificate of Completion in ESL Beginning Workplace Skills upon successful completion of any two of the following courses.

Courses Required for the Certificate of Completion in ESL Beginning Workplace Skills

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ESLB 3822 Keyboarding for ESL Students</td>
<td>180</td>
</tr>
<tr>
<td>ESLB 4822 Keyboarding for ESL Students</td>
<td>90</td>
</tr>
<tr>
<td>ESLF 3003 ESL Math</td>
<td>90</td>
</tr>
<tr>
<td>ESLV 3020 ESL Skills Computer Lab</td>
<td>90</td>
</tr>
<tr>
<td>ESLV 4823 Online Job Search Skills for ESL</td>
<td>45</td>
</tr>
</tbody>
</table>

Total Hours 135-270

ESL for Health Professionals Noncredit Certificate

Requirements for the Certificate of Completion. The Certificate of Completion in ESL for Health Professionals provides immigrant and non-native English speakers, current and protective health care/community health employers, and others documented evidence of completion of three courses in an accelerated program in English communication for the healthcare workplace.

Learning Outcomes

Upon completion students will have an upper intermediate English language proficiency level and will have acquired communicative and cultural competencies that will help them succeed in the field of healthcare.

Upon completion of this certificate, students will be able to:

- Explore career goals and tools to assist them in advancing their career in heath.
- Use appropriate language skills with patients and co-workers.
- Examine current issues in the field of medicine and health care.
- Apply strategies for recognizing and including cultural beliefs and values, as they relate to health and health care.

Courses Required for the Certificate of Completion in ESL for Health Professionals

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ESLV 3842 Healthcare Communication I</td>
<td>105</td>
</tr>
<tr>
<td>ESLV 3843 Healthcare Communication II</td>
<td>105</td>
</tr>
<tr>
<td>ESLV 3844 Healthcare Communication III</td>
<td>105</td>
</tr>
</tbody>
</table>

Total Hours 105

Beginning Low VESL Communication Noncredit Certificate

This is a Beginning Low Vocational ESL certificate. These courses in English as a Second Language will provide language skills for students with little or no English language skills.

Learning Outcomes

Upon completion of this certificate, students will be able to:

- Demonstrate basic understanding of health and safety in the workplace.
- Recognize basic employee rights in the U.S. workplace.
- Effectively communicate with co-workers and supervisors on-the-job.

Students may obtain a Certificate of Completion in Beginning Low VESL Communication upon successful completion of any of the following courses.
**Beginning VESL for Housekeeping Workers Noncredit Certificate**

This is a Beginning Low Vocational ESL certificate. These courses in English as a Second Language will provide language skills for students with little or no English language skills.

**Learning Outcomes**

Upon completion of this certificate, students will be able to:

- Describe housekeeping products and methods.
- Communicate effectively in a job interview and about housekeeping work.
- Explain health and safety procedures as they apply to housekeeping work.
- Understand basic employer/employee relations such as elder care issues.

Students may obtain a Certificate of Completion in Beginning Low VESL for Housekeeping Workers upon successful completion of either ESLV 3806 or ESLV 3807 and any of the following courses.

**Courses Required for the Certificate of Completion in Beginning Low VESL for Housekeeping Workers**

<table>
<thead>
<tr>
<th>Courses</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ESLV 3806 ESL for Housekeeping or ESLV 3807 Housekeeping ESL</td>
<td>88-105</td>
</tr>
<tr>
<td>And any one of the following: ESLV 3841 Beginning VESL Communication</td>
<td>180</td>
</tr>
<tr>
<td>ESLV 4841 Beginning-Low VESL Comm. A</td>
<td>90</td>
</tr>
<tr>
<td>ESLV 4842 Beginning-Low VESL Comm. B</td>
<td>90</td>
</tr>
<tr>
<td>ESLV 3836 VESL for Customer Service</td>
<td>90</td>
</tr>
<tr>
<td>Total Hours</td>
<td>178-285</td>
</tr>
</tbody>
</table>

**Beginning VESL for Construction Workers Noncredit Certificate**

This is a Beginning Vocational ESL certificate. These courses in English as a Second Language develop and expand beginning English skills.

**Learning Outcomes**

Upon completion of this certificate, students will be able to:

- Describe past work experience, education and skills related to construction both orally and on paper.
- Respond appropriately to basic orders, requests and directions and participate in basic conversations with co-workers.
- Identify and correctly pronounce the names of basic tools and equipment.
- Demonstrate general safety practices.

Students may obtain a Certificate of Completion in ESL Beginning VESL for Construction Workers upon successful completion of ESLV 3832 and any of the following courses.

**Courses Required for the Certificate of Completion in Beginning VESL for Construction Workers**

<table>
<thead>
<tr>
<th>Courses</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ESLV 3832 Communication Skills for Construction Workers</td>
<td>90</td>
</tr>
<tr>
<td>And any one of the following: ESLV 3800 Communication Skills for the Workplace</td>
<td>90</td>
</tr>
<tr>
<td>ESLV 3801 Communication Skills for the Workplace</td>
<td>180</td>
</tr>
<tr>
<td>ESLV 4822 Workplace Communication Strategies</td>
<td>45</td>
</tr>
<tr>
<td>ESLV 5822 Basic Workplace Communication</td>
<td>22.5</td>
</tr>
<tr>
<td>Total Hours</td>
<td>112.5-270</td>
</tr>
</tbody>
</table>

**Beginning VESL for Janitorial Workers Noncredit Certificate**

This is a Beginning Vocational ESL certificate. These courses in English as a Second Language develop and expand beginning English skills.

**Learning Outcomes**

Upon completion of this certificate, students will be able to:

- Identify and pronounce names of basic equipment and tools.
- Demonstrate understanding of basic janitorial terminology.
- Understand general safety practices.
- Demonstrate understanding of basic workers’ rights on the job.
- Effectively communicate with co-workers and supervisors on-the-job.

Students may obtain a Certificate of Completion in Beginning VESL for Janitorial Workers upon successful completion of ESLV 3816 or ESLV 4816 and any of the following courses.

**Courses Required for the Certificate of Completion in Beginning VESL for Janitorial Workers**

<table>
<thead>
<tr>
<th>Courses</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ESLV 3816 Communication Skills for Janitorial Workers or ESLV 4816 Communication Skills for Janitorial Workers</td>
<td>90-180</td>
</tr>
<tr>
<td>And any one of the following: ESLV 3800 Communication Skills for the Workplace</td>
<td>180</td>
</tr>
<tr>
<td>ESLV 3801 Communication Skills for the Workplace</td>
<td>90</td>
</tr>
<tr>
<td>ESLV 4822 Workplace Communication Strategies</td>
<td>45</td>
</tr>
<tr>
<td>ESLV 5822 Basic Workplace Communication</td>
<td>22.5</td>
</tr>
<tr>
<td>Total Hours</td>
<td>112.5-360</td>
</tr>
</tbody>
</table>

**Beginning VESL for the Hospitality Industry Noncredit Certificate**

This is a Beginning Vocational ESL certificate. These courses in English as a Second Language develop and expand beginning English skills.

**Learning Outcomes**

Upon completion of this certificate, students will be able to:

- Identify and pronounce names of basic tools and equipment in the hospitality industry.
- Demonstrate understanding of general safety practices.
- Effectively communicate with co-workers and supervisors on-the-job.
Students may obtain a Certificate of Completion in Beginning VESL for the Hospitality Industry upon successful completion of ESLV 3814 or ESLV 3827 and any of the following courses.

**Courses Required for the Certificate of Completion in Beginning VESL for Hospitality Industry**

<table>
<thead>
<tr>
<th>Courses</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ESLV 3814 Communication Skills for Chinese Cooks</td>
<td></td>
</tr>
<tr>
<td>or ESLV 3827 Communication Skills for Hotel/Service Workers</td>
<td>90</td>
</tr>
<tr>
<td>And any one of the following</td>
<td></td>
</tr>
<tr>
<td>ESLV 3800 Communication Skills for the Workplace</td>
<td>180</td>
</tr>
<tr>
<td>ESLV 3801 Communication Skills for the Workplace</td>
<td>90</td>
</tr>
<tr>
<td>ESLV 4822 Workplace Communication Strategies</td>
<td>45</td>
</tr>
<tr>
<td>ESLV 5822 Basic Workplace Communication</td>
<td>22.5</td>
</tr>
<tr>
<td>Total Hours</td>
<td>112.5-270</td>
</tr>
</tbody>
</table>

**Intermediate VESL for Biotech Workers Noncredit Certificate**

This certificate develops and expands ESL Intermediate level verbal communication skills for jobs as biotech workers. These courses in English as a Second Language develop and expand intermediate English skills.

**Learning Outcomes**

Upon completion of this certificate, students will be able to:

- Demonstrate understanding of terms in the child development/childcare fields.
- Apply understanding of Child Development (CDEV) terms to describe children's interactions and assess individual children in a classroom setting.

Students may obtain an Intermediate VESL for Biotech Workers Noncredit Certificate of Completion upon successful completion of any course.

**Courses Required for the Certificate of Completion in Intermediate VESL for Child Development Workers**

<table>
<thead>
<tr>
<th>Courses</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ESLV 3833 VESL for Child Development A</td>
<td>90</td>
</tr>
<tr>
<td>ESLV 3834 VESL for Child Development B</td>
<td>90</td>
</tr>
<tr>
<td>ESLV 4833 VESL for Child Development A</td>
<td>45</td>
</tr>
<tr>
<td>Total Hours</td>
<td>45-90</td>
</tr>
</tbody>
</table>

**Intermediate VESL for Child Development Workers Noncredit Certificate**

This certificate develops and expands ESL Intermediate level verbal communication skills for jobs as child development workers. These courses in English as a Second Language develop and expand intermediate English skills.

**Learning Outcomes**

Upon completion of this certificate, students will be able to:

- Compose business messages, memoranda, reports, letters and resumes.
- Respond appropriately to basic orders, requests, and directions used in clerical jobs.
- Use basic telephone knowledge, common phrases and appropriate etiquette in answering/making office phone calls and taking phone messages.
- Apply job search skills to looking for clerical work.

Students may obtain an Intermediate VESL for Child Development Workers Noncredit Certificate of Completion upon successful completion of ESLV 3804 and any of the following courses.

**Courses Required for the Certificate of Completion in Intermediate VESL for Clerical Workers**

<table>
<thead>
<tr>
<th>Courses</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ESLV 3804 VESL for Clerical Procedures</td>
<td>180</td>
</tr>
<tr>
<td>And any one of the following</td>
<td></td>
</tr>
<tr>
<td>ESLV 3828 Business Writing on Micros/ESL</td>
<td>90</td>
</tr>
<tr>
<td>ESLV 3819 Social Communication</td>
<td>90</td>
</tr>
<tr>
<td>Total Hours</td>
<td>270</td>
</tr>
</tbody>
</table>

**Intermediate VESL for Construction Workers Noncredit Certificate**

This certificate develops and expands ESL Intermediate level verbal communication skills for jobs in the construction trades.

**Learning Outcomes**

Upon completion of this certificate, students will be able to:

- Demonstrate understanding of basic construction terms and tasks in listening, speaking, reading and writing activities.
- Demonstrate general safety practices through listening, speaking and reading, activities.
- Clarify basic construction tasks through asking and answering appropriate questions related to tasks.

Students may obtain an Intermediate VESL for Construction Workers Noncredit Certificate upon successful completion of ESLV 3831 and any of the following courses.

**Courses Required for the Certificate of Completion in Intermediate VESL for Construction Workers**

<table>
<thead>
<tr>
<th>Courses</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ESLV 3831 Comm. Skills for Construction Workers</td>
<td>90</td>
</tr>
<tr>
<td>ESLV 3800 Comm. Skills for the Workplace</td>
<td>90</td>
</tr>
<tr>
<td>ESLV 4822 Workplace Comm. Strategies</td>
<td>45</td>
</tr>
<tr>
<td>ESLV 5822 Basic Workplace Communication</td>
<td>22.5</td>
</tr>
<tr>
<td>Total Hours</td>
<td>112.5-180</td>
</tr>
</tbody>
</table>

**Intermediate VESL for Health Workers Noncredit Certificate**

This certificate develops and expands ESL Intermediate level verbal communication skills for jobs as health workers. These courses in English as a Second Language develop and expand intermediate English skills.

**Learning Outcomes**

Upon completion of this certificate, students will be able to:

- Demonstrate general knowledge of health care settings, terminology, and staff.
- Communicate effectively with workers in a medical setting, including use of small talk and idioms.
- Recognize and demonstrate an awareness of cultural and gender diversity in a medical environment.

Students may obtain an Intermediate VESL for Health Workers Non-Credit Certificate upon successful completion of any of the following courses.

**Courses Required for the Certificate of Completion in Intermediate VESL for Health Workers**

<table>
<thead>
<tr>
<th>Courses</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ESLV 5830 VESL for Health Workers</td>
<td>90</td>
</tr>
<tr>
<td>ESLV 3830 Comm. Skills for Health Workers</td>
<td>180</td>
</tr>
<tr>
<td>ESLV 4830 Comm. Skills for Health Workers-A</td>
<td>90</td>
</tr>
<tr>
<td>ESLV 4831 Comm. Skills for Health Workers-B</td>
<td>90</td>
</tr>
<tr>
<td>ESLV 4839 Computer VESL-Health Workers</td>
<td>22.5</td>
</tr>
<tr>
<td>Total Hours</td>
<td>22.5-180</td>
</tr>
</tbody>
</table>

**Intermediate VESL for Hospitality Workers Noncredit Certificate**

This is an Intermediate VESL certificate. These courses in English as a Second Language develop and expand intermediate English skills.

**Learning Outcomes**

Upon completion of this certificate, students will be able to:

- Identify and demonstrate health and safety practices.
- Effectively communicate with co-workers and supervisors on-the-job.

Students may obtain a Certificate of Completion in Intermediate VESL for Hospitality Workers upon successful completion of any two of the following courses.

**Courses Required for the Certificate of Completion in Intermediate VESL for Hospitality Workers**

<table>
<thead>
<tr>
<th>Courses</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ESLV 3822 Communications for Customer Service Employees</td>
<td>90</td>
</tr>
<tr>
<td>ESLV 3808 Communication Skills for Culinary Workers</td>
<td>90</td>
</tr>
<tr>
<td>ESLV 3835 VESL for Banquet Servers</td>
<td>90</td>
</tr>
<tr>
<td>ESLV 3824 Communication Skills for Food Service/Hospitality</td>
<td>90</td>
</tr>
<tr>
<td>ESLV 3830 Communication Skills for the Workplace</td>
<td>90</td>
</tr>
<tr>
<td>ESLV 4822 Workplace Communication Strategies</td>
<td>45</td>
</tr>
<tr>
<td>ESLV 5822 Basic Workplace Communication</td>
<td>22.5</td>
</tr>
<tr>
<td>Total Hours</td>
<td>67.5-180</td>
</tr>
</tbody>
</table>

**Intermediate VESL for Job Searching Noncredit Certificate**

This is an Intermediate VESL certificate. These courses in English as a Second Language develop and expand intermediate English skills.

**Learning Outcomes**

Upon completion of this certificate, students will be able to:

- Demonstrate ability to describe one's training, education, experience, skills, and interests in an interview.
- Interpret job want-ads, announcements, and descriptions.
- Compare some cultural values and attitudes in the United States towards work with those in the student's native country.

Students may obtain a Certificate of Completion in Intermediate VESL Skills for Job Searching upon successful completion of ESLV 3823 and any of the following courses.

**Courses Required for the Certificate of Completion in Intermediate VESL Skills for Job Searching**

<table>
<thead>
<tr>
<th>Courses</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ESLV 3823 Communication Skills for Job Searching</td>
<td>90</td>
</tr>
<tr>
<td>ESLV 3800 Communication Skills for the Workplace</td>
<td>90</td>
</tr>
<tr>
<td>ESLV 4822 Workplace Communication Strategies</td>
<td>45</td>
</tr>
<tr>
<td>ESLV 4823 Online Job Search Skills for ESL</td>
<td>45</td>
</tr>
<tr>
<td>ESLV 5822 Basic Workplace Communication</td>
<td>22.5</td>
</tr>
<tr>
<td>Total Hours</td>
<td>112.5-180</td>
</tr>
</tbody>
</table>

**Intermediate VESL for Printing Workers Noncredit Certificate**

This certificate develops and expands ESL Intermediate level verbal communication skills for jobs as printing workers. These courses in English as a Second Language develop and expand intermediate English skills.

**Learning Outcomes**

Upon completion of this certificate, students will be able to:

- Describe and explain printing processes, methods of print production and safety warnings.
- Demonstrate professional service practices when assisting customers.
- Demonstrate general safety practices.

Students may obtain a Certificate of Completion in Intermediate VESL for Printing Workers upon successful completion of ESLV 3839 and any of the following courses.
Courses Required for the Certificate of Completion in Intermediate VESL for Printing Workers

<table>
<thead>
<tr>
<th>Courses</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ESLV 3839 VESL for Printing</td>
<td>90</td>
</tr>
<tr>
<td>And any one of the following</td>
<td></td>
</tr>
<tr>
<td>ESLV 3800 Communication Skills for the Workplace</td>
<td>90</td>
</tr>
<tr>
<td>ESLV 4822 Workplace Communication Strategies</td>
<td>45</td>
</tr>
<tr>
<td>ESLV 5822 Basic Workplace Communication</td>
<td>22.5</td>
</tr>
<tr>
<td>Total Hours</td>
<td>112.5-180</td>
</tr>
</tbody>
</table>

Intermediate VESL for Transit Operators Noncredit Certificate

This certificate develops and expands ESL Intermediate level verbal communication skills for jobs as transit operators. These courses in English as a Second Language develop and expand intermediate English skills.

Learning Outcomes
Upon completion of this certificate, students will be able to:

- Demonstrate ability to communicate with passengers and supervisors.
- Demonstrate ability to use the phone and comprehend radio dispatches.
- Describe basic parts of mass transit vehicles and engines.
- Identify safety issues in public transportation.

Students may obtain an Intermediate VESL for Transit Operators Noncredit Certificate of Completion upon successful completion of any of the following courses.

Courses Required for the Certificate of Completion in Intermediate VESL for Transit Operators

<table>
<thead>
<tr>
<th>Courses</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ESLV 3837 Comm. Skills for New Transit Operators</td>
<td>90</td>
</tr>
<tr>
<td>ESLV 3838 Comm. Skills for Transit Operators</td>
<td>90</td>
</tr>
<tr>
<td>ESLV 4837 Comm. Skills for New Transit Operators</td>
<td>45</td>
</tr>
<tr>
<td>ESLV 4838 Comm. Skills for Transit Operators</td>
<td>45</td>
</tr>
<tr>
<td>Total Hours</td>
<td>45-90</td>
</tr>
</tbody>
</table>

Vocational ESL Office Training Noncredit Certificate

This certificate of completion program prepares students for a wide variety of entry-level clerical positions in the automated office environment or for further advanced studies. Class instruction includes basic business skills (keyboarding, 10-key calculation, office correspondence and filing), business communication skills (business English, telephone training, and job search), and computer applications (word processing, database management, and spreadsheets).

Learning Outcomes
Upon completion of this certificate, students will be able to:

- Demonstrate understanding of basic office technology and procedures.
- Respond appropriately to basic orders, requests, and directions used in clerical jobs.
- Demonstrate understanding of general office work culture through critical thinking and problem-solving activities.
- Apply job search skills for clerical work.

Admission Requirements. Completion of Intermediate Low 5 (ESLN 3500 or 3505); typing (25 wpm or with permission of instructor).

Requirements for Completion. In addition to the course requirements, students must also fulfill the following requirements: 80% minimum attendance; Typing (45 wpm; 10% error rate) and 10-key (160 wpm; 5% error rate). Length of Program: 810 hours

Courses Required for the Certificate of Completion in Vocational ESL Office Training

<table>
<thead>
<tr>
<th>Courses</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ESLV 3804 VESL for Clerical Workers</td>
<td>180</td>
</tr>
<tr>
<td>ESLV 3801 Communication Skills for the Workplace</td>
<td>180</td>
</tr>
<tr>
<td>OR ESLV 3819 Social Communication</td>
<td>180</td>
</tr>
<tr>
<td>AND ESLV 3829 Computer VESL-High Int</td>
<td>180</td>
</tr>
<tr>
<td>BOSS 5503 Keyboarding-All Levels</td>
<td>180</td>
</tr>
<tr>
<td>OR BOSS 5502 Clerical Keyboarding</td>
<td>180</td>
</tr>
<tr>
<td>OR ESLB 3822 Keyboarding for ESL Students</td>
<td>180</td>
</tr>
<tr>
<td>BOSS 5507 Data Entry/10-Key</td>
<td>90</td>
</tr>
<tr>
<td>OR BOSS 2500 Bus. Math with Spreadsheets</td>
<td>90</td>
</tr>
<tr>
<td>ESLV 3821 Intro to Computers for ESL-Intermediate</td>
<td>90</td>
</tr>
<tr>
<td>OR COMP 9857 MS Office Business Appl. with Simulated Projects</td>
<td>90</td>
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<tr>
<td>Electives (Selected from below)</td>
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</tr>
<tr>
<td>Total Hours</td>
<td>810</td>
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Noncredit Courses

These courses are designed for students whose first or native language is not English. Students gain proficiency in English to find employment, to continue their education, and to function successfully in the culture and society of the United States. Survival skills are stressed in the first three levels of the program. Vocational paths provide a bridge to vocational training. Up to 90 ESL credits may be used as elective credit for the high school diploma.

ESL, Academic

ESLA 3012. Test of English as a Foreign Language (TOEFL) Preparation (25 hrs)

Advised: Completion of ESLN 3600 (Intermediate Low 6)

Development of test-taking techniques essential for success in taking TOEFL exams. Sample tests of Listening, Grammar and Reading sections administered.

ESLA 3565. Strategies for Success in Credit ESL (90 hrs)

Advised: Completion of ESLN 3400 (Beginning Low 4)

Intermediate noncredit ESL students will develop the writing and composition skills needed for composition assignments in credit ESL classes. Academic level listening strategies and note-taking skills will prepare students for academic oral participation and presentations. Students will learn in-class test-taking strategies.

ESL, Bridge

Grades of P/NP are offered for ESLB courses.

ESLB 3821. Introduction to Computers for ESL - Intermediate (90 hrs)

Advised: Completion of ESLN 3400 (Beginning High 4)

Introduction to computer skills for intermediate level ESL students. Overview of computer components and terminology: Introduction to
applications such as word processing, Internet, e-mail, spreadsheets, presentation and other software. English reading, writing, speaking and listening skills are developed through a variety of computer projects and interactive classroom work.

ESLB 3822. Keyboarding for ESL Students (180 hrs)
**Advise: Completion of ESLN 3100 (Beginning Low 1)**
Reinforcement of language skills through introduction to keyboarding with materials and lessons especially adapted for ESL students. Development of keyboarding techniques for centering, tabulating, speed and accuracy. Application of typing skills to writing at appropriate ESL levels.

ESLB 4821. Introduction to Computers for ESL - Intermediate (45 hrs)
**Advise: Completion of ESLN 3400 (Beginning High 4)**
A short introductory course in computer skills for intermediate level ESL students. Computer terminology related to word processing, spreadsheets, and database applications are introduced. Intermediate reading and writing skills are used to create and edit a few documents, worksheets and data reports, using simple software.

ESLB 4822. Keyboarding for ESL Students (90 hrs)
**Advise: Completion of ESLN 3100 (Beginning Low 1)**
An overview of keyboarding skills with materials and lessons especially adapted for beginning level ESL students. Keyboarding techniques for centering, tabulating, speed and accuracy are introduced. Limited practice is available.

**ESL, Citizenship**

ESLC 3030. ESL/Citizenship Literacy (90 hrs)
**Advise: Completion of ESLN 3100 (Literacy A)**
ESL Literacy students prepare for the U.S. Citizenship test given by the Department of Immigration and Naturalization Services. Speaking, listening, reading and writing skills at the basic literacy level applied to answering test questions on personal information, U.S. history, government and the Constitution.

ESLC 3031. ESL/Citizenship (90 hrs)
**Advise: Completion of ESLN 3100 (Beginning Low 1)**
Preparation for the U.S. Citizenship test given by the Department of Immigration and Naturalization Services. Speaking, listening, reading and writing skills applied to answering test questions on U.S. history, government and the Constitution.

ESLC 3032. ESL Citizenship Multi-Level 1-4 (90 hrs)
**Advise: Literate in Native Language**
ESL learners prepare for the U.S. Citizenship test given by the Department of Immigration and Naturalization Services. Beginning English speaking, listening, reading and writing skills applied to answering test questions on personal information, U.S. history, government and the Constitution.

ESLC 3033. ESL Citizenship Multi-Level 5-8 (90 hrs)
**Advise: Completion of ESLN 3400 (Beginning High 4)**
Preparation for the U.S. Citizenship test given by the Department of Immigration and Naturalization Services. Speaking, listening, reading and writing skills applied to answering test questions on personal information, U.S. history, government and the Constitution.

ESLC 4032. ESL Citizenship Multi-Level 1-4 (45 hrs)
**Advise: Literate in Native Language**
ESL learners receive minimal preparation for the U.S. Citizenship test given by the Department of Immigration and Naturalization Services. Beginning speaking and listening are emphasized for accurate responses to test questions. Learners also practice written responses.

**ESLC 4033. ESL Citizenship Multi-Level 5-8 (45 hrs)**
**Advise: Completion of ESLN 3400 (Beginning High 4)**
ESL learners receive basic preparation for the U.S. Citizenship test given by the Department of Immigration and Naturalization Services. Intermediate speaking and listening are emphasized for accurate responses to test questions. Learners engage in extended discussions of the above topics as they relate to current events. Written responses are also practiced.

**ESL, Focus**

ESLF 3000. Native Language Literacy (180 hrs)
Development of literacy skills in native language. Emphasis on reading, writing, math and basic education. 1-6 semesters depending on mastery of course objectives.

ESLF 3001. ESL Women’s Issues (90 hrs)
**Advise: Completion of ESLN 3500 (Intermediate Low 5)**
Development of listening, speaking, reading, and writing skills through discussions on topics that affect women’s lives such as family life, changing roles of men and women, gender and the workplace.

ESLF 3002. ESL Current Events (90 hrs)
**Advise: Completion of ESLN 3600 (Intermediate Low 6)**
Readings from a variety of materials on current events and issues followed by discussions to increase awareness of local, state, national and international issues. Development of reading vocabulary, listening and speaking skills. Emphasis on evaluation and interpretation of materials.

ESLF 3003. ESL Math (90 hrs)
**Advise: Completion of ESLN 3100 (Beginning Low 1)**
Development of math vocabulary used in directions and written problems involving whole numbers, fractions, decimals and percents in an ESL context.

ESLF 3005. Writing with a Computer - Intermediate (90 hrs)
**Advise: Completion of ESLN 3400 (Beginning High 4)**
Writing skills and the computer skills necessary to compose on a computer are taught. All parts of the writing process - brainstorming, writing outlines, revising and editing. Computer terminology, word processing, spreadsheet documents, drawing and navigating the Internet are included.

ESLF 3006. Computer Assisted ESL - Intermediate (180 hrs)
**Advise: Completion of ESLN 3400 (Beginning High 4)**
Intermediate level ESL listening, speaking, reading and writing skills expanded and developed through more extensive group computer projects in an interactive classroom environment. Instruction includes computer terminology and development and application of computer skills to a variety of projects.

ESLF 3007. Computer Assisted ESL - Beginning Low (90 hrs)
**Advise: Completion of ESLN 3100 (Literacy A)**
Beginning level ESL listening, speaking, reading and writing skills are expanded and developed through group computer projects in an interactive classroom environment. Aural development, oral readiness and reading readiness are stressed. Computer terminology and basic computer skills are included.
ESLF 3008. Computer Assisted ESL - Beginning High (90 hrs)  
**Advised: Completion of ESLN 3200 (Beginning High 2)**  
Beginning level ESL listening, speaking, reading and writing skills expanded and developed through group computer projects. Aural development, oral readiness and reading readiness stressed. Computer terminology and basic computer skills.

ESLF 3011. English Through Song Lyrics (90 hrs)  
**Advised: Completion of ESLN 3300 (Beginning Low 3)**  
Using English-language music to learn listening, reading, writing, and conversational skills and grammar, and to develop awareness of American culture.

ESLF 3020. ESL Skills Computer Lab (6-90 hrs)  
**Advised: Completion of ESLN 3100 (Beginning Low 1)**  
Designed to meet the needs of ESL students at various levels. Development of speaking, listening, reading, writing and basic computer skills through the use of computer-assisted language learning software, writing on the computer, internet and other software programs.

ESLF 3126. Listening - Beginning Low (90 hrs)  
**Advised: Literate in native language**  
Beginning level listening comprehension is developed. This course develops basic listening skills. Students learn frequently spoken words, phrases, simple learned expressions and questions.

ESLF 3127. Speaking - Beginning Low (90 hrs)  
**Advised: Literate in native language**  
Speaking skills for Beginning low ESL students. Communicate survival needs using very simple learned phrases and sentences. Engage in limited conversations.

ESLF 3128. Reading - Beginning Low (90 hrs)  
**Advised: Literate in native language**  
Beginning low reading skills are developed. This course includes recognition of numbers and letters. Students construct meaning from simple print materials on familiar topics.

ESLF 3129. Writing - Beginning Low (90 hrs)  
**Advised: Literate in native language**  
Beginning low writing skills developed. Basic mechanics such as punctuation and capitalization are emphasized. Most content is dictated, substituted, completed or copied from other sources. Writing intended primarily to facilitate and reflect learning of spoken language.

ESLF 3144. Pronunciation - Beginning (90 hrs)  
**Advised: Completion of ESLN 3020 (Literacy B)**  
Development of basic pronunciation skills through understanding of English sounds. Rhythm, stress, and intonation are introduced.

ESLF 3346. Listening - Beginning High (90 hrs)  
**Advised: Completion of ESLN 3200 (Beginning Low 2)**  
Beginning High listening comprehension skills are emphasized. Learners comprehend spoken English containing some unfamiliar words when used in familiar contexts and can participate in simple conversations.

ESLF 3347. Speaking - Beginning High (90 hrs)  
**Advised: Completion of ESLN 3200 (Beginning Low 2)**  
High Beginning speaking skills are emphasized in this course. Learners communicate about basic needs and common activities and participate in basic conversations in routine social situations.

ESLF 3348. Reading - Beginning High (90 hrs)  
**Advised: Completion of ESLN 3200 (Beginning Low 2)**  
Basic reading skills practiced and developed, including interpreting vocabulary in context, reading simplified forms, and using various reading strategies to comprehend written materials. Learners read some authentic materials dealing with everyday topics.

ESLF 3349. Writing - Beginning High (90 hrs)  
**Advised: Completion of ESLN 3200 (Beginning Low 2)**  
Beginning High writing skills are emphasized. Use of correct mechanics and formatting are expanded. Learners generate sentences into short, loosely organized paragraphs related to survival skills and personal topics. Short messages or notes are produced.

ESLF 3566. Listening - Intermediate Low (90 hrs)  
**Advised: Completion of ESLN 3400 (Beginning High 4)**  
Intermediate Low listening focus course. Comprehend spoken English containing some unfamiliar words in mostly familiar contexts. Understand and respond to another speaker in increasingly extended conversations on familiar topics.

ESLF 3567. Speaking - Intermediate Low (90 hrs)  
**Advised: Completion of ESLN 3400 (High Beginning 4)**  
Intermediate Low speaking focus. Comprehend spoken English containing some unfamiliar words well enough to respond to another speaker in increasingly extended conversations on familiar topics and in some unfamiliar contexts. Communicate about topics beyond survival needs including giving a brief oral presentation.

ESLF 3568. Reading - Intermediate Low (90 hrs)  
**Advised: Completion of ESLN 3400 (High Beginning 4)**  
Intermediate Low reading focus course. Comprehend written English containing some unfamiliar words. Use an increasing variety of word analysis skills to determine the meaning of new words. Learners read simplified materials on familiar subjects and use visual, graphic and contextual clues to help comprehend authentic materials.

ESLF 3569. Writing - Intermediate Low (90 hrs)  
**Advised: Completion of ESLN 3400 (Beginning High 4)**  
Longer written work produced in less controlled tasks with expanded vocabulary and sentence style. Paragraph development and methods of organization introduced. Work revised and edited from peer-group response and/or teacher feedback.

ESLF 3581. Vocabulary Power (180 hrs)  
**Advised: Completion of ESLN 3400 (Beginning Low 4)**  
Focus on building vocabulary skills in English through a variety of highly motivating and communicative activities to improve oral and written fluency in English at an intermediate level.

ESLF 3584. Pronunciation - Intermediate (90 hrs)  
**Advised: Completion of ESLN 3400 (Beginning High 4)**  
Pronunciation skills are practiced and expanded for better oral communication. Review of formation and production of English sounds. Rhythm, stress, and intonation in intermediate level conversations developed.

ESLF 3585. Accelerated Grammar (180 hrs)  
**Advised: Completion of ESLN 3400 (Beginning High 4)**  
Practice in writing all types of grammatical structures and in using all the tenses and forms of English at the Intermediate level.
ESLF 3786. Listening - Intermediate High (90 hrs)

Advised: Completion of ESLN 3700 (Intermediate High 7)

Intermediate High listening focus course. Learners will comprehend essential points of spoken English on topics in specific fields of interest. Learners will understand and respond to another speaker in conversations on unfamiliar topics.

ESLF 3787. Speaking - Intermediate High (90 hrs)

Advised: Completion of ESLN 3700 (Intermediate High 7)

Intermediate High speaking focus course. Learners communicate about a variety of topics. Learners engage in extended conversations and interviews except for highly specialized subjects. Learners can adjust language to the level of formality needed to converse and can clarify utterances in order to be understood by the general public.

ESLF 3788. Reading - Intermediate High (90 hrs)

Advised: Completion of ESLN 3700 (Intermediate High 7)

Intermediate High reading focus course. Comprehend authentic written English on common topics. Use a variety of word analysis skills to determine the meaning of new words in context on familiar topics and in specialized materials. Learners draw conclusions from authentic materials on familiar topics.

ESLF 3789. Writing - Intermediate High (90 hrs)

Advised: Completion of ESLN 3700 (Intermediate High 7)

Intermediate High writing focus course. Learners write brief compositions about previously discussed topics. Learners write routine correspondence with increasing complexity of organization and detail.

ESLF 3790. Telling Stories for ESL Students (90 hrs)

Advised: Completion of ESLN 3600 (Low Intermediate 6)

Focus on the creative use of the English language through performance exercises, the telling of various tales from different cultures, and the oral creation of original stories to improve narrative and communication skills at the high intermediate level.

ESLF 3791. ESL Through Story-Based Video and TV (90 hrs)

Advised: Completion of ESLN 3600 (Intermediate Low 6)

Development of intermediate listening and speaking skills through viewing of story-based videos and TV programs such as episodes of soap operas, sit-coms and dramas.

ESLF 4006. Intermediate CALL (90 hrs)

Advised: Completion of ESLN 3400 or Equivalent Language Level

Intermediate level English as a Second Language (ESL) listening, speaking, reading and writing skills are expanded and further developed in an interactive computer lab. Learners are introduced to basic computer terminology and English language learning software. Students participate in short in-class group projects.

ESLF 4007. Beginning Low CALL (45 hrs)

Advised: Completion of ESLN 3010

Low beginning level English as a Second Language (ESL) listening, speaking, reading and writing skills are developed through a limited number of computer-assisted ESL language learning activities in an ESL computer lab. Computer vocabulary and activities are the focus of beginning ESL listening and speaking conversational skills.

ESLF 4008. Beginning High CALL (45 hrs)

Advised: Completion of ESLN 3200 (Beginning Low 2)

Beginning high level English as a Second Language (ESL) listening, speaking, reading and writing skills are further developed through ESL language learning computer software in an ESL computer lab. Group projects will encourage listening and speaking skills.

ESLF 4127. Beginning Low Conversation (45 hrs)

Advised: Literate in Native Language

Beginning low speaking and listening conversational skills are emphasized. Learners begin to communicate about common activities and engage in short, simple conversations.

ESLF 4347. Conversation-Beginning High (45 hrs)

Advised: Completion of ESLN 3200 (Beginning Low 2)

Beginning high speaking and listening conversational skills are emphasized. Learners communicate about common activities and participate in simple conversations in routine social situations.

ESLF 4567. Intermediate Low Conversation (45 hrs)

Advised: Completion of ESLN 3400 (High Beginning 4)

Intermediate low speaking and listening skills are emphasized. Students participate in conversations on some unfamiliar topics beyond survival needs. Students begin to discuss authentic written materials on familiar subjects.

ESLF 4569. Writing – Intermediate Low (45 hrs)

Advised: Completion of ESLN 3400 (Beginning High 4)

Longer written work produced in less controlled tasks, with expanded vocabulary and sentence style. Paragraph development and methods of organization introduced. Work revised and edited from peer-group response and/or teacher feedback.

ESLF 4787. Intermediate High Conversation (45 hrs)

Advised: Completion of ESLN 3600 (Intermediate Low 6)

Intermediate high speaking and listening skills are emphasized. Students participate in extended conversations on a variety of topics. Students are able to read and discuss authentic material on common topics.

ESLF 5006. Computer-Assisted ESL (45 hrs)

Advised: Completion of ESLN 3400 (Beginning High 4)

Intermediate level ESL listening, speaking, reading, and writing skills are expanded through selected group computer projects. Students are exposed to computer vocabulary and basic skills which can be used as a basis for further study.

ESL, Noncredit General

ESLF 3010. ESL Literacy-A (180 hrs)

Advised: Literate in Native Language

Orientation to the classroom and development of ESL literacy skills. Emphasis on oral English for survival and development of pre-reading and pre-writing skills.

ESLF 3015. ESL Literacy A (90 hrs)

Advised: Literate in Native Language

Orientation to classroom procedures and development of ESL literacy skills. Emphasis on oral English for classroom and basic survival.

ESLF 3016. ESL Literacy A (90 hrs)

Advised: Literate in Native Language

Development of ESL literacy skills. Survival listening and pronunciation skills are included. Emphasis is on pre-reading and pre-writing survival skills.
ESLN 3020. ESL Literacy B (180 hrs)
*Advised: Literate in Native Language*
Development of ESL literacy skills. Emphasis on English sound/symbol correspondence, reading and writing simple English sentences.

ESLN 3100. Beginning Low 1 (180 hrs)
*Advised: Literate in Native Language*
Beginning Low 1 students develop language skills and a general understanding of the content in simple written and spoken English. Students practice language for daily survival and participate in common social exchanges. Students learn to copy and print simple sentences.

ESLN 3105. Beginning Low 1 - A (90 hrs)
*Advised: Literate in Native Language*
Beginning Low 1 English language skills. Students are introduced to language for daily survival and common social conversations. Students learn to print learned material.

ESLN 3106. Beginning Low 1 - B (90 hrs)
*Advised: Literate in Native Language*
Beginning Low 1 English language skills. Students are introduced to simple written English. Students continue to practice language for daily survival and expand their ability to participate in common social exchanges. Students copy and print learned phrases and simple sentences.

ESLN 3140. Beginning 1-4 Multi-level (180 hrs)
*Advised: Literate in Native Language*
Designed to meet the needs of students with various levels of beginning English proficiency. Comprehend spoken English in familiar contexts. Communicate about common activities and participate in basic conversations in routine social situations. Generate sentences related to survival skills and personal topics.

ESLN 3145. Beginning 1-4 Multi-level - A (90 hrs)
*Advised: Literate in Native Language*
Designed to meet the needs of students with various levels of beginning English proficiency. Comprehension of spoken English in familiar contexts and communication related to basic needs and common is emphasized. Participation in basic conversations in routine social situations is included. Basic reading skills and sentence writing related to survival skills and personal topics is introduced.

ESLN 3146. Beginning 1-4 Multi-level - B (90 hrs)
*Advised: Literate in Native Language*
Designed to meet the needs of students with various levels of beginning English proficiency. Basic reading skills and sentence writing related to survival skills and personal topics are emphasized. Participation in basic conversations in routine social situations is included.

ESLN 3150. Beginning Low 1-2 Intensive (180 hrs)
*Advised: Literate in Native Language*
Beginning Low accelerated course. Students learn basic language skills including frequently used spoken words, simple expressions and questions in familiar contexts. Survival needs listening comprehension, oral communication, reading readiness are included. Pre-writing skills are introduced.

ESLN 3200. Beginning Low 2 (180 hrs)
*Advised: Completion of ESLN 3100 (Beginning Low 1)*
Beginning Low 2 students further develop and expand their knowledge of beginning low English skills. Students learn language for daily needs and limited participation in common social conversations. Aural development, oral readiness, and reading readiness are emphasized. Simple writing practice is introduced.

ESLN 3205. Beginning Low 2 - A (90 hrs)
*Advised: Completion of ESLN 3100 (Beginning Low 1)*
Beginning Low 2 students further develop and expand their knowledge of beginning low English skills. Students learn language for daily needs and limited participation in common social conversations. Listening, speaking and pronunciation skills are emphasized.

ESLN 3206. Beginning Low 2 - B (90 hrs)
*Advised: Completion of ESLN 3100 (Beginning Low 1)*
Beginning Low 2 students further develop and expand their knowledge of beginning low English skills. Students learn language for daily needs and limited participation in common social conversations. Reading readiness is emphasized and simple writing practice is introduced.

ESLN 3300. Beginning High 3 (180 hrs)
*Advised: Completion of ESLN 3200 or Equivalent Language Ability*
Beginning high basic level English skills. Comprehend spoken English in familiar contexts. Communicate about basic needs and routine activities and participate in basic conversations about routine social situations. Generate sentences related to survival skills and personal topics.

ESLN 3305. Beginning High 3 - A (90 hrs)
*Advised: Completion of ESLN 3200 (Beginning Low 2)*
Beginning High 3 English skills. Students learn to comprehend spoken English in routine and familiar contexts. Communicating about basic needs and participating in basic conversations is emphasized. Students generate sentences related to personal topics.

ESLN 3306. Beginning High 3 - B (90 hrs)
*Advised: Completion of ESLN 3200 (Beginning Low 2)*
Beginning High 3 basic English skills. Students review their comprehension of spoken English in familiar contexts. Students interpret simplified reading material. Generate short, loosely organized paragraphs related to familiar topics.

ESLN 3340. Beginning High 3-4 Multilevel (180 hrs)
*Advised: Completion of ESLN 3200 (Beginning Low 2)*
Students will develop Beginning High basic level English skills. Students will generate sentences about life and work topics and organize them into paragraph form. Students will understand English speakers and can participate in basic conversations in familiar work life contexts. Students can communicate about basic needs and routine activities.

ESLN 3350. Beginning High 3-4 Intensive (180 hrs)
*Advised: Completion of ESLN 3200 (Beginning High 2)*
Beginning High accelerated course. Comprehend spoken English in familiar contexts with the ability to participate in simple conversations. Communicate about basic needs and common activities in routine social situations. Read simplified material on familiar topics and generate sentences to form short, loosely organized paragraphs related to survival skills and personal topics.

ESLN 3400. Beginning High 4 (180 hrs)
*Advised: Completion of ESLN 3300 (Beginning High 3)*
Beginning High 4 language skills. Comprehend spoken English in familiar contexts. Communicate about basic needs and common activ
ities and participate in basic conversations in routine social situations. Generate sentences into short, loosely organized paragraphs related to survival skills and personal topics.

**ESLN 3405. Beginning High 4 - A (90 hrs)**

*Advised: Completion of ESLN 3300 (Beginning High 3)*

Beginning High 4 language skills. Comprehend spoken English in familiar contexts with some unfamiliar words. Communicate about basic needs and activities and participate in basic conversations in routine social situations. Generate simple sentences about personal and familiar topics.

**ESLN 3406. Beginning High 4 - B (90 hrs)**

*Advised: Completion of ESLN 3300 (Beginning High 3)*

Beginning High 4 language skills. Comprehend spoken English in familiar contexts. Communicate about common activities and participate in basic conversations. Generate sentences about personal experiences and familiar topics into short loosely organized paragraphs.

**ESLN 3500. Intermediate Low 5 (180 hrs)**

*Advised: Completion of ESLN 3400 (Beginning High 4)*

Intermediate Low 5 English skills. Learners understand increasingly extended conversations on familiar topics. Readings include authentic or adapted narratives and descriptive passages. Level 5 grammar structures and forms are used to develop short clearly organized paragraphs and messages.

**ESLN 3505. Intermediate Low 5 - A (90 hrs)**

*Advised: Completion of ESLN 3400 (Beginning High 4)*

Intermediate Low 5 English skills. Learners comprehend increasingly extended conversations in mostly familiar contexts. Students participate in conversations in familiar and unfamiliar contexts. Readings include simplified narratives. Level 5 grammar structures and forms are introduced.

**ESLN 3506. Intermediate Low 5 - B (90 hrs)**

*Advised: Completion of ESLN 3400 (Beginning High 4)*

Intermediate Low 5 English skills. Learners comprehend extended conversations in familiar contexts. Readings include authentic or adapted narratives and descriptive passages. Level 5 grammar structures and forms are used to develop short, clearly organized paragraphs and messages.

**ESLN 3550. Intermediate Low 5-6 Intensive (180 hrs)**

*Advised: Completion of ESLN 3400 (Beginning High 4)*

Intermediate Low accelerated course. Comprehend spoken and written English containing some unfamiliar words. Participate in conversation on some unfamiliar topics beyond survival needs. Comprehend simplified materials on familiar subjects and begin to read authentic materials. Write one or more paragraphs related to survival skills, personal topics and other topics.

**ESLN 3560. Intermediate Low 5-6 Multilevel (180 hrs)**

*Advised: Completion of ESLN 3400 (Beginning High 4)*

Students improve speaking, listening and writing of English on topics beyond survival needs. Students develop vocabulary and reading skills. Students write paragraphs and give short speeches on familiar topics using clear organization.

**ESLN 3580. Intermediate 5-8 Multi-level (180 hrs)**

*Advised: Completion of ESLN 3400 (Beginning High 4)*

Intermediate noncredit ESL students will develop the skills necessary to participate in extended conversations with some unfamiliar vocabulary. Students will be able to summarize familiar authentic material. Students will write short letters and paragraphs on learned topics.

**ESLN 3600. Intermediate Low 6 (180 hrs)**

*Advised: Completion of ESLN 3500 (Intermediate Low 5)*

Intermediate Low 6 language skills. Comprehend spoken and written English containing some unfamiliar words. Participate in increasingly extended conversations on some unfamiliar topics beyond survival needs. Understand short reading passages differentiating between fact and opinion with some accuracy. Write a clearly organized paragraph with relevant ideas and clearly organized ideas.

**ESLN 3605. Intermediate Low 6 - A (90 hrs)**

*Advised: Completion of ESLN 3500 (Intermediate Low 5)*

Intermediate Low 6 language skills. Communication skills are stressed. Comprehend spoken English containing some unfamiliar words. Participate in increasingly extended conversations on some unfamiliar topics beyond survival needs. Begin to understand short reading passages. Organize relevant ideas and supporting details into a short paragraph.

**ESLN 3606. Intermediate Low 6 - B (90 hrs)**

*Advised: Completion of ESLN 3500 (Intermediate Low 5)*

Intermediate Low 6 language skills. Comprehension of spoken and written English containing some unfamiliar words. Participate in conversations on some unfamiliar topics beyond survival needs. Understand short reading passages differentiating between fact and opinion with some accuracy. Write a clearly organized paragraph with relevant ideas and clearly organized ideas.

**ESLN 3700. Intermediate High 7 (180 hrs)**

*Advised: Completion of ESLN 3600 (Intermediate Low 6)*

High Intermediate 7 language skills. Understanding of increasingly extended conversations, discussions or lectures. Speak about familiar topics with little hesitation. Read authentic material identifying the main idea including making simple inferences. Write well-developed paragraphs.

**ESLN 3750. Intermediate High 7-8 Intensive (180 hrs)**

*Advised: Completion of ESLN 3600 (Intermediate Low 6)*

Intermediate High accelerated course. Understand essential points of discussion or speeches on topics of special interest and communicate on a variety of topics. Engage in extended conversations and interviews on familiar topics. Read authentic materials on everyday subjects and write brief compositions about previously discussed topics. Write routine correspondence with increasing complexity or organization and detail.

**ESLN 3780. Intermediate High 7-8 Multilevel (180 hrs)**

*Advised: Completion of ESLN 3600 (Intermediate Low 6)*

Intermediate-High ESL students develop listening skills in order to understand extended discussions or lectures, and express themselves with increasing fluency and grammatical accuracy. Students read authentic materials and write paragraphs or brief essays.

**ESLN 3785. Intermediate High 7-8 Intensive - A (90 hrs)**

*Advised: Completion of ESLN 3600 (Intermediate Low 6)*

Intermediate High accelerated course for listening and speaking skills. Understand essential points of discussion or speeches on topics of special interest and communicate on a variety of topics. Engage in extended conversation and interviews on familiar topics. Read authentic materials on everyday subjects. Write routine correspondence in familiar situations.
ESLN 3786. Intermediate High 7-8 Intensive - B (90 hrs)
Advised: Completion of ESLN 3600 (Intermediate Low 6)
Intermediate High accelerated course for reading and writing skills. Understand essential points of discussion and be able to participate in conversations. Read authentic material on everyday subjects and write brief compositions about previously discussed topics. Write routine correspondence with increasing complexity or organization and detail.

ESLN 3800. Intermediate High 8 (180 hrs)
Advised: Completion of Intermediate High 7
High intermediate 8 language skills. Understand essential points of discussions or speeches in special fields of interest. Communicate about a variety of topics using appropriate syntax. Read authentic material on a variety of topics identifying the main idea including drawing conclusions. Write brief compositions about previously discussed topics.

ESLN 3900. Advanced Low 9 (180 hrs)
Advised: Completion of ESLN 3800 (Intermediate High 8)
Advanced Low 9 language skills. Designed to meet daily needs in familiar and unfamiliar situations, with emphasis on fluency and communication in the four language skills.

ESLN 4015. ESL Literacy A (45 hrs)
Advised: Pre-literate, non-literate or semi-literate in native language with little or no English language skills.
Development of ESL literacy listening, speaking, reading and very basic writing skills. Emphasis on oral English for survival.

ESLN 4150. Beginning Low 1-2 Intensive - A (90 hrs)
Advised: Literature in native language
Beginning Low accelerated course. Survival needs, listening comprehension and oral communication are emphasized. Reading readiness and pre-writing skills are introduced.

ESLN 4151. Beginning Low 1-2 Intensive - B (90 hrs)
Advised: Literature in native language
Beginning Low accelerated course. Survival needs listening comprehension and oral communication. Reading readiness and pre-writing skills are emphasized.

ESL, Vocational

ESLV 3800. Communication Skills for the Workplace (90 hrs)
Advised: Completion of ESLN 3300 (Beginning High 3)
Basic verbal communication skills and cultural knowledge needed in preparation for finding employment in the United States.

ESLV 3801. Communication Skills for the Workplace (180 hrs)
Advised: Completion of ESLN 3300 (Beginning High 3)
Verbal communication skills and cultural knowledge needed for obtaining employment and staying successfully employed in the U.S.

ESLV 3804. VESL for Clerical Workers (180 hrs)
Advised: Completion of ESLN 3500 (Intermediate Low 5)
Communicative language required for general clerical work. Terminology related to office procedures, forms, filing, and telephone training is emphasized. Language for job search and job retention is included.

ESLV 3806. ESL for Housekeeping (105 hrs)
Advised: Literature in native language
For those interested in entry-level positions in housekeeping. English language acquisition related to housekeeping such as identification and use of cleaning products and electrical appliances, health and safety procedures, crime prevention, the social security system, transportation, record keeping, employer/employee relations, elder abuse, and job search preparation.

ESLV 3807. Housekeeping ESL (88 hrs)
Advised: Literature in native language
For those interested in entry-level positions in housekeeping. Includes language on housekeeping methods and terminology, such as use of cleaning products and electrical appliances, health and safety procedures, record keeping, employer/employee relations, and job search preparation.

ESLV 3808. Communication Skills for Culinary Workers (90 hrs)
Advised: Completion of ESLN 3400 (Beginning High 4)
Learners develop verbal communication skills for work in the culinary industry. English terminology for cooking utensils, supplies, common tasks, and safety in culinary occupations.

ESLV 3813. ESL/ABE for Automotive Technology (15 hrs)
Advised: Completion of ESLN 3500 (Low Intermediate 5), ABE 2074 or equivalent language ability
Language and communication skills, including technical vocabulary, informal speech and idioms used by automotive mechanics. Reading of shop manuals and automotive specification data and the comprehension of oral and written descriptions.

ESLV 3814. Communication Skills for Chinese Cooks (90 hrs)
Advised: Completion of ESLN 3300 (Beginning High 3)
Verbal communication skills for the job. English terminology for cooking utensils, supplies, common tasks, and safety in restaurants specializing in Chinese cuisine.

ESLV 3816. Communication Skills for Janitorial Workers (180 hrs)
Advised: Completion of ESLN 3300 (Beginning High 3)
Students develop good verbal communication skills for janitorial work. English terminology of equipment, supplies, common tasks, and safety are included.

ESLV 3819. Social Communication (90 hrs)
Advised: Completion of ESLN 3400 (Beginning High 4)
Conversational strategies for appropriate interaction in American work and social settings; cross-cultural discussions about social customs and practice in telephone procedures.

ESLV 3822. Communication Skills for Customer Service Employees (90 hrs)
Advised: Completion of ESLN 3600 (Intermediate Low 6)
Students learn verbal communication skills in customer service positions. Students learn to handle customers, engage in small talk with co-workers, discuss work performance with supervisors and in general, be able to participate in conversations in a variety of work situations.

ESLV 3823. Communication Skills for Job Searching (90 hrs)
Advised: Completion of ESLN 3600 (Intermediate Low 6)
Students learn, practice, and utilize the communication skills and related vocabulary involved in getting a job. Students learn interview techniques.

ESLV 3824. Communication Skills for Food Service/Hospitality (180 hrs)
Advised: Completion of ESLN 3400 (Beginning High 4)
Communication skills for a job in the food service industry. English terminology of cooking utensils, supplies, common tasks, and safety in food service occupations.
ESLV 3825. VESL for Career Exploration I (45 hrs)
Advised: Completion of ESLN 3300 (Beginning High 3)
Verbal communication skills and vocabulary related to getting a job, discussing personal goals, and understanding cultural/social skills as they relate to the U.S. workplace. Also see ESLV 3825 (VESL and Career Exploration II).

ESLV 3826. VESL for Career Exploration II (45 hrs)
Advised: Completion of ESLN 3300 (Beginning High 3)
Communication skills and vocabulary related to the areas of keeping a job, personal skills evaluation and development, career evaluation, and resume writing. Also see ESLV 3825 (VESL for Career Exploration I).

ESLV 3827. Communication Skills for Hotel/Service Workers (90 hrs)
Advised: Completion of ESLN 3300 (Beginning High 3)
Verbal communication skills for the hotel service industry. Includes English terminology of equipment, supplies, common tasks, and safety in the hotel industry.

ESLV 3828. Business Writing on Micros/ESL (90 hrs)
Advised: Completion of ESLN 3700 (Intermediate High 7), BOSS 5500 Keyboarding/25 Words Per Minute
Develop business communication skills using basic word processing software. Includes composition and style of documents, vocabulary and spelling, review of grammar and punctuation. Recognition, pronunciation and use of computer terminology relevant to word processing.

ESLV 3829. Computer VESL - High Intermediate (90 hrs)
Advised: Completion of ESLN 3500 (Intermediate Low 5)
Communicative language skills, computer vocabulary and terminology used in the automated office environment. Additional focus will be on knowledge and procedures for responding to computer messages and problem-solving.

ESLV 3830. Communication Skills for Health Workers (180 hrs)
Advised: Completion of ESLN 3600 (Intermediate Low 6)
Designed for health care workers and others interested in the health field. Focus on language skills necessary to function in a medical environment. Study of basic medical terms and pronunciation. Social and cultural skills necessary for successful verbal interaction in health care surroundings.

ESLV 3831. Communication Skills for Construction Workers (180 hrs)
Advised: Completion of ESLN 3400 (Beginning High 4)
Intermediate verbal communication skills for jobs in the construction trades. Terminology of tools, supplies, materials, tasks, and safety. Instructors and/or coordinators from vocational and apprenticeship programs (such as Carpentry, Electrical, Sheet Metal) may serve as guest speakers.

ESLV 3832. Communication Skills for Construction Workers (90 hrs)
Advised: Completion of ESLN 3200 (Beginning Low 2)
Beginning level verbal communication skills for the job and terms for tools, supplies, materials, tasks and safety in the construction field. Instructors and/or coordinators from vocational and apprenticeship programs (such as Carpentry, Electrical, Sheet Metal, etc.) may serve as guest speakers.

ESLV 3833. VESL for Child Development - A (90 hrs)
Advised: Completion of ESLN 3400 (Intermediate Low 4)
Practice in language needed by students enrolled in child development classes. Strategies for reading of simple material on childcare philosophy, trends, and practices. Familiarization with popular children's books, nursery rhymes, finger plays and games for pre-school-age children. May be taken before or concurrently with VESL for CDEV "B."

ESLV 3834. VESL for Child Development - B (90 hrs)
Advised: Completion of ESLN 3400 (Intermediate Low 4)
Practice in language needed by workers in the childcare field. Strategies for reading simple material on childcare philosophy, trends, and practices. Familiarization with popular children's books, nursery rhymes, finger plays and games for pre-school-age children. Job skills focus. May be taken before or concurrently with VESL for CDEV "A."

ESLV 3835. VESL for Banquet Servers (24 hrs)
Advised: Completion of ESLN 3500 (Intermediate Low 5)
Communicative language required for entry-level positions in banquet service. Includes language on essential banquet service terminology, banquet service etiquette, personal grooming and hygiene, and effective communication in banquet service environment.

ESLV 3836. VESL for Customer Service (90 hrs)
Advised: Completion of ESLN 3010 (Literacy A)
English language skills in preparation for work in customer service jobs. Content and communication skills focus on serving customers in retail, restaurant, financial, hotel and travel industries.

ESLV 3837. Communication Skills for New Transit Operators (90 hrs)
Advised: Completion of ESLN 3400 (Beginning High 4)
English language skills to prepare for entry into transit training. Content and communication skills for new coach, metro, and streetcar drivers in the transit system, with an emphasis on listening and speaking.

ESLV 3838. Communication Skills for Transit Operators (90 hrs)
Advised: Completion of ESLN 3400 (Beginning High 4)
English language skills for working transit operators to improve basic communication skills for coach, metro, and streetcar operators, with an emphasis on customer service for a diverse public.

ESLV 3839. VESL for Printing (90 hrs)
Advised: Completion of ESLN 3400 (Beginning-High 4) or permission of instructor.
Language and communication skills, vocabulary, speech and idioms, necessary for a career in printing.

ESLV 3840. VESL for the Biotech Industry (64 hrs)
Advised: Completion of ESLN 3600 (Intermediate Low 6)
Introductory level lecture course covering basic scientific language and applying it to some fundamental concepts of biology. An orientation to the field of biotechnology and professional opportunities.

ESLV 3841. Beginning VESL Communication (180 hrs)
Advised: Completion of ESLN 3020 (Literacy B)
Development of verbal and nonverbal communication strategies for successful interaction in multicultural workplaces for beginning level English learners.
ESLV 3842. Healthcare Communication I (105 hrs)
Advised: Health care background, completion of ESLN 3600 (Intermediate Low 6); Basic Computer Literacy (ESLB 3821)
Designed for all health care professionals with upper intermediate English language proficiency. Develop integrated language skills for career options and requirements in health care, patient-centered communication techniques, interaction patterns among health co-workers, assertive communication, health care systems and traditions, and cultural diversity in U.S. health care contexts.
See also ESL 20.

ESLV 3843. Healthcare Communication II (105 hrs)
Advised: Health care background, completion of ESLN 3600 (Intermediate Low 6); Basic Computer Literacy (ESLB 3821)
For all health care professionals with upper intermediate English language proficiency. Develop integrated language skills for job resumes, interviews, interaction patterns on health care teams, discussion of treatment options with patients, exploration of alternative health perspectives, and communication strategies among culturally diverse patients and health workers.
See also ESL 23.

ESLV 3844. Healthcare Communication III (105 hrs)
Advised: Health care background, completion of ESLN 3600 (Intermediate Low 6); Basic Computer Literacy (ESLB 3821)
Designed for all health care professionals with upper intermediate English language proficiency. Develop integrated language skills for phone and email communication in health care settings, strategies for communicating with special-needs patients, resolving conflict with co-workers, understanding legal and ethical issues in health care, and researching racial and cultural health disparities.
See also ESL 26.

ESLV 4816. Communication Skills for Janitorial Workers (90 hrs)
Advised: Completion of ESLN 3300 (Beginning High 3)
Students acquire minimal verbal communication skills for janitorial work, including English terminology for equipment, supplies, common tasks, and safety.

ESLV 4822. Workplace Communication Strategies (45 hrs)
Advised: Completion of ESLN 3300 (Beginning High 3)
Students learn verbal and nonverbal communication strategies for successful interaction in multicultural workplaces.

ESLV 4823. Online Job Search Skills for ESL (45 hrs)
Advised: Completion of ESLN 3400 (Beginning Low 4)
Students will develop the English vocabulary, reading, and writing skills necessary to complete the online job search process successfully. Students will search for, read and analyze online job listings. They will describe their education, skills and experience for online job applications, resumes and other job-search e-mails.

ESLV 4830. Communication Skills for Health Workers - A (90 hrs)
Advised: Completion of ESLN 3600 (Intermediate Low 6)
Designed for health care workers and others interested in the health field. General knowledge of health care settings, terminology and staff. Identification of major body systems and their basic functions. Appropriate language for successful verbal interaction in a medical setting between medical professionals.

ESLV 4831. Communication Skills for Health Workers - B (90 hrs)
Advised: Completion of ESLN 3600 (Intermediate Low 6)
Designed for health care workers and others interested in the health field. Focus on language skills necessary to function in a medical environment. Study of social and cultural skills necessary for successful interaction with patients and co-workers.

ESLV 4833. VESL for Child Development - A (45 hrs)
Advised: Completion of ESLN 3400 (Intermediate Low 4)
Practice in minimal language skills needed by students enrolled in child development classes. Strategies for reading of simple material on childcare philosophy, trends, and practices. May be taken before or concurrently with VESL for CDEV “B.”

ESLV 4837. Communication Skills for New Transit Operators (45 hrs)
Advised: Completion of ESLN 3400 (Beginning High 4)
Introduction to English language skills to prepare transit trainees for work. Basic communication skills for coach, metro, and streetcar drivers in the transit system.

ESLV 4838. Communication Skills for Transit Operators (45 hrs)
Advised: Completion of ESLN 3400 (Beginning-High 4)
In overview of English language skills for working transit operators is presented to help improve basic communication skills for coach, metro, and streetcar operators, with an emphasis on customer service for a diverse public.

ESLV 4839. Computer VESL - Health Workers (22.5 hrs)
Advised: Completion of ESLN 3400 (Intermediate Low 4)
Communicative language skills, computer vocabulary and terminology used in an automated healthcare environment. Additional focus will be on knowledge and procedures for responding to computer messages and problem-solving.

ESLV 4841. Beginning-Low VESL Communication - A (90 hrs)
Advised: Completion of ESLN 3020 (Literacy B)
Development of verbal and nonverbal communication strategies for successful interaction in multicultural workplaces for beginning level English learners.

ESLV 4842. Beginning-Low VESL Communication - B (90 hrs)
Advised: Completion of ESLN 3020 (Literacy B)
Development of verbal and nonverbal communication strategies for successful interaction in multicultural workplaces for beginning level English learners.

ESLV 5822. Basic Workplace Communication (22.5 hrs)
Advised: Completion of ESLN 3300 (Beginning High 3)
Development of verbal and nonverbal communication strategies for successful interaction in multicultural workplaces.

ESLV 5830. VESL for Health Workers (90 hrs)
Advised: Completion of ESLN 3500 (Intermediate Low 5)
Designed for health care workers and others interested in the health field. Focus on language skills necessary to function in a medical environment. Emphasis on social skills for successful interaction with patients and co-workers.
Environmental Horticulture and Floristry
Office: EH/F
Phone Number: (415) 239-3140
Web Site: www.ccsf.edu/envhort

Announcement of Curricula

General Information
The Environmental Horticulture and Floristry Department offers students a choice of preparation for employment in producing, selling, and caring for plants and flowers used to beautify homes, stores, gardens, parks, highways, and industrial property. Training is offered in four fields: commercial cut-flower and greenhouse production, landscape gardening and landscape contracting, nursery and garden-center operation, and retail floristry. The Program in Environmental Horticulture and Floristry comprises the curricula in these fields. Students may complete majors concurrently in any two of these fields, or, with the help of the teaching staff, plan a course of study to meet their particular needs.

Learning Outcomes
Students who satisfactorily complete the curriculum in their chosen course of study in the Environmental Horticulture and Floristry Department are qualified for employment in the environmental horticultural and floristry industries or they may transfer to a four year institution of learning to achieve a more advanced degree.

Admission. Enrollment is open to all interested students.

Work Experience Training. Students in the Program may obtain field training in the horticulture or floristry industries by enrolling in the appropriate work-experience course. To receive credit, students must work at least 5 hours weekly in an approved position. The College helps students in the course find internship opportunities or salaried employment. Placement depends upon students’ abilities and records, employers’ requirements, and economic conditions. Students are supervised by both employers and instructors. Students may apply toward graduation a maximum of eight semester units earned in work experience courses.

Associate in Science Degree. The four majors in Environmental Horticulture and Floristry are designed so that students may satisfy the major requirement for graduation from the College with a Associate in Science degree.

Transfer to Other California State Universities. Students who complete any of the following curricula satisfactorily may transfer to California Polytechnic State University, San Luis Obispo; California State Polytechnic University, Pomona; or California State University, Fresno and work toward the degree of Bachelor of Science in Environmental Horticulture.

Approval of Instruction. The curriculum in Environmental Horticulture is approved by the following organizations: the Association of Landscape Architects; California Arborists Association; California Association of Nurserymen (Central, Peninsula, and Redwood Chapters); California Fertilizer Association; California Seed Trade Association; Golf Course Superintendents Association; California Landscape Contractors Association; Park Employees Union, Local No. 311, AFL-CIO; San Francisco Professional Gardeners Association; Agricultural Chemicals Association; Bedding Plant Association; California Anti-Litter League; California Cut Flower Growers Association; California Horticultural Society; and the State Division of Highways. The curriculum in Floristry is offered in cooperation with the San Francisco Bay Area Florists Association and California State Florists Association.

Environmental Horticulture

Commercial Cut-Flower and Greenhouse Production Major (AS)

Students who satisfactorily complete the Curriculum in Commercial Cut-Flower and Greenhouse Production, a two-year course of study, are qualified for employment in the cut-flower and greenhouse production industries in the following capacities: cut-flower grower, groundskeeper, flower shipper, plant propagator, plant salesperson, and pot-plant grower.

The course of study includes instruction in commercial cut-flower and greenhouse production, principles of environmental horticulture, plant identification, the use of horticultural machines, and business practices in the environmental horticultural industry.

Students who complete the curriculum and other graduation requirements receive the Associate in Science in Commercial Cut-Flower and Greenhouse Production.

Learning Outcomes
Upon completion of this program, students will be able to:

- Demonstrate proficiency in plant identification.
- Demonstrate proficiency the use of horticultural machines.
- Demonstrate proficiency in plant propagation and production.
- Demonstrate proficiency in business practices, salesmanship, groundskeeper and grower.

Courses Required for the Major in Commercial Cut-Flower and Greenhouse Production

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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<tbody>
<tr>
<td>First Semester</td>
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<tr>
<td>O H 50 Intro to Horticulture</td>
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<tr>
<td>O H 56 Horticulture Machines</td>
<td>3</td>
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<tr>
<td>O H 76 Fall &amp; Winter Plant Ident.</td>
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<td>Additional graduation requirements</td>
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<td>Second Semester</td>
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<td>O H 58 Comm Cut-Flower &amp; Greenhouse Prod</td>
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<tr>
<td>O H 77 Spring &amp; Summer Plant Ident.</td>
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<tr>
<td>R F 81 Flower and Foliage</td>
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<tr>
<td>Identification/Culture and Care</td>
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<td>Additional graduation requirements</td>
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<tr>
<td>Third Semester</td>
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<tr>
<td>O H 63 Soils</td>
<td>3</td>
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<tr>
<td>O H 65 Reprod of Ornamental Plants</td>
<td>3</td>
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<tr>
<td>SPCH 11 Basic Public Speaking</td>
<td>3</td>
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<tr>
<td>R F 82 Indoor Plant I.D. &amp; Care</td>
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<td>Additional graduation requirements</td>
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<tr>
<td>Fourth Semester</td>
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<tr>
<td>O H 60 Bus Practices in Environ Horticulture</td>
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<tr>
<td>O H 75 Pest Management</td>
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<tr>
<td>O H 97 Wk Exper</td>
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<tr>
<td>O H 70A Landscaping Design</td>
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Landscape Gardening and Landscape Contracting Major (AS)

Training in the curriculum in Landscape Gardening and Landscape Contracting, a two-year course of study, is planned so that graduates, depending upon their interests, abilities, and achievement, may qualify for employment in a wide variety of capacities. Positions that graduates may hold in private employment, or for which they may take civil-service examinations, include those of landscape maintenance gardener, estate gardener, municipal gardener, landscape installer or contractor, landscape designer, nursery specialist, horticultural or agricultural inspector, highway landscape supervisor, tree-maintenance technician, school or community garden coordinator, irrigation technician, landscape restoration worker, athletic field or golf course groundskeeper, or landscape consultant. Other positions include: garden sales, growers, horticultural supply sales, interiorscape technicians or supervisors, irrigation design or sales and arborist.

The course of study includes instruction in principles of landscape design and landscape construction, principles of environmental horticulture, plant identification, landscape horticulture, and business practices in the environmental-horticultural industry.

Students who complete the curriculum and other graduation requirements receive the Associate in Science in Landscape Gardening and Landscape Contracting.

Learning Outcomes

Upon completion of this program, students will be able to:

- Demonstrate proficiency principles of landscape design.
- Demonstrate proficiency the use of horticultural machines and construction equipment.
- Demonstrate proficiency in plant identification, and landscape horticulture.
- Demonstrate proficiency and be able to compete for any of these job areas include those of landscape maintenance gardener, estate gardener, municipal gardener, landscape installer or contractor, landscape designer, nursery specialist, horticultural or agricultural inspector, highway landscape supervisor, tree-maintenance technician, school or community garden coordinator, irrigation technician, landscape restoration worker, athletic field or golf course groundskeeper, or landscape consultant. Other positions include: garden sales, growers, horticultural supply sales, interiorscape technicians or supervisors, irrigation design or sales and arborist.

Courses Required for the Major in Landscape Gardening and Landscape Contracting

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<tr>
<th>Course</th>
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<tbody>
<tr>
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<tr>
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<tr>
<td>SPCH 11 Basic Public Speak</td>
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Additional graduation requirements

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<tr>
<th>Course</th>
<th>Units</th>
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<tbody>
<tr>
<td>O H 75 Pest Management</td>
<td>3</td>
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<tr>
<td>O H 77 Spring and Summer Plant Ident</td>
<td>4</td>
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</tbody>
</table>

Recommended Additional Coursework: ACCT 10, SMBS 135

Nursery and Garden-Center Operation Major (AS)

Students who complete the curriculum in Nursery and Garden-Center Operation satisfactorily are qualified for employment in the wholesale and retail nursery businesses as growers, propagators, salespeople, and seed brokers. Graduates of this two-year course of study may also take civil-service examinations for positions as pest-control applicators and supervisors, weed-seed analysts, farm and garden supervisors, horticultural inspectors, and plant propagators.

The course of study includes instruction in nursery operation, principles of environmental horticulture, plant identification, the use of horticultural machines, and business practices in the environmental-horticulture industry.

Students who complete the curriculum and other graduation requirements receive the Associate in Science in Nursery and Garden-Center Operation.

Learning Outcomes

Upon completion of this program, students will be able to:

- Be prepared to take civil-service examinations.
- Be prepared to compete for positions such as pest-control applicators and supervisors, weed-seed analysts, farm and garden supervisors, horticultural inspectors, and plant propagators.
- Be qualified for employment in the wholesale and retail nursery businesses.

Courses Required for the Major in Nursery and Garden-Center Operation

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</tbody>
</table>

Recommended Additional Coursework: ACCT 10, SMBS 135
O H 70A Landscaping Design .................. 3
Additional graduation requirements

Fourth Semester
O H 57B Retail Nursery Management  ............ 3
O H 60 Bus Practices in Environ Horticulture ....... 3
O H 97 Work Experience .......................... 3
O H 71A Landscaping Construct  .................. 4
Additional graduation requirements
Total Units ....................................... 45

Recommended Additional Coursework: ACCT 10, SMBS 135

Certificate Curricula
The program of study for the Certificate of Achievement in Environmental Horticulture is designed to give students both broad and specialized training for entry level employment or to add to their capabilities in one of the following fields: greenhouse operation, landscape maintenance, nursery and garden-center operations, landscape design or landscape construction.

Admission. Enrollment is open to all interested students.

Employment. A number of entry-level positions are open to those who complete training in any of the preceding fields. For example, those who complete the requirements in landscape horticulture may work as self-employed maintenance gardeners or take State and City civil service examinations for the position of maintenance gardener. Those who complete the requirements in greenhouse operation or nursery and garden-center operation are qualified for employment in sales work and in various kinds of horticultural production.

Requirements for the Certificate of Achievement. Students may obtain the Certificate of Achievement in Environmental Horticulture in one or more areas of specialization: Landscape Maintenance, Nursery Operations, Commercial Cut-Flower & Greenhouse Production, Landscape Design and Landscape Construction. This is accomplished by completing each of the following courses with a final grade of "C" or higher:

Learning Outcomes
Upon completion of this certificate, students will be able to:

- Be prepared to work in horticulture as self-employed maintenance gardeners or take State and City civil service examinations for the position of maintenance gardener.
- Be prepared to work in the field of greenhouse operation or nursery and garden-center operation.
- Be qualified for employment in sales work and in various kinds of horticultural production.

Courses Required for the Certificate of Achievement in Environmental Horticulture

Core Coursework

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<td>Core Coursework Subtotal</td>
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To earn the Certificate of Achievement, select one of the areas of specialization:

Landscape Maintenance Certificate

Core Coursework ................................ 26
O H 53A Beginning Landscape Horticulture .... 3
O H 53B Advanced Landscape Horticulture ....... 3
Total Units ..................................... 32

Nursery and Garden-Center Operation Certificate

Core Coursework ................................ 26
O H 57A Wholesale Nursery Operations
and O H 57B Retail Nursery Operations ....... 6
Total Units ..................................... 32

Commercial Cut-Flower Greenhouse Production Certificate

Core Coursework ................................ 26
O H 58 Greenhouse Operations
and O H 65 Plant Propagation .................. 6
Total Units ..................................... 32

Landscape Design Certificate

Core Coursework ................................ 26
O H 70A Principles of Landscaping Design
and O H 70B Adv Prin of Landscape Design .... 6
Total Units ..................................... 32

Landscape Construction Certificate

Core Coursework ................................ 26
O H 71A and 71B Landscape Construction ....... 8
Total Units ..................................... 34

Floristry

Floristry Major (AS)

Instruction in retail floristry is offered in cooperation with the San Francisco Bay Area Retail Florists Association and California State Florists Association.

Enrollment is open to all interested students.

The two-year course of study is designed to give students thorough and well-balanced training in buying flowers, in the art of arranging and selling them to the public, and in operating a retail flower shop. Students who complete the curriculum satisfactorily are qualified for employment as designers and salespersons in the retail-floral industry.

The course of study includes instruction in the following: beginning, intermediate and advanced floral design, flower shop procedures, “hands-on” floral work experience, flower shop management, merchandising, marketing, basic business arithmetic, and record keeping.

Students who complete the curriculum and other graduation requirements receive the Associate in Science in Floristry.

Learning Outcomes

Upon completion of this program, students will be able to:

- Demonstrate proficiency in plant identifying and buying flowers.
- Demonstrate proficiency in all aspects of the art of arranging floral products.
- Demonstrate proficiency in selling flowers to the public.
• Demonstrate proficiency in business practices and in operating a retail flower business.

Courses Required for the Major in Floristry

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<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
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<tr>
<td>BSMA J* Basic Business Arithmetic</td>
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<tr>
<td>R F 80A Flower Shop Proc &amp; Basic Design</td>
<td>5</td>
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<tr>
<td>R F 81 Flower and Foliage Identification/Culture and Care</td>
<td>2</td>
</tr>
<tr>
<td>R F 85 Introduction to Flower Arranging</td>
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<tr>
<td>Additional graduation requirements</td>
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<tr>
<td>Second Semester</td>
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<tr>
<td>ACCT 10 (or equivalent) Intro to Account</td>
<td>4</td>
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<tr>
<td>R F 80B Intermediate Floral Design</td>
<td>5</td>
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<tr>
<td>R F 82 Interior Plant Identification</td>
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* Not required of students who have passed the City College placement examination in mathematics. Students who have passed this examination should take an elective in lieu of BSMA J.

Third Semester

<table>
<thead>
<tr>
<th>Course</th>
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<tr>
<td>R F 80C Advanced Floral Designs</td>
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<tr>
<td>R F 86 Oriental Style Floral Arranging</td>
<td>1.5</td>
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<tr>
<td>R F 98 Work Experience</td>
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Fourth Semester

<table>
<thead>
<tr>
<th>Course</th>
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<tr>
<td>MRKT 140 Principles of Marketing</td>
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<tr>
<td>R F 84 Flower-Shop Oper</td>
<td>3</td>
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<td>R F 98 Work Experience</td>
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</table>

Total Units: 39.5

Recommended Additional Coursework: ART 130; BSEN 74, 76; BSL 1; MRKT 122, 170; SMBS 135; PSYC 26

Announcement of Courses

Environmental Horticulture

Credit, Degree Applicable Courses:

O H 50. Introduction to Environmental Horticulture (3)
Lec-2, lab-3, field trips
Overview of environmental horticulture: nursery and greenhouse production; landscape design, installation and maintenance. Career opportunities are explored in class and on field trips. Introduction to technical aspects including plant anatomy, soils and amendments, composting, plant propagation, planting and transplanting, irrigation, landscape maintenance, pruning, pests, and tree care. CSU/UC

O H 53A. Beginning Landscape Horticulture (3)
Lec-2, lab-4, field trips
Advise: OH 53A: OH 50 and completion/concurrent enrollment in OH 76 or 77.
The principles and practices of garden planting and maintenance will be covered in practical laboratory experiences in the Horticulture Center and on the college campus. Care and maintenance of established gardens; irrigation, fertilizing, pruning, identifying and controlling weeds and plant pests and diseases. CSU

O H 53B. Advanced Landscape Horticulture (3-3)
Lec-2, lab-4, field trips
This advanced course prepares the student to install and maintain new and established gardens. Course work will include, but is not limited to irrigation and sprinkler systems, drainage and erosion control, xeriscaping, maintenance estimates, proposals and agreements. Instruction in troubleshooting and supervising others will be included. CSU

O H 54. Turfgrass Management (1.5)
Lec-1, lab-2, field trips
Advise: O H 50 and 53A or demonstration of exit skills
Establishment and care of turf areas. Uses of turf in landscape. Site preparation, species selection, and planting of seed, sod and hydroseed. Turf maintenance including mowing, irrigation, fertilization, thatch management, aeratin and renovation. Identification and control of turf pests. Care of specialized turf areas including golf-greens and athletic fields. Use and operation of irrigation and maintenance equipment. CSU

O H 55. Tree Care (3)
Lec-2, lab-3, field trips
Advise: O H 50, 53A; and completion/concurrent enrollment in O H 76 or 77
Care and management of trees common to residential, public, and commercial landscaping. Emphasizes correct planting, irrigating, fertilizing, pest control, and pruning. Use of saws, ropes, and other safety equipment in the tree industry is covered. Prepares student for the International Society of Arboriculture Certified Arborist Exam. CSU

O H 56. Horticulture Machines (3)
Lec-2, lab-3, field trips
Advise: Completion/concurrent enrollment in O H 50
Field and shop practice in the safe and proper operation of necessary horticultural equipment. Preventative service and maintenance will be stressed during all lab and lecture sessions. CSU

O H 57A. Wholesale Nursery Operations (3)
Lec-2, lab-3, field trips
Advise: O H 50 and 65, and O H 76 or 77, or demonstration of exit skills
Cultural practices and management of wholesale nursery operations from groundcovers and perennials to specimen trees. Emphasis on container production. Propagation and planting, nursery structures and equipment, growing media, irrigation, growth management, pest control, post-harvest operations. Management topics include site selection, nursery organization, industry standards, shipping, laws and regulations, niche marketing. Careers explored. CSU

O H 57B. Retail Nursery Operations (3)
Lec-2, lab-3, field trips
Advise: O H 50, 75, and O H 76 or 77, or significant field experience
Overview of the retail trade. Preparation for the California Association of Nurserymen's certification exam, introduction to marketing and management techniques, and practical training for employment in the nursery or garden center. Examines a wide variety of retail operations including mass market outlets, small specialized nurseries, catalog operations, single-store businesses, small and large chain stores, and “high end” specialty shops. CSU

O H 58. Gardening for Profit (2)
Lec-2, lab-4, field trips
Advise: O H 50, 53A or demonstration of exit skills
Introduction to marketing and management techniques. Includes the principles of developing and marketing specialty plant nurseries and businesses. CSU/UC
O H 58. Greenhouse Operations (3)
Lec-2, lab-3, field trips
ADVICE: O H 50, 65, and O H 76 or 77, OR SIGNIFICANT FIELD EXPERIENCE
Overview of commercial greenhouse operations including materials and construction, heating and cooling systems, containers and greenhouse equipment; crops surveyed include foliage, cut flowers, potted flowering plants; emphasis on bedding plants; management of growing medium, irrigation, fertilization, growth regulators, CO2, light and temperature; alternative cropping systems, post-production handling, and marketing discussed. CSU

O H 60. Business Practices in Environmental Horticulture (3)
Lec-3
Practical business practices in various branches of environmental horticulture including estimating, sales and service, public relations, budgets and record keeping, and starting a business. CSU

O H 63. Soils (3)
Lec-2, lab-3, field trips
ADVICE: O H 50 OR SIGNIFICANT FIELD EXPERIENCE
Introduces students to soils and growing media in Environmental Horticulture. Preparation and management of field and container soils. Soil composition and texture, soil chemistry, organic matter, colloids, soil structure, soil water and pH, plant nutrients and fertilizers, amendments, composting, beneficial soil organisms and diseases. Sustainable soil management practices. CSU

O H 65. Plant Propagation (3)
Lec-2, lab-3, field trips
ADVICE: COMPLETION/CONCURRENT ENROLLMENT IN O H 50 OR DEMONSTRATION OF EXIT SKILLS
Principles and practices of reproducing plants as commercially practiced in the horticulture industry. Topics include propagation by seed, and vegetative methods including cuttings, layering, division, grafting and micro-propagation. Field trips to local greenhouses and nursery operations. CSU

O H 66. Irrigation (2)
Lec-1, lab-3, field trips
ADVICE: O H 50, 53A, OR SIGNIFICANT FIELD EXPERIENCE
Basics of design, installation, maintenance, and troubleshooting of sprinkler and drip irrigation systems. Emphasis on landscape and turf irrigation. Nursery and greenhouse irrigation. Topics include establishing hydrozones, providing drainage, calculating pressure and flow requirements, system design and installation, equipment and fittings, automatic control systems and water conserving technologies. CSU

O H 70A. Principles of Landscaping Design (3)
Lec-2, lab-3, field trips
Lectures, reading assignments, and hands-on laboratory projects involving the principles of landscape design, especially as applied to residential properties. Graphic and drafting techniques are included. CSU

O H 70B. Advanced Principles of Landscape Design (3)
Lec-2, lab-3, field trips
ADVICE: O H 70A
Principles of advanced landscape design, especially as applied to residential properties. CSU

O H 71A. Landscape Construction (4)
Lec-2, lab-6, field trips
Principles of landscape construction applicable to horticulture. Safety, tools, hardware, lumber, fences, gates, benches, decks, steps, paints, stains, concrete paving, concrete blocks, stone walls, and other physical aspects of landscape construction are presented. CSU

O H 71B. Advanced Landscape Construction (4)
Lec-2, lab-6, field trips
Advanced principles of construction for the landscape from design to installation. Advanced irrigation projects involving copper pipe cutting, prepping and soldering. Irrigation valve placement and means of back-flow prevention. Irrigation clock wiring design and installation. Designing and building fences, gates, benches, decks and steps. Advanced concrete and masonry projects. CSU

O H 75. Pest Management (3)
Lec-3, field trips
ADVICE: O H 50 OR SIGNIFICANT FIELD EXPERIENCE
An overview of pest management in landscape, greenhouse, and nursery operations; introduction to the identification, life cycles and damage of/ by weeds, insects, mites, fungi, bacteria, virus, mollusks, nematodes and mammal pests. Emphasis on integrated Pest Management. Cultural, mechanical, biological and least-toxic chemical techniques, legal requirements and safety. Preparation for Qualified Applicator Certificate. CSU

O H 76. Fall and Winter Plant Identification (4)
Lec-3, conf-1, field trips
Identification of approximately 150 ornamental plants commonly used in the San Francisco Bay Area for Fall and Winter bloom, fruit, or foliage. Covers basic plant anatomy and terminology used in the taxonomic classification of plants. Emphasis is on cultural requirements, habits of growth and landscape use of plants. CSU/UC

O H 77. Spring and Summer Plant Identification (4)
Lec-3, conf-1, field trips
Identification of approximately 150 ornamental plants commonly used in the San Francisco Bay Area for Spring and Summer bloom, fruit, or foliage. Covers basic plant anatomy and terminology used in the taxonomic classification of plants. Emphasis is on cultural requirements, habits of growth and landscape use of plants. CSU/UC

O H 91-92-93. Independent Study (1-2-3)
Conf-1, lab-3,6,9, field trips
P/NP available
PREREQ.: 6 UNITS OF O H COURSE WORK AND PROJECT APPROVAL
Individual research on a special topic in environmental horticulture. Opportunity for students to investigate horticultural problems of special interest or conduct an in-depth project. Emphasis on practical application and current issues in horticulture. CSU

O H 97. Work Experience (1-4)
Conf-1, work-5 per unit, field trips
PREREQ.: COMPLETION OF 6 UNITS IN ENVIRONMENTAL HORTICULTURE; APPROVAL OF OH WORK EXPERIENCE COORDINATOR Repeat: Maximum credit: 12 units Maximum credit: 12 units
Field application of principles and practices taught in horticulture courses. A supervised work experience program with cooperating employers, providing students with hands-on experience and a smooth transition into commercial practice. Students acquire job experience in their chosen field of horticulture. Preparation of job applications and resumes. Interview and career development skills discussed. CSU
O H 101. Garden Practices (3)
Lec-3, field trips
Topics include basic tools, soil improvement and composting, planning a garden adapted to climate and microclimate, plant selection, seed germination, transplanting, watering and water conservation, pest management (using integrated, least-toxic methods), and basic maintenance, including pruning. Plants discussed include annuals, bulbs, perennials, groundcovers, lawns, shrubs, trees, vegetables, fruit shrubs and trees, drought-tolerant plants, street trees, and houseplants. Appropriate for students seeking careers in horticulture as well as a home gardeners. CSU

O H 102. Greenhouse Crops (3)
Lec-2, lab-3, field trips
Advisor: O H 50, 65, and O H 76 or 77, or demonstration of exit skills
Propagation, culture, post-harvest handling and care of principle greenhouse crops. Foliage and cut flowers including roses and carnations. Emphasis on potted flowering plants including poinsettias, azaleas, hydrangeas, chrysanthemums, cyclamen, gesneriads, lilies, and other forced bulbs. Discussion of pests, alternative crops, and field-grown flowers. CSU

O H 104. Principles of Landscaping (3)
Lec-3
Fundamentals of and practices in designing the small home garden. CSU

O H 111-112-113. Selected Topics in Ornamental Horticulture (1-3)
Lec-1 to 3; lab-1 to 3, field trips
Advisor: O H 50
Investigation in depth of selected topics in horticulture. Consideration of current issues and innovations; expansion of subjects covered briefly in introductory courses. CSU

O H 111A. Year-Round Garden Color (1)
O H 111B. Orchids (1)
O H 111C. Container Gardening (1)
O H 111D. Introduction to Xeriscaping (1)
O H 111E. Vegetables & Herbs: Fall (1)
O H 111F. Vegetables & Herbs: Spring (1)
O H 111G. Vegetables & Herbs: Summer (1)

Floristry
Credit, Degree Applicable Courses:
R F 80A. Flower Shop Procedures and Basic Designs (5)
Lec-3, lab-6, field trips
Beginning floral design techniques used by professional flower artists. Includes principles and elements of basic floral designs, corsage and body flower construction, use or ribbon and other decorative accessories as well as identification of floral materials and supplies used in commercial floristry. This course is a prerequisite for RF 80B. CSU

R F 80B. Intermediate Floral Design (5)
Lec-3, conf-1, lab-5, field trips
Prereq: R F 80A
Intermediate study of and practice in professional flower arranging techniques used by the floral industry. Emphasis on sympathy tributes, window and store display, oriental, high style design and European floral design. CSU

R F 80C. Advanced Floral Design (3)
Lec-2, conf-2, lab-1, field trips
Prereq: R F 80B
Advanced principles and techniques for designing, coordinating, and installing floral displays for weddings, parties, special events, churches, receptions, residences, venues, retail stores and corporate accounts. Traditional, contemporary and European style designing for wedding bouquets, personal flowers, and arrangements and display design. CSU

R F 81. Flower and Foliage Identification/Culture and Care (2)
Lec-2, field trips
Identification of cut flowers and foliage used in commercial floristry, with emphasis on post-harvest care and handling, vase life, wholesale packaging, pricing, and uses in floral design. CSU

R F 82. Interior Plant Identification (3)
Lec-3, field trips
Identification of indoor/tropical house plants used in commercial floristry and horticulture, with emphasis on post-harvest care and handling, wholesale and retail pricing, packaging and uses in interior plantscapes, floral design and display. CSU

R F 84. Flower-Shop Operations (3)
Lec-3, field trips
Principles and practices of flower shop operations including salesmanship, types of shops, merchandising, buying, advertising, delivering, and personnel from a floral business owner perspective. CSU

R F 85. Introduction to Flower Arranging (2)
Lec-1, lab-2, field trips
Students provide own materials.
Introduction to basic flower arranging, flower and foliage use, care and handling of fresh materials, use of ever-lasting materials, flower forms, types and use of containers. Basic historical periods and styles of decorating for beginners. CSU

R F 86A. Oriental Style Flower Arranging (1.5)
Lec-1, lab-2
Students provide own materials.
Basic understanding and appreciation of Oriental Style flower arrangement, known as Ikebana. Beginning design, experimentation, technique, exploration, and critique intended to develop creativity and manipulation of floral materials. CSU

R F 88. Designs in Floristry (2)
Lec-1, conf-1, lab-1, field trips
An in-service training program for those engaged in the field of floristry and enrolled in the Retail Floristry Department. Guest lecturer-demonstrators. Design work and topics such as body flower trends and techniques, internationally influenced design styles, memorial flowers, special events, weddings, competition, and exhibition designs. CSU

R F 98. Work Experience (1-4)
Conf-1, work-5, 10, 15, 20
Prereq: Approval of RF Work Experience Coordinator
Repeat: Maximum credit: 12 units
A supervised work-experience program at an approved florist or related business. Designed to provide the student with an opportunity to successfully gain employment and to learn and practice skills with professional guidance. CSU
Ethnic Studies

Fashion
Office: Batmale 210
Phone Number: (415) 239-3588
Web Site: www.ccsf.edu/departments/fashion

Announcement of Curricula

General Information
The Fashion Department is dedicated to teaching the requisite skills needed for success in all aspects of the fashion industry. The curricula offer students interested in careers in fashion merchandising, design and image consulting, specialized programs and training for career advancement and employment.

Admission. Enrollment is open to all interested students.

Degree Curriculum. The Degree Curriculum in Fashion Merchandising, a two-year course of study, offers students a degree (38-42 units) in Fashion Merchandising. The combination of classroom instruction coordinated with part-time off-campus employment, is designed to help students advance to mid-management positions in the retail, manufacturing and wholesaling industry.

Fashion Merchandising Major (AS)

Upon completion of the Curriculum in Fashion Merchandising, a two-year course of study, students will be qualified to work as sales associates, merchandise specialists, retail managers, retail buyers and assistant buyers, visual merchandisers, stylists, fashion show producers, special events consultants, fashion coordinators, fashion writers and publicists, fashion forecasters, show room assistants, and bookers in modeling agencies. All positions include working for department stores, specialty stores, boutiques, private companies, as well as working as entrepreneurs.

Classes include all areas of the fashion merchandising field and are designed to give students exposure to a variety of fashion experiences. A Major in Fashion Merchandising gives students improved job prospects.

Students who complete each of the following courses, and complete the graduation requirements for the Associate in Science Degree, will satisfy the requirements of the Fashion Merchandising Major.

Learning Outcomes

Upon completion of the program, the student will be able to:

- Apply technical skills used in fashion show production, styling, visual merchandising, and fashion coordination.
- Compare and contrast the economic, sociological, technologi
cal, psychological, and political factors affecting fashion change and adoption.
- Communicate effectively using standard fashion industry vocabulary.
- Identify the criteria for entry level employment in the fashion merchandising industry, create an entrepreneurial business, or be successful in the next level of fashion coursework, should they choose to continue.

Courses Required for the Major in Fashion Merchandising

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<thead>
<tr>
<th>Course</th>
<th>Units</th>
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<tbody>
<tr>
<td>BSMA 66 Business Mathematics</td>
<td>6</td>
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<tr>
<td>or BSMA 68 Mathematics of Business</td>
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<tr>
<td>or MATH E1 Basic Mathematics</td>
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<tr>
<td>or MATH E3 Basic Mathematics</td>
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<tr>
<td>FASH 22 Textile Analysis</td>
<td>3</td>
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<tr>
<td>or FASH 57 Fabric Glossary</td>
<td>3</td>
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<tr>
<td>FASH 42 Introduction to Fashion Industry</td>
<td>3</td>
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<tr>
<td>FASH 44 Fashion Retail Buying</td>
<td>3</td>
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<tr>
<td>FASH 46 Fashion Merchandising</td>
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<td>FASH 47 Fashion Coordination</td>
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<tr>
<td>FASH 48 Fashion Show Production</td>
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<td>FASH 49 Visual Merchandising</td>
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<td>FASH 50 Runway: The Business of Modeling</td>
<td>3</td>
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<tr>
<td>or FASH 54B Advanced Fashion Styling</td>
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<tr>
<td>or FASH 45A Image Consulting</td>
<td>3</td>
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<tr>
<td>FASH 53 Fashion Forecasting</td>
<td>3</td>
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<tr>
<td>FASH 54A Fashion Styling</td>
<td>3</td>
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<tr>
<td>FASH 56 Fashion Writing and Publicity</td>
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<td>FASH 60 Field Work in Fashion Merchandising</td>
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<td>FASH 61 Work Experience in the Fashion Industry</td>
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Recommended Additional Coursework: ACCT 1, 10; ART 101-108, 138; BSEN 70, 74; FASH 23; MRKT 122, 140, 148, 170; MABS 101, 405, 406; SPCH 11, 12; SMBL 135; SMBU 9415, 9421.

Fashion Design Major (AS)

Students may major in Fashion Design as well as receive a Certificate of Achievement. Students who complete each of the requisite courses, and complete the graduation requirements for the Associate in Science Degree, will satisfy the requirements for the Fashion Design Major. The curriculum in Fashion Design, a two-year course of study (51) combines classroom instruction with a part-time internship that is designed to help students qualify for employment as assistant designers, fashion illustrators, assistant patternmakers, and product developers. Positions to which graduates have advanced after gaining experience include those of designers, technical designers, and patternmakers. All positions include working for large and small companies as well as entrepreneurship.

Design training can lead to careers as fashion illustrators, designers, assistant designers, patternmakers, product developers and entrepreneurs.

Learning Outcomes

Upon completion of this program, students will be able to:

- Apply the principles and elements of fashion design when creating their own designs.
- Effectively communicate clearly and concisely in the fashion industry, using visual, oral and written methods.
- Execute the technical skills of pattern and garment development.
- Identify and properly utilize the appropriate raw materials for their fashion products.
- Relate the history and social context of fashion to the current fashion zeitgeist.
Courses Required for the Major in Fashion Design

<table>
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<td>FASH 15A Apparel Construction I</td>
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<td>FASH 21 Fashion Careers</td>
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<td>FASH 22 Textile Analysis</td>
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<tr>
<td>FASH 27 Fashion Draping</td>
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<td>FASH 35A Fashion Illustration I</td>
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<tr>
<td>FASH 15B Apparel Construction II</td>
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<tr>
<td>FASH 23 Fashion History</td>
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<tr>
<td>FASH 26 Flat Pattern Design I</td>
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<td>FASH 36 Fashion Design</td>
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<td>FASH 15C Apparel Construction III</td>
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<td>FASH 35B Fashion Illustration II</td>
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<td>FASH 55 Icons of Contemporary Design</td>
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<td>FASH 67 Computerized Pattern Development: Gerber</td>
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<tr>
<td>FASH 33 Design Portfolio in Fashion</td>
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<td>FASH 37 Flat Pattern Design II</td>
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<tr>
<td>FASH 51 Creating a Garment Business</td>
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<tr>
<td>FASH 63 Fashion Design and Production Internship</td>
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<tr>
<td>FASH 112 Digital Illustration for Fashion</td>
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Recommended Additional Coursework: ART 125A, 125B, 132A, 132B; FASH 29, 34, 42, 46, 53, 54A, 66; VMD 105, 98A, 100A

Courses Required for the Certificate of Achievement in Fashion Design

<table>
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<tbody>
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<tr>
<td>FASH 15A Apparel Construction I</td>
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<td>FASH 21 Fashion Careers</td>
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<tr>
<td>FASH 22 Textile Analysis</td>
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<tr>
<td>FASH 27 Fashion Draping</td>
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<tr>
<td>FASH 35A Fashion Illustration I</td>
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<td>Second Semester-Spring</td>
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<tr>
<td>FASH 15B Apparel Construction II</td>
<td>3</td>
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<tr>
<td>FASH 23 Fashion History</td>
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<tr>
<td>FASH 26 Flat Pattern Design I</td>
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<td>FASH 36 Fashion Design</td>
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<td>Third Semester-Fall</td>
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<tr>
<td>FASH 15C Apparel Construction III</td>
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<td>FASH 35B Fashion Illustration II</td>
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<td>3</td>
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<tr>
<td>Fourth Semester-Spring</td>
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<tr>
<td>FASH 33 Design Portfolio in Fashion</td>
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<tr>
<td>FASH 37 Flat Pattern Design II</td>
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<td>FASH 51 Creating a Garment Business</td>
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<td>FASH 63 Fashion Design and Production Internship</td>
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<td>FASH 112 Digital Illustration for Fashion</td>
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<td>Total Units</td>
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</tbody>
</table>

Recommended Additional Coursework: ART 125A, 125B, 132A, 132B; FASH 29, 34, 42, 46, 53, 54A, 66; VMD 105, 98A, 100A

Fashion Design Certificate

The Certificate of Achievement in Fashion Design (37 units) combines classroom instruction with a part-time internship that is designed to help students qualify for employment as assistant designers, fashion illustrators, assistant patternmakers, and product developers. Positions to which graduates have advanced after gaining experience include those of designers, technical designers, and patternmakers. All positions include working for large and small companies as well as entrepreneurship.

Fashion Merchandising Certificate

The Certificate of Achievement in Fashion Merchandising (37-41 units) fulfills the needs of two groups: those who desire to prepare for employment in the fashion merchandising field and those currently employed who wish to improve their on-the-job skills in this industry.

Learning Outcomes

Upon completion of this certificate the student will be able to:

- Apply technical skills used in fashion show production, styling, visual merchandising, and fashion coordination.
- Compare and contrast the economic, sociological, technological, psychological, and political factors affecting fashion change and adoption.
- Communicate effectively using standard fashion industry vocabulary.
- Identify the criteria for entry level employment in the fashion merchandising industry, create an entrepreneurial business, or be successful in the next level of fashion coursework, should they choose to continue.

Courses Required for the Certificate of Achievement in Fashion Merchandising:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BSMA 66 Business Mathematics</td>
<td></td>
</tr>
<tr>
<td>or BSMA 68 Mathematics of Business</td>
<td></td>
</tr>
<tr>
<td>or MATH E1 Basic Mathematics</td>
<td></td>
</tr>
<tr>
<td>or MATH E3 Basic Mathematics</td>
<td>2 or 3 or 4</td>
</tr>
</tbody>
</table>
FASH 22 Textile Analysis .......................... 1 or 3
or FASH 57 Fabric Glossary .......................... 1 or 3
FASH 42 Introduction to Fashion Industry .................. 3
FASH 44 Fashion Retail Buying .......................... 3
FASH 46 Fashion Merchandising ........................ 3
FASH 47 Fashion Coordination .......................... 3
FASH 48 Fashion Show Production ....................... 4
FASH 49 Visual Merchandising .......................... 3
FASH 50 Runway: The Business of Modeling
or FASH 54B Fashion Styling .......................... 3
or FASH 45A Image Consulting .......................... 3
FASH 53 Fashion Forecasting .......................... 3
FASH 54A Fashion Styling ............................... 3
FASH 56 Fashion Writing and Publicity .................... 3
FASH 60 Field Work ................................. 1
FASH 61 Fashion Work Experience
or FASH 62 Work Experience in Image Consulting ........ 3
Total Units ............................................. 38-42

Recommended Additional Coursework: ACCT 1, 10; ART 101-118, 138; BSEN 70, 74; FASH 23, 28; MRKT 122, 140, 170; PSYC 26; SPCH 11

**Fashion Styling Certificate**

The Certificate of Accomplishment in Fashion Styling is a hands-on field-based program that teaches students the skills required to become professional stylists. It includes instruction in assembling a styling kit, the different aspects of merchandise styling, and sources of styling inspiration. Students completing this certificate will be qualified for employment as photo, fashion show, film, and video stylists.

Learning Outcomes

Upon completion of this certificate, students will be able to:
- Describe principles of styling and apply them in visual display, wardrobe styling, and fashion merchandising.
- Effectively communicate clearly and concisely in the fashion industry, using visual, oral, and written methods.
- Execute the technical skills for creating fashion images in a photographic media.
- Create and present a mood-board to demonstrate ideas and skills to potential employers, clients, and editors.
- Create and maintain a fashion stylist kit.
- Identify the criteria for entry level employment as a fashion stylist or the next level of fashion coursework should they choose to continue.

Students must complete each course with a grade of “C” or higher. Where applicable, grades of “Pass” may be used.

**Courses Required for the Certificate of Accomplishment in Fashion Styling**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>FASH 47 Fashion Coordination</td>
<td>3</td>
</tr>
<tr>
<td>FASH 53 Fashion Forecasting</td>
<td>3</td>
</tr>
<tr>
<td>FASH 54A Fashion Styling</td>
<td>3</td>
</tr>
<tr>
<td>FASH 54B Advanced Fashion Styling</td>
<td>3</td>
</tr>
<tr>
<td>FASH 60 Field Work in Fashion Merchandising</td>
<td>1</td>
</tr>
<tr>
<td>FASH 61 Work Experience in Fashion Industry or FASH 33 Design Portfolio</td>
<td>3</td>
</tr>
<tr>
<td>Total Units</td>
<td>16</td>
</tr>
</tbody>
</table>

Recommended Additional Coursework: FASH 45A, 45B; MRKT 148

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**Image Consulting Certificate**

The Image Consulting Program is designed to prepare students for careers as image consultants, personal shoppers, stylists, sales associates. They can either work independently or for a retailer. Coursework will incorporate skills such as color and wardrobe selection, figure analysis, and setting up a business.

Learning Outcomes

Upon completion of this certificate, students will be able to:
- Execute the technical skills of image consulting.
- Effectively communicate clearly and concisely in the image consulting industry, using visual, oral, and written methods.
- Identify the criteria for entry level employment in image consulting, create an entrepreneurial business, or be successful in the next level of coursework, should they choose to continue.

**Courses Required for the Certificate of Accomplishment in Image Consulting**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>FASH 45A Image Consulting</td>
<td>3</td>
</tr>
<tr>
<td>FASH 45B Advanced Image Consulting</td>
<td>3</td>
</tr>
<tr>
<td>FASH 47 Fashion Coordination</td>
<td>3</td>
</tr>
<tr>
<td>FASH 54A Fashion Styling</td>
<td>3</td>
</tr>
<tr>
<td>FASH 60 Fashion Field Work</td>
<td>1</td>
</tr>
<tr>
<td>FASH 62 Work Experience in Image Consulting</td>
<td>3</td>
</tr>
<tr>
<td>Total Units</td>
<td>16</td>
</tr>
</tbody>
</table>

Recommended Additional Coursework: ART 125A, 125B, 126; BSEN 70; BSEN 74; SMBS 135; MABS 60

**Textiles Certificate**

The objective of the Certificate of Achievement in Textiles is to offer students a diverse array of techniques ranging from the fundamentals of loom controlled multi-harness weaving to designing woven textiles using advanced weave structures. Students explore methods of fabric manipulation in two and three-dimensional surface designs using painting, stamping, stenciling, silk screening, and other techniques. Emphasis is on both conceptual and practical skills development. Positions available to graduates include Knitwear and Woven Product Developers, Textile Designers, Weavers, Fabric Developers, and Fiber Artists.

Learning Outcomes

Upon completion of this certificate, students will be able to:
- Apply the principles and elements of textile design when creating their own designs.
- Effectively communicate their design ideas clearly and concisely, using methods oral, written, and visual.

**Courses Required for the Certificate of Achievement in Textiles**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>FASH 15A Apparel Construction I</td>
<td>3</td>
</tr>
<tr>
<td>FASH 22 Textile Analysis</td>
<td>3</td>
</tr>
<tr>
<td>FASH 25A Weaving I</td>
<td>2</td>
</tr>
<tr>
<td>FASH 25B Weaving II</td>
<td>2</td>
</tr>
<tr>
<td>FASH 25C Weaving III</td>
<td>3</td>
</tr>
<tr>
<td>FASH 64 Fashion Surface Design I</td>
<td>3</td>
</tr>
</tbody>
</table>
Textile, Weaving and Sewing Noncredit Certificate

This certificate provides students with foundation skills in several types of needlecraft, including fashion sewing, alterations, quilting, and weaving.

Learning Outcomes
Upon completion of this certificate, students will be able to:

- Employ the techniques of quilting and tapestry weaving to create various items, such as pillows, wall hangings, and bed dressing.
- Create sewn items, including garments and products such as pillows or accessories.
- Alter garments for proper fit.

Courses Required for the Certificate of Completion in Textile, Weaving and Sewing

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>FASH 6008 Weaving Tapestry</td>
<td>72</td>
</tr>
<tr>
<td>FASH 6014 Fashion Sewing and Alteration</td>
<td>108</td>
</tr>
<tr>
<td>FASH 6025 Quiltmaking</td>
<td>54</td>
</tr>
<tr>
<td><strong>Total Hours</strong></td>
<td><strong>234</strong></td>
</tr>
</tbody>
</table>

Announcement of Courses

Credit, Non-Degree Applicable Courses:

**FASH A. Introduction to Sewing (1)**
Lec-8, lab-24 (total hrs) P/NP Available
Introduction to Sewing. Students will learn the basics of sewing machines, how to make minor repair to clothing, and how to construct a basic rectangular item in fabric. A good choice for the novice before moving on to FASH 15A, apparel Construction I.

NOTE: Some courses include a materials fee.

Credit, Degree Applicable Courses:

**FASH 15A. Apparel Construction I (3)**
Lec-2, lab-3 P/NP available
**Advise: FASH A**
Beginning course covering basic principles and concepts in the construction of garments. Emphasis on machine operation, sewing skills and techniques, and construction processes. Students will create sewing samples and 3-4 garments. CSU

**FASH 15B. Apparel Construction II (3)**
P/NP available
**Prereq: FASH 15A**
Elements of garment construction using intermediate clothing construction methods and techniques. Multiple finishes, hard to handle fabrics, use of serger, complex construction sequences. Students construct 3 garments using techniques from class. CSU

**FASH 15C. Apparel Construction III (3)**
P/NP available
**Prereq: FASH 15B or Demonstrated Skills**
Advanced sewing technique used by industry. Machine tailoring, lining, menswear techniques, combining fabrics. Students construct complex garments, including dress, trousers, jacket. CSU

**FASH 15D. Apparel Construction IV (3)**
P/NP available
**Prereq: FASH 15C**
Introduction to design and construction of menswear garments. Emphasis on design application and fabric manipulation. CSU

**FASH 15E. Apparel Construction V (3)**
P/NP available
**Prereq: FASH 15D**
Introduction to design and construction of women’s garments. Emphasis on design application and fabric manipulation. CSU

**FASH 15F. Apparel Construction VI (3)**
P/NP available
**Prereq: FASH 15E**
Introduction to design and construction of women’s and men’s garments. Emphasis on design application and fabric manipulation. CSU

**FASH 15G. Apparel Construction VII (3)**
P/NP available
**Prereq: FASH 15F**
Introduction to design and construction of garments. Emphasis on theory and design. A major focus will be integrated surface design techniques with woven cloth to create signature fabrics. CSU

**FASH 15H. Apparel Construction VIII (3)**
P/NP available
**Prereq: FASH 15G**
Introduction to design and construction of garments. Emphasis on design application and fabric manipulation. CSU

**FASH 15I. Apparel Construction IX (3)**
P/NP available
**Prereq: FASH 15H**
Introduction to design and construction of garments. Emphasis on design application and fabric manipulation. CSU

**FASH 15J. Apparel Construction X (3)**
P/NP available
**Prereq: FASH 15I**
Introduction to design and construction of garments. Emphasis on design application and fabric manipulation. CSU

**FASH 15K. Apparel Construction XI (3)**
P/NP available
**Prereq: FASH 15J**
Introduction to design and construction of garments. Emphasis on design application and fabric manipulation. CSU

**FASH 15L. Apparel Construction XII (3)**
P/NP available
**Prereq: FASH 15K**
Introduction to design and construction of garments. Emphasis on design application and fabric manipulation. CSU

**FASH 15M. Apparel Construction XIII (3)**
P/NP available
**Prereq: FASH 15L**
Introduction to design and construction of garments. Emphasis on design application and fabric manipulation. CSU

**FASH 15N. Apparel Construction XIV (3)**
P/NP available
**Prereq: FASH 15M**
Introduction to design and construction of garments. Emphasis on design application and fabric manipulation. CSU

**FASH 15O. Apparel Construction XV (3)**
P/NP available
**Prereq: FASH 15N**
Introduction to design and construction of garments. Emphasis on design application and fabric manipulation. CSU

**FASH 15P. Apparel Construction XVI (3)**
P/NP available
**Prereq: FASH 15O**
Introduction to design and construction of garments. Emphasis on design application and fabric manipulation. CSU

**FASH 15Q. Apparel Construction XVII (3)**
P/NP available
**Prereq: FASH 15P**
Introduction to design and construction of garments. Emphasis on design application and fabric manipulation. CSU

**FASH 15R. Apparel Construction XVIII (3)**
P/NP available
**Prereq: FASH 15Q**
Introduction to design and construction of garments. Emphasis on design application and fabric manipulation. CSU

**FASH 15S. Apparel Construction XIX (3)**
P/NP available
**Prereq: FASH 15R**
Introduction to design and construction of garments. Emphasis on design application and fabric manipulation. CSU

**FASH 15T. Apparel Construction XX (3)**
P/NP available
**Prereq: FASH 15S**
Introduction to design and construction of garments. Emphasis on design application and fabric manipulation. CSU

**FASH 15U. Apparel Construction XXI (3)**
P/NP available
**Prereq: FASH 15T**
Introduction to design and construction of garments. Emphasis on design application and fabric manipulation. CSU

**FASH 15V. Apparel Construction XXII (3)**
P/NP available
**Prereq: FASH 15U**
Introduction to design and construction of garments. Emphasis on design application and fabric manipulation. CSU

**FASH 15W. Apparel Construction XXIII (3)**
P/NP available
**Prereq: FASH 15V**
Introduction to design and construction of garments. Emphasis on design application and fabric manipulation. CSU

**FASH 15X. Apparel Construction XXIV (3)**
P/NP available
**Prereq: FASH 15W**
Introduction to design and construction of garments. Emphasis on design application and fabric manipulation. CSU

**FASH 15Y. Apparel Construction XXV (3)**
P/NP available
**Prereq: FASH 15X**
Introduction to design and construction of garments. Emphasis on design application and fabric manipulation. CSU

**FASH 15Z. Apparel Construction XXVI (3)**
P/NP available
**Prereq: FASH 15Y**
Introduction to design and construction of garments. Emphasis on design application and fabric manipulation. CSU

**FASH 16. Garment Fitting Techniques (3)**
Lec-2, lab-3 P/NP Available
Introduction to fitting on a live model. Students will learn to identify and correct fitting problems on a sample muslin garments, including bodices, skirts, pants and jackets. Students will then learn how to transfer those adjustments to the pattern to create well-fitting production patterns. Fitting issues for knit and stretch fabrics will also be addressed. CSU

**FASH 17. Custom Tailoring (3)**
Lec-2, lab-3, filed trips P/NP Available
**Prereq: FASH 15B**
**Advise: FASH 16 and FASH 20**
Students will learn the specialized skills needed to construct tailored and structured garments using traditional methods. Course includes fitting from muslin and construction of fully hand-tailored jacket or coat. CSU

**FASH 21. Fashion Careers (1)**
Lec-1, field trips
An overview of career opportunities within the fashion industry, with specific guidelines to assist students who are looking for ways to direct their interests and talents. CSU

**FASH 22. Textile Analysis (3)**
Lec-3 P/NP Available
Analysis of the performance and care of natural and man-made textile fibers, yarns, fabrics and other products. Fabric construction methods, fabric identification, dyeing and finishing processes are included. Discussion of current issues and innovations in the textile field. CSU/UC

**FASH 23. Fashion History (3)**
Lec-3
Chronological study of costumes from antiquity to the present. Western, eastern and folk influences included. Analysis of sources of fashion design developed from influences of history and culture upon clothing. CSU

**FASH 25A. Weaving I (2)**
Lec-1, lab-3
A beginning course in the fundamentals of loom controlled multi-harness weaves. Emphasis on the fundamentals of fiber classification, yarn calculation, comprehensive drafting, weave analysis and fabric finishing techniques. CSU

**FASH 25B. Weaving II (2)**
Lec-1, lab-3, field trips
**Prereq: FASH 25A**
Introduction to designing woven textiles using advanced weave structures. Students learn to select yarns, weaves, and equipment and design original textiles. CSU

**FASH 25C. Weaving III (3)**
Lec-2, lab-3, field trips P/NP available
In further developing the students’ knowledge of weave structures, emphasis is placed on theory and design. A major focus will be integrated surface design techniques with woven cloth to create signature fabrics. CSU

**FASH 26. Flat Pattern Design I (3)**
Lec-2, lab-3, field trips P/NP available
Principles and techniques of designing a garment pattern using flat pattern methods. Using a basic sloper, students analyze designs and
create patterns for those designs. Students will create a final, finished garment from an original design. CSU

FASH 27. Fashion Draping (3)  
Lec-2, lab-3  
P/NP available  
Draping for garment design and fit. Techniques and concepts of draping the human figure using cloth as the starting point. Draping a fitting shell, draping with special fabrics and draping for unusual design problems. CSU

FASH 28. The Social Meaning of Clothing (2)  
Lec-2  
The interrelationship of clothing and culture, including the psychological aspects of clothing and human behavior. Analysis of clothing use as a social tool. Comparison of regional and class differences as represented by clothing. CSU/UC

FASH 29. Pattern Grading (1)  
Lec-.5, lab-1.5, field trips  
P/NP available  
Theories and techniques for grading patterns into multiple sizes, including principles of fit, how the body grows, and various size ranges. Conventional methods are used to practice the basic principles of grading on a variety of pattern types. CSU

FASH 33. Design Portfolio in Fashion (3)  
Lec-3  
P/NP available  
Prereq.: FASH 35A or CASC 35  
Prepares the student in the presentation of their work in a professional portfolio for the purpose of employment. Selection of illustrations for style and medium, types of portfolios available, and overall professional presentation standards will be covered. CSU

FASH 34. Apparel Manufacturing (3)  
Lec-3, field trips  
P/NP available  
All phases of the manufacture of wearing apparel and accessories. Technological limitations and possibilities, operation of machines used in production and manufacturing techniques. CSU

FASH 35A. Fashion Illustration I (3)  
Lec-2, lab-3  
Drawing of the fashion figure including working sketches. The clothed figure in motion with emphasis on textile characteristics, color mediums, and construction details. Development of a personal illustration style and a portfolio. CSU

FASH 35B. Fashion Illustration II (3)  
Lec-2, lab-3  
Prereq.: FASH 35A  
Students will learn to expand on their artistic renderings, flat sketches, coloration and textile interpretations by using computer programs. The human figure in fashion proportions will be drawn from every angle and will be clothed in a variety of garments. Designs for men, women, and children will be explored and created. CSU

FASH 36. Fashion Design (3)  
Lec-3, field trips  
P/NP available  
Basic design principles examined as they apply to clothing for women, men, and children. Includes design modifications as required by fabric and figure characteristics. Relates design problems to current aesthetic trends and use of the garment. CSU

FASH 37. Flat Pattern Design II (3)  
Lec-2, lab-3, field trips  
P/NP available  
Prereq.: FASH 26 or demonstration of FASH 26 exit skill  
Continuation of techniques for pattern development, with an emphasis on industry production skills. Techniques covered include the development of more complex designs, patterns for stretch fabric, and use of the computer to create original patterns. CSU

FASH 42. Introduction to Fashion Industry (3)  
Lec-3, field trips  
An overview of the fashion industry that prepares students to be on the cutting edge of what is happening. Emphasis will be on the economic, political, sociological, technological and psychological environment that affects why fashion changes and evolves. The role of manufacturers, designers and retailers in the fashion business will be explored along with the elements of fashion marketing. CSU

FASH 44. Fashion Retail Buying (3)  
Lec-3, field trips  
P/NP available  
Planning, control, buying and pricing of product for the retail store. Merchandising functions of modern retail, including receiving and selling merchandise, visual merchandising, branding and marketing. CSU

FASH 45A. Image Consulting (3)  
Lec-3, field trips  
P/NP available  
This course prepares students to become image consultants, either working independently or for a retailer. It will incorporate the techniques of color and wardrobe selection, figure analysis, and setting up a business. CSU

FASH 45B. Advanced Image Consulting (3)  
Lec-3, field trips  
P/NP available  
Prereq.: FASH 45A  
Provides advanced knowledge and skills in the preparation of becoming an Image Consultant. Emphasis is placed on techniques of wardrobe planning and consultation, public relations, marketing and business operations for an image consulting business. CSU

FASH 46. Fashion Merchandising (3)  
Lec-3, field trips  
Overview of how fashion merchandising operates within the retail environment; principles of the many aspects of fashion merchandising are studied along with career opportunities. CSU

FASH 47. Fashion Direction and Coordination (3)  
Lec-3, field trips  
Analysis and examination of the duties of a fashion director with emphasis on trend research and projection of a firm’s fashion image and brand. Students will produce and execute an informal fashion show from concept to runway. CSU

FASH 48. Fashion Show Production (4)  
Lec-3, lab-4, field trips  
Prereq.: FASH 47  
Strongly recommended for all fashion merchandising majors. Preparation and execution of a complete fashion show, from concept to runway, for a specific firm and audience; on and off campus production. CSU
FASH 49. Visual Merchandising (3)
Lec-3, field trips
A practical study of merchandise display in a variety of business establishments. This course will provide students with the skills and knowledge to arrange a store window, in-store display, and floor layout. Students will learn how to display merchandise to the consumer regardless of their specific job title. CSU

FASH 50. Runway: The Business of Modeling (3)
Lec-3, field trips
Fundamentals of and practices in training for a career in modeling and fashion coordination, with emphasis on developing the ability to identify specific skills requisite to the industry. CSU

FASH 51. Creating a Garment Business (3)
Lec-3 P/NP available
Students learn how to organize and transfer their ideas for clothing design into a business that is viable and sustainable. Elements of a fashion business, financing, planning, branding, marketing. CSU

FASH 53. Fashion Forecasting (3)
Lec-3, field trips P/NP available
The theories and frameworks underlying forecasting in the textile and apparel industry. The factors involved in planning and presenting the forecast. Emphasis on using print, Internet and broadcast information in competitive analysis. CSU

FASH 54A. Fashion Styling (3)
Lec-3, field trips P/NP available
This course explores the skills required for “styling” outfits (choosing accessories to project fashion image), whether for photography, video, film and commercials, visual merchandising or fashion shows. Emphasis on identifying the many styling images and methods used in promoting fashion. CSU
Formerly FASH 54

FASH 54B. Advanced Fashion Styling (3)
Lec-3, field trips P/NP available
Prereq: FASH 54A
This hands-on, field-based course teaches the skills required of various types of professional stylists. Students will be guided through the process of developing a professional styling portfolio which they can present to prospective clients. CSU

FASH 55. Icons of Contemporary Fashion (3)
Lec-3, field trips
An overview of the key movements and innovations in fashion through the exploration of the work of the most influential and original contemporary designers. Emphasis will be on crucial shifts in style within their socio-economic, political and cultural contexts. CSU

FASH 56. Fashion Writing and Publicity (3)
Lec-3, field trips
The field of fashion writing and publicity offers a great diversity of careers in fashion, textiles and home furnishings markets. Students will learn how to write fashion reports, press releases, photo captions, fashion show and web scripts, commercials for radio and television as well as create press kits. CSU

FASH 57. Fabric Glossary (1)
Lec-1, field trip P/NP available
Merchandising students will learn how to identify fashion fabrics and to determine the suitability of these fabrics to various styles of clothing. CSU

FASH 60. Field Work - Fashion Merchandising (1)
Work-5 P/NP only
Repeat: FASH 60, 61, 62, and 63 combined, max. credit: 16 units
Fashion show production work experience. Students work backstage as dressers for a variety of designers or stores. CSU

FASH 61. Work Experience in Fashion Industry (3)
Work-15 P/NP available
Repeat: FASH 60, 61, 62, and 63 combined, max. credit: 16 units
Fashion retail or wholesale internship with local employers to gain meaningful work experience. CSU

FASH 62. Work Experience in Image Consulting (3)
Work-15 P/NP available
Repeat: FASH 60, 61, 62, and 63 combined, max. credit: 16 units
Image consulting internship with local employers to gain meaningful work experience. CSU

FASH 63. Fashion Design and Production Internship (2)
Work-10
Repeat: FASH 60, 61, 62, and 63 combined, max. credit: 16 units
Fashion design and production internship with local employers to gain meaningful work experience. CSU

FASH 64. Fashion Surface Design (3)
Lec-2, lab-3, field trips
All sections will charge a material fee of $20.00.
Printing designs on fabric via painting, stamping, stenciling, airbrushing, photo silkscreening, transferring and marbleizing. Emphasis is on technique, color and design. CSU

FASH 65. Advanced Fashion Surface Design (3)
Lec-2, lab-3, field trips
Advise: FASH 15A
Two dimensional Surface Design created by the manipulation of fabrics and enhanced with sewn-on embellishments. Trapunto, layering/texturing, quilting, patchwork, pleating, applique, and beading. Fee may be charged. CSU

FASH 66. Lingerie Design and Construction (3)
Lec-2, lab-3, field trips
Development of original designs and construction of all types of intimate apparel. Pattern-making and specialized sewing techniques emphasizing the calculations necessary for the successful production of finely calibrated garments. CSU

FASH 67. Computerized Pattern Development (3-3)
Lec-3, 3, field trips P/NP available
Prereq: FASH 26
Overview of the functions and capabilities of computerized pattern development systems, such as PAD and Gerber. Industry pattern development including drafting, modifying, and grading patterns. Digitizing and plotting patterns. CSU

FASH 67A. Computerized Pattern Development: PAD (3) CSU
FASH 67B. Computerized Pattern Development: Gerber (3) CSU

FASH 69. Basic Pant Draft (1)
Lec-5, lab-1.5 P/NP available
Prereq: FASH 15A or demonstration of FASH 15A exit skills
Students will learn the specialized skills needed to properly measure a figure and draft a well fitting pant pattern. CSU
FASH 70. Copying Ready-to-Wear (1)
Lec-1 P/NP available
Prereq.: FASH 15A
The student will learn how to duplicate an existing garment while the garment is still intact. Students will learn the specialized techniques and skills needed to generate a pattern from the garment. CSU

FASH 71. Apparel Art (2)
Lec-2, field trips P/NP available
Class will present garment design possibilities in techniques including: weaving, quilting, fabric painting, applique, beading, felting and reconstructed fabric making. Pattern designing is emphasized. CSU

FASH 72. Drafting a Sloper (Moulage) (1)
Lec-1 P/NP available
Prereq.: FASH 15A
Students will learn the specialized skills needed to properly measure the figure and draft a personal sloper/moulage. CSU

FASH 73. Sewing with Knit and Stretch Fabrics (1)
Lec-.5, lab-1.5, field trips P/NP available
Special sewing techniques for garments made from knit fabrics, such as t-shirts, activewear and swimwear. Students will construct garments while learning how to work with knit fabrics, including ribbed finishes, elastic edgings, and special seam types. CSU

FASH 74. Sewing Haute Couture (3)
Lec-2, lab-3, field trips P/NP available
Prereq.: FASH 15B, FASH 26 or FASH 27
Advise: FASH 16
Students will learn advanced sewing techniques used in the creation of couture garments such as evening and bridal gowns. Students will create their own designs. CSU

FASH 112. Digital Illustration for Fashion (3)
Lec-3, lab-1 P/NP available
Prereq.: VMD 105 and FASH 35B
This course covers techniques in Adobe Photoshop and Illustrator for Fashion Designers. CSU

Noncredit Courses:
FASH 6003. Upholstery (63 hrs)
A material fee of $30 will be charged.
Introduction to upholstering furniture and to making furniture starting from the frame. Use of tools, cutting and fitting different fabrics, fillings and placement of fabrics.

FASH 6004. Weaving - Contemporary Basketry
Contemporary and traditional basketry. Coiling, twining, plaiting, and knotless netting using natural fibers and innovative modern materials. Formerly CASC 6004.

FASH 6006. Expanded Woven Design (72 hrs)
Prereq.: FASH 6005 or CASC 6005
The design and weaving of textiles using 4 and 8 shaft floor looms. Introduction to 16 shaft dobby loom design and technology. Projects expand basic weave structures with emphasis on best choice of materials, technique and appreciation of the medium. Emphasis on imaginative applications of basic technology to innovative resolutions.

FASH 6007. Art Weaving (70 hrs)
Design and weave textiles using 4 and 8 harness treadle looms and 16 harness computer driven looms. Utilizing computer weaving pro grams, emphasis will be placed on weave structure theory to enable students to conceptualize and create signature fabrics. Integration of the woven structure with dyeing and surface design processes applied before, during and after weaving. Exercises to enhance confidence in color and design skills.

FASH 6008. Weaving Tapestry (72 hrs)
Integrating traditional Aubusson tapestry techniques with contemporary techniques and materials. All levels: beginning - samplers; intermediate - cartoons; advanced - approved, pre-planned pieces.

FASH 6014. Fashion Sewing and Alteration (108 hrs)
Development of skills in clothing construction. Areas include tailoring, dressmaking, fitting, alterations. Students provide materials and supplies.

FASH 6025. Quiltmaking (54 hrs)
Develop/improve skills in sewing, design, pattern drafting, applique, patchwork and quilting. Beginning students construct a sampler quilt. Intermediate/advanced students work on individually designed projects.

FASH 6027. Surface Design - 3-dimensional (54 hrs)
Applications of design on fabric via painting silk screening, airbrushing, stenciling, blueprinting, marbleizing and sculpting. Pattern drafting for 3 dimensional objects: figures, animals, boxes, masks, headdresses and footwear. Emphasis on color and design.

FASH 6040. Interior Textiles (36 hrs)
Lab-2, field trips
Woven structures used in interior furnishings. Practice techniques of upholstery, drapery, rugs, bed coverings, wall weavings and table mattings. Relationship to commercial production of these products is emphasized. A notebook with sample woven presentations is recommended.

FASH 6050. Lingerie (72 hrs)
Basic underwear design principles will be examined as they apply to men and women and children. This will include design modifications based on individual creativeness, body shape, figure accents, and selection of fabrics and notions. Course will focus on both consumer and industrial production.

FASH 6051. Millinery (54 hrs)
All aspects of basic hat making, including sewn hats, framed hats and felt hats. Application of trims and embellishments included.

FASH 6052. Apparel Art Lab (35 hrs)

FASH 6055. Upholstery Trade (90 hrs)
A material fee of $30 will be charged.
Upholstering as a trade. Focusing on the skills necessary for upholstering new and existing residential and commercial upholstered furniture. Upholstering as a professional business - wholesale or retail, including fabric and pattern layout, sewing.

FASH 9612. Draping/Design/Pattern Drafting (54 hrs)
Methods and techniques of clothing construction used to meet students' individual design needs. Covers basic sewing and pattern drafting through composing test draping designs on manikins. Demonstrations of draping techniques that summarize the basics of garment assembly and finishing.
Foreign Languages
Office: Art 202
Phone Number: (415) 239-3223
Web Site: www.ccsf.edu/forlang

Announcement of Curricula
(See specific course entries for American Sign Language, Chinese, French, German, Italian, Japanese, Pilipino, Russian and Spanish.)

General Information
City College offers language and culture courses in nine languages: American Sign Language, Chinese (both Cantonese and Mandarin), French, German, Italian, Japanese, Pilipino, Russian and Spanish.

In foreign language courses, the course numbers and letters follow in sequence. A student who has completed a course with a grade of A, B, C, or P may not re-register for the same course (unless repetition is specifically permitted), nor may he/she register for a course with a lower number or letter unless otherwise indicated.

Chinese, French, German, Italian, Japanese, and Spanish offer an advisory placement test to help students determine their level of language ability. Following consultation with the advisor in that language, the student may sign an agreement which will permit the granting of credit for the previous level course of that language, provided the student enrolls in the recommended level and completes the course with a grade of A or B. For further information contact the Foreign Language Department.

Learning Outcomes
Given the structures and vocabulary included in each course, students will be able to:
- Understand spoken and written language;
- Speak with reasonable accuracy and pronunciation;
- Develop their understanding of other cultures and customs;
- Write in the language appropriate to the level studied.

For foreign language studies abroad, contact the International Education Coordinator, 239-3778.

For short term noncredit foreign language classes, contact the Continuing Education Coordinator, 561-1860.

French
Office: Art 202
Phone Number: (415) 239-3223
Web Site: www.ccsf.edu/forlang

French Major (AA)
Program Information. The French program provides instruction in developing a student’s ability to communicate in French, both written and oral, through the intermediate level and to gain a knowledge of francophone cultures throughout the world. The program is designed to meet transfer goals as well as personal development and career growth. Students must complete the curriculum with final grades of C or higher in their major preparation.

Degree Curriculum. The Degree Curriculum in French is a two-year course of study designed to build a strong language foundation as well as expose students to francophone cultural content and some literature. Students who complete the curriculum are better prepared to transfer to the CSU and UC systems as well as other universities with the intent of majoring or minoring in French.

Learning Outcomes
Upon completion of this degree, students will be able to:
- Demonstrate fluency to interact in French in a normal and spontaneous fashion at an intermediate level.
- Understand and analyze publications and current affairs media as well as contemporary literary prose.
- Demonstrate understanding of geography and cultural differences in the francophone world.
- Display an intermediate level of proficiency in speaking, understanding, reading and writing in French to perform successfully in upper division courses.

Courses Required for the Major in French
Students must complete a minimum of 15 units chosen from

<table>
<thead>
<tr>
<th>Courses</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>FREN 2 or 2A+2B Cont. of Elem. French</td>
<td>5 or 6</td>
</tr>
<tr>
<td>FREN 3A+3B Intermediate French</td>
<td>6</td>
</tr>
<tr>
<td>FREN 4 Cont. of Intermediate French</td>
<td>6</td>
</tr>
<tr>
<td>FREN 5 Adv. French: Conv. on French</td>
<td>3</td>
</tr>
<tr>
<td>Literature and Culture</td>
<td>3</td>
</tr>
<tr>
<td>FREN 22 Grammar Review and Composition</td>
<td>3</td>
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</tbody>
</table>

An additional three (3) units must be completed from the following courses:

<table>
<thead>
<tr>
<th>Courses</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>FREN 1 or 1A+1B Elementary French</td>
<td>5 or 6</td>
</tr>
<tr>
<td>FREN 10B Beginning Conv. French</td>
<td>3</td>
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<tr>
<td>FREN 10C Intermediate Conv. French</td>
<td>3</td>
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<tr>
<td>FREN 10D Cont. of Intermed. Conv. French</td>
<td>3</td>
</tr>
<tr>
<td>FREN 10E Cont. of Intermed. Conv. French</td>
<td>3</td>
</tr>
<tr>
<td>FREN 11A-11B Advanced Conv. French</td>
<td>3-3</td>
</tr>
<tr>
<td>FREN 41 Culture and Civilization France</td>
<td>3</td>
</tr>
<tr>
<td>FREN 42 Contemporary French Culture &amp; Civ</td>
<td>3</td>
</tr>
<tr>
<td>Total Units</td>
<td>18</td>
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</tbody>
</table>

French Certificate
The Certificate of Accomplishment in French provides students, prospective employers and others with documented evidence of persistence and academic accomplishment in the language. The certificate requires completion of 15 units in French. Each course must be completed with a final grade of “C” or higher or Pass. At least 9 units must be selected from the core list. The remaining 6 units may be selected from the elective units.

Learning Outcomes
Upon completion of this certificate, students will be able to:
- Understand the main points of standard speech on familiar matters encountered in work, school, leisure, etc., as well as many radio or television programs.
- Understand texts which consist mainly of high-frequency everyday or job-related languages.
Courses Required for the Certificate of Accomplishment in French

Core Courses

- FREN 1 Elementary French
  - or FREN 1A-1B Elementary French
- FREN 2 Continuation of Elementary French
  - or FREN 2A-2B Continuation of Elem French
- FREN 3 Intermediate French
  - or FREN 3A-3B Intermediate French
- FREN 4 Continuation of Elem French
- FREN 5 Adv French: Conv on French Lit and Cult

Elective Courses

- FREN 10A Beginning Conversational French
- FREN 10B Cont of Beg Conversational French
- FREN 10C Intermediate Conversational French
- FREN 10D Cont of Inter Conversational French
- FREN 10E Cont of Inter Conversational French
- FREN 11A, 11B Adv Conversational French
- FREN 20 Independent Studies
- FREN 22 Grammar Review and Composition
- FREN 23 French Phonetics
- FREN 41 Culture and Civilization of France
- FREN 42 Contemporary French Culture and Civ

Total Units 15

Announcement of Courses

Students of beginning French are directed to consider French courses numbered 1, 1A, 10A.

A placement test in French is available for guidance in selecting the appropriate course. For information, call 239-3223. Total beginners in French should select from French 1, 1A or 10A.

Credit, Degree Applicable Courses:

- FREN 1. Elementary French (5)
  Lec-5, lab-2 P/NP available
  **Advisement:** ENGL 93 or 94; or ESL 160 or Placement in ENGL 96 or ESL 170 or any City College or University Foreign Language Course.
  Beginner's course. Grammar, composition, and reading. Practice in speaking and understanding French. CSU/UC

- FREN 1A-1B. Elementary French (3-3)
  Lec-3, lab-1 P/NP available
  **Advisement:** For FREN 1A: ENGL 93 or 94; or ESL 160 or Placement in ENGL 96 or ESL 170 or any City College or University Foreign Language Course
  **Prerequisite:** For FREN 1B: FREN 1A or Demonstration of FREN 1A exit skills
  Grammar, composition, and reading. Practice in speaking and understanding French. CSU/UC
  FREN 1A+1B = FREN 1

- FREN 2. Continuation of Elementary French (5)
  Lec-5, lab-2 P/NP available
  **Prerequisite:** FREN 1 or 1B or Demonstration of FREN 1/1B exit skills
  Second semester course. Continuation of elementary grammar, composition and reading. Continued practice in speaking and understanding French. CSU/UC

- FREN 2A-2B. Continuation of Elementary French (3-3)
  Lec-3, lab-1 P/NP available
  **Prerequisite:** For FREN 2A: FREN 1 or 1B or Demonstration of FREN 1/1B exit skills.
  **Prerequisite:** For FREN 2B: FREN 2A or Demonstration of FREN 2A exit skills
  Continuation of elementary grammar, composition and reading. Continued practice in speaking and understanding French. CSU/UC
  FREN 2A+2B = FREN 2

- FREN 3. Intermediate French (5)
  Lec-5, lab-1 P/NP available
  **Prerequisite:** FREN 2 or 2B or Demonstration of FREN 2/2B exit skills
  Third semester course: Review of grammar and composition; reading of cultural materials. Constant practice in the use and comprehension of the spoken language. Conducted in French. CSU/UC

- FREN 3A-3B. Intermediate French (3-3)
  Lec-3, lab-1 P/NP available
  **Prerequisite:** FREN 2 or 2B or Demonstration of FREN 2/2B exit skills
  **Non-sequential**
  Review of grammar and composition; reading of cultural materials. Constant practice in the use and comprehension of the spoken language. Conducted in French. CSU/UC
  FREN 3A+3B = FREN 3

- FREN 4. Continuation of Intermediate French (3)
  Lec-3, lab-1 P/NP available
  **Prerequisite:** FREN 2 or 2B or Demonstration of exit skills
  Fourth semester course. Reading of representative literary works; review of grammar and composition. Increased emphasis on speaking. Conducted in French. CSU/UC

- FREN 5. Advanced French: Conversation on French Literature and Culture (3)
  Lec-3, lab-1, field trips P/NP available
  **Prerequisite:** FREN 2/2B or Demonstration of FREN 2/2B exit skills
  **Advisement:** FREN 3 or 3B
  Reading in and discussion of French literature and culture. Exclusively oral training to acquire greater command of the spoken language through building vocabulary, improving pronunciation and expressing ideas in a more natural manner. CSU

- FREN 10A. Beginning Conversational French (3)
  Lec-3, lab-1 P/NP available
  **Recommended all beginning students and for students enrolled in FREN 1 or FREN 1A. Not recommended for native speakers of French.**
  Beginner's course. Extensive oral training in French. Emphasis on practical vocabulary and idiom rather than formal grammar and literature. CSU

- FREN 10B. Continuation of Beginning Conversational French (3)
  Lec-3, lab-1 P/NP available
  **Prerequisite:** FREN 10A or Demonstration of FREN 10A exit skills
  **Recommended for students enrolled in FREN 2 or FREN 2A. Not recommended for native speakers of French.**
  Second semester course. Continuation of extensive oral training in French. Emphasis on practical vocabulary and idiom rather than formal grammar and literature. CSU
FREN 10C. Intermediate Conversational French (3)
Lec-3, lab-1  P/NP available
Prereq.: FREN 10B or demonstration of FREN 10B exit skills
Recommended for students enrolled in FREN 2 or 2A or 2B. Not recommended for native speakers of French.
Continuation of extensive oral training in French. Designed for students who wish to continue acquiring more advanced skills of the spoken language with a minimum of formal grammar. CSU

FREN 10D. Continuation of Intermediate Conversational French (3)
Lec-3, lab-1  P/NP available
Prereq.: FREN 10C or demonstration of FREN 10C exit skills
Recommended for students enrolled in FREN 2B or 3A or 3B. Not recommended for native speakers of French.
Continuation of extensive oral training in French for students who wish to continue acquiring more advanced skills of the spoken language with a minimum of formal grammar. CSU

FREN 10E. Continuation of Intermediate Conversational French (3)
Lec-3, lab-1  P/NP available
Prereq.: FREN 10D or demonstration of FREN 10D exit skills
Recommended for students enrolled in FREN 3 or FREN 3B. Not recommended for native speakers of French.
Continuation of extensive oral training in French for students who wish to continue acquiring more advanced skills of the spoken language with a minimum of formal grammar. CSU

FREN 11A-11B. Advanced Conversational French (3-3)
Lec-3, lab-1  P/NP available
Prereq.: FREN 10E or 3 or 3A+3B or demonstration of FREN 10E, 3, or 3A+3B exit skills
Non-sequential
Students will consolidate their grammatical acquisitions, practice their listening and reading skills and attain speaking proficiency while learning about Francophone cinema. They will exchange viewpoints on the various movies seen in class and discuss social and cultural values of the country of origin of each movie. CSU/UC

FREN 20. Independent Studies in French (1)
Lec-1  P/NP available
Prereq.: FREN 3A, 3B, or 4 or demonstration of FREN 3A/3B/4 exit skills
May not be offered every semester.
Students will be developing a current knowledge in a specific area of interest - literary, cultural or linguistic - while improving critical thinking and communicative skills in the French language. This course is an independent study course. CSU (UC upon review)

FREN 22. Grammar Review and Composition (3)
Lec-3, lab-1  P/NP available
Prereq.: FREN 4 or demonstration of FREN 4 exit skills
May not be offered every semester.
Advanced review of grammar and composition with attention to style, vocabulary development, and more advanced grammatical structure, taught entirely in French. CSU/UC

FREN 23. French Phonetics (2)
Lec-2  P/NP available
Prereq.: FREN 10C or 2A or demonstration of FREN 10C or 2A exit skills
May not be offered every semester.
Introduction to the French phonological system with attention given to spoken French and its differences with written French. Emphasis on skills of pronunciation, oral expression and comprehension rather than on conversation or discussion. CSU

FREN 41. Culture and Civilization of France (3)
Lec-3  P/NP available
Advise: ENGL 96 or placement in ENGL 1A
No knowledge of French required.
May not be offered every semester.
The history, geography, social institutions, literature, art, architecture, and music of France from their beginnings to the First World War. CSU/UC

FREN 42. Contemporary French Culture and Civilization (3)
Lec-3  P/NP available
Advise: ENGL 96 or placement in ENGL 1A
No knowledge of French required.
May not be offered every semester.
Aspects of French culture and civilization from the entre-deux-guerres period to the present. Insights into the historical and traditional forces which have contributed to the current and emerging conditions of France. CSU/UC

Gay, Lesbian and Bisexual Studies
See Lesbian, Gay, Bisexual, and Transgender Studies

Geography
See Earth Sciences listings

Geology
See Earth Sciences listings.

German
Office: Art 202
Phone Number: (415) 239-3223
Web Site: www.ccsf.edu/forlang

German Certificate
The Certificate of Accomplishment in German provides students, prospective employers and others with documented evidence of persistence and academic accomplishment in the language. The certificate requires completion of 15 units in German. Each course must be completed with a final grade of “C” or higher or Pass. At least 9 units must be selected from the core list. The remaining 6 units may be selected from the elective units.

Learning Outcomes
Upon completion of this certificate, students will be able to:
- Understand the main points of standard speech on familiar matters encountered in work, school, leisure, etc. as well as many radio or television programs on current affairs.
- Understand texts which consist mainly of high-frequency everyday or job-related language.
- Deal with most situations likely to arise while traveling in an area where the language is spoken.
- Write simple connected text on topics which are familiar or of personal interest or personal letters describing experiences and impressions.
Courses Required for the Certificate of Accomplishment in German

Core Courses

GERM 1 Elementary German
or GERM 1A-1B Elementary German .............................. 3-5
GERM 2 Continuation of Elementary German
or GERM 2A-2B Continuation of Elementary German .............................. 3-5
GERM 3 Intermediate German
or GERM 3A-3B Intermediate German .............................. 3-5
GERM 4 Continuation of Intermediate German
or GERM 4A-4B Continuation of Intermediate German .............................. 3-5

Elective Courses

GERM 10A, 10B Beg Prac Spoken German .............................. 3-3
GERM 10C Intermediate Conversational German .............................. 3-3
GERM 10D Continuation of Intermediate Conversational German .............................. 3-3
GERM 11A, 11B Advanced Conversational German .............................. 3-3

Total Units .......................................................... 15

Announcement of Courses

Credit, Degree Applicable Courses:

Students of beginning German are directed to consider German courses numbered 1, 1A or 10A.

A placement test in German is available for guidance in selecting the appropriate course. For information, call 239-3223.

GERM 1. Elementary German (5)
Lec-5, lab-2  P/NP available
Advising: ENGL 93 or 94; or ESL 160 or Placement in ENGL 96 or ESL 170 or any City College or University Foreign Language Course
Beginner’s course: Grammar, composition, and reading; practice in speaking and understanding German. CSU/UC
GERM 1A + GERM 1B=GERM 1

GERM 1A-1B. Elementary German (3-3)
Lec-3, lab-1  P/NP available
Prerequisite: GERM 1B: GERM 1A or Demonstration of GERM 1A Exit Skills.
Advising: ENGL 93 or 94; or ESL 160 or Placement in ENGL 96 or ESL 170 or any City College or University Foreign Language Course
Grammar, composition and reading; practice in speaking and understanding simple German. CSU/UC
GERM 1A + GERM 1B=GERM 1

GERM 2. Continuation of Elementary German (5)
Lec-5, lab-2  P/NP available
Prerequisite: GERM 1 or IB or Demonstration of GERM 1/1B Exit Skills.
Second semester course. Continuation of elementary grammar, composition and reading; practice in speaking and understanding German. CSU/UC

GERM 2A-2B. Continuation of Elementary German (3-3)
Lec-3, lab-1  P/NP available
Prerequisite: For GERM 2A: GERM 1 or 1B or Demonstration of GERM 1/1B Exit Skills.
Prerequisite: For GERM 2B: GERM 2A or Demonstration of GERM 2A Exit Skills.
Continuation of elementary grammar, composition and reading; practice in speaking and understanding German. CSU/UC
GERM 2A + GERM 2B=GERM 2

GERM 3. Intermediate German (5)
Lec-5, lab-1  P/NP available
Prerequisite: GERM 2 or 2B or Demonstration of GERM 2/2B Exit Skills.
Third semester course. Introduction to the reading of German prose. Grammar review and composition; constant practice in the use and comprehension of the spoken language. CSU/UC

GERM 3A-3B. Intermediate German (3-3)
Lec-3, lab-1  P/NP available
Prerequisite: GERM 2 or 2B or Demonstration of GERM 2/2B Exit Skills.
GERM 3A is not a prerequisite for GERM 3B. These courses may be taken non-sequentially.
Introduction to the reading of German prose. Grammar review and composition; constant practice in the use and comprehension of the spoken language. CSU/UC
GERM 3A + GERM 3B=GERM 3

GERM 4. Continuation of Intermediate German (5)
Lec-5, lab-1  P/NP available
Prerequisite: GERM 3 or GERM 3A+3B or Demonstration of GERM 3/3A+3B Exit Skills.
Extensive and intensive reading of modern German prose. CSU/UC

GERM 4A-4B. Continuation of Intermediate German (3-3)
Lec-3, lab-1  P/NP available
Prerequisite: GERM 3 or 3A+3B or Demonstration of GERM 3/3A+3B Exit Skills.
GERM 4A is not a prerequisite for German 4B. These courses may be taken non-sequentially.
Extensive and intensive reading of modern German prose. CSU/UC
GERM 4A + GERM 4B=GERM 4

GERM 10A-10B. Beginning Practical Spoken German (3-3)
Lec-3, lab-1  P/NP available
Prerequisite: For GERM 10B: GERM 10A or Demonstration of GERM 10A Exit Skills.
Not recommended for native speakers of German
Beginning Practical Spoken German is a course for elementary students of the German language with extensive oral training. It follows the Common European Framework of Reference for Languages (CEFR) from levels A1 to B1. CSU

GERM 10C. Intermediate Conversational German (3)
Lec-3, lab-1  P/NP available
Prerequisite: GERM 10B or Demonstration of GERM 10B Exit Skills.
Recommended for students enrolled in GERM 2 or 2A.
Not recommended for native speakers of German.
Third semester course. Continuation of extensive oral training in German. Emphasis on conversational idiom. Introduction to German customs, culture, civilization, and current affairs. Grammar analysis is kept to a minimum. CSU

GERM 10D. Continuation of Intermediate Conversational German (3)
Lec-3, lab-1  P/NP available
Prerequisite: GERM 10C or Demonstration of GERM 10C Exit Skills.
Recommended for students enrolled in GERM 2B or GERM 3.
Not recommended for native speakers of German.
Fourth semester course. Continuation of extensive oral training in German with emphasis on German customs, culture, civilization, and current affairs. Grammar analysis is kept to a minimum. CSU
General Information. The Paramedic Program is structured so students may satisfy the requirements for graduation from the College. Students who satisfy these requirements and complete the paramedic curricula with a grade of "C" or higher and grade of "C" or higher in general education classes may receive the Associate in Science Degree with a Major in Paramedic Training.

The course of study is designed so students who complete each of the following courses, and complete the Graduation requirements for the Associate in Science Degree, or the CCSF transfer Associate Degree General Education requirements, will satisfy the requirements for the Paramedic Major.

Learning Outcomes

Upon completion, students will be able to:

- Comprehend, apply and evaluate information relative to the role of an entry-level Paramedic.
- Demonstrate technical proficiency in all of the skills necessary to fulfill the role of an entry-level Paramedic.
- Demonstrate personal behaviors consistent with professional and employer expectations of an entry-level Paramedic.
- Apply for the National Registry Paramedic Level cognitive and psychomotor examinations.

Courses Required for the Major in Paramedic

Classes are offered in a sequence that may not match with semester start and end dates, so classes are listed in order of sequence only.

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>EMTP 120 Human Systems and Patient Assessment</td>
<td>5</td>
</tr>
<tr>
<td>EMTP 121 Paramedic Theory- Roles &amp; Responsib</td>
<td>2</td>
</tr>
<tr>
<td>EMTP 122 Pharmacology and Ventilatory Mgt</td>
<td>2.5</td>
</tr>
<tr>
<td>EMTP 123 Trauma Emergencies</td>
<td>4</td>
</tr>
<tr>
<td>EMTP 124 Trauma Certification</td>
<td>1</td>
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<tr>
<td>EMTP 125 Cardiorespiratory Emergencies</td>
<td>4.5</td>
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<tr>
<td>EMTP 126 Neuroendocrine Emergencies</td>
<td>4</td>
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<tr>
<td>EMTP 127 Medical Emergencies</td>
<td>5</td>
</tr>
<tr>
<td>EMTP 128 OB/GYN &amp; Pedi Emergencies</td>
<td>4</td>
</tr>
<tr>
<td>EMTP 129 Special Populations, EMS Ops</td>
<td>5</td>
</tr>
<tr>
<td>EMTP 130 Clinical and Field Internship</td>
<td>12</td>
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<tr>
<td>EMT 104 Advanced Skills for EMS Providers</td>
<td>4</td>
</tr>
<tr>
<td><strong>Total Units</strong></td>
<td><strong>53</strong></td>
</tr>
</tbody>
</table>

*The program is pending state approval.

Please refer to the online version of the Catalog.

CVT/Echocardiography Certificate

Students who complete their training satisfactorily are prepared to hold positions as cardiac sonographers, echocardiography technicians, cardiovascular technicians in a medical center, cardiology officer or health center. Students must maintain a grade of "C" or higher. Graduates are eligible to sit for the national registry examinations: American Registry of Diagnostic Medical Sonography (ARDMS) or Cardiovascular Credentialing International (CCI).

Students must have completed Anatomy 14 or 25, must be eligible for placement into ENGL 96 or ESL 82.

Learning Outcomes

Upon completion of this program, the student will be able:

- Comprehend, apply and evaluate information relative to the role of cardiac sonographer.
- Demonstrate technical skills necessary to fulfill the role of cardiac sonographer.
- Behave professionally, skillfully, and in a manner consistent with employer expectations for an entry-level position in cardiac ultrasound.
- Qualify for the national registry examinations in cardiac ultrasound: American Registry of Diagnostic Medical Sonography (ARDMS) or Cardiovascular Credentialing International (CCI).

Courses Required for the Certificate of Achievement in CVT/Echocardiography

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
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<tbody>
<tr>
<td>Fall ECHO 101 Echocardiography</td>
<td>7</td>
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<tr>
<td>Fall CVT 101 Cardiovascular Technician</td>
<td>3</td>
</tr>
<tr>
<td>Fall CVT 110 Cardiovascular Skills</td>
<td>7</td>
</tr>
<tr>
<td>Spring ECHO 201 Adv. Echocardiography Technician</td>
<td>6</td>
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<tr>
<td>Spring CVT 201 Adv. Cardiovascular Technician</td>
<td>4</td>
</tr>
<tr>
<td>Spring CVT 210 Adv. Cardiovascular Skills</td>
<td>7</td>
</tr>
<tr>
<td>Fall ECHO 301 Adv. Cardiac Abnormalities</td>
<td>5</td>
</tr>
<tr>
<td>Fall CVT 301 Adv. Physics of Ultrasound</td>
<td>3</td>
</tr>
<tr>
<td>Fall CVT 310 Adv. Clinical Experience in Cardiac Ultrasound</td>
<td>9</td>
</tr>
<tr>
<td>Spring ECHO 401 Adv. Echocardiography Studies</td>
<td>6</td>
</tr>
<tr>
<td>Spring CVT 410 Clinical Experience in Adv. Cardiac Ultrasound</td>
<td>11</td>
</tr>
<tr>
<td>Total Units</td>
<td>68</td>
</tr>
</tbody>
</table>

**EKG Technician Certificate**

This program prepares students to operate an EKG equipment and work as an EKG Technician in a cardiology office, noninvasive cardiac diagnostic department in a hospital, medical clinic or other medical facilities. Students must maintain a grade of “C” or higher. Graduates are eligible to sit for the national registry examination: Cardiovascular Credentialing International (CCI).

Learning Outcomes

Upon completion of this program, the student will be able:

- Comprehend, apply and evaluate information relative to the role of an EKG Technician.
- Demonstrate technical skills necessary to fulfill the role of an EKG Technician.
- Behave professionally, skillfully, and in a manner consistent with employer expectations for an entry-level position in an EKG Department.
- Demonstrate the technical skills to perform clinical tasks on EKG machines, Holter monitor systems, and exercise stress test equipment.
- Qualify for the national registry examination: Cardiovascular Credentialing International (CCI).

Courses Required for the Certificate of Accomplishment in EKG Technician

<table>
<thead>
<tr>
<th>Courses</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECGT 101 ECG Technician I</td>
<td>4</td>
</tr>
<tr>
<td>ECGT 102 ECG Technician II</td>
<td>4</td>
</tr>
<tr>
<td>Total Units</td>
<td>8</td>
</tr>
</tbody>
</table>

Additional Requirements. Successful completion of program with a grade of “C” or higher and minimum of 80% attendance.

**Emergency Medical Technician Certificate**

The primary goal of the City College of San Francisco Emergency Medical Technician Program is to prepare students to become competent entry-level patient care providers in emergency medical services. EMT’s most often work in the pre-hospital area for ambulance agencies, park service or fire departments. Many students use their EMT training as an introduction to a variety of other medical fields, such as: registered nurse, ER Technician, or physician.

This program is in compliance with requirements set forth in the California Code of Regulation, Title 22. All aspects of the EMT Training Program meet or exceed the NHTSA 2009 National EMS Education Standards. Students must maintain a grade of “C” or higher.

Learning Outcomes

Upon successful completion of this program, the student will be able:

- Comprehend, apply and evaluate information relative to the role of an entry-level Emergency Medical Technician.
- Demonstrate technical proficiency in all of the skills necessary to fulfill the role of an entry-level Emergency Medical Technician.
- Behave professionally and in a manner consistent with employer expectations for an entry-level Emergency Medical Technician.
- Apply for the NREMT exam for certification as an Emergency Medical Technician.

Courses Required for the Certificate of Accomplishment in Emergency Medical Technician

<table>
<thead>
<tr>
<th>Core Courses</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>EMT 102 Emer Med Tech Clinical</td>
<td>1</td>
</tr>
<tr>
<td>EMT 100 Emer Med Tech I, Theory</td>
<td>12</td>
</tr>
<tr>
<td>Total Units</td>
<td>13</td>
</tr>
</tbody>
</table>

Additional Requirements. Completion of required courses with a C grade or higher in each phase of the program.

**Paramedic Certificate**

The program is designed to prepare students to sit for the National Registry Paramedic Licensure Examination.

Requirements for the Certificate of Achievement. Students may obtain the Certificate of Achievement in Paramedic by completing each of the following courses in Paramedic Theory and Paramedic Theory and Practice. Students must maintain a grade of “C” or higher.

Learning Outcomes

Upon completion, students will be able to:

- Comprehend, apply and evaluate information relative to the role of an entry-level Paramedic.
- Demonstrate technical proficiency in all of the skills necessary to fulfill the role of an entry-level Paramedic.
- Demonstrate personal behaviors consistent with professional and employer expectations of an entry-level Paramedic.
- Apply for the National Registry Paramedic Level cognitive and psychomotor examinations.

Courses Required for the Certificate of Achievement in Paramedic

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>EMTP 120 Human Systems and Patient Assessment</td>
<td>5</td>
</tr>
<tr>
<td>EMTP 121 Paramed Theory-Roles &amp; Responsib</td>
<td>2</td>
</tr>
</tbody>
</table>
Health Information Technology

General Information
The Health Information Technology (HIT) Program provides competency-based instruction and professional practice experiences to assist students in developing the knowledge and skills necessary to process analyze, disseminate and maintain health care information. A career as a health information professional offers a unique opportunity to be at the forefront of the healthcare industry where healthcare meets the cutting edge of technology and a member of the healthcare team. Historically, medical records have been a paper-based or in hybrid format. The demand to advance the implementation of electronic health records (EHRs) requires training of heath information professionals to enter the workforce.

Accreditation. The Health Information Technology Program is accredited by the Commission on Accreditation for Health Informatics and Information Management Education (CAHIIM), located at 233 N. Michigan Avenue, 21st floor, Chicago, IL 60601-5800; Telephone: (312) 233-1100; http://www.cahiim.org

Degree Curricula
Upon successful completion of the two-year curriculum in Health Information Technology, graduates are trained to perform specialized skills in electronic (EHR) computer software, security and privacy practices, coding, and collecting, organizing, and analyzing electronic data to improve healthcare information as more healthcare providers and hospitals adopt EHR systems.

As one of the fastest growing occupations, possible career opportunities for practitioners in health information management include data analysts, inpatient and outpatient coding specialists, privacy and security officers, release of information and recovery audit coordinators, clinical data improvement specialists, cancer registrars, and health information managers.

Employment. The United States Department of Labor, Bureau of Labor Statistics project medical record and health information technician’s employment is expected to increase by 21 percent from 2010 to 2020, faster than the average for all occupations. As the population ages, the demand for health services is expected to increase. http://www.bls.gov/oco

Health information professionals are employed in a variety of work settings including hospitals, ambulatory care, physician offices, managed care facilities, long-term care and rehabilitation, behavioral health, chemical dependency and correctional facilities, home health and hospice, cancer centers, state and federal government agencies, insurance companies, research and policy agencies, accounting and legal firms, coding compliance and data quality organizations, HIM service providers and vendors, consulting firms, academic institutions, pharmaceutical companies, health information exchanges, and other venues.

Employment opportunities for trained health information technicians continue to increase with emphasis on data quality and integrity, management of electronic health information, revenue cycle management and compliance around payment are prevalent both for ambulatory and inpatient care. This is one of the few health occupations in which there is little or no direct contact with patients.

Admission. Enrollment is open to all interested students who fulfill the following admission requirements:

1. Eligible for credit classes (See admission requirements.)
2. Strongly recommended for success in the HIT program: ENGL 91 or ESL 150
3. Attend a HIT orientation session to ask questions about requirements and structure of the program.
4. Certain programs have prerequisites that must be met prior to enrollment in individual classes.

Credit by Examination. Refer to College Catalog

Associate in Science Degree in Health Information Technology. The curriculum is designed so that students may satisfy the requirements for graduation from the College. Students who satisfy these requirements and complete the Health Information Technology Curriculum with a “C” or better in every course receive the Associate in Science Degree in Health Information Technology.

Basis for Disqualification. Students who do not earn a “C” or better in a Health Information Technology program course will have one opportunity to repeat the course to improve their grade. Students who do not earn a “C” or better on the second try will be disqualified from the program. Students may also be disqualified other reasons consistent with College policy.

National Certification Examination Registered Health Information Technician (RHIT). Successful graduates with an Associate in Science Degree in Health Information Technology are eligible to take the national certification examination offered by the American Health Information Association to earn the Registered Health Information Technician (RHIT) credential. AHIMA, located at 233 N. Michigan Avenue, 21st floor, Chicago, IL 60601-5800: Tel: (312) 233-1090; http://www.ahima.org/certification

Students holding an associate’s degree, baccalaureate degree or higher in a discipline from an accredited institution of post-secondary education must petition for the Associate in Science Degree in Health Information Technology. A previous degree does not automatically meet General Education Requirements. (See current CCSF Catalog for concise lists and descriptions of General Education Requirements Areas A-H)

Course of Study. Each option, in addition to an emphasis in the major field includes typical course work in computer applications, medical terminology, anatomy and physiology and disease process, data analysis, legal aspects, clinical classification and coding systems, health care reimbursement methods, statistics and data reporting, health information systems, quality assurance and improvement methods and personnel management.

Professional Practice Experience (PPE) refer to supervised rotations in the third and fourth semesters gives students experience in health information management departments in various health care organizations. Each CAHIIM-accredited HIM program must have at least one PPE that helps students assimilate theory with practical application in order to work toward achievement of AHIMA entry-level competencies in a real-world environment.
Health Information Technology Major (AS)

Learning Outcomes
Upon completion of the Associate in Science degree in Health Information Technology, the student will be able to:

- Demonstrate record management skills and knowledge necessary for HIM entry-level employment as a health information professional in various health care settings
- Demonstrate the technical skills and knowledge necessary for HIM entry-level employment as a health information professional in various health care settings
- Demonstrate the behavioral, interpersonal, ethical, and professional skills necessary for HIM employment as a health information professional in various health care settings
- Apply and take the Registered Health Information Technician (RHIT) national certification examination offered by the AHIMA
- Apply and take the Certified Coding Associate (CCA) national certification examination offered by the AHIMA

Courses Required for the Major in Health Information Technology

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>First Semester</td>
<td></td>
</tr>
<tr>
<td>One of the following options in Anatomy and Physiology:</td>
<td></td>
</tr>
<tr>
<td><strong>Option 1:</strong></td>
<td></td>
</tr>
<tr>
<td>ANAT 14 Intro to Human Anatomy and Physiology</td>
<td>4</td>
</tr>
<tr>
<td><strong>Option 2:</strong></td>
<td></td>
</tr>
<tr>
<td>ANAT 25 General Human Anatomy</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 1 Introductory Human Physiology</td>
<td>4–5</td>
</tr>
<tr>
<td>or PHYS 12 Intro to Human Physiology</td>
<td></td>
</tr>
<tr>
<td><strong>Course</strong></td>
<td><strong>Units</strong></td>
</tr>
<tr>
<td>HCT 61 Introduction to Health Care</td>
<td>3</td>
</tr>
<tr>
<td>HIT 50A Medical Terminology I</td>
<td>3</td>
</tr>
<tr>
<td>HIT 67 Computer Applications in the Health Care Setting</td>
<td>2</td>
</tr>
<tr>
<td><strong>Second Semester</strong></td>
<td></td>
</tr>
<tr>
<td>HIT 50B Medical Terminology II</td>
<td>2</td>
</tr>
<tr>
<td>HIT 57 Disease Process</td>
<td>3</td>
</tr>
<tr>
<td>HIT 63 Health Information Systems</td>
<td>3</td>
</tr>
<tr>
<td>HIT 65 Organization of Health Data</td>
<td>2</td>
</tr>
<tr>
<td>HIT 73A ICD-10-CM Coding</td>
<td>2</td>
</tr>
<tr>
<td><strong>Third Semester</strong></td>
<td></td>
</tr>
<tr>
<td>HIT 72 Legal Aspects of HIT</td>
<td>3</td>
</tr>
<tr>
<td>HIT 73B ICD-10-PCS Coding</td>
<td>4</td>
</tr>
<tr>
<td>HIT 77A Professional Practice Experience I</td>
<td>3</td>
</tr>
<tr>
<td>HIT 74 Introduction to Quality Improvement</td>
<td>2</td>
</tr>
<tr>
<td><strong>Fourth Semester</strong></td>
<td></td>
</tr>
<tr>
<td>HIT 75 Organization and Management</td>
<td>3</td>
</tr>
<tr>
<td>HIT 76 CPT Coding</td>
<td>3</td>
</tr>
<tr>
<td>HIT 77B Professional Practice Experience II</td>
<td>3</td>
</tr>
<tr>
<td>HIT 78 Reimbursement Methods in HI</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>47–52</strong></td>
</tr>
</tbody>
</table>

Certificate Curricula
Students may obtain the Certificate of Accomplishment in Health Information Clerk I, or Certificate of Achievement in Health Information Clerk II, Health Information Coding Specialist, and Health Information Technology by completing the curriculum with a final grade of “C” or higher or Pass.

Health Information Clerk I Certificate

This certificate program prepares students for entry-level positions in health information management departments. Opportunities for employment include basic record management, reception, admitting department functions, scanning of documents, filing and retrieval of records, filing and sorting loose documents, purging of records, storage and retention activities, data entry, processing admissions and discharges, and assembly of medical documents in a sequential order.

Learning Outcomes
Upon completion of the Health Information Clerk I Certificate of Accomplishment, students will be able to:

- Demonstrate record management skills and knowledge necessary for HIM entry-level employment as a health information professional in various health care settings.
- Perform computer applications necessary for HIM entry-level employment as a health information professional.
- Demonstrate the behavioral, interpersonal, ethical and professional skills necessary for HIM employment as a health information professional in various health care settings.

Students must complete each course with a final grade of “C” or higher or “Pass”.

Courses Required for the Certificate of Accomplishment in Health Information Clerk I

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>One of the following options in Anatomy and Physiology:</td>
<td></td>
</tr>
<tr>
<td><strong>Option 1:</strong></td>
<td></td>
</tr>
<tr>
<td>ANAT 14 Intro to Human Anatomy and Physiology</td>
<td>4</td>
</tr>
<tr>
<td><strong>Option 2:</strong></td>
<td></td>
</tr>
<tr>
<td>ANAT 25 General Human Anatomy</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 1 Introductory Human Physiology</td>
<td>4–5</td>
</tr>
<tr>
<td>or PHYS 12 Intro to Human Physiology</td>
<td></td>
</tr>
<tr>
<td><strong>Course</strong></td>
<td><strong>Units</strong></td>
</tr>
<tr>
<td>HCT 61 Intro to Health Care</td>
<td>3</td>
</tr>
<tr>
<td>HIT 50A Medical Terminology I</td>
<td>3</td>
</tr>
<tr>
<td>HIT 67 Computer Applications in the Health Care Setting</td>
<td>2</td>
</tr>
<tr>
<td>ENGL 91 Intro to Basic Reading and Writing</td>
<td>3</td>
</tr>
<tr>
<td>or ESL 150 Adv Academic ESL</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Units</strong></td>
<td><strong>15–20</strong></td>
</tr>
</tbody>
</table>

Health Information Clerk II Certificate

This certificate program prepares students for technical positions in health information departments. Employment opportunities include working in a hybrid and electronic environment, analyzing health records for deficiencies according to established standards, maintaining and using a variety of indices and storage retrieval systems; managing the usage and release of health information; collecting and abstracting health data for statistical purposes, scanning of documents and performing quality audits on all documents, assignment of codes according to specific classification systems and use of official coding guidelines for reimbursement, billing and reporting purposes.

Learning Outcomes
Upon completion of the Health Information Clerk II Certificate of Achievement, students will be able to:

- Demonstrate record management skills and knowledge necessary for HIM entry-level employment as a health information professional in various health care settings.
• Perform computer applications necessary for HIM entry-level employment as a health information professional in various health care settings
• Demonstrate technical skills and knowledge necessary for HIM entry-level employment as a health information professional in various health care settings
• Demonstrate the behavioral, interpersonal, ethical and professional skills necessary for HIM employment as a health information professional in various health care settings

Students must complete each course with a final grade of “C” or higher or “Pass”.

Courses Required for the Certificate of Achievement in Health Information Clerk II

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>First Semester</strong></td>
<td></td>
</tr>
<tr>
<td>One of the following options in Anatomy and Physiology:</td>
<td></td>
</tr>
<tr>
<td>Option 1:</td>
<td></td>
</tr>
<tr>
<td>ANAT 14 Intro to Human Anatomy and Physiology</td>
<td>4</td>
</tr>
<tr>
<td>Option 2:</td>
<td></td>
</tr>
<tr>
<td>ANAT 25 General Human Anatomy</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 1 Introductory Human Physiology</td>
<td>4–5</td>
</tr>
<tr>
<td>or PHYS 12 Intro to Human Physiology</td>
<td></td>
</tr>
<tr>
<td><strong>Course</strong></td>
<td>Units</td>
</tr>
<tr>
<td>HCT 61 Intro to Health Care</td>
<td>3</td>
</tr>
<tr>
<td>HIT 50A Medical Terminology I</td>
<td>3</td>
</tr>
<tr>
<td>HIT 67 Computer Applications in the Health</td>
<td></td>
</tr>
<tr>
<td>Care Setting</td>
<td>2</td>
</tr>
<tr>
<td>ENGL 91 Intro to Basic Reading and Writing</td>
<td></td>
</tr>
<tr>
<td>or ESL 150 Adv Academic ESL</td>
<td>3</td>
</tr>
<tr>
<td><strong>Second Semester</strong></td>
<td></td>
</tr>
<tr>
<td>HIT 50B Medical Terminology II</td>
<td>2</td>
</tr>
<tr>
<td>HIT 63 Health Information Systems</td>
<td>3</td>
</tr>
<tr>
<td>HIT 65 Organization of Health Data</td>
<td>2</td>
</tr>
<tr>
<td>HIT 72 Legal Aspects of HIT</td>
<td>3</td>
</tr>
<tr>
<td>HIT 73A ICD-10-CM Coding</td>
<td>2</td>
</tr>
<tr>
<td>HIT 77A Professional Practice I</td>
<td>3</td>
</tr>
<tr>
<td>MATH E1 Basic Math (Individualized)*</td>
<td></td>
</tr>
<tr>
<td>or MATH E3 Basic Math (Lecture/Group)</td>
<td>2–3</td>
</tr>
<tr>
<td>Total Units</td>
<td>32–38</td>
</tr>
</tbody>
</table>

* Requirement based on college Math Placement Test Score.

Health Information Coding Specialist Certificate

This certificate program prepares students to assign diagnostic and procedural codes supported by medical documentation in accordance with official coding and reporting guidelines and compliance regulations. Students choose reportable codes to use on exercises, case scenarios, and actual patient records with basic to moderate and advanced clinical complexity. Courses required for the Certificate of Achievement in Health Information Technology, Coding Specialist.

Learning Outcomes

Upon completion of the Health Information Coding Specialist Certificate in Health Information Technology, students will be able to:

- Assign diagnosis/procedures using the International Classification of Diseases (ICD) official coding guidelines for inpatient and outpatient records
- Use and maintain electronic applications and work processes to support clinical classifications and coding
- Demonstrate professional and behavior skills and adhere to the necessary ethical standards of coding for HIM employment as a health information coder
- Apply for Certified Coding Associate (CCA) examination offered through the American Health Information Management Association (AHIMA)

Students must complete each course with a final grade of “C” or higher or “Pass”.

Courses Required for the Certificate of Achievement in Health Information Coding Specialist

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>First Semester</strong></td>
<td></td>
</tr>
<tr>
<td>One of the following options in Anatomy and Physiology:</td>
<td></td>
</tr>
<tr>
<td>Option 1:</td>
<td></td>
</tr>
<tr>
<td>ANAT 14 Intro to Human Anatomy and Physiology</td>
<td>4</td>
</tr>
<tr>
<td>Option 2:</td>
<td></td>
</tr>
<tr>
<td>ANAT 25 General Human Anatomy</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 1 Introductory Human Physiology</td>
<td>4–5</td>
</tr>
<tr>
<td>or PHYS 12 Intro to Human Physiology</td>
<td></td>
</tr>
<tr>
<td><strong>Course</strong></td>
<td>Units</td>
</tr>
<tr>
<td>HCT 61 Intro to Health Care</td>
<td>3</td>
</tr>
<tr>
<td>HIT 50A Medical Terminology I</td>
<td>3</td>
</tr>
<tr>
<td>HIT 67 Computer Applications in the Health</td>
<td></td>
</tr>
<tr>
<td>Care Setting</td>
<td>2</td>
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<tr>
<td>ENGL 91 Intro to Basic Reading and Writing</td>
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<tr>
<td>or ESL 150 Adv Academic ESL</td>
<td>3</td>
</tr>
<tr>
<td><strong>Second Semester</strong></td>
<td></td>
</tr>
<tr>
<td>HIT 50B Medical Terminology II</td>
<td>2</td>
</tr>
<tr>
<td>HIT 57 Disease Process</td>
<td>3</td>
</tr>
<tr>
<td>HIT 63 Health Information Systems</td>
<td>3</td>
</tr>
<tr>
<td>HIT 65 Organization of Health Data</td>
<td>2</td>
</tr>
<tr>
<td>HIT 73A ICD-10-CM Coding</td>
<td>2</td>
</tr>
<tr>
<td><strong>Third Semester</strong></td>
<td></td>
</tr>
<tr>
<td>HIT 73B ICD-10-PCS Coding</td>
<td>4</td>
</tr>
<tr>
<td>HIT 74 Introduction to Quality Improvement</td>
<td>2</td>
</tr>
<tr>
<td>HIT 76 CPT Coding</td>
<td>3</td>
</tr>
<tr>
<td>HIT 77A Professional Practice I</td>
<td>3</td>
</tr>
<tr>
<td>HIT 78 Reimbursement Methods in HIT</td>
<td>2</td>
</tr>
<tr>
<td>Total Units</td>
<td>41–46</td>
</tr>
</tbody>
</table>

Health Information Technology Certificate

This certificate program is designed for students entering City College with a degree (A.A./A.S. or higher) or satisfying the CCSF graduation requirements.

Learning Outcomes

Upon completion of the certificate program in Health Information Technology, the student will be able to:

- Demonstrate record management skills and knowledge necessary for HIM entry-level employment as a health information professional in various health care settings
- Demonstrate the technical skills and knowledge necessary for HIM entry level employment as a health information professional in various health care settings
- Demonstrate the behavioral, interpersonal, ethical and professional skills necessary for HIM employment as a health information professional in various health care settings
• Apply for the Certified Coding Associate (CCA) national certification examination offered by the American Health Information Management Association (AHIMA)

Students must complete each course with a final grade of “C” or higher or “Pass”.

Courses Required for the Certificate of Achievement in Health Information Technology

<table>
<thead>
<tr>
<th>Courses</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>First Semester</td>
<td></td>
</tr>
<tr>
<td>One of the following options in Anatomy and Physiology:</td>
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<td>Option 1:</td>
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<tr>
<td>ANAT 14 Intro to Human Anatomy and Physiology</td>
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<tr>
<td>Option 2:</td>
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<tr>
<td>ANAT 25 General Human Anatomy</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 1 Introductory Human Physiology</td>
<td>4</td>
</tr>
<tr>
<td>or PHYS 12 Intro to Human Physiology</td>
<td>4-5</td>
</tr>
<tr>
<td>Course</td>
<td>Units</td>
</tr>
<tr>
<td>HCT 61 Intro to Health Care</td>
<td>3</td>
</tr>
<tr>
<td>HIT 50A Medical Terminology I</td>
<td>3</td>
</tr>
<tr>
<td>HIT 67 Computer Applications in the Health Care Setting</td>
<td>2</td>
</tr>
<tr>
<td>Second Semester</td>
<td></td>
</tr>
<tr>
<td>HIT 50B Medical Terminology II</td>
<td>2</td>
</tr>
<tr>
<td>HIT 57 Disease Process</td>
<td>3</td>
</tr>
<tr>
<td>HIT 63 Health Information Systems</td>
<td>3</td>
</tr>
<tr>
<td>HIT 65 Organization of Health Data</td>
<td>2</td>
</tr>
<tr>
<td>HIT 73A ICD-10-CM Coding</td>
<td>2</td>
</tr>
<tr>
<td>Third Semester</td>
<td></td>
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<tr>
<td>HIT 72 Legal Aspects of HIT</td>
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<td>HIT 73B ICD-10-PCS Coding</td>
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</tr>
<tr>
<td>HIT 77A Professional Practice I</td>
<td>3</td>
</tr>
<tr>
<td>HIT 75 Organization and Management in Health</td>
<td>3</td>
</tr>
<tr>
<td>Fourth Semester</td>
<td></td>
</tr>
<tr>
<td>HIT 74 Introduction to Quality Improvement</td>
<td>2</td>
</tr>
<tr>
<td>HIT 76 CPT Coding</td>
<td>3</td>
</tr>
<tr>
<td>HIT 77B Professional Practice II</td>
<td>3</td>
</tr>
<tr>
<td>HIT 78 Reimbursement Methods in HIT</td>
<td>2</td>
</tr>
<tr>
<td>Total Units</td>
<td>47–52</td>
</tr>
</tbody>
</table>

Medical Assisting Program

Degree Curricula

(Options in Medical Office Assisting and Medical Administrative Assisting)

The curriculum in Medical Assisting, a two-year course of study, offers students training for employment through options in two areas: Medical Office Assisting and Medical Administrative Assisting. The Medical Office Assisting program is offered in cooperation with the American Association of Medical Assistants (AAMA).

Admission. Enrollment is open to all interested students; however, students must have completed ESL 150 or placement in ENGL 92 or ESL 160 or higher.

Students must complete HCT 61, Introduction to Health Care, during their first semester with a final grade of “C” or higher. HCT 61 is an orientation course conducted by the faculty of the Health Care Technology Department to review the requirements and expectations of the curriculum. Students are also required to satisfy prerequisites in order to enroll in certain courses.

Students are required to submit evidence of a recent tuberculin skin test or chest x-ray, proof of immunizations, and a physical examination which indicates that they are in good physical health to include the following:

• vision correctable to 20/30 in both eyes
• able to stand unassisted for long periods of time
• able to walk, bend, reach, and stoop frequently
• able to assist patients on and off exam tables and in and out of wheel chair
• normal hearing or corrected hearing within normal range
• able to manipulate stationary and mobile medical equipment
• behavior and social skills acceptable within the college and clinical rotations

Please refer to the Dictionary of Occupational Titles to review the Federal ADA guidelines. Go to: www.occupationalinfo.org

Students who enroll in HCT 82 must also hold a valid CPR Healthcare Provider card from the American Heart Association, complete a background and drug and alcohol screening, and complete a HIPAA Awareness training to qualify for the Professional Practice Internship. Students are responsible for all fees required to qualify for enrolment in the Professional Practice Internship.

Credit by Examination. Applicants who have been admitted to the Program and who have previous education or medical assisting/clinical or related experience may apply for credit and advanced placement in the curriculum by transfer or challenge process.

Purchase of Lab Coat and Clinical Supplies. Students are responsible for purchasing a lab coat and stethoscope for use in the clinical skills courses. Other fees may be required for the clinical classes.

Accreditation. The Medical Assisting Program is accredited by the Commission on Accreditation for Allied Health Education Programs (CAAHEP), 1361 Park Street, Clearwater, Florida, 33756, (727) 210-2354, on recommendation of the Committee on Accreditation for Medical Assistant Education Review Board (MAERB).

Course of Study. Each option includes training in the following subjects common to all branches of medical assisting: Anatomy and physiology, medical terminology, typing and transcription, business correspondence, medical billing, insurance and coding, filing systems, medical records including the electronic health record, psychology and professional relationships, management and supervision, and CPR and first aid.

In addition, students who elect the option in Medical Office Assisting receive specialized training in clinical procedures including phlebotomy and medical laboratory techniques and are eligible to apply and sit for the CPT1 and CMA or RMA examinations.

In the Professional Practice Internship/Certiﬁcation course (HCT 82), a course included in the second year, students complete 196 hours of supervised practical training off campus in their speciﬁc ﬁeld of study. Students who elected the option of Medical Office Assisting are assigned to perform clinical and administrative duties with physicians and other medical personnel without compensation in an outpatient clinic, medical ofﬁce or health center. Students who have elected the option in Medical Administrative Assisting are assigned primarily to perform administrative duties without compensation in an outpatient clinic, medical ofﬁce, or health center.

Employment. Students who have completed their training satisfactorily are qualiﬁed for employment in various capacities. Those who have completed the option in Medical Office Assisting are prepared to hold positions combining the duties of medical assistant, receptionist, and ofﬁce manager in outpatient clinics, medical ofﬁces or health centers. Those who have completed the option in Medical Administrative Assisting are qualiﬁed for the positions of receptionist, medical biller,
admitting, ward clerk, or office manager in an outpatient clinic, medical office, and health center.

Associate in Science Degree. The curriculum is designed so that students may satisfy the requirements for graduation from the College. Students who satisfy these requirements and complete their training in Medical Office Assisting or Medical Administrative Assisting with a 2.0 grade point average or higher receive the Associate Degree in Medical Office Assisting or Medical Administrative Assisting.

Certified Medical Assistant Examination. Graduates who receive the Certificate of Completion in Medical Office Assisting are eligible to take the Certified Medical Assistant (CMA) examination given by the American Association of Medical Assistants (AAMA).

Medical Office Assisting Major (AS)

Students who complete their training satisfactorily are prepared to hold positions as a medical assistant, medical receptionist, or office manager in the physician's office, hospital outpatient clinic, medical clinics, and health centers. Students must maintain a grade of "C" or higher. The Medical Assisting Program is accredited by the Commission on Accreditation of Allied Health Education Programs (CAAHEP), on recommendation of the Medical Assisting Education Review Board (MAERB). Graduates who complete the Associate of Science in Medical Office Assisting are eligible to take the Certified Medical Assistant examination given by the American Association of Medical Assistants (AAMA).

Learning Outcomes

Upon completion of the program the student will be able to:
- Perform the clinical skills necessary for entry-level employment as a medical assistant in an ambulatory health care setting
- Perform the administrative skills necessary for entry-level employment as a medical assistant in an ambulatory health care setting
- Demonstrate the behavioral, ethical, and professional interpersonal skills necessary for employment as a medical assistant in an ambulatory health care setting
- Apply for the Certified Medical Assistant (CMA) examination offered by the AAMA.
- Apply for the certified phlebotomy Technician (CPT-1) examination.

Courses Required for the Major in Medical Office Assisting

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYC 1 General Psychology</td>
<td>3</td>
</tr>
</tbody>
</table>

One of the following options in Anatomy and Physiology:

Option 1:
- ANAT 14 Intro to Human Anatomy and Physiology 4

Option 2:
- ANAT 25 General Human Anatomy 4
- PHYS 1 Introductory Human Physiology or PHYS 12 Intro to Human Physiology 4–5

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>First Semester</td>
<td></td>
</tr>
<tr>
<td>HCT 61 Introduction to Health Care</td>
<td>3</td>
</tr>
<tr>
<td>HCT 66 Medical Typing/Transcription</td>
<td>4</td>
</tr>
<tr>
<td>HCT 104 Phlebotomy Technician</td>
<td>3.5</td>
</tr>
<tr>
<td>HIT 50A Medical Terminology I</td>
<td>3</td>
</tr>
<tr>
<td>MED 55 The Electronic Health Record</td>
<td>4</td>
</tr>
<tr>
<td>MED 56 Administrative Procedures</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Second Semester</td>
<td></td>
</tr>
<tr>
<td>HIT 50B Medical Terminology II</td>
<td>2</td>
</tr>
</tbody>
</table>

Medical Administrative Assisting Major (AS)

Students who complete their training satisfactorily are prepared to hold positions as a medical receptionist, admitting clerk, ward clerk, or office manager in the physician's office or outpatient clinic, medical office, or health center. Students must maintain a 2.0 grade point average or higher. Students are eligible to sit for the Certified Professional Coder (CPC) or Certified Coding Specialist Physician Office (CCS-P) examinations.

Learning Outcomes

Upon completion of this program, the student will be able to:
- Perform the reception skills necessary for entry-level employment as a Medical Administrative Assistant in an ambulatory health care setting
- Perform the medical billing procedures necessary for entry-level employment as a Medical Administrative Assistant in an ambulatory health care setting
- Perform computer applications necessary for entry-level employment in an ambulatory health care setting
- Perform the management skills necessary for entry-level employment in an ambulatory health care setting
- Apply for the Certified Professional Coder (CPC) examination

Courses Required for the Major in Medical Administrative Assisting

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYC 1 General Psychology</td>
<td>3</td>
</tr>
</tbody>
</table>

One of the following options in Anatomy and Physiology:

Option 1:
- ANAT 14 Intro to Human Anatomy and Physiology 4

Option 2:
- ANAT 25 General Human Anatomy 4
- PHYS 1 Introductory Human Physiology or PHYS 12 Intro to Human Physiology 4–5

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>First Semester</td>
<td></td>
</tr>
<tr>
<td>HCT 61 Introduction to Health Care</td>
<td>3</td>
</tr>
<tr>
<td>HCT 66 Medical Typing/Transcription</td>
<td>4</td>
</tr>
<tr>
<td>HIT 50A Medical Terminology I</td>
<td>3</td>
</tr>
<tr>
<td>MED 55 The Electronic Health Record</td>
<td>4</td>
</tr>
<tr>
<td>MED 56 Administrative Procedures</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Second Semester</td>
<td></td>
</tr>
<tr>
<td>HIT 50B Medical Terminology II</td>
<td>2</td>
</tr>
<tr>
<td>HIT 57 Disease Process</td>
<td>3</td>
</tr>
<tr>
<td>HIT 73A ICD-10-CM Coding</td>
<td>2</td>
</tr>
<tr>
<td>HIT 76 CPT Coding</td>
<td>3</td>
</tr>
</tbody>
</table>
MED 70 Medical Bookkeeping and Insurance ........ 3
MED 71 Electronic Management of Financial Health care Technology 293
Medical Records ..................................... 1.5

**Summer Session**
HCT 82 Professional Practice
Internship/Certification ............................... 5

**Third Semester**
HIT 75 Organization and Management ............. 3
MED 72 Advanced Insurance Billing ................ 3
MED 73 Advanced Medical Manager ................ 2
Total .................................................... 51.5–56.5

**Medical Biller Certificate**

This certificate program prepares students to complete medical insurance
claims for private physician offices and outpatient facilities.
Students learn CPT and ICD-9-CM coding, medical terminology, disease
process, manual and computer bookkeeping procedures, manual
and computer insurance billing for private insurance, Medicaid,
Medicare, Worker’s Compensation, and managed care plans. Students
must maintain a grade of “C” or higher.

**Learning Outcomes**

Upon completion of this program, the student will be able to:

- Assign CPT codes to services and procedures
- Assign ICD codes to diagnoses
- Perform insurance billing procedures necessary for entry-level employment in an ambulatory health care setting
- Apply for the Certified Professional Coder (CPC) examination

**Courses Required for the Certificate of Achievement in Medical Biller Certificate**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>First Semester</td>
<td></td>
</tr>
<tr>
<td>ANAT 14 Intro to Human Anatomy and Physiology</td>
<td>4</td>
</tr>
<tr>
<td>HCT 66 Medical Typing/Transcription</td>
<td>4</td>
</tr>
<tr>
<td>HIT 50A Medical Terminology I</td>
<td>3</td>
</tr>
<tr>
<td>HIT 76 CPT Coding</td>
<td></td>
</tr>
<tr>
<td>MED 70 Medical Bookkeeping and Insurance</td>
<td>3</td>
</tr>
<tr>
<td>MED 71 Electronic Management of Financial</td>
<td>1.5</td>
</tr>
<tr>
<td>Medical Records</td>
<td></td>
</tr>
<tr>
<td>or MATH E1 OR E3</td>
<td>2–3</td>
</tr>
<tr>
<td>Second Semester</td>
<td></td>
</tr>
<tr>
<td>HIT 50B Medical Terminology II</td>
<td>2</td>
</tr>
<tr>
<td>HIT 57 Disease Process</td>
<td>3</td>
</tr>
<tr>
<td>HIT 73A Basic ICD Coding</td>
<td>2</td>
</tr>
<tr>
<td>MED 55 The Electronic Health Record</td>
<td>4</td>
</tr>
<tr>
<td>MED 72 Advanced Insurance Billing</td>
<td>3</td>
</tr>
<tr>
<td>MED 73 Advanced Medical Manager</td>
<td>2</td>
</tr>
<tr>
<td>ENGL 92 Basic Composition and Reading II</td>
<td>3–4</td>
</tr>
<tr>
<td>or ESL 160 Advanced Composition</td>
<td></td>
</tr>
<tr>
<td>Total Units</td>
<td>39.5–41.5</td>
</tr>
</tbody>
</table>

**Medical Evaluation Assistant Certificate**

This certificate program is designed specifically for employment within
the San Francisco Public Health Department including the neighbor-
hood health clinics. Students have the option of completing additional
courses for a Certificate of Achievement in Medical Office Assisting.
Students receive instruction in anatomy and physiology, medical
terminology, health care systems, medical typing and transcription,
health education and disease processes, clinical procedures, phlebot
omy, and computer applications. Students will complete an intern-
ship and must hold a valid CPR Health Provider card and a HIPAA
Awareness Training certificate. Students may obtain the Certificate
of Achievement for MEA by completing the following courses with a
grade of “C” or higher.

**Learning Outcomes**

Upon completion of the Certificate of Achievement in Medical Evaluation Assistant, the student will be able to:

- Perform the clinical skills necessary for entry-level employment as a Medical Evaluation Assistant in an ambulatory health care setting.
- Demonstrate the behavioral, ethical, and professional interpersonal skills necessary for employment as a Medical Evaluation Assistant in an ambulatory health care setting.
- Apply for the Certified Phlebotomy Technician examination (CPT-1)

Enrollment is open to all interested students; however, students must have completed ESL 150 or place in ENGL 92 or ESL 160.

**Courses Required for the Certificate of Achievement in Medical Evaluation Assistant**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>First Semester</td>
<td></td>
</tr>
<tr>
<td>ANAT 14 Intro to Human Anatomy and Physiology</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 1 Introductory Human Physiology</td>
<td>4</td>
</tr>
<tr>
<td>or PHYS 12 Intro to Human Physiology</td>
<td>4–5</td>
</tr>
<tr>
<td>Course</td>
<td>Units</td>
</tr>
<tr>
<td>HCT 66 Medical Typing/Transcription</td>
<td>4</td>
</tr>
<tr>
<td>HIT 50A Medical Terminology I</td>
<td>3</td>
</tr>
<tr>
<td>MED 55 The Electronic Health Record</td>
<td>4</td>
</tr>
<tr>
<td>Second Semester</td>
<td></td>
</tr>
<tr>
<td>HCT 104 Introduction to Phlebotomy</td>
<td>3.5</td>
</tr>
<tr>
<td>HIT 50B Medical Terminology II</td>
<td>2</td>
</tr>
<tr>
<td>HIT 57 Disease Process</td>
<td>3</td>
</tr>
<tr>
<td>HLTH 66 Health Education and Chronic Disease</td>
<td>3</td>
</tr>
<tr>
<td>MED 49 Clinical Procedures</td>
<td>4</td>
</tr>
<tr>
<td>MED 71 Electronic Management of Financial</td>
<td>1.5</td>
</tr>
<tr>
<td>Medical Records</td>
<td></td>
</tr>
<tr>
<td>Total Units</td>
<td>37.5–42.5</td>
</tr>
</tbody>
</table>

**Medical Office Assisting Certificate**

The certificate in Medical Office Assisting provides students with both clinical and administrative training. Students who complete their training satisfactorily are prepared to hold positions as a medical assistant, medical receptionist, or office manager in a physician’s office, hospital outpatient clinic, medical clinic, and health centers. The medical assisting Program is accredited by the Commission on Accreditation of Allied Health Education Programs (CAAHEP), on recommendation of the Medical Assisting Education Review Board (MAEB). Graduates who complete the certificate of Achievement are eligible to take the Certified Medical Assistant examination given
by the American Association of Medical Assistants (AAMA). Student must maintain a grade of "C" or higher.

Learning Outcomes
Upon completion of the Certificate of Achievement in Medical Office Assisting, the student will be able to:

- Perform the clinical skills necessary for entry-level employment as a medical assistant in an ambulatory health care setting
- Perform the administrative skills necessary for entry-level employment as a medical assistant in an ambulatory health care setting
- Demonstrate the behavioral, ethical, and professional interpersonal skills necessary for employment as a medical assistant in an ambulatory health care setting
- Apply for the Certified Medical Assistant Examination (CMA) offered by the AAMA
- Apply for the Certified Phlebotomy Technician Examination (CPT-I)

Students must be eligible for ENGL 92 or ESL 160.

Courses Required for the Certificate of Achievement in Medical Office Assisting

Courses | Units
---|---
PSYC 1 General Psychology | 3

One of the following options in Anatomy and Physiology:

Option 1:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANAT 14 Intro to Human Anatomy and Physiology</td>
<td>4</td>
</tr>
</tbody>
</table>

Option 2:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANAT 25 General Human Anatomy</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 1 Introductory Human Physiology or PHYS 12 Intro to Human Physiology</td>
<td>4–5</td>
</tr>
</tbody>
</table>

First Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>HCT 61 Introduction to Health Care</td>
<td>3</td>
</tr>
<tr>
<td>HCT 66 Medical Typing/Transcription</td>
<td>4</td>
</tr>
<tr>
<td>HIT 104 Introduction to Phlebotomy</td>
<td>3.5</td>
</tr>
<tr>
<td>HIT 50A Medical Terminology I</td>
<td>3</td>
</tr>
<tr>
<td>MED 55 The Electronic Health Record</td>
<td>4</td>
</tr>
<tr>
<td>MED 56 Administrative Procedures</td>
<td>3</td>
</tr>
</tbody>
</table>

Second Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIT 50B Medical Terminology II</td>
<td>2</td>
</tr>
<tr>
<td>HIT 73A ICD-10-CM Coding</td>
<td>2</td>
</tr>
<tr>
<td>HIT 76 CPT Coding</td>
<td>3</td>
</tr>
<tr>
<td>MED 49 Clinical Procedures</td>
<td>4</td>
</tr>
<tr>
<td>MED 70 Medical Bookkeeping and Insurance</td>
<td>3</td>
</tr>
<tr>
<td>MED 71 Electronic Management of Financial Medical Records</td>
<td>1.5</td>
</tr>
</tbody>
</table>

Summer Session

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>HCT 82 Professional Practice Internship/Certification</td>
<td>5</td>
</tr>
</tbody>
</table>

Total Units | 51–56

Medical Receptionist Certificate

This certificate program prepares students for employment as a receptionist in a clinician's office, outpatient clinic, or other medical facility. Students receive training in computer applications, appointment scheduling, telephone etiquette, medical record preparation, medical terminology, business correspondence, insurance claims completion, and first aid and CPR. Students must maintain a grade of "C" or higher.

Learning Outcomes
Upon completion of the Certificate of Achievement in Medical Receptionist, the student will be able to:

- Perform the medical receptionist skills necessary for entry-level employment as a medical receptionist in an ambulatory health care setting
- Perform computer applications necessary for entry-level employment in an ambulatory health care setting
- Demonstrate the behavioral, ethical, and professional interpersonal skills necessary for employment as a Medical Receptionist in an ambulatory health care setting

Courses Required for the Certificate of Achievement in Medical Receptionist

Course | Units | First Semester
---|---|---
Anat | | 4
| | 4
HIT 61 Introduction to Health Care | 3 |
HIT 66 Medical Typing/Transcription | 4 |
HIT 50A Medical Terminology I | 3 |
MED 56 Administrative Procedures | 3 |

Second Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIT 50B Medical Terminology II</td>
<td>2</td>
</tr>
<tr>
<td>HIT 76 CPT Coding</td>
<td>3</td>
</tr>
<tr>
<td>MED 55 The Electronic Health Record</td>
<td>4</td>
</tr>
<tr>
<td>MED 70 Bookkeeping/Insurance Procedures</td>
<td>3</td>
</tr>
<tr>
<td>MED 71 Electronic Management of Financial Medical Records</td>
<td>1.5</td>
</tr>
</tbody>
</table>

Summer

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>HCT 82 Professional Practice Internship/Certification</td>
<td>5</td>
</tr>
</tbody>
</table>

Total Units | 35.5–40.5

Pharmacy Technician Certificate

Certificate Curricula

General Information

Students may obtain the Certificate of Achievement in Pharmacy Technician by successfully completing the two semester program. The Pharmacy Technician Program starts in the Fall Semester each year. The curriculum is designed to prepare students to work under the direct supervision of a pharmacist in hospitals, community based pharmacies and other institutional settings.

Admission. To be considered for admission to the program, applicants must:

1. Complete the pre-requisites to the Program: Math 40 and ENGL 93 or ENGL 94 or placement in ENGL 96.
2. Attend the orientation session scheduled during the month of April and pick up the Application to the Pharmacy Technician Program.
3. Complete and submit the Application to the Pharmacy Technician Program to the Pharmacy Technician Office, Room
111, Gym Building, John Adams Center, by 5:00 PM Friday the first week in May.

4. Attend the individual orientation session scheduled with the Pharmacy Technician instructors to review prerequisite compliance and clinical placement requirements.

5. File with the Office of Admissions and Records a completed credit application for admission to City College.

6. Take the City College of San Francisco placement test. Dates and times for this test are available at: ccsf.edu/NEW/en/student_services/matriculation_services/ged_center.html

Successful applicants are required to submit evidence of a recent tuberculin skin test or chest x-ray, proof of immunizations, and a physical examination which indicates they are in good physical health to include the following:

- 20/100 vision correctable to 20/30 in both eyes with normal color perception
- able to stand unassisted for long periods of time
- able to walk, bend, reach, lift product, and stoop frequently
- possess normal hearing or corrected hearing within the normal range
- able to manipulate stationary and mobile medical equipment

Before you apply to the program, please review the following description of the tasks, knowledge, skills, abilities and work activities that a student will need to perform in classes and assigned internship settings. The website for the Dictionary of Occupational Titles is: http://www.occupationalinfo.org/

All applicants who meet the above requirements are eligible for the program. Classroom space and clinical site placements limit the class size to 30 students, therefore, students are selected by lottery from the eligible applicants.

**Background Check.** A background check may be required by the assigned clinical sites. The cost of this will be incurred by the student. Students must complete this background check prior to clinical placement.

**Drug Screening.** Drug screening may be required by the clinical placement site. The student is responsible for this cost.

**Learning Outcomes**

Upon completion of the Pharmacy Technician Program, the student will be able to:

- Perform the administrative and clinical skills necessary for entry-level employment as a pharmacy technician in an institutional, community-based or hospital pharmacy
- Provide professional customer service to patients and clients in a pharmacy setting
- Apply for a license as a Pharmacy Technician to the California State Board of Pharmacy
- Successfully complete the Pharmacy Technician Certification Board National examination

**Courses Required for the Certificate of Achievement in Pharmacy Technician**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>First Semester</strong></td>
<td></td>
</tr>
<tr>
<td>PHTC 101 Theory I</td>
<td>9</td>
</tr>
<tr>
<td>PHTC 102 Clinical I</td>
<td>3</td>
</tr>
<tr>
<td><strong>Second Semester</strong></td>
<td></td>
</tr>
<tr>
<td>PHTC 103 Theory II</td>
<td>9</td>
</tr>
</tbody>
</table>

- PHTC 104 Clinical II | 3 |

**Total Units** | 24

**Core Courses.** Both theory and clinical courses must be taken in the same semester.

**Requirements for Completion.** The Certificate of Achievement requires completion of 24 units. Each course must be completed with a final grade point average of 2.00 or higher.

**Unit Coordinator (Hospital)/Ward Clerk Noncredit Certificate**

This program is designed to introduce the student to the clerical duties of the hospital unit coordinator. The unit coordinator serves as the liaison between the hospitalized patient and the medical professionals in an acute care or other medical facility environment. Students will gain the knowledge and communication skills necessary for this entry-level position.

**Learning Outcomes**

Upon completion of this program, the student will be able to:

- Describe the various health care departments and delivery systems
- Describe the role and responsibilities of a unit coordinator in a nursing care unit of a hospital
- Apply appropriate medical terminology on the clinical site
- Demonstrate professional behavior and team work skills in the health care environment

**Admission Requirements.** High school diploma, GED, or high school proficiency certificate.

**Length of Course.** One semester.

<table>
<thead>
<tr>
<th>Core Course</th>
<th>Hours/Weeks</th>
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<tbody>
<tr>
<td>AHW 9183 Unit Coordinator (Hospital)</td>
<td>108</td>
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**Requirements for Completion of Completion.** Successful completion of required courses with a grade of “C” or higher.

**Announcement of Courses**

**Credit, Degree Applicable Courses:**

**Echocardiography**

ECHO 101. Echocardiography (7)

Lec-6, lab-3

**Prereq:** ANAT 14 or 25
**Coreq:** CVT 101, CVT 110

Cardiac anatomy and physiology. Standard presentation of Two Dimensional (2D) and M-Mode images. Principles and characteristics of color flow Doppler. Color flow, pulse and continuous wave Doppler investigated and applied to normal and abnormal cardiac ultrasound studies. Disease states relationship to ultrasound findings and calculations will be used to determine severity. CSU

ECHO 201. Advanced Echocardiography Technician (7)

Lec-5, lab-6

**Prereq:** ECHO 101, CVT 101, CVT 110
**Coreq:** CVT 201, CVT 210

Advanced cardiac abnormalities evaluated by two dimensional (2D), M-Mode, and Doppler methods include: stenosis, valve abnormalities, regurgitation, diastolic dysfunction, cardiomyopathies, pericardial and coronary artery disease, congestive heart failure, hypertension, pul
monary hypertension, right ventricular methods of evaluation, masses and tumors, endocarditis, prosthesis, aortic root diseases, and cardiac transplants. Transesophageal Echo: standard views and cardiac identification. CSU

ECHO 301. Advanced Cardiac Abnormalities (5)
Lec-4, lab-3, field trips
Prereq: ECHO 201
Description and analysis of advanced cardiac abnormalities including cardiac embryology and congenital cardiac defects. Emphasis on cardiac congenital pathology, methods of interrogation used specifically with congenital cardiac ultrasound, and ultrasound findings of surgical repairs. CSU

ECHO 401. Advanced Echocardiographic Studies (6)
Lec-6
Prereq: ECHO 101, CVT 101, ECHO 201, CVT 301, CVT 310 (Lab)
Review of advanced cardiac ultrasound technologies and assessment methods including 3D echocardiography, Cardiac Resynchronization Therapy (CRT), intravascular (coronary) imaging, Transesophageal Echocardiograms (TEE) assessment in Electrophysiology Studies (EP) and Strain Rate. Integration of complex formulas and use of computers for generating preliminary interpretations. CSU

CVT 101. Cardiovascular Technician (3)
Lec-3
Prereq: ANAT 14 or 25;
Coreq: ECHO 101, CVT 110
Cardiac anatomy and the conduction system. ECG identification and measurements, action potential curve, basic dysrhythmias, myocardial ischemia and infarction patterns, interpretation techniques of 12 lead ECGs. Holter monitor and exercise stress testing protocols, procedures, and analysis. CSU

CVT 103. Vascular Ultrasound (3)
Lec-3, field trips
Prereq: Completion of a Cardiovascular Technology Program, ultrasound course, or echocardiography course
Arterial and peripheral vascular ultrasound will focus on the ultrasound imaging of peripheral vascular system. Content will include identifying the peripheral arterial anatomy, pathology, and ultrasound imaging and Doppler techniques used to identify vascular pathology. CSU

CVT 104. Venous Ultrasound (3)
Lec-2, conf-1, field trips
Prereq: Completion of a Cardiovascular Technician (CVT)/Echocardiography Technician (ECHO) Program
Arterial and peripheral vascular ultrasound will focus on the ultrasound imaging of peripheral venous system. Content will include identifying the peripheral venous anatomy, pathology, and ultrasound imaging and Doppler techniques used to identify vein thrombosis and insufficiency. CSU

CVT 105. Vascular Technology - Cerebrovascular Ultrasound (3)
Lec-2, conf-1, field trips
Prereq: CVT/ECHO Program
Cerebrovascular ultrasound will focus on the ultrasound imaging of the cerebrovascular system. Content will include identifying the normal cerebrovascular system, pathology, and ultrasound imaging techniques used to identify pathology, and Doppler findings. CSU

CVT 110. Cardiovascular Skills (7)
Lab-3, conf-6
Prereq: ANAT 14 or 25
Coreq: ECHO 101, CVT 101
Practice in the classroom setting and clinical locations performing and measuring ECGs, taking blood pressures, practice setting up and performing exercise stress testing. Learn technical imaging skills to perform echocardiograms and manipulate ultrasound system instrumentation. CSU

CVT 201. Advanced Cardiovascular Technician (4)
Lec-3, lab-3
Prereq: CVT 101, ECHO 101, CVT 110
Coreq: ECHO 201, CVT 210
Advanced complex cardiac rhythms including heart blocks, bundle branch blocks, and accessory pathways. Includes cardiac pharmacology pacemaker technology and stress echo indications: procedures and analysis. Observation and practice of ECG and stress testing in clinical locations. CSU

CVT 210. Advanced Cardiovascular Skills (7)
Lab-6, conf-5
Prereq: CVT 101, ECHO 101, CVT 110
Coreq: ECHO 201, CVT 210
Practice in the classroom setting of exercise stress testing, ECGs, echocardiograms and stress echocardiograms. In the clinical internship, observation and participation of non-invasive cardiology procedures: ECGs, exercise stress testing, echocardiograms, stress echocardiograms, and Transesophageal Echoes (TEEs). CSU

CVT 301. Physics of Cardiac Ultrasound (3)
Lec-3, field trips
Prereq: CVT 201
Description and analysis of ultrasound physics as applied to sound waves, transducers, two dimensional images, Doppler, ultrasound artifacts and biosafety concerns. CSU

CVT 310. Clinical Experience in Cardiac Ultrasound (9)
Lec-1, conf-2, lab-15, field trips
Prereq: CVT 210
Principles and practices in cardiac ultrasound in neonates through adults. Integrates all aspects of ultrasound technology with identification of congenital defects and disease states. Clinical experience is designed to be concurrent with theory and will be supervised in cooperating hospitals and cardiovascular office practices. CSU

CVT 410. Clinical Experience in Advanced Cardiac Ultrasound (11)
Lec-3, conf-2, lab-24
Prereq: ECHO 101, CVT 101, ECHO 201, ECHO 301, CVT 301, CVT 310 (Lab)
Coreq: ECHO 401
Advanced principles and practices in cardiac ultrasound in neonates through adults. Integrates all aspects of ultrasound technology with identification of congenital defects and disease states. Clinical experience is designed to be concurrent with theory and will be supervised in acute care facilities and cardiovascular office practices. CSU

ECG Technician
ECGT 101. ECG Technician I (4)
Lec-3, lab-4
Prereq: ENGL 91 or ESL 150 or placement in ENGL 92 or ESL 160
Introduction to the cardiovascular system and related terminology.
Emphasis on basic rhythm identification, calculation of wave forms, and cardiac disease states. Patient preparation, running, mounting and basic interpretation of 12 lead, single and three channel ECG tracings. CSU
Formerly EKGT 101.

ECGT 102. ECG Technician II (4)
Lec-3, lab-3
Prereq.: ECGT 101
Advanced knowledge of cardiovascular system with emphasis on the heart in disease states including interpretation of advanced arrhythmias, hypertrophies, cardiac ischemia, and myocardial infarction. Patient preparation and running of appropriate ECG machines. Introduction to other non-invasive cardiology tests. CSU
Formerly EKGT 102.

Emergency Medical Technician

EMT 11A. Pediatric CPR and First Aid (0.5)
Lec-8 (total hrs) P/NP available
Students enrolled in this course will be assessed a $5 lab/material fee for CPR and First Aid cards
Instruction in the practice of universal precautions, pediatric CPR and first aid. Emphasis on identification and care for secondary survey conditions of common traumatic, medical and environmental emergencies involving children. American Heart Association “Heartsaver Child and Infant CPR” and City College of San Francisco Pediatric First Aid cards will be awarded to those who qualify. Course fulfills the partial requirement of AB 243 mandated Health and Safety Training established by the State EMS Authority for Childcare Providers. CSU
Formerly HLTH 11A.

EMT 12. Health Providers BLS/First Aid (1)
Lec-16 (total hrs) P/NP available
Students enrolled in this course will be assessed a $5 lab/material fee for CPR and First Aid cards and certifications.
Instruction and practice in the identification and care of life threatening and serious traumatic, medical, and environmental emergencies including respiratory and cardiac emergencies for adults, children, and infants. Emphasis is also on control of life threatening emergencies such as bleeding and shock. Identification and care of serious secondary survey conditions and situations involving special populations such as children and the elderly. American Heart Association “Healthcare Provider CPR/AED” and City College of San Francisco First Aid cards will be awarded to those who qualify. CSU

EMT 13. Standard First Aid (0.5)
Lec-8 (total hrs) P/NP available
Students enrolled in this course will be assessed a $5 lab/material fee for CPR and First Aid cards and certifications.
Current trends in standard first aid and adult cardiopulmonary resuscitation. Emphasis also on the ability to handle life threatening injuries, the performance of a secondary survey, and activation of the emergency medical services system. American Heart Association “Heartsaver Adult CPR” and City College of San Francisco First Aid cards will be awarded to those who qualify. CSU

EMT 14. Advanced First Aid and Basic Life Support for Healthcare Providers (2)
Lec-2 P/NP available
Satisfies requirements for public safety personnel as stated in Title 22, Division 9, California Code of Regulations.

Students enrolled in this course assessed a $5.
Emergency care for one and two-rescuer adult, child, and infant CPR with mask ventilation and AED; life-threatening, medical, environmental, and traumatic emergencies such as bleeding, burns, musculoskeletal injuries; poisoning and emergency childbirth. Qualified participants are awarded American Heart Association Basic Life Support Healthcare Providers/AED and CCSF Advanced First Aid cards. CSU/UC

EMT 15. Basic Life Support Recertification (0.5)
Lec-8 (total hrs) P/NP available
Prereq.: EMT 12, 14 or 17, or an American Red Cross, or an American Heart Association Healthcare Provider CPR/AED course within the last two years. Valid certification card must be presented in the first hour of instruction.
Students enrolled in this course assessed a $5 lab/material fee for CPR and First Aid cards and certifications.
An updated presentation of the newest techniques in cardiopulmonary resuscitation with an emphasis on current trends. Instruction also on the ability to handle other types of injuries, as well as performance of a secondary survey and activation of the emergency medical services. An American Heart Association Healthcare Provider CPR/AED Recertification card will be awarded to those who qualify. CSU

EMT 21. CPR, Childcare Health and Safety Education (3)
Lec-3 P/NP available
Students enrolled in this course assessed a $5 lab/material fee for CPR and First Aid cards and certifications.
Training for childcare personnel to develop the knowledge and skills needed to provide first aid care for victims of traumatic, medical and environmental emergencies. Instruction includes Adult and Pediatric CPR, advanced level first aid, childcare health practice policies, prevention of childhood injuries, management of well children with mild illnesses, chronic health conditions and special needs. Course fulfills the AB 243 mandated Health and Safety Training requirements established by the State EMS Authority for Childcare Providers. CSU

EMT 100. Emergency Medical Technician I (12)
Lec-5, conf-10, field trips
Coreq.: EMT 102
Designed to meet the requirements of the State and National EMS Education Standards for the entry-level EMS provider in a pre-hospital setting. Students will acquire both the knowledge and manipulative skills required to provide emergency care and transportation of the ill and injured. CSU

EMT 101. Emergency Medical Technician (6.5)
Lec-4, conf-4
Coreq.: EMT 102
Provides the theoretical knowledge and technical skills necessary for working in the emergency pre-hospital medical field. Key topics include: emergency management of victims of serious illness or injury; management of a disaster scene; and extraction of victims. CSU

EMT 101A. Emergency Medical Technician (3.25)
Lec-2, conf-2
Provides the theoretical knowledge and technical skills necessary for working in the emergency pre-hospital medical field. CSU
EMT 101A-101B = EMT 101
EMTP 101. Introduction to Emergency Medical Services (EMS) (3)
Lec-18 (total hrs); lab-2
Prereq.: 60-100 or 101
Coreq.: Completion/concurrent enrollment in EMT 102
Introduction to the theoretical knowledge and technical skills necessary for working in the emergency prehospital medical field. Key topics include emergency management of victims of serious illness or injury, management of a disaster scene, and extrication of victims. CSU

EMTP 102. EMT Clinical (1)
Lec-24 (total hrs); lab-2
Prereq.: EMT 101 or 100
Clinical phase of the EMT program to provide clinical skills competencies, observation and participation in actual patient calls on an ambulance in the prehospital setting. Course meets the National EMS Education Standards and the California Health and Safety Code of Regulations, Title 22, Division 9. CSU

EMTP 103. EMT Refresher (1.5)
Lec-24 (total hrs); lab-8
Prereq.: Current EMT-I Certification
The EMT Clinical Refresher Course is required for recertification of EMT-I personnel. This course consists of didactic and skills instruction. The student will be updated in all areas of emergency medical prehospital care, as contained in the EMT-I scope of practice. CSU

EMTP 104. Advanced Skills for EMS Providers (4)
Lec/conf-4
Prereq.: EMT 100
This course is a practicum of the following advanced life support skills used in the prehospital setting by Paramedics: basic and advanced airway and ventilatory management, use of the various functions of cardiac monitors, pharmacology skills of obtaining intravenous and intraosseous access, measuring blood glucose and administering medications through various routes. The course incorporates these advanced diagnostic and treatment skills into the systematic assessment of critical and non-critical medical and trauma patients in simulated scenarios. CSU

EMTP 120. Human Systems and Patient Assessment (5)
Lec-96 (total hrs)
Prereq.: EMT 100 or EMT 101
This course reviews the fundamentals of human anatomy, physiology and pathophysiology and the language and terminology of medicine. Each organ system will be reviewed along with clinical case studies related to dysfunction of the various organ systems. Emphasis will be placed on application of physiology and pathophysiology to the assessment of patients with various emergency medical conditions and the documentation and reporting skills used in the delivery of emergency medical care. CSU
Formerly EMTP 100.

EMTP 121. Paramedic Theory - Roles and Responsibilities (2)
Lec-36 (total hrs)
Prereq.: EMTP 120
Introduction to Emergency Medical Services (EMS) including the history of EMS development, medical legal issues in emergency care, health and safety of the paramedic and the principles of EMS research. CSU
Formerly EMTP 101.

EMTP 122. Pharmacology and Ventilatory Mgt (2.5)
Lec/conf-42 (total hrs)
Prereq.: EMTP 121
Basic principles of pharmacology including drug classifications, actions, therapeutic uses in emergency medical services (EMS) and methods of medication administration. Basic and advanced airway and ventilatory management principles. CSU

EMTP 123. Trauma Emergencies (4)
Lec/conf-72 (total hrs)
Prereq.: EMTP 122
Pathophysiology, assessment and management of trauma emergencies in the field. Basic and advanced management principles and continuum of trauma care. Focus on prehospital and definitive management of patients with shock as the result of traumatic injury. CSU

EMTP 124. Trauma Certification (1)
Lec/conf-32 (total hrs)
Prereq.: EMTP 123
This course meets the requirements for trauma certification according to national, state and local standards. CSU

EMTP 125. Cardiorespiratory Emergencies (4.5)
Lec/conf-84 (total hrs)
Prereq.: EMTP 124
Assessment and management principles in EMS advanced life support care of patients with respiratory and cardiovascular emergencies in the prehospital and in-hospital setting. Includes ECG interpretation of dysrhythmias and 12-Lead ECG. Advanced cardiac life support guidelines and preparation for certification. CSU
Formerly EMTP 105.

EMTP 126. Neuroendocrine Emergencies (4)
Lec/conf-76 (total hrs)
Prereq.: EMTP 125
Prehospital and in-hospital assessment and management of patients...
with altered mental status, seizures, strokes and other dysfunctions of the neuroendocrine systems. CSU
Formerly EMTP 106.

EMTP 127. Medical Emergencies (5)
Lec/conf-100 (total hrs)
PREREQ.: EMTP 126
Prehospital and in-hospital assessment and management of patients with medical emergencies. CSU
Formerly EMTP 107.

EMTP 128. OB/GYN & Pedi Emergencies (4)
Lec/conf-76 (total hrs)
PREREQ.: EMTP 127
Prehospital assessment and management of gynecological and obstetric emergencies, neonatal and pediatric emergencies. CSU
Formerly EMTP 108.

EMTP 129. Special Populations, EMS Ops (5)
Lec/conf-100 (total hrs)
PREREQ.: EMTP 128
Prehospital assessment and management of patients with special challenges. Includes geriatrics, abuse/neglect, hospice and home care. Also reviews EMS operations, including patient and scene management at multiple casualty incidents. Final didactic module of Paramedic program includes final cognitive evaluation. CSU
Formerly EMTP 109.

EMTP 130. Clinical and Field Internship (12)
Conf-60, lab-480 (total hrs)
PREREQ.: EMTP 129
Paramedic program clinical rotations in emergency departments, operating room, labor and delivery, psychiatric emergency, pediatrics, intensive care unit and other clinical settings. Prehospital field internship on an advanced life support ambulance is final phase. CSU
Formerly EMTP 110.

**Health Care Technology**

HCT 61. Introduction to Health Care (3)
Lec-2, lab-3, field trips
PREREQ.: ESL 150 or PLACEMENT IN ENGL 92 or ESL 170
An overview of the evolution of medicine and health care delivery. Development and organization of health care professions, including health information management and medical assisting. Emphasis on inpatient, and physician office record content; numbering and filing systems; and electronic health record adoption. CSU

HCT 66. Medical Typing and Transcription (4)
Lec-2, lab-6
PREREQ.: TYPING SPEED OF 40 NWPM
Using Microsoft Office Suite software, students will prepare systems-based and specialties-based medical correspondence and reports. Medical/legal requirements are integrated into the preparation and correction of case histories, discharge summaries, operative reports, etc. Students will select appropriate medical terminology and abbreviations as they relate to specific systems and specialties. CSU

HCT 82. Professional Practice Internship/Certification (5)
Conf-21, lab-35, work-196 (total hrs)  P/NP Only
PREREQ.: MED 56, 70, 71, AND HIT 50B
Repeat: VMD 194A, 198, 199, and HCT 82 combined, max. credit: 16 units

Supervised experience in developing a professional relationship with patients and health care professionals in physician offices, hospitals, and outpatient clinics focusing on professional attitudes and work-related skills competency. Includes preparation for various certification exams to include Certified Medical Assistant (CMA), Registered Medical Assisting (RMA), or the Certified Professional Coder (CPC). CSU

HCT 100. Introduction for Residential Service Providers (3)
Lec-3
Introduction to the principles and practices necessary to establish and administer a residential care home for persons with developmental disabilities. Emphasis is on entry into the profession, legal requirements, and positive clinical interventions. CSU

HCT 101. Traditional Chinese Medicine (3)
Lec-3
PREREQ.: ESL 160 OR PLACEMENT IN ENGL 92 OR ESL 170
Traditional Chinese Medicine (TCM) fundamentals explores the nature of health and disease processes in Traditional Chinese Medicine. This course covers the concepts of TCM philosophy, anatomy, physiology, etiology, pathology, diagnosis, and treatment. CSU

HCT 104. Phlebotomy Technician (3.5)
Lec-2, conf-4
PREREQ.: ESL 160 OR PLACEMENT IN ENGL 93 OR ESL 170
ADVICE: EMT 100 OR 101
Theory and skills necessary to meet requirements of AB 1557 for a phlebotomy technician. Emphasis on phlebotomy techniques, equipment, medical/legal considerations, safety, infection control, specimen collection and handling, patient preparation and patient care. CSU
Formerly ERT 104

HCT 106. Chinese Herbs and Nutrition I (3)
Lec-3, field trips
PREREQ.: COMPLETION/CONCURRENT ENROLLMENT IN HCT 101
Instruction on the preparation, tastes, entering channels, dose, functions, indications, contra-indications, and some simple combinations of 116 of the most commonly used substances in the Chinese Medicinal Pharmacopoeia. Class will emphasize the proper and accurate identification of the prepared substances (i.e. dried, calcined, ginger fried, honey fried, sliced, etc.) CSU

HCT 107. Everyday Chinese Medicine (3)
Lec-3
Everyday Chinese Medicine covers simple movements and manual therapies designed to enhance longevity and vitality, including 12 channels and 27 common acupuncture points. This class emphasizes the use of qi gong (movement), moxabustion, cupping, topical herbs, and massage. CSU

HCT 108. Everyday Healing Foods and Herbs (3)
Lec-3
The proper use of foods and herbs according to Chinese medicine for sustaining a long and healthy life. Fundamental principles, pattern identification, seasonal adjustments, and the properties of over 30 foods and herbs together with preparation techniques and demonstrations. CSU
Health Information Technology

HIT 50A. Medical Terminology I (3)
Lec-3
Introductory course on the roots, prefixes, suffixes and abbreviations used to form and define medical terminology. The systems based terminology covers anatomy, vocabulary, disease states, anomalies, endoscopic and surgical procedures, laboratory findings and standard pharmaceuticals in systems such as: gastrointestinal, cardiovascular and genitourinary. CSU

HIT 50B. Medical Terminology II (2)
Lec-2
Prereq.: HIT 50A
Advanced course on medical terms found in case histories, discharge summaries, radiology, pathology, psychiatric, and autopsy reports. Emphasis on musculoskeletal, endocrine, and respiratory systems. Selected terminology and abbreviations used in specialty areas of hematology, psychology, neoplasms, radiology and nuclear medicine. CSU

HIT 51. Basic Medical Terminology (1)
Lec-21 (total hrs)
Basic course in medical terminology covering roots, prefixes, suffixes, and abbreviations related to the gastrointestinal and cardiovascular systems. Recommended for students applying to the medical interpreter program and those exploring entry into health careers. CSU

HIT 57. Disease Process (3)
Lec-3
Prereq.: ANAT 14, HIT 50A
Instructs students in the general principles of disease process with emphasis on etiologies and anatomical and physiological manifestations. The class focuses on diagnostic studies, procedures, treatments, and medications utilized in the diagnosing and treatment of diseases. CSU

HIT 63. Health Information Systems (3)
Lec-2, lab-3
Prereq.: HCT 61; HIT 50A and 67
Instruction in healthcare delivery systems utilized in health information management practice with emphasis on secondary data sources, accreditation and regulatory requirements, alternative healthcare settings, the electronic health record (HER), and healthcare information systems. CSU

HIT 65. Organization of Health Data (2)
Lec-1, lab-3
Prereq.: HCT 61, HIT 50A and 67
The study of basic hospital and health statistics including sources, definitions, and use of health data. Computerized and manual methods of collecting, processing, and preparing statistical reports and spreadsheets for health care management, including various methods of presenting data; calculation of common rates and percentages. CSU

HIT 67. Computer Applications in the Health Care Setting (2)
Lec-1, lab-3
An introduction to the various types of computer systems and their usage in health information management. Instruction will include word processing, database, spreadsheets, presentation materials, and Internet usage as they pertain to health information. Importance of data accuracy, consistency, completeness, security of information, and letter and memo presentation are emphasized. CSU

HIT 72. Legal Aspects of HIM (3)
Lec-2, lab-3
Prereq.: HIT 50B, HCT 61, and HIT 67
Overview of the fundamentals of law, U.S. legal system, consents, confidentiality, release of information, use of patient records during proceedings and health information practice, ethics, regulatory requirements, compliance, risk management and quality improvement. Emphasis on privacy and security rules from the Health Information Portability and Accountability Act (HIPAA). CSU

HIT 73A. ICD-10-CM Coding (2)
Lec-2, lab-1
Prereq.: ANAT 14
Coreq.: HIT 50A
Provides students with basic International Classification of Disease (ICD) coding principles with emphasis on inpatient and outpatient guidelines. The course focuses on book format, code conventions, Uniform Hospital Discharge Data Set (UHDDS) guidelines, document sources, code sequencing, and abstracting. CSU

HIT 73B. ICD-10-PCS Coding (4)
Lec-3, lab-3
Prereq.: HIT 73A
ICD-10-PCS instructs students in the process of building codes in the new procedure coding system. Instruction includes selection of ICD-10-CM and ICD-10-PCS codes for coding cases, regulatory guidelines, an overview of Diagnostic Related Groups (DRGs), and computerized encoders and groupers. CSU

HIT 74. Introduction to Quality Improvement (2)
Lec-1, lab-3
Prereq.: HIT 50B and 63
Evolution of continuous quality improvement in healthcare from the operational and clinical perspective. Topics include quality measurements and performance initiatives of patient outcomes, disease management, satisfaction surveys, quality measures, data sources, collection methods and measurement techniques. Use of control tools, statistical process, and benchmarking. CSU

HIT 75. Organization and Management in Health (3)
Lec-3
Prereq.: HIT 77A or HCT 82
Instruction in the introduction to the principles of organization and management functions and theories in various settings, time management and management tools, communication processes, decision making strategies, recruitment and staffing, performance reviews, disciplinary actions, motivating personnel, budget, and grievances and labor unions. CSU

HIT 76. CPT Coding (3)
Lec-3
The Current procedural terminology (CPT) coding system is used to describe services and procedures provided by health care providers to include evaluation and management, surgery, radiology, pathology, laboratory, and medicine. The class includes an overview of the HCPCS coding system and the ambulatory payment classification system. CSU

HIT 77A. Professional Practice I (3)
Conf-3, lab-6
Prereq.: HIT 63, 65, and 73A
Provide students with supervised professional practice experience in
performing tasks health information departments or other types of health information practice settings at affiliated facilities. Emphasis on the clinical application of the principles and practice of health information management. CSU

**HIT 77B. Professional Practice II (3)**
Lec-3, lab-6
Prereq.: HIT 77A
Recommended to be taken in student’s last semester.
Provide students with advanced professional practice experience in performing specific activities in the HIM setting. Emphasis on legal aspects, quality and risk management, utilization review, management and supervision, CPT and ICD coding, DRG assignment, healthcare statistics and electronic health records. Preparation and review for national certification examination. CSU

**HIT 78. Reimbursement Methods in HIT (2)**
Lec-2
Prereq.: HIT 73A
Overview of the historical developments of the U.S. reimbursement and payment systems in various healthcare settings. Emphasis on healthcare reimbursement methodologies, prospective payment systems, clinical coding, coding compliance, voluntary healthcare insurance plans, government-sponsored health care programs, managed care plans, revenue cycle management and quality issues. CSU

**Medical Assisting**

**MED 49. Clinical Procedures (4)**
Lec-3, conf-3
Prereq.: ANAT 14, HIT 50A
Advises Placement in MATH 40 or Completion of BSM A G, H, I or MATH E!
Instruction in clinical procedures to include aseptic techniques, medical instruments, charting, vital signs, patient history, sterilization and maintenance of equipment, preparation of patient, instruction in the collection of lab specimens, injections and electrocardiograms.
Instruction in medical calculations, prescriptions, and commonly prescribed medications. CSU

**MED 55. The Electronic Health Record (4)**
Lec-3, lab-3
Structural components of the interactive electronic health record (EHR) and how it supports communication and continuity of care. Perspective on how the EHR impacts work and workflow. Practical hands-on experience utilizing an educational version of an EHR to manage patient visit information, such as examination/assessment notes and treatment plans.

**MED 56. Administrative Procedures (3)**
Lec-3, lab-2
Coreq.: HCT 61
Instruction in the U.S. health care environment; medicolegal and ethical responsibilities the art of communication; telephone, reception, and appointment scheduling techniques; written correspondence; processing mail and telecommunications; office managerial responsibilities; and seeking employment. CSU

**MED 70. Medical Bookkeeping and Insurance (3)**
Lec-2, lab-3
Coreq.: HIT 76
Comprehensive and intensive study of bookkeeping and financial activities, billing, credit and collection procedures, and third party medical insurance billing. The course reviews medical terminology as it relates to insurance claims, utilizes procedure and diagnostic coding and provides practice in completing various insurance claim forms which include commercial, Medicare, Medicaid, Worker’s Compensation, and disability insurance. CSU

**MED 71. Electronic Management of Financial Medical Records (1.5)**
Lec-1, lab-2
Introduction to medical office financial applications. Students use medical office software to establish new accounts, post charges, payments, and adjustments to accounts, print financial activity reports, patient statements, and insurance claim forms, and schedule appointments and hospital rounds. CSU

**MED 72. Advanced Insurance Billing (3)**
Lec-2, lab-3, field trips
Prereq.: MED 70
An advanced insurance billing course which concentrates on commercial insurance, Medicare, and Medicaid claims. The course focuses on specialty billing to include cardiology, OB/GYN, surgery, orthopedic, and dermatology. Students will learn how to manage capitated accounts, obtain preauthorizations and referrals, complete secondary insurance billing, and handle claim appeals and disputes. CSU

**MED 73. Advanced Medical Manager (2)**
Lec-1, lab-2, field trips
Prereq.: MED 71
An advanced Medical Manager Software course, students will edit the support files, establish new patient accounts, post charges, payments, and adjustments to accounts, learn to format the appointment template, create and manage the recall system, produce and analyze financial activity reports, generate insurance forms and patient statements, and work with an electronic health record. CSU

**Pharmacy Technician**

Students must be accepted into the Pharmacy Technician Program to register in PHTC 101 and 102.

**PHTC 101. Pharmacy Technician I - Theory (9)**
Lec-9
Prereq.: ENGL 93 or 94 or Placement in ENGL 96 and MATH 40
Coreq.: PHTC 102
Prepares students to work as technicians in pharmacies under the direct supervision of a pharmacist. Covers drug classification and uses; pharmacy laws, rules and regulations; storage, inventory and record keeping of drugs; drug dose calculations and pharmacy math; basic anatomy and physiology; medical terminology, abbreviations, and symbols used in prescriptions. CSU

**PHTC 102. Pharmacy Technician I - Clinical (3)**
Conf-10
Coreq.: PHTC 101
Instruction includes application of pharmaceutical knowledge, pharmacy law, mathematics, and terminology to a clinical setting as well as storage and labeling of drugs requirements, sterile products preparation, and computerized record keeping. CSU

**PHTC 102A. Health Care Mathematics (2)**
Lec-2
Introduction to mathematical calculations required for health care professionals. Emphasis on the use of ratio and proportion method,
percentage and basic algebraic equations to determine drug dosing.
Topics include various measurement systems for calculating oral and
parenteral drug dosages. CSU

PHCT 103. Pharmacy Technician II - Theory (9)
Lec-9
Prereq.: PHCT 101 and 102
Coreq.: PHCT 104
Introduction includes advanced drug classification, uses, and side
effects, preparation of intravenous additives and chemotherapeutic
agents, record keeping of legend and controlled drugs, anatomy,
physiology, medical terminology, pharmacology, and pharmaceutical
calculations pharmacy law as they pertain to pharmacy practice. CSU

PHCT 104. Pharmacy Technician II - Clinical (3)
Conf-10
Coreq.: PHCT 103
Introduction includes the application of advanced drug preparation
skills to various clinical settings as well as maintaining inventory,
storage requirements, drug selection, preparation and filling of pre-
scriptions. Emphasis on quality assurance and the use of automated
technology as related to preparation of IV admixtures and chemotherapeutic agents. CSU

Noncredit Courses:

Emergency Response Skills and Skills
for Home Care Providers

AHTC 9105. Emergency Response Skills (45 hrs)
Course covers basic emergency training in CPR, First Aid, and
Automatic External Defibrillation and the skills necessary to stabilize
victims of serious injury or illness until the arrival of advanced medical
assistance.

AHTC 9121. Skills for Home Care Providers (25 hrs)
Training in the basic communication, health, safety, nutrition, and job
readiness skills competencies required of a health care provider.

Unit Coordinator and Medical Computing Skills

AHWC 9183. Unit Coordinator (108 hrs)
Advis: TRST 2421
Instruction in the community health care environment; ethical respon-
sibilities; medical terminology; telephone, reception, and appointment
scheduling techniques; nursing unit communication systems; medical
transcription; patient’s paper chart and/or electronic medical record
maintenance; managing nonclinical functions of the nursing unit.

AHWC 9188. Medical Computing Skills (90 hrs)
Instruction in one or more health care software applications for stu-
dents enrolled in applicable Health Care Technology courses. These
programs include Microsoft Office Word, Delmar/Cengage Learning
SAGE MedWare® for the Electronic Health Record, Administrative
Medical Assisting StudyWare®, Delmar/Cengage Learning RHIA/
RHIT Study Tests, Health Information Numbering and Filing,
keyboarding.

Health Education
Office: MUB 353
Phone Number: (415) 239-3220
Web Site: www.ccsf.edu/curriculum
Formerly Health Science

Announcement of Curricula

General Information
The Health Education Department is committed to promoting indi-
vidual, family and community health, advocating for social justice and
the elimination of health inequalities. The Department offers a wide
range of courses and career and technical education training programs
designed to:

- Provide students with academic training in the interdisciplinary
  field of Health Education.
- Meet Associate Degree and transfer requirements.
- Train students for careers in public health.
- Diversify the health work force.

The Department offers a Health Education Major and seven certificate
programs for students interested in health-related careers, including the:

- Community Health Worker Certificate, a 20-unit course of
  study;
- Community Mental Health Certificate, a 16-unit course of
  study;
- Drug and Alcohol Studies Certificate, a 38.5-unit course of
  study;
- Health Care Interpreter Certificate, a 15-unit course of study;
- Infectious Disease Prevention in Priority Populations
  Certificate, an 11-unit course of study.
- Nutrition Assistant Certificate, a 17 unit course of study;
- Post Prison Health Worker, a 20-unit course of study;
- Youth Worker Certificate: Organizing, Advocacy, Counseling
  and Education, a 22-unit course of study

The Department also teaches two required courses for the 15-unit
Trauma Prevention and Recovery Certificate offered through the
Interdisciplinary Studies Department.

The Department coordinates a health and social justice based transfer
program - the Metro Academy of Health - for students preparing to
transfer to California State Universities to complete bachelor's degrees
in health education, public health, urban studies, other social sciences,
humanities and related fields. Metro Academy of Health is a multiple
semester 30-33 unit program of study. Students participate in linked
learning community classes in Health Education, English, Speech and
Mathematics. Classes are infused with health and social justice con-
tent and designed to strengthen writing, oral communication, critical
thinking and quantitative reasoning skills. Metro Academy of Health
also emphasizes academic success skills and provides counseling sup-
port. For more information, please call the program coordinator at
(415) 239-3513.

Health Education Major (AS)

The Health Education Department offers a Major in Health Education
designed to prepare students for transfer to the California State
University (CSU) system for further study in health education, public health and related academic fields. With a Bachelor's Degree in Health Education, students are prepared for careers with a wide range of public and private employers. The Health Education Major is open to all students who are admitted to City College of San Francisco and who have satisfied the prerequisites listed next to each course before enrolling in that course.

The purpose of CCSF's Health Education Major is to provide students with coursework in public health content to transfer to the California State University system in health education, public health and related academic fields. The major prepares students with an analysis of the major determinants of health and illness, in-depth health content, an overview of necessary skills in the field, including interpersonal and quantitative reasoning skills. The goal of this program is to prepare a diverse student body to address the health needs of our communities.

The 20-unit Associate of Science degree program in Health Education includes core courses related to public health and health education and a selection of electives from a variety of health-related subject areas. The course of study is designed to give flexibility to students who want to pursue specific areas of interest within health. The degree may be combined with any of the programs or certificates offered by the Department.

Core courses in the major: The major consists of 14 units of required courses. Students interested in the major should note that the quantitative skills courses all have mathematics prerequisites and should plan their course of study accordingly.

Electives in the major: Students majoring in Health Education are required to take at least six (6) units of approved electives described below. Requirements for Bachelor Degrees in the Health Education or Health Science field vary widely. Students are advised to check the specific major requirements for the institution they plan to transfer to.

Prerequisites: There are no specific prerequisites for the Health Education Major except for those prerequisites and advisories required of certain classes. This includes one of the core classes in the major, Psychology 5 (or MATH 80 or ECON 5), which requires students to take the Math Placement Test and to either place into the class or take MATH 60 or 860 or MATH 45 or 845 as a prerequisite. Some of our elective courses also have prerequisites. These courses are highlighted with an asterisk (*) in the list of elective course options.

Learning Outcomes

Upon completion of this program, the student will be able to:

- Analyze the various factors that shape health and illness of individuals and communities and propose and compare strategies to improve health.
- Demonstrate communication skills that enhance interpersonal relations and value cultural awareness and sensitivity.
- Examine the causes of health inequities and critically analyze theoretical models and research findings.
- Access, interpret and analyze health data; design tools, measures and apply statistical models to understand and improve community health.
- Meet the requirements for transfer to health education and related programs in the California State University System.

Courses Required for the Major in Health Education

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>HLTH 53 Health in Society</td>
<td>3</td>
</tr>
<tr>
<td>or HLTH 27 Men's Health</td>
<td>3</td>
</tr>
<tr>
<td>or HLTH 25 Women's Health</td>
<td>3</td>
</tr>
<tr>
<td>HLTH 54 Introduction to Public Health</td>
<td>3</td>
</tr>
<tr>
<td>BIO 9 Human Biology</td>
<td>3</td>
</tr>
<tr>
<td>or BIO 11 The Science of Living Organisms</td>
<td>4</td>
</tr>
<tr>
<td>PSYC 5 Statistics for Behavioral Sciences</td>
<td>4</td>
</tr>
<tr>
<td>or ECON 5 Introductory Statistics</td>
<td>4</td>
</tr>
<tr>
<td>or MATH 80 Probability and Statistics</td>
<td>4</td>
</tr>
</tbody>
</table>

Six units must be taken from the following elective courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>HLTH 10 Health and Aging</td>
<td>3</td>
</tr>
<tr>
<td>EMT 14 Advanced CPR and First Aid</td>
<td>2</td>
</tr>
<tr>
<td>HLTH 30 Drugs and Society*</td>
<td>3</td>
</tr>
<tr>
<td>HLTH 38 Trauma Response and Recovery*</td>
<td>3</td>
</tr>
<tr>
<td>HLTH 48 Violence as Public Health Issue</td>
<td>3</td>
</tr>
<tr>
<td>HLTH 50 Tai Chi for Health</td>
<td>3</td>
</tr>
<tr>
<td>HLTH 64 Health Education and Prevention</td>
<td>3</td>
</tr>
<tr>
<td>HLTH 65 Youth Development and Leadership</td>
<td>3</td>
</tr>
<tr>
<td>HLTH 66 Health Education and Chronic Disease Management</td>
<td>3</td>
</tr>
<tr>
<td>HLTH 67 HIV/STI Prevention Education</td>
<td>3</td>
</tr>
<tr>
<td>HLTH 72 Cultural Aspects of Addiction*</td>
<td>3</td>
</tr>
<tr>
<td>HLTH 73 Case Management/Individual Intervention*</td>
<td>3</td>
</tr>
<tr>
<td>HLTH 80 Interpreting in Health Care I</td>
<td>6</td>
</tr>
<tr>
<td>HLTH 83 Motivational Counseling Skills*</td>
<td>3</td>
</tr>
<tr>
<td>HLTH 90A Homelessness Issues</td>
<td>5</td>
</tr>
<tr>
<td>HLTH 91C Hepatitis ABC’s</td>
<td>3</td>
</tr>
<tr>
<td>HLTH 95 Transgender Health, Working with Clients &amp; Communities</td>
<td>1</td>
</tr>
<tr>
<td>HLTH 97 Health &amp; Stress in Society</td>
<td>3</td>
</tr>
<tr>
<td>HLTH 110 Health Impacts of Incarceration</td>
<td>3</td>
</tr>
<tr>
<td>HLTH 116 Conflict Resolution Skills in the Health Care Workplace</td>
<td>3</td>
</tr>
<tr>
<td>HLTH 120 Health and Educational Justice</td>
<td>3</td>
</tr>
<tr>
<td>HLTH 221 Health and Social Justice</td>
<td>3</td>
</tr>
<tr>
<td>HLTH 231 Urban Health Policy</td>
<td>3</td>
</tr>
<tr>
<td>ADMJ 59 Organized Crime</td>
<td>3</td>
</tr>
<tr>
<td>ANAT 25 General Human Anatomy</td>
<td>3</td>
</tr>
<tr>
<td>CDEV 67 The Child, the Family, and the Community</td>
<td>3</td>
</tr>
<tr>
<td>CDEV 100 Violence and Its Impact on Children and Their Families</td>
<td>3</td>
</tr>
<tr>
<td>IDST 17 Human Sexuality</td>
<td>3</td>
</tr>
<tr>
<td>IDST 37 Race and Ethnic Groups in the United States-A Comparative Survey</td>
<td>3</td>
</tr>
<tr>
<td>LBCS 81 Organizing for Economic and Social Justice</td>
<td>3</td>
</tr>
<tr>
<td>LBDC 12 Introduction to Microbiology</td>
<td>3</td>
</tr>
<tr>
<td>NUTR 12 Introduction to Nutrition</td>
<td>3</td>
</tr>
<tr>
<td>POLS 4 The Politics of Globalization</td>
<td>3</td>
</tr>
<tr>
<td>POLS 22 Environmental Politics and Policy</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 23 Psychology of Race &amp; Ethnic Relations</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 1 Introduction to Human Physiology</td>
<td>3</td>
</tr>
<tr>
<td>WOMN 54 The Politics of Sexual Violence</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Units: 20

*Classes marked with an asterisks have pre-requisites.
Community Health Worker and Specialty Certificates

Certificate Curricula
The Community Health Worker Program offers three linked certificates: the Community Health Worker, Post Prison Health Worker and Youth Worker Certificates. Each Certificate shares core public health foundation principals, competencies and a social justice perspective. The curriculum is designed to prepare individuals for positions in community oriented health and social service fields. The core courses HLTH 201 and HLTH 202 emphasize health education and promotion, community building and advocacy as well as competencies for working with specific communities such as immigrant and linguistically isolated communities; youth ages 13-21; and the formally incarcerated and their families. Students may earn one or more of these specialty certificates upon completion of the required courses.

The Community Health Worker (CHW), Post-Prison Health Worker (PPHW) and Youth Worker (YW) Certificates share the same admission requirements, requirements for the Certificate of Accomplishment, an internship requirement, and core foundation classes.

Admission. Admission to the program is based on:

1. The completion of prerequisite course HLTH 59, “Introduction to Community Health Work” (1 unit), with a grade of “C” or higher, OR documented successful experience as a Community Health Worker.

AND

2. Submission of a written application (Applications are due each year in May)

Any student who receives a grade less than a “C” in HLTH 201, must re-apply for admission to the program.

For more information, an application or a form for documenting work experience, go to www.csf.edu/chw, call (415) 452-7481 or come to MUB 353.

Requirements for the Certificate of Accomplishment. To receive the Certificate of Accomplishment, the following must be satisfied:

1. An approved internship placement secured during the semester before the start of the internship placement;
   - Option 1: Secured during HLTH 201
   - Option 1: Internship approved with written permission from the CHW Program Coordinator before the start of HLTH 202.

2. Complete 128 internship hours (for PPHW or the YW certificate, internships must be completed at a site serving their respective communities),

3. A satisfactory evaluation from the internship supervisor,

4. A “pass” grade on the Performance Based Examination

5. Completion of the certificate’s required units of course work with final grades of “C” or higher or pass.

Note. Students who do not complete their internship placement will have the next 2 semesters to complete their hours with prior approval from the program coordinator. Otherwise, the student must reapply for the program.

Credit toward Transfer. Nine units from the CHW Certificate satisfy graduation requirements for a Bachelor’s Degree in Health Education at San Francisco State University.

Below you will find specific information for each certificate program.

Community Health Worker Certificate
The Community Health Worker (CHW) provides health education, information and referrals, and client advocacy in both clinic and community settings. The CHW serves as a two-way bridge between communities and resources. They play a vital role in reducing health disparities among underserved communities by reducing barriers to access in a culturally appropriate way.

The San Francisco Department of Public Health accepts the certificate of accomplishment to satisfy six out of twelve months of experience that is required as minimum qualification for hiring as a City Health Worker.

The CHW certificate requires successful completion of 20 units.

Learning Outcomes
Upon successful completion of the Community Health Worker Certificate Program, students will be able to demonstrate the following learning objectives:

- Analyze and discuss the root causes and consequences of health disparities on local, national and global communities.
- Research (including online research) and evaluate the quality and accuracy of health information and culturally relevant resources and services.
- Discuss and integrate health professional skills including ethics, scope of practice, professional boundaries, cultural humility, conflict resolution skills and self-care practices.
- Conduct an initial interview or assessment with a client, applying a strength-based approach to assess needs, resources, priorities and proposed actions.
- Interpret and provide non-clinical health advising on various health topics, from a client-centered perspective.
- Demonstrate client-centered counseling drawing upon active listening skills and motivational interviewing concepts and skills.
- Prepare, implement and document a client-centered service coordination/case management/action plan including the provision of culturally appropriate referrals.
- Create and facilitate a group health education training or presentation (about core competencies) using popular education theory and methods.
- Describe and demonstrate effective group level or team work.
- Analyze and apply community organizing skills through the Community Action Model (CAM) including an understanding of the public policy process and how to conduct a community diagnosis.
- Construct a professional resume and portfolio showcasing employability competencies and professionalism and apply job interviewing skills as part of job readiness.

Courses Required for the Certificate of Achievement in Community Health Worker

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>HLTH 201 CHW Principles &amp; Practice</td>
<td>5</td>
</tr>
<tr>
<td>HLTH 64 Health Ed and Prevention</td>
<td>3</td>
</tr>
</tbody>
</table>
Post-Prison Health Worker Specialty Certificate

The curriculum for the Post-Prison Health Worker Certificate is designed to prepare individuals for positions working with incarcerated and formerly incarcerated people in community health and social services agencies and programs. It emphasizes specific competencies for working with incarcerated and formerly incarcerated people such as culturally responsive outreach, case management, client-centered intake and counseling skills, and community organizing and advocacy. As part of their education, students will complete an internship with a local agency serving incarcerated and/or formerly incarcerated people. The Post-Prison Health Worker Certificate requires successful completion of 20 units.

Learning Outcomes

In addition to the student learning objectives described in the Community Health Worker Program, students completing the specialty Post-Prison Health Worker Certificate Program will also be able to:

- Describe and analyze the historical development of the U.S. criminal justice system including: prison system conditions, culture of prison life, the political and economic roots, and their implications for poor communities and communities of color.
- Examine and summarize the health impacts of incarceration including health inequities and common chronic diseases on the health and well-being of families and communities.
- Examine and identify the challenges and systemic barriers to reentry an incarcerated person faces when re-entering society.
- Assess and apply prevention-based models of criminal justice that promote health and safety.
- Define and analyze the role of Community Health Workers and Medical Assistants in the management of chronic conditions including application of the ecological model, concepts of scope of practice, working as part of a clinical team and ethics.
- Conduct culturally sensitive client-centered counseling and document client-action plans to patients with chronic conditions with special considerations for seniors and those formerly incarcerated.

Courses Required for the Certificate of Achievement as a Post-Prison Health Worker Certificate Program.

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>HLTH 201* CHW Principles &amp; Practice 1</td>
<td>5</td>
</tr>
<tr>
<td>HLTH 202* CHW Principles &amp; Practice 2</td>
<td>5</td>
</tr>
<tr>
<td>HLTH 66 Health Education and Chronic Disease Management</td>
<td>3</td>
</tr>
<tr>
<td>HLTH 110 Health Impacts of Incarceration</td>
<td>3</td>
</tr>
<tr>
<td>HLTH 116 Conflict Resolution</td>
<td>1</td>
</tr>
<tr>
<td>Electives (see below)</td>
<td>3</td>
</tr>
<tr>
<td>Total Units</td>
<td>20</td>
</tr>
</tbody>
</table>

Students must complete three (3) units from the following list of electives:

- HLTH 10 Health and Aging
- HLTH 25 Women’s Health
- HLTH 27 Men’s Health
- HLTH 38 Trauma Response and Recovery
- HLTH 65 Youth Leadership in Public Health
- HLTH 66 Chronic Conditions
- HLTH 67 HIV/STI Prevention
- HLTH 91C Hepatitis ABC’s
- HLTH 94 Transgender Health
- HLTH 110 Health Impacts of Incarceration
- HLTH 116 Conflict Resolution
- Electives (see below)

*Note: HLTH 201 (5 units) taken in the first semester. HLTH 202 (5 units) is taken in the second semester.

Youth Worker: Organizing, Advocacy, Counseling and Education Certificate

The Youth Worker Certificate is designed to prepare individuals for positions working with youth ages 13–21 with community health and social service agencies and programs. Youth Workers provide health education client-centered counseling and case management services, and conduct community organizing and advocacy in a wide variety of employment settings. As part of their education, students will complete an internship with a local youth serving agency. The Youth Worker Certificate was developed in partnership with other CCSF departments and local employers. A second certificate based in the Child Development Department focuses on preparing individuals to work in After-School and Recreation Settings with youth of all ages and administration for those already working in the field seeking career advancement. The Youth Worker certificate requires successful completion of 22 units.

Learning Outcomes

In addition to the student learning objectives described in the Community Health Worker Program, students successfully completing the specialty Youth Worker Certificate Program will also be able to:
• Examine and analyze cultural assumptions, stereotypes, and social issues affecting today's youth including the relationship between the health of a community and the health of the young person.
• Describe basic adolescent and human development and its role in youth behavior and decision making.
• Assess and describe the principles of youth development including youth empowerment with strategies for youth participation and leadership development.

**Courses Required for the Certificate of Achievement as a Youth Worker.**

**Course** | **Units**
--- | ---
HLTH 201* CHW Principles & Practice 1 | 5
HLTH 202* CHW Principles & Practice 2 | 5
HLTH 65 Youth Development and Leadership | 3
CDEV 67 The Child, the Family, and the Community | 3
HLTH 106 Conflict Resolution | 1
IDST 80-81 Diversity & Social Justice | 1
Electives (see below) | 4
**Total Units** | **22**

**Students must complete four (4) units from the following list of electives:**

HLTH 38 Trauma Response and Recovery | 3
HLTH 231 Urban Health Policy | 3
HLTH 46 Immigrant Health | 3
HLTH 64 Health Education Practice | 3
HLTH 67 HIV/STI Prevention | 3
HLTH 83 Motivational Counseling Skills | 3
HLTH 90B Harm Reduction and Health | 0.5
HLTH 95 Transgender Health: Working with Clients and Communities | 1
HLTH 97 Health & Stress in Society | 3
HLTH 117 Demystifying Health Research | 1
HLTH 221 Health and Social Justice | 3
ADMJ 51 Juvenile Procedures | 3
ADMJ 59 Organized Crime | 3
CDEV 53 Child Growth and Development | 3
CDEV 100 Violence and Its Impact on Children and Their Families | 3
CDEV 101 Intro to Violence Intervention | 3
IDST 17 Human Sexuality | 3
CRER 62 Successful Job Search Techniques | 1
CRER 63 Career Counseling for Work Experience | 1
WOMN 54 Politics of Sexual Violence | 3
WOMN 55 Ending Sexual Violence | 3
EMT 11A Pediatric CPR and First Aid or EMT 12 HLth Providers
Basic Life Support/First Aid | 0.5-2
or EMT 14 Advanced First Aid and Basic Life Support for Healthcare Providers | 0.5-2
LERN 51 College Success Basics or LERN 52A Study Strategies: Discipline Specific or LERN 32B Study Strategies: Skills Based | 0.5-1
**Total Units** | **22**

*Note: HLTH 201 (5 units) taken in the first semester. HLTH 202 (5 units) is taken in the second semester.*

**Community Mental Health Certificate**

The curriculum for this 16 unit Community Mental Health Certificate of Accomplishment is based on the wellness and recovery model in mental health. The program trains a diverse group of front-line health workers to provide culturally responsive mental health and recovery services in San Francisco. The program engages mental health consumers, their family members, and other interested individuals and communities. It is comprised of courses that promote the development of skills needed to become gainfully employed as a mental health worker and enhance the knowledge base of those already employed. As part of their education, students complete an internship with a local agency serving mental health consumers.

**Admission.** Admission to the program is based on:

The completion of prerequisite course HLTH 91 D, Introduction to Recovery Model in Mental Health (1 unit) with a grade of “C” or higher.

**Requirements for the Certificate of Accomplishment.** The Certificate requires the completion of 16 units. Each course must be completed with a final grade of “C” or higher.

**Internship.** Students must complete a semester long internship of at least 120 hours with an agency serving mental health consumers. Preparation and supervision for the field work experience will be provided in HLTH 104 and HLTH 105.

**Learning Outcomes**

Upon successful completion of the program students will be able to demonstrate the following:

• Summarize the impact of the social and consumer movements that have shaped the development and evolution of mental health wellness and recovery services along with related public policy.
• Describe key functions and approaches within the recovery movement, including consumer advocacy, self-help, intensive care management, peer counseling, motivational interviewing, harm reduction, person-centered counseling, strength based-approach, cultural humility, and wellness and recovery action planning.
• Formulate criteria for, and demonstrate competency in the applied practice of screening, intake, assessment, progress notes, behavioral health counseling, wellness and recovery action planning, and appropriate referrals with culturally diverse individuals, groups, and families.
• Plan, convene, and facilitate recovery and wellness based groups with diverse populations, including the development and presentation of educational materials.
• Appraise the effects of family concerns, rules, roles, values, beliefs, and cultural constructs, on emotional and relational health, interpersonal behavior, wellness, and substance abuse.
• Collaboratively support families in managing the effects of culture, environment, social systems, stigma, trauma, and human diversity in their recovery process.
• Demonstrate proficiency in articulating medical model and wellness/recovery based terminology, concepts, and service delivery principles in multiple settings and work environments.
• Produce reliable documentation of service delivery, apply evidence-based and community defined evidence counseling strategies, promote consumer leadership, and manage referrals and system navigation in a collaborative manner.
Mental Health Worker

Courses Required for the Certificate of Accomplishment in Community Mental Health Worker

Course | Units
--- | ---
HLTH 102 Helping Relationships: Recovery & Wellness | .3
HLTH 103 Community and Group Forums | .3
HLTH 88 Family Systems: Theories and Practice | .3
HLTH 104 Internship Prep. and Professional Conduct | .3
HLTH 105 Internship Placement and Performance | .3
Electives: total elective units (see below) | .1

Total Units: .16

Students must complete at least one unit from the following list of electives:

Course | Units
--- | ---
HLTH 9A Elder Abuse and Prevention | .0.5
HLTH 10 Health and Aging | .3
EMT 11A Pediatric CPR and First Aid | .0.5
EMT 12 Health Providers Basic Life Support | 1
EMT 13 Standard First Aid | .0.5
EMT 14 Advanced First Aid & Emergency Care | 2
HLTH 25 Women’s Health | .3
HLTH 27 Men’s Health | .3
HLTH 38 Trauma Response and Recovery | .3
HLTH 46 Immigrant Health | .3
HLTH 48 Violence as a Public Health Issue Prevention Strategies | .3
HLTH 65 Youth Development and Leadership | .3
HLTH 66 Chronic Conditions | .3
HLTH 67 HIV/STI Prevention Education | .3
HLTH 70 Physiological Effects of Addiction | .3
HLTH 90A Health Worker: Homeless Issues | .3
HLTH 90B Harm Reduction and Health | .0.5
HLTH 90C Trauma and Recovery: An Introduction | .0.5
HLTH 91C Hepatitis ABCs | .1
HLTH 95 Transgender Health: Working with Clients | 1
HLTH 97 Health & Stress in Society | .3
HLTH 110 Health Impacts of Incarceration | .3
HLTH 116 Conflict Resolution Skills | .1
CDEV 53 Child Growth and Development | .3
dS M5 Strategies for Problem Solving | .2
IDST 17 Human Sexuality | .3
LERN 50 College Success | .3
LERN 51 College Success Basics | 1
CRER 60 Creating Career Options | .3
CRER 61 Orientation to Career Success | .3
CRER 62 Successful Job Search Techniques | .1

Drug and Alcohol Studies Certificate

The Drug and Alcohol Certificate is accredited by the California Association for Alcohol and Drug Educators (CAADE). The curriculum for the Certificate in Drug and Alcohol Studies is designed to prepare individuals for work in the addiction field. The program emphasizes a public health approach that addresses community, social, and individual factors of addiction while providing certificate candidates with a strong background in treatment modalities, health education and prevention, professional and ethical responsibilities, and client advocacy.

Admission. Admission to the program is based on:

The completion of prerequisite course HLTH 100, Introduction to Drug & Alcohol Studies (1 unit) with a grade of “C” or higher.

Requirements for the Certificate of Achievements. The certificate requires the completion of 38.5 units. Each course must be completed with a final grade of “C” or higher.

Internship. Students must complete two full semesters of internship of at least 125 hours each with a state-licensed substance abuse services agency. Preparation and supervision for the field work experience will be provided in HLTH 79A and HLTH 79B.

Learning Outcomes

Upon successful completion of the program students will be able to:

- Provide a historical and sociological perspective on the use, abuse, and social control of psychoactive drugs, such as the basic concepts of social, political, economic, and cultural systems and their impact on drug-taking activity.
- Demonstrate the principles and practice of case management in addiction treatment including the processes of intake, screening, assessment, treatment planning, referral and documentation.
- Demonstrate a working knowledge of professional and ethical code of behavior: informing clients of their confidentiality rights, mandated reporting requirements, dual relationships, Tarasoff, Transference, Counter Transference, and personal and professional boundaries.
- Summarize the physiological processes and impacts of psychoactive drugs on clients, as well as the differences and similarities between and among physical and psychological dependency, tolerance, and withdrawal.
- Differentiate and discuss the concepts and practices of harm reduction and cultural humility.
- Compare and contrast the major concepts, definitions and features of co-occurring conditions associated with addiction.
- Describe the relationships among trauma, substance use and abuse, HIV and mental health.
- Conduct client-centered counseling drawing upon active listening and motivational interviewing skills.
- Formulate the basic concepts of family systems theory and families impacted by substance abuse.
- Describe, select and appropriately use strategies from culturally relevant models for group counseling with clients who abuse substances.
- Design and provide culturally relevant formal and informal education programs.

Courses Required for the Certificate of Achievement in Drug and Alcohol Studies

Course | Units
--- | ---
HLTH 30 Drugs and Society | .3
HLTH 70 Physiological Effects of Addiction | .3
HLTH 72 Cultural Aspects of Addiction | .3
HLTH 73 Case Mgmt/Indiv Intervention Skills | .3
HLTH 74 Criminology and Addiction | .3
Learning Outcomes

Upon successful completion of the program students will be able to demonstrate the following learning outcomes:

- Analyze the impact of various regulations and laws regarding access to healthcare for people who are Limited English Proficient (LEP) and apply these to the US healthcare system.
- Compare and contrast ethical standards in Healthcare Interpreting as promulgated by at least two different HCI organizations such as California Healthcare Interpreter Association (CHIA) and the National Council for Interpreting in Health Care, and apply the Ethical Decision Making Process as outlined in the CHIA standards.
- Explain the hierarchy and the nuances of interpreter roles in healthcare, and demonstrate the 4 principle roles of the interpreter in health care (message converter, message clarifier, cultural clarifier and patient advocate).
- Differentiate between 4 modes of interpreting (consecutive, simultaneous, sight translation and summarization), and summarize when each mode is the preferable choice.
- Analyze the subtleties, implications, and applications of various techniques used to manage the flow of communication such as the Transparency technique, the pre and post sessions, the use of 1st and 3rd person grammatical form, when interpreting from 1 language to another - and demonstrate these.
- Contrast and/or describe cultural beliefs and practices regarding health and healthcare between the dominant (US) culture, the culture of biomedicine and the various cultures of the LEP patient communities and describe cultural gaps between providers and LEP patients of the culture that the student will be interpreting.
- Describe anatomical features for at least 8 systems, and frequent diseases or disorders related to those systems, and Utilize 10 medical terms correctly in at least 10 different anatomical systems or health care modalities - in both English and the Language of Service (LOS).
- Name at least 5 different diagnostic technologies in at least two languages and be able to describe their use in the healthcare environment.
- Differentiate between interpreting environments such as remote, face-to-face, dedicated interpreters, dual-role interpreters, and free-lance interpreters.
- Demonstrate fluently and proficiently the ability to switch from 1 language to the other (English and LOS), using basic (non-medical) vocabulary and without the infiltration of words from the opposite language, interpreting with 95% accuracy and fluidity.
- Develop personal learning objectives, a plan for developing and improving interpreting skills, and produce a professional resume geared towards health care job market.
- Utilize technology in interpreting such as video conferencing equipment with confidence, and articulate the pros and cons of such technology.

Courses Required for the Certificate of Accomplishment in Health Care Interpreter

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>HLTH 80 Interpreting in Health Care I</td>
<td>6</td>
</tr>
<tr>
<td>HLTH 81 Interpreting in Health Care II</td>
<td>6</td>
</tr>
</tbody>
</table>

Health Care Interpreter Certificate

The curriculum for the 15 unit Health Care Interpreter Certificate is designed to train bilingual/bicultural students to become linguistically and culturally competent interpreters who can function effectively and efficiently in healthcare settings. Through academic preparation, practical skills training and service in community based health care settings, certificate candidates learn: a) roles and responsibilities of a health care interpreter; b) basic knowledge of common medical conditions, treatments and procedures; c) insight in language and cultural nuances for specific communities; d) application of interpreting skills in English and language of service. Both California and National Standards of Practice are included in the instruction.

Admission requirements. Admission is based on:

1. Proficiency in English and an additional language
2. Attendance required at introductory course-HLTH 84
3. Submission of written application distributed at HLTH 84 session
4. Priority is given to those who have successfully completed at least one of the recommended courses below
5. Up to four different languages are offered each semester depending on number of applicants.

Any student who receives a grade less than a “C” in HLTH 80, must re-apply for admission to the program in subsequent semesters.

Any student who takes HLTH 81 and 82 12 months or more after competing HLTH 80 must re-apply for admission to the program.

Requirements for the Certificate of Accomplishment.

Each course must be completed with a grade of “C” or higher or Pass.
Upon successful completion of the program students will be able to:

**Learning Outcomes**

1. Develop and attain the knowledge, skills, and competencies in the delivery of nutrition-related services in preparation for entry-level employment in the nutrition field.
2. Apply and integrate theoretical knowledge and acquire practical skills at supervised practice sites under the guidance of a registered dietitian.
   a. Describe the organization, its goals/purposes, and delivery of services.
   b. Communicate program value.
   c. Conduct program evaluation.
   d. Apply knowledge of basic nutrition principles.
   e. Demonstrate cross-cultural competence and respect for diversity.
   f. Maintain effective internal and external partnerships and interpersonal relationships.
   g. Demonstrate personal accountability.
   h. Maintain accurate records and reports.
   i. Demonstrate excellence in teaching.
   j. Administer nutrition screening, assessment, and counseling (of low-risk clients under supervision of Registered Dietitian).
   k. Apply knowledge of food safety and sanitation.
   l. Demonstrate technology literacy.
3. Achieve or progress towards educational or career advancement in nutrition and health field.

**Admission Requirements.** Admission to the program is based on the following:

1. Graduation from an accredited high school or have passed the G.E.D. test or have passed the California High School Proficiency examination.
2. Completion of HOEC 98, Introduction to Dietetics Profession with a grade of “C” or higher.
3. Recommended completion of ESL 150 or placement in ESL 160.

*If the number of students who meet criteria #2 exceeds maximum class size, admission will also be determined by the earliest registration date.

All applicants to the program must enroll in HOEC 98 which is offered the first five weeks of the fall semester. Upon admission to the program, the student will enroll in the other courses which start the sixth week of the same semester.

The certificate requires completion of 17 units. Each course must be completed with a final grade of C or higher and a Pass grade in the field experience.
Courses Required for the Certificate of Achievement in Nutrition Assistant

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>HLTH 170 Introduction to Dietetics Profession</td>
<td>1</td>
</tr>
<tr>
<td>HLTH 171 Nutrition for Health (or equivalent)</td>
<td>3</td>
</tr>
<tr>
<td>HLTH 172 Foodways, Nutrition and Health</td>
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</table>

Second Semester (Spring)

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>HLTH 173 Life Span Nutrition and Assessment</td>
<td>4</td>
</tr>
<tr>
<td>HLTH 174 Clinical and Community Nutrition</td>
<td>4</td>
</tr>
<tr>
<td>HLTH 175 Nutrition Assistant Field Experience</td>
<td>2</td>
</tr>
<tr>
<td>Total Units</td>
<td>17</td>
</tr>
</tbody>
</table>

Sexual Health Educator Certificate*

*See Women's Studies

Trauma Prevention and Recovery Certificate*

*See Interdisciplinary Studies

Child Development: Youth Worker Certificate*

*See Child Development and Family Studies

Announcement of Courses

Students enrolled in First Aid and CPR courses may be assessed a materials fee.

Credit, Degree Applicable Courses:

HLTH 6. End of Life Issues in the U.S. (3)

Lec-3

Advise: ENGL 92 or ESL 150 (or Placement in ENGL 93 or ESL 160)

Multidisciplinary survey of end of life issues including cultural perspectives, public health policy, health care systems, psycho-social theories and methodology, and decision-making about end of life care at the individual, family, community and societal level in the U.S. CSU/UC

HLTH 9A. Elder Abuse Prevention (.5)

Lec-8 (total hrs) P/NP available

Instruction in the different types of elder abuse, including physical, behavioral, and environmental indicators of elder abuse. Social aspects of aging, multicultural perspectives, and methods of prevention. CSU

HLTH 10. Health and Aging (3)

Lec-3, field trips P/NP available

Introduction to gerontology course gives broad overview of the health aspects of aging and the changes and challenges which take place in the aging process. Employs a multidisciplinary perspective, incorporating biology, psychology, sociology and health education. Uses gerontology theory and research methodology with a feminist and multicultural perspective and analysis. CSU/UC

HLTH 11B. Pediatric Preventive Health Education (0.5)

Lec-8 (total hrs) P/NP available

Instruction in the recognition and management of preventive health practices, prevention policies and injury prevention in the child care setting. Course fulfills the partial requirement of AB243 mandated Health and Safety Training established by the State EMS Authority for Childcare Providers. Qualified participants are awarded a CCSF Pediatric Prevention Health Education Training certificate of completion. CSU

HLTH 11C. First Aid Care for Ill Children (0.5)

Lec-8 (total hrs) P/NP available

Identification, transmission, control and care for common childhood illnesses and communicable diseases. Childcare first aid practices and procedures for the management of well children with mild illnesses, chronic health conditions and special needs. A City College of San Francisco First Aid Care for Ill Children certificate of attendance will be awarded to those who qualify. Course fulfills the partial continuing education requirement of the AB 243 mandated Health and Safety Training established by the State EMS Authority for Childcare Providers. CSU

HLTH 11D. Childcare Disaster Prep. (0.5)

Lec-8 (total hrs) P/NP available

Training for childcare personnel on how to develop their own program plan for disaster management and emergency preparedness. Instruction in preparing for and effectively dealing with, and recovery from emergency and crisis situations. A City College of San Francisco Childcare Disaster Preparedness certificate of attendance will be awarded to those who qualify. Fulfils the partial continuing education requirement of the AB 243 mandated Health and Safety Training established by the State EMS Authority for Childcare Providers. CSU

HLTH 11E. Child Passenger Safety (0.5)

Lec-8 (total hrs) P/NP available

Training for students in the fields of Health and/or Child Development, childcare providers and child safety advocates on Child Passenger Safety covering the legal, practical and policy aspects of safely transporting children. Includes an overview of Child Passenger Safety regulations, appropriate selection and installation of restraint systems, resources and development of an agency child transportation policy. CSU

HLTH 18. Community Disaster Prep. (1)

Lec-18 (total hrs) P/NP available

Training in community disaster management and emergency preparedness. Basic disaster skills instruction in utility control, identification of nonstructural hazards, hazardous materials awareness, fire extinguishing equipment and techniques, disaster medicine, search and rescue, team organization and management, and disaster psychology. A Neighborhood Response Team Training certificate of attendance will be awarded to those who qualify. CSU

HLTH 25. Women's Health (3)

Lec-3, field trips P/NP available

Advise: ESL 150 or Placement in ESL 160 or ENGL 92

Explores the social determinants and issues related to women's health on an individual and community level. Emphasis on evaluation of health resources, behavior change process, and role of risk factors and prevention. CSU/UC

HLTH 27. Men's Health (3)

Lec-3 P/NP available

Advise: ESL 150 or Placement in ESL 160 or ENGL 92

Exploration of the social determinants and issues related to men's health on the individual and community levels. Emphasis on evaluation of health resources, behavior change process, and role of risk factors and prevention. CSU/UC
HLTH 30. Drugs and Society (3)
Lec-3, field trips P/NP available
Prereq.: HLTH 100
Exploration of the nature and extent of the chemical "problem" in today's world. This course is designed to increase awareness, dispel myths and nurture critical thinking on numerous issues related to chemical use/misuse/dependency and society. CSU

HLTH 33. Introduction to Health and Wellness (2)
Lec-2
Advised: ESL 140 or placement in ESL 150
An introduction to the causes and consequences of illness and the prevention of major health conditions across the lifecycle. CSU/UC

HLTH 36. Health at Every Size: Shifting the Paradigm (3)
Lec-3 P/NP Available
Advised: ENGL 92 or ESL 150 or placement in ENGL 93 or ESL 160
Provides an overview of the Health at Every Size paradigm, which is based on the premise that the best way to improve health is to respect our bodies, regardless of what we weigh. HAES encourages self-care for the sake of well-being (rather than weight control) and promotes social justice. CSU

HLTH 38. Trauma Response and Recovery (3)
Lec-3 P/NP available
Prereq.: HLTH 25 or 27 or 30 or 48 or 60 or 64 or 67 or 100 or WOMEN 54 or CDEV 100 or Demonstration of Equivalent Knowledge and/or Skills
This course is designed for students in the health, justice, or social service fields. Students will review definitions of trauma, identity traumatic events, analyze ways trauma affects survivors, learn varying approaches to trauma recovery, and develop client-centered skills to support the recovery of others. CSU

HLTH 46. Immigrant Health (3)
Lec-3 P/NP available
Students will gain an understanding of the health issues that immigrants and their communities face, including physical and mental health. The impact of policies and access to health care as determinants to immigrant health outcomes will be explored. CSU

HLTH 48. Violence as a Public Health Issue Prevention Strategies (3)
Lec-3 P/NP available
Public health perspectives to understanding the causes and consequences of violence will be examined along with strategies for violence prevention, including preparation for working in community agencies serving at-risk and affected populations. CSU

HLTH 50. Tai Chi for Health (3)
Lec-2.5, lab-1.5, field trips P/NP available
Practical application of Tai Chi in daily lives can be introduced and understood through basic principles of Chinese Medicine as applied to exercise, diet, and environment. Tai Chi and Tai Chi Qigong are meditation in movement exercises and are methods of preventive health care, stress relief, mental alertness and bodily control. CSU/UC

HLTH 52. Critical Perspectives in Global Health (3)
Lec-3 P/NP available
Explores the primary determinants of global health, inequalities in health status among nations, and current challenges, controversies and public policy priorities. CSU

HLTH 53. Health in Society (3)
Lec-3 P/NP available
Advised: ENGL 92 or ESL 150 or placement in ENGL 93 or 94; or ESL 160
Critical analysis of the causes and contributors to individual and community health and illness based on public health and other social and behavioral sciences. Exploration of physical, mental, social and political aspects of health along with causes, consequences, prevention strategies and treatments for major health conditions across the life cycle. CSU/UC

HLTH 54. Introduction to Public Health (3)
Lec-3 P/NP available
Advised: ENGL 92 or ESL 150 (or placement in ENGL 92 or ESL 150)
Students will be introduced to the basic concepts of public health, including population-based approaches, epidemiological frameworks, and the social determinants of health. Students will discuss contemporary public health challenges, focusing on eliminating health disparities in chronic conditions, infectious diseases and behavioral health. CSU/UC

HLTH 59. Introduction to Community Health Work (1)
Lec-18 (total hrs), field trips
An introduction to the roles and function of Community Health Workers including Post Prison Health Worker and Youth Workers in the field of community health. Students will learn key public health concepts. Particular attention will be given to the social, political and economic factors that contribute to the health disparities of those communities and the roles CHWs play in helping to improve the many communities they work with including youth and those that have been formerly incarcerated. CSU

HLTH 64. Health Education Practice (3)
Lec-3
An introduction to the principles of health education including basic theories, practices, and participatory methods with a focus on meeting the diverse needs of communities and adult learners. Application of skills and management strategies covering topic such as: HIV/AIDS, drug and alcohol use, chronic disease, and violence. CSU

HLTH 65. Youth Development and Leadership (3)
Lec-3, field trips P/NP available
An introduction to the principles of youth development and approaches to investigating significant health issues affecting today’s youth with a focus on meeting the diverse needs of community and youth learners. Strategies and skills needed for engaging and involving young people in their own decision-making and community activism. CSU

HLTH 66. Health Education and Chronic Disease Management (3)
Lec-3 P/NP available
Instruction to the epidemiology and causes and consequences of the most common chronic diseases and barriers to overcoming them. Management of chronic disease, development of essential communication skills needed in the clinical setting, and challenges to working in a team based medical environment. CSU

HLTH 67. HIV/STI Prevention (3)
Lec-3 P/NP available
Education and skills training in HIV and Sexually Transmitted Infection (STI) prevention for diverse communities. Emphasis on harm reduction and structural interventions as well as personal and community based prevention strategies. CSU
HLTH 70. Physiological Effects of Addiction (3)
Lec-3
P/NP available
**Prereq:** HLTH 100
This course provides an understanding of basic physiology and pharmacology including how chemicals are metabolized, the effects of chemicals on basic nutrition and sexuality (including pregnancy), treatment implications and new medical research, the semantics of addiction, and the relationship between brain chemistry and craving. CSU

HLTH 72. Cultural Aspects of Addiction (3)
Lec-3, field trips
P/NP available
**Prereq:** HLTH 100
This course is a comprehensive, integral, and interdisciplinary approach in examining substance use and abuse within marginalized populations. Exploration of interrelated quality of life issues that influence and contribute to substance use and misuse. CSU

HLTH 73. Case Management/Individual Intervention (3)
Lec-3, field trips
P/NP available
**Prereq:** HLTH 72, 75 (for Drug & Alcohol Cert. students only); HLTH 64, 67, 91C (for HIV/STI Cert. students only)
Skill development will focus on communication skills and techniques used for client-centered health advising, intake and data collection processes, documentation and referrals, with ethical considerations regarding the scopes of practice and competency for clinicians and agencies. Students will develop the skills needed to work in behavioral health agencies, including community settings, and develop appropriate strategies in a holistic process of managing cases for diverse populations. CSU

HLTH 74. Criminology and Addiction (3)
Lec-3, field trips
P/NP available
**Prereq:** HLTH 30, 70, AND 78
A comprehensive examination of various theories of addiction and their application to incarcerated populations, men, women, and youth. An analysis and exploration of theories of incarceration, diversity, prevention of gang involvement, criminal behavior and recovery from addiction. CSU

HLTH 75. Treatment Modalities (3)
Lec-3, field trips
P/NP available
**Prereq:** HLTH 30, 70, 78
Exploring the differing models of treatment. Basic clinical strategies, and interventions will be analyzed and practiced. The course will focus on developing clinical interviewing, assessment and treatment planning skills, with emphasis in cultural appropriate and case conceptualization. CSU

HLTH 77. Co-Occurring Disorders (3)
Lec-3, field trips
P/NP available
**Prereq:** HLTH 30, 70, 78,
This course will help students to identify common pre-existent or concurrent psychiatric disorders that may surface with substance use. CSU

HLTH 78. Ethical Issues for Addiction Counselors (2)
Lec-2, field trips
P/NP available
**Prereq:** HLTH 100
An introduction to ethical and legal issues in the addictions field. Students will develop a framework for addressing ethical and legal issues. Students will gain an understanding of laws, code of ethics and client rights. The relationship between one's own personal values and professional behavior will be explored. CSU

HLTH 79A. Beginning Field Work (3)
Lec-3, work-8
P/NP available
**Prereq:** HLTH 72, 74, AND 75
Training students to acquire practical field experience in alcohol and other drugs settings. Students will work in drug and alcohol treatment programs as part of their internship requirements. CSU

HLTH 79B. Advanced Field Work (3)
Lec-3, work-8, field trips
P/NP available
**Prereq:** HLTH 79A, 83
This course provides students with hands-on learning experiences in settings involving all aspects of the recovery process. CSU

HLTH 80. Interpreting in Health Care I (6)
Lec-6, field trips
P/NP available
**Prereq:** HLTH 84
Training for bilingual individuals to develop awareness, knowledge, and skills necessary for effective language interpretation in health care settings. Emphasis include the roles and responsibilities of a health care interpreter, basic knowledge of common medical conditions, treatments and procedures, insight in language and cultural nuances for specific communities necessary in the art of interpretation. Students who receive a D or F grade must reapply to the HCI program. CSU

HLTH 81. Interpreting in Health Care II (6)
Lec-6, field trips
P/NP available
**Prereq:** HLTH 80
Advanced training for bilingual individuals as integral members of the healthcare teams; bridging linguistic and cultural gaps between clients and providers. Specialized focus in healthcare service areas: genetics, mental health, immunology, men’s and women’s health. Advanced skills: ethical decision making; memory development, patient advocacy, listening skills. Continued development of cultural competency. CSU

HLTH 82. Field Experience in Health Care Interpreting (3)
Lec-.3, field trips
P/NP available
**Coreq:** HLTH 81
Training interpreters in facilitating linguistic and cultural communication between client and health care providers. Knowledge and technical interpreting skills studied and practiced in the classroom will be applied in the field, and classroom lecture and practice including simulations. CSU

HLTH 83. Motivational Counseling Skills (3)
Lec-3
P/NP available
**Prereq:** HLTH 72, 74, AND 75
An examination of models and techniques used to counsel clients in addiction treatment settings with an emphasis on Motivational Counseling. CSU

HLTH 84. Introduction to Interpreting in Health Care (0.5)
Lec-.5
Bilingual students are introduced to the field of interpreting in health care. Required for CCSF's Healthcare Interpreting (HCI) Certificate Program, students are introduced to the California HCI Standards, and explore the roles, scopes and practice of healthcare interpreters. The HCI program will be explained and linguistic proficiencies will be assessed. CSU

HLTH 88. Family Systems: Theories and Practice (3)
Lec-3
P/NP available
**Prereq:** HLTH 72 AND 75
This course offers and introduction to the applied practice and theo
retical principles of working with family systems in behavioral health settings. The course examines the definition and impact of family roles, rules, dynamics, and communication styles. Social systems, stigma, trauma, and chemical dependency are considered. CSU

HLTH 89. Individual Study in Health Education (1-2-3)
Ind st-5, 10, 15 P/NP available
Supervised individual or group study on topics and issues in public and community health. CSU

HLTH 90. Selected Topics in Health Education (0.5)
Lec-0.5 P/NP available
Investigation of current and emerging health concerns which affect our communities, professions and occupations. Designed to provide in-depth and intensive examination of health issues relevant to the fields of public health and social services. CSU

HLTH 90B. Harm Reduction and Health
HLTH 90C. Trauma and Recovery: An Introduction

HLTH 91. Selected Topics in Health Education (1)
Lec-1 P/NP available
Investigation of current and emerging health concerns which affect our communities, professions and occupations. Designed to provide in-depth and intensive examination of health issues relevant to the fields of public health and social services. CSU

HLTH 91A. Hepatitis ABC's
HLTH 91C. Hepatitis ABC's
HLTH 91D. Recovery Model in Mental Health
HLTH 91F. Introduction to Grant Writing Process
HLTH 91G. Health, Education, and Equity

HLTH 95. Transgender Health: Working with Clients and Communities (1)
Lec-1 P/NP available
A critical analysis of the health status of transgender people. The course will provide knowledge, skills, and resources necessary to work effectively in health and social service settings that serve transgender clients and communities. CSU

HLTH 97. Health & Stress in Society (3)
Lec-3, field trips P/NP Available
Overview of social and behavioral theories and core concepts of stress, stress reduction and stress management. Critical assessment of the health impacts of stress on individuals, communities, and society. Evidence based approaches to reducing stress responses and promoting improved health indicators will be explored. CSU

HLTH 100. Introduction to Drug and Alcohol Studies (1)
Lec-1, field trips P/NP available
This course provides an overview of the Drug and Alcohol counseling field and an orientation to the requirements of Health Science Department's Alcohol and Drug program. Students will identify necessary skills and potential challenges to success in the field. CSU

HLTH 102. Helping Relationships: Recovery and Wellness (3)
Lec-3 P/NP available
Prereq: HLTH 91D
This course offers and introduction to the applied and theoretical principles of recovery, wellness, and psychosocial rehabilitation with individuals in behavioral health settings. The course emphasizes consumer-directed goal setting, collaboration, motivational interviewing, assessment, wellness and recovery action plans, documentation, systems navigation and linkage crisis management, and recovery movement policy.

HLTH 103. Community and Group Forums (3)
Lec-3
This course offers an introduction to community evaluation methods, action planning, community and group dynamics, and leadership and group facilitation skills. It prepares students to work in the fields of behavioral health recovery, chemical dependency, and HIV/STD prevention education.

HLTH 104. Internship Preparation and Professional Conduct in Mental Health (3)
Lec-3
Prereq: HLTH 102
The course prepares students for internship placement in behavioral health settings. Emphasis is placed on reviewing and practicing course counseling skills, legal and ethical issues, standard documentation of service delivery, expectations and responsibilities, cultural humility, self-care, and placement strategies including resume writing and employment interviewing skills.

HLTH 105. Internship Placement and Performance (3)
Lec-3
This course mentors students through the process of completing all internship placement requirements in behavioral health settings. It prepares students to complete the community mental health certificate program and to provide services in the field of mental health recovery.

HLTH 110. Health Impacts of Incarceration (3)
Lec-3 P/NP Available
Health impacts of incarceration on the individual, families and communities. Policies and service deliveries to formerly incarcerated people will be explored. The promotion of positive health outcomes among formerly incarcerated populations will be examined. CSU

HLTH 116. Conflict Resolution in the Health Care Workplace (1)
Lec-1 P/NP Available
Students will learn practical skills and strategies for the management of conflict in the health care workplace. Models and approaches of conflict resolution will be discussed. Implications of culture and power dynamics on conflict resolution will be examined. CSU

HLTH 117. Demystifying Health Research (1)
Lec-1
This course presents and overview of research basics for Community Health Workers and others concerned with promoting community health. A focus of the course will be the ethics and politics surrounding research in communities of color and the principles of research justice as a means to address health inequalities.

HLTH 120. Health and Educational Justice (3)
Lec-3
Exploration of how race, class and gender impact health and education. General education skills will be applied to public health concepts. CSU

HLTH 161. San Francisco System of HIV Prevention (.5)
Lec-8 (total hrs) P/NP Available
Overview of current San Francisco HIV prevention policy and practice including rationale for new directions in HIV prevention and program focus areas. CSU
HLTH 162. Drivers of HIV in San Francisco (.5)  
Lec-8 (total hrs) P/NP available  
Overview of the specific drivers linked to new HIV infection in San Francisco with a focus on substance use and specific Sexually Transmitted Infections and sexual behaviors. Discussion of the larger social contexts that influence these drivers and co-factors.  
Examination of current HIV prevention programming with a focus on these issues. CSU

HLTH 163. Prevention with Positives (.5)  
Lec-8 (total hrs) P/NP available  
Overview of strategies and interventions that address the specific needs of people who know they are living with HIV. This course will cover the required elements of Prevention with Positives programming in San Francisco. CSU

HLTH 164. HIV Prevention Messages (.5)  
Lec-8 (total hrs) P/NP available  
Overview of HIV prevention messages for gay men, injection drug users, and transfemales, with instruction in communication skills to convey the messages. CSU

HLTH 170. Introduction to Dietetics Profession(1)  
Lec-16 (total hrs)  
Focuses on the scope and nature of work in the nutrition field, including higher education pathways, career opportunities, professional roles, skills, responsibilities, ethics. Includes guest presentations by various nutrition paraprofessionals and networking opportunities with registered dietitians. This course is a prerequisite for acceptance of the Nutrition Assistant Program. CSU  
Formerly HOEC 98

HLTH 171. Nutrition for Health (3)  
Lec-3  
The course uses a practical approach to the study of nutrients with emphasis on their physiological roles, food sources, and health implications. Basic principles and tools for planning a healthy diet, and nutrition issues of current interest will be analyzed. CSU  
Formerly HOEC 99

HLTH 172. Foodways, Nutrition and Health (3)  
Lec-54 (total hrs)  
Prereq.: HLTH 170  
A study of the cultural and socioeconomic influences on the food habits of different ethnic groups in the United States and their diet-related health risks and implications. Cross-cultural counseling strategies, food service sanitation and safety, and optional use of the food dollar will also be covered. CSU  
Formerly HOEC 100

HLTH 173. Life Span Nutrition and Assessment (4)  
Lec-66 (total hrs)  
Nutritional needs and special nutrition issues common at different periods of the life cycle from conception, infancy, childhood, adolescence, young, middle and late adulthood, including pregnancy and lactation. Also covers nutrition screening parameters to assess nutrition risk for each age group. CSU  
Formerly HOEC 104

HLTH 174. Clinical and Community Nutrition (4)  
Lec-66 (total hrs)  
A two-part course that focuses on the principles of medical nutrition therapy and on nutrition applications in public health. Intended for those planning careers in the field of nutrition. CSU  
Formerly HOEC 105

HLTH 175. Nutrition Assistant Field Experience (2)  
Conf-35, lab-8, work-160 (total hrs) P/NP Only  
Prereq.: Completion of HLTH 170, 171, 172, 173 & 174 with a grade of “C” or higher  
Learn entry-level, job-specific skills and competencies in the delivery of nutrition care and services under the supervision of registered dietitians while placed at various field experience sites such as Women, Infants, and Children (WIC) Supplemental Nutrition Programs, Head Start, senior nutrition programs, public health agencies, or other health care settings. CSU  
Formerly HOEC 106

HLTH 176. Sports Nutrition (3)  
Lec-3  
Overview of the science of sports nutrition, with emphasis on nutrition as it applies to fitness, sport-specific training, and athletic performance. Topics include nutrient requirements and dietary recommendations, energy metabolism, weight management, special nutrient needs during training and competition, nutritional ergogenics. CSU  
HLTH 176=PE 20  
Formerly HOEC 108

HLTH 177. Introduction to Child Nutrition (3)  
Lec-3  
Overview of child nutrition issues, with an emphasis on practical skills and approaches to influence positive eating behaviors that promote optimal health and nutrition. Topics include basic nutrition principles, planning healthy meals and snacks, food safety, childhood obesity, physical activity, nutrition education, child nutrition programs and food assistance resources. CSU  
HLTH 177=CDEV 107  
Formerly HOEC 107

HLTH 201. CHW Principles and Practice 1 (5)  
Lec-5  
Prereq: HLTH 59 and Acceptance into CHW Certificate Program  
Trains and prepares students for CHW positions in the health and social service fields. The course emphasizes skill development in areas such as: health advising, documentation, interviewing and intake, and client advocacy. CSU

HLTH 202. CHW Principles & Practice 2 (5)  
Lec-5  
Prereq: HLTH 201  
Students will continue to develop and master core competency skills as health advising, documentation, service coordination, and interviewing and intakes to prepare them for work at their internships with employer partners. This course will also provide an overview of topical health and social issues most important for CHWs such as the current health care delivery system and our aging communities. CSU

HLTH 221. Health and Social Justice (3)  
P/NP available  
Health inequalities in the U.S. stem from unequal living conditions. We will use case studies from the PBS film series Unnatural Causes: Is Inequality Making Us Sick? We explore how class, racism, and gender shape epidemics, and learn how to influence policy and advocate for health and social justice. CSU
Upon completion of courses in History, students will be able to:

**Learning Outcomes**

- Demonstrate the ability to critically analyze, evaluate and synthesize historical evidence and interpretations and to use methods of inquiry and expression appropriate to the course.
- Demonstrate the ability to interpret primary and secondary sources and to compose a written argument of interpretation which uses them, as appropriate, for support.
- Explain the major social, cultural, political and economic developments in United States history, their causes and effects, and their historical significance.
- Demonstrate an understanding of the major social, cultural, political and economic developments in non-western countries and their historical impact on the western world and global development.
- Exhibit an understanding of the art, literature, and major cultural traditions of people through the ages, as appropriate.

**Noncredit Courses:**

- **HLTH 5018. Tai Chi for Health (36-270 hrs)**
  Tai Chi Chuan is a stylized form of movement that promotes both mental and physical well-being. This course is an introduction to the Chinese style of exercises known as Tai Chi Chuan, and it will teach the student Yang style Tai Chi form.

- **HLTH 5020. Elder Abuse Prevention (8 hrs)**
  Instruction in the different types of elder abuse, including physical, behavioral, and environmental indicators of elder abuse. Social aspects of aging, multicultural perspectives, and methods of prevention.

- **HLTH 5122. Consumer Education - Health and Nutrition (54 hrs)**
  Practical information, effective strategies, and skills that teach the student how to practice good nutrition, manage personal health, and maintain an active, healthy lifestyle in the later years. Formerly HOEC 6122

- **HLTH 5410. Organization of Health Services (8 hrs)**
  Overview of the financing and organization of health services in the United States. This course is designed for recent immigrants who have health professional training. The course will address the major functional components of the health system, including financing, health insurance, care delivery systems, the “safety net”, and issues of cost, quality and access.

- **HLTH 5420. Public Health and Society (8 hrs)**
  Introductory overview of the health and wellness in the United States. This course is designed for recent immigrants who have health professional training. Content areas include: public health; the determinants of health; American values about health and health care services; measuring health status and disparities; and the history and evolution of biomedicine.

- **HLTH 5430. Health Professions and Practice (8 hrs)**
  Overview of health care practice and professional culture. This course is designed for recent immigrants who have health professional training. The course will describe the major health professions and occupations, educational pathways, the organization and culture of their practice, licensure and other regulations affecting professional practice and the delivery of health services.

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**History Major (AA-T)**

**Associate in Arts in History for Transfer.** History is the study of multiple aspects of human behavior including the development of world civilizations; the creation of arts, literature, philosophy, and science; development of cultural heritages, political institutions, international diplomacy; and the significant achievements of human kind. The History major is designed to develop knowledge, analytical skills, and critical insight into the nature of humanity and the historical underpinnings of our current world. The core History program includes survey studies on the United States and Western Civilization. Survey courses on specific continents such as Africa, Latin America, and Asia, and focused studies on specific countries such as China, the Philippines, and Mexico, provide a breadth of coverage of international developments. Attention to traditionally under-represented groups such as women, African Americans, Latinos, Asian Americans, Native Americans, Lesbian, Gay, Bi and Transgendered peoples provides a multicultural emphasis on human achievement. The aim is to prepare students for active participation in all areas of life, with a deep understanding of how the present has been shaped by the past, and to prepare for transfer to a four-year university, and then to a range of possible careers.

**Learning Outcomes**

Upon completion of this degree, students will be able to:

- Demonstrate a breadth of knowledge of historical developments and trends, including the impact of class, gender, ethnicity, culture and politics related to the courses taken.
- Demonstrate the ability to critically analyze, evaluate and synthesize historical evidence and interpretations and to use methods of inquiry and expression appropriate to the course.
- Demonstrate the ability to interpret primary and secondary sources and to compose a written argument or interpretation which uses them, as appropriate, for support.
- Explain the major social, cultural, political and economic developments in United States history, their causes and effects, and their historical significance.

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**History**

Office: Batmale 656
Phone Number: (415) 239-3330
Web Site: www.ccsf.edu/socialsci

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**Announcement of Curricula**

Learning Outcomes

Upon completion of courses in History, students will be able to:

- Demonstrate a breadth of knowledge of historical developments and trends, including the impact of class, gender, ethnicity, culture and politics related to the courses taken.
- Demonstrate the ability to critically analyze, evaluate and synthesize historical evidence and interpretations and to use methods of inquiry and expression appropriate to the course.
- Demonstrate the ability to interpret primary and secondary sources and to compose a written argument or interpretation which uses them, as appropriate, for support.
- Explain the major social, cultural, political and economic developments in United States history, their causes and effects, and their historical significance.
- Analyze changes in the political, social, cultural and economic organization in the western world and explain their historical significance.
- Demonstrate an understanding of the major social, cultural, political and economic developments in non-western countries and their historical impact on the western world and global development.
- Exhibit an understanding of the art, literature, and major cultural traditions of people through the ages, as appropriate.

Degree Requirements: Students who wish to earn the Associate in Arts in History for Transfer (AA-T) must complete 60 CSU transferable units with at least a 2.0 grade point average. This must include the units required for full completion of the IGETC or CSU GE curriculum and the 21 units for the major as specified below. Each course in the major must be completed with a grade of "C" or better. Courses used to meet the major requirements may also be used to meet IGETC or CSU GE requirements.

Courses Required for the Major in History

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core Courses - minimum 12 units:</td>
<td></td>
</tr>
<tr>
<td>HIST 17A The United States</td>
<td>3</td>
</tr>
<tr>
<td>HIST 17B The United States</td>
<td>3</td>
</tr>
<tr>
<td>HIST 4A Western Civilization</td>
<td>3</td>
</tr>
<tr>
<td>HIST 4B Western Civilization</td>
<td>3</td>
</tr>
</tbody>
</table>

Diversity Course: United States Under-Represented Groups Choose any One of the following for a minimum of 3 units:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIST 9 Immigrants in American History</td>
<td>3</td>
</tr>
<tr>
<td>HIST 12A United States Women’s History</td>
<td>3</td>
</tr>
<tr>
<td>HIST 12B United States Women’s History</td>
<td>3</td>
</tr>
<tr>
<td>HIST 15A The Indian in North America</td>
<td>3</td>
</tr>
<tr>
<td>HIST 15B The Indian in North America</td>
<td>3</td>
</tr>
<tr>
<td>HIST 18A History of Latin America</td>
<td>3</td>
</tr>
<tr>
<td>HIST 18B History of Latin America</td>
<td>3</td>
</tr>
<tr>
<td>HIST 20 History of Mexico</td>
<td>3</td>
</tr>
<tr>
<td>HIST 21 History of the Mexican American/Chicano</td>
<td>3</td>
</tr>
<tr>
<td>HIST 31 The History of England</td>
<td>3</td>
</tr>
<tr>
<td>HIST 32 History of Russia</td>
<td>3</td>
</tr>
<tr>
<td>HIST 33 History of South Asia</td>
<td>3</td>
</tr>
<tr>
<td>HIST 34 The History of Japan</td>
<td>3</td>
</tr>
<tr>
<td>HIST 35A History of China</td>
<td>3</td>
</tr>
<tr>
<td>HIST 35B History of China</td>
<td>3</td>
</tr>
<tr>
<td>HIST 36 History of Southeast Asia</td>
<td>3</td>
</tr>
<tr>
<td>HIST 37 History of the Philippines</td>
<td>3</td>
</tr>
<tr>
<td>HIST 38 The Antebellum South in America</td>
<td>3</td>
</tr>
<tr>
<td>HIST 39 U.S. Presence in the Western Pacific Rim</td>
<td>3</td>
</tr>
<tr>
<td>HIST 40 California</td>
<td>3</td>
</tr>
<tr>
<td>HIST 41A The African American in the United States</td>
<td>3</td>
</tr>
<tr>
<td>HIST 41B The African American in the United States</td>
<td>3</td>
</tr>
<tr>
<td>HIST 44 Comparative History of Overseas Chinese</td>
<td>3</td>
</tr>
<tr>
<td>HIST 45 Lesbian and Gay American History</td>
<td>3</td>
</tr>
<tr>
<td>HIST 48 African History</td>
<td>3</td>
</tr>
<tr>
<td>HIST 49 History of San Francisco</td>
<td>3</td>
</tr>
<tr>
<td>HIST 50 United States Railroad History</td>
<td>3</td>
</tr>
<tr>
<td>HIST 53A The Civil War</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Units: 21

Announcement of Courses

Credit, Degree Applicable Courses:

HIST 1. The United States Since 1900 (3)
Lec-3
An in-depth history of the United States since 1900, with emphasis on the more important political, economic, social, artistic, and cultural aspects of American life and on the role of the United States in world affairs. CSU/UC

HIST 3A-3B. The People's Century (3-3)
Lec-3, field trips P/NP available
This course surveys the history of our times, offering insight into the turbulent events of these 100 years. Emphasis will be placed on the social and political upheaval of the times, including war and revolution - and great expectations. Also illustrates how and why the 20th century was shaped as much by the masses and the force of the common people as by the elite and powerful. CSU/UC

HIST 4A-4B. Western Civilization (3-3)
Lec-3
HIST 4A is not prerequisite to 4B
HIST 4A. Development of Western Civilization from ancient times through the Reformation. The emergence of civilization in the Near East; Greek and Roman contributions, development of Christianity, Byzantine influences, the Middle Ages, and the intellectual and religious changes of the Renaissance and Reformation. CSU/UC/C-ID HIST 170
HIST 4B. Development of Western Civilization since the Reformation and into the twentieth century. The emergence of modern Europe, overseas expansion of European civilization, great-power rivalries, the French and industrial revolutions, the con
solidation of nation states, and the development of parliamentary democracy and scientific, intellectual, and cultural developments. CSU/UC

HIST 5. Europe Since 1900 (3)
Lec-3
A survey of developments since 1900 with emphasis on European and world relationships since 1914. The political-economic-social effects on Europe of the World Wars and the power blocks. The reason for current European attitudes. CSU/UC

HIST 9. Immigrants in American History (3)
Lec-3
Comparison of selected Asian, European and Latino groups in the United States from colonial times to the present. Students examine and compare economic, social, and cultural contributions of immigrant communities; evaluate immigration and naturalization policies; and discuss issues of acculturation and ethnic identity. Meets American Cultures requirement at U.C. Berkeley. CSU/UC

HIST 12A-12B. United States Women's History (3-3)
Lec-3

HIST 12A IS NOT PREREQUISITE TO 12B
An in-depth study of the experiences, roles and contributions of women in the political, economic, social and cultural developments of the United States across racial, ethnic, and class lines. CSU/UC

HIST 12A. Pre-colonial period through the 1880's.
HIST 12B. From 1890 to the present.

HIST 15A-15B. The Indian in North America (3-3)
Lec-3

HIST 15A IS NOT PREREQUISITE TO 15B
The Indian in North American history. CSU/UC

HIST 15A. Emphasis on Indians east of the Mississippi starting with the period of European colonization, continuing with the establishment of American domination and the removal policy, and ending with their participation in the Civil War.

HIST 15B. Emphasis on the life styles of Indians living west of the Mississippi and their wars in defense of their homelands. Governmental policies enacted toward the Indians during the twentieth century.

HIST 17A-17B. The United States (3-3)
Lec-3

HIST 17A IS NOT PREREQUISITE TO 17B
The history of the United States from Colonial Times to the present. A survey of the more important political, economic, social, artistic, and cultural aspects of American life as well as of the role of the United States in world affairs.

HIST 17A. Pre-colonial to the end of the Civil War. CSU/UC
HIST 17B. End of the Civil War to the present. CSU/UC

HIST 18A-18B. History of Latin America (3-3)
Lec-3

HIST 18A IS NOT PREREQUISITE TO 18B
A survey of Latin American history, institutions, culture, and art from colonial times to present. CSU/UC

HIST 20. History of Mexico (3)
Lec-3

HIST 21. History of the Mexican American/Chicano (3)
Lec-3
Survey of historical processes undergone by the Mexican American/Chicano from pre-Conquest to the present. Social, political, economic, artistic, and cultural trends. Emphasis on the history of the United States to explain the contemporary status of Mexican American/Chicanos. CSU/UC

HIST 31. Introduction to the History of England (3)
Lec-3

HIST 32. History of Russia (3)
Lec-3

HIST 33. History of South Asia (3)
Lec-3

HIST 34. The History of Japan (3)
Lec-3

HIST 35A-35B. History of China (3-3)
Lec-3

HIST 35A IS NOT PREREQUISITE TO 35B
Intellectual, social, political, and economic development of China from ancient times to the present. Emphasis in second semester on twentieth century China, concentrating on the rise of nationalism and Communist rule on the Mainland. CSU/UC

HIST 35A. Ancient times to approximately 1900.
HIST 35B. 1900 to present.

HIST 36. History of Southeast Asia (3)
Lec-3

HIST 37. History of the Philippines (3)
Lec-3

HIST 38. The Antebellum South in American History (3)
Lec-3

HIST 39. The United States Presence in the Western Pacific Rim: An Introduction (3)
Lec-3

A survey course on the evolution of US interests, expansion and for
eign policies in the Western Pacific Rim area, specifically the countries in East Asia and Southeast Asia. CSU/UC

HIST 40. California (3)
Lec-3 P/NP available
A search for meaning in the forces, events, and lives that have shaped the present-day destiny of the Golden State and the Pacific Slope, beginning with the Spanish conquistadors and the period of exploration, extending through the '49er era and statehood, and including present-day political, social, and economic trends. CSU/UC

HIST 41A-41B. The African American in the United States (3-3)
Lec-3 P/NP available
The political, social, artistic, and cultural history of the African American in the United States, from the African heritage to the present. CSU/UC

HIST 41A. From the African heritage through the Civil War.
HIST 41B. From the Reconstruction to the present.

HIST 44. Comparative History of Overseas Chinese (3)
Lec-3 P/NP available
The history and social organization of overseas Chinese communities in Southeast Asia, North America, and Latin America from the Eastern Han Dynasty to the present. CSU/UC

HIST 45. Lesbian and Gay American History (3)
Lec-3, field trips P/NP available
A survey of the origins, development, and current status of the Gay, Lesbian, and Bisexual reform and liberation movements in the United States during the last two centuries, with particular emphasis since the Second World War. The lives, communities, organizations, and resistance movements created by lesbian, gay, and bisexual peoples from diverse racial, ethnic, and class backgrounds. CSU/UC

HIST 46. Independent Studies in History (1)
Ind st-5 An individualized reading or research program. CSU (UC upon review)

HIST 47A-47B-47C-47D. Discussions in History (1-1-1-1)
Lec-1 P/NP available
Discussions and field trips. CSU (UC upon review)

HIST 48. African History (3)
Lec-3 P/NP available
A survey of African history from the beginning of man to the present. Its geography, race, development of major states, art, culture, population movements, European influence, and nationalism. CSU/UC

HIST 49. History of San Francisco (3)
Lec-3, field trips P/NP available
The growth of San Francisco from its origins as an Indian-Spanish-Mexican settlement to the metropolis of the San Francisco Bay Area. Emphasis on the role of San Francisco as the political, social, cultural, commercial, and artistic capital of the West Coast. CSU

HIST 50. United States Railroad History (3)
Lec-3, field trips P/NP available
United States Railroad History covers the History and evolution of the railroad industry in North America, including the geographical expansion, technical advancements, sociological influences, government involvement, and economic impacts of the railroads and related businesses in the United States, Canada and Mexico. CSU

HIST 51-52-53. Selected Topics in History (1-2-3)
Lec-1,2,3 P/NP available
Selected topics in history will be explored through lectures, discussions, film, video, and/or television leading to a critical analysis and understanding of the topic under consideration.

HIST 53A. The Civil War. CSU

Announcement of Courses
Credit, Degree Applicable Courses:
HUM 7. Comparative Religions (3)
Lec-3, field trips P/NP available
A survey of the religions: Hinduism, Buddhism, Taoism, Judaism, Christianity, and Islam. An analysis of the origins of these religious as well as their cultural contexts and present-day issues. CSU/UC

HUM 8. Philosophies of Religions (3)
Lec-3, field trips P/NP Available
A close reading of the sacred scriptures of six of the world's great religious (Hinduism, Buddhism, Daoism, Judaism, Christianity, and Islam), including their influences on their cultures and today's world. CSU/UC

HUM 11. Music, Art, and Literature: Traditional Concepts (3)
Lec-3, field trips P/NP available
An introduction to traditional concepts in the humanities embracing the visual arts, music, literature, and the cross-cultural life of the community. Development of awareness for both cultural diversity and shared concepts. Background for guided discussions and study provided through the use of recordings, readings, slides, tape recording, films, as well as field trips (on the students' own time) to museums, concerts, and plays. CSU/UC

HUM 12. Music, Art, and Literature: Modern (3)
Lec-3, field trips P/NP Available
An introduction to modern concepts in the humanities, embracing the visual arts, music, literature, and the cross-cultural life of the commu-
nity, including exposure to the Bay Area’s artistic communities. CSU/UC

HUM 20. Bay Area Arts (3)
Lec-3, field trips P/NP available
Special studies in the Bay Area and how the forms of architecture, art, music, literature, and other aesthetic expressions define our regional culture and our position in the broader international field of the arts. CSU/UC

HUM 25. Women in the Arts (3)
Lec-3, field trips P/NP available
A cross-cultural survey of women’s achievements in the visual, literary, and performing arts made through examination of current and historical examples. Student understanding is informed by original, biographical, and critical texts and enhanced by cultural theories of aesthetics, sex, gender, and race. CSU/UC

HUM 28. African American Literature (3)
Lec-3, field trips P/NP available
A study of African American literature, philosophy, art, and music through an examination of examples and a comparison of biographical, and critical texts and enhanced by cultural theories of aesthetics, sex, gender, and race. CSU/UC

HUM 41A. Western Cultural Values (3)
Lec-3, field trips P/NP available
ADVISE: ENGL 96 OR PLACEMENT IN ENGL 1A
The evolution of Western consciousness from Paleolithic times to the Renaissance. Emphasis on the creations of those artists and thinkers whose styles and modes of thought reflect the cultural temper of their times. CSU/UC

HUM 41B. Western Cultural Values (3)
Lec-3, field trips P/NP available
ADVISE: ENGL 96 OR PLACEMENT IN ENGL 1A
HUM 41A IS NOT PREREQUISITE TO 41B.
The evolution of Western consciousness from the Renaissance to the modern era. Emphasis on the creations of those artists and thinkers whose styles and modes of thought reflect the cultural temper of their times. CSU/UC

HUM 48. African American Music, Art, and Literature (3)
Lec-3, field trips
A study of significant works in African American literature, philosophy, art, and music through an examination of examples and a comparison with other cultural expressions in the United States. CSU/UC

Interdisciplinary Studies
Office: Batmale 338
Phone Number: (415) 452-5343
Web Site: www.ccsf.edu/Departments/IDST

Announcement of Curricula

Collaborative Design Certificate

The 17-unit certificate program in Collaborative Design provides students with a strong foundation in multidisciplinary approaches to design and collaboration. Our approach offers students the collaborative skills and experiences needed for success in today’s workplace. This program will enhance a focused study in any design discipline or provide an introduction to design thinking and making for all students.

Learning Outcomes

Upon completion of this certificate, students will be able to:

- Demonstrate knowledge of the historical and contemporary practice of collaboration across a range of design disciplines
- Work collaboratively within a creative team
- Critically evaluate and discuss the merits of various concepts and approaches to design solutions, using design vocabulary
- Employ a structured iterative process (identification, research, ideation, development, analysis and prototyping) to solve a variety of design problems
- Use sketching as a tool for visual problem solving and
- Understand color theories and select and apply color harmonies in a meaningful way in their creative work.

Courses Required for the Certificate of Accomplishment in Collaborative Design

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>DSGN 101 Design Fundamentals</td>
<td>3</td>
</tr>
<tr>
<td>DSGN 105 Survey of Collaborative Design</td>
<td>3</td>
</tr>
<tr>
<td>DSGN 110 Rapid Visualization</td>
<td>3</td>
</tr>
<tr>
<td>DSGN 150 Color in Design</td>
<td>3</td>
</tr>
<tr>
<td>Elective coursework from the required list</td>
<td>3–5</td>
</tr>
</tbody>
</table>

Total | 15–17 |

Recommended Additional Coursework: ARCH 18B, 20, 120, 127, 29A, 29B, 31A, 134; VMD 100, 105, 120, 130, 140, 150, 152, 154, 162, 164, 166, 192; PHOT 51, 50A, 50B, 57, 60A, 60B, 101B-G

Diversity and Social Justice Certificate

The Diversity and Social Justice Certificate of Accomplishment is achieved through completing a series of consciousness raising courses that analyze specific forms of social oppression and evaluate social justice interventions in the United States. Addressing individual, institutional and socio-cultural elements of diversity and social justice, the certificate provides thorough diversity training for City College of San Francisco faculty, staff and students. It also serves professional development needs for employers, community based organizations and social and government agencies.

Learning Outcomes:

- Discuss and analyze emotional defensiveness as it relates to issues of diversity and oppression, including Racism, Anti-Semitism/Anti-Arabism, Classism, Sexism, Heterosexism, Ableism, Adultism and Ageism, and Transphobia
- Differentiate between key concepts and definitions commonly used to discuss diverse identities, various forms of oppression, and social justice interventions
- Demonstrate an increased awareness and understanding of the destructiveness of social injustices
- Assess examples of conscious and unconscious manifestations of social injustices, phobias and stereotypes on the individual, institutional and socio-cultural levels
- Formulate an understanding of the privileges conferred by normative representations and material facts of race, ethnicity, religion, sexuality, gender, class, ability and age
• Formulate an understanding of expressions of fear, collusion and internalization in relation to diversity and oppression
• Analyze the processes of socialization that construct normativity and perpetuate social injustices
• Evaluate information that contradicts stereotypes
• Analyze the costs and benefits of collusion with systems of oppression
• Analyze personal beliefs, thoughts, feelings, biases, prejudices and stereotypes
• Identify and appraise different ways of taking action against oppressions in personal, community and institutional lives and levels
• Evaluate social justice models of responding to oppressions
• Explain the intersectionality and interrelatedness of distinct forms of social oppression including Racism, Anti-Semitism/ Anti-Arabism, Classism, Sexism, Heterosexism, Ableism, Adultism and Ageism, and Transphobia

Admission: The Diversity and Social Justice Certificate is open to any student enrolled at CCSF.

Requirements for the Certificate of Accomplishment: The certificate requires completion of a series of courses for a total of five units. Each course must be completed with a grade of "C" or higher, or a Pass. The series can be completed in two years.

Credit Toward Graduation: Credit earned to obtain the certificate satisfies areas D1 and H2 of graduation requirements.

Credit Toward Other Certificates: In addition to counting towards the Diversity and Social Justice Certificate, courses in the IDST 80/81 series fulfill requirements for the Social Work Certificate.

Courses Required for the Certificate of Accomplishment in Diversity and Social Justice

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>IDST 80A Diversity and Social Justice: Racism</td>
<td>0.5</td>
</tr>
<tr>
<td>IDST 80C Diversity and Social Justice: Sexism</td>
<td>0.5</td>
</tr>
<tr>
<td>IDST 80D: Diversity and Social Justice: Heterosexism</td>
<td>0.5</td>
</tr>
<tr>
<td>IDST 80E Diversity and Social Justice: Ableism</td>
<td>0.5</td>
</tr>
<tr>
<td>IDST 80F Diversity and Social Justice: Classism</td>
<td>0.5</td>
</tr>
<tr>
<td>IDST 80G Diversity and Social Justice: Transphobia</td>
<td>0.5</td>
</tr>
<tr>
<td>IDST 81A Diversity and Social Justice: Ageism/Adultism</td>
<td></td>
</tr>
<tr>
<td>IDST 81B Diversity and Social Justice: Anti-Semitism/Anti-Arabism</td>
<td></td>
</tr>
</tbody>
</table>

Total Units: 5

Leadership Skills for Youth Workers Certificate*

*The program is pending state approval.

Please refer to the online version of the Catalog.

Trauma Prevention and Recovery Certificate

The Trauma Prevention and Recovery Certificate of Achievement trains students as paraprofessionals to work in the field of violence prevention and trauma response, including service provision to victims and survivors of violence. It also trains service providers such as probation officers or nurses who routinely work with survivors of traumatic events to understand and respond to concerns unique to survivors.

This interdisciplinary curriculum provides students with a broad understanding of violence and its impact on diverse individuals, families, communities and societies.

This certificate program focuses on how violence affects individuals and groups, including considerations of ability/disability, age, culture, ethnicity/race, gender, gender identity/sexuality, and immigration status. Students develop skills to critically analyze social constructs that contribute to violence, listen empathetically, offer appropriate referrals, and provide culturally competent peer support.

Learning Outcomes

• Analyze the causes & consequences of diverse forms of violence and trauma on individuals and groups.
• Access, summarize and evaluate public health research related to violence and trauma, for its application to prevention and intervention programs.
• Compare programmatic approaches to prevention and intervention.
• Discuss historic and aesthetic approaches to understanding violence, trauma and recovery.
• Describe, recognize and respond to specific effects of violence on children and their families.
• Demonstrate peer counseling and client-centered communication skills for working with victims and survivors in ways that are culturally relevant and culturally sensitive.
• Describe available community resources and provide appropriate referrals.
• Demonstrate knowledge and skills regarding considerations of ability/disability, age, culture, ethnicity/race, gender, gender identity, sexuality, and immigration status in relation to trauma and violence, with cultural humility and sensitivity.
• Demonstrate self-awareness in relation to the healing process, the dynamics of vicarious trauma and the role of frontline workers.

Admission. The Trauma Prevention and Recovery Certificate program is open to any student enrolled at CCSF who meets the prerequisite requirements for each of the required courses.

Requirements for the Certificate of Achievement. The certificate requires completion of 18 units, which can be completed in two semesters. Each course must be completed with a final grade of "C" or higher, or Pass.

Credit Toward Graduation. Credit earned to obtain the Certificate of Achievement satisfies the G1 and H2 graduation requirements.

Credit Toward Other Certificates. In addition to counting toward the Trauma Prevention & Recovery Certificate, WOMN 54 meets a requirement for the Social Work Certificate and serves as an elective for the Community Health Worker Certificate. HLTH 38 meets a requirement for the Drug & Alcohol Certificate. CDEV 100 meets a requirement of the Violence Intervention in Early Childhood certificate.

Courses Required for the Certificate of Achievement in Trauma Prevention and Recovery

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CDEV 100 Violence &amp; Its Impact on Children and Their Families</td>
<td>3</td>
</tr>
<tr>
<td>IDST 47 Trauma &amp; The Arts: An Interdisciplinary Approach</td>
<td>3</td>
</tr>
</tbody>
</table>
Announcement of Courses

**Interdisciplinary Studies**

**Credit, Degree Applicable Courses:**

**IDST 3. Introduction to Museum Studies (3)**
Lec-3, field trips  
P/NP available  
May not be offered every semester. Specific times, topics, and instructors will be announced through campus media.

Museums display, collect, preserve, and interpret art, historical, and scientific artifacts. Exploration of museums from multiple perspectives: architecture, collections, exhibits, and economic realities involved in museum sustainability. History of museums in the United States. Promotion of museums as a community resource with open access to everyone. Visits to local museums. CSU/UC

**IDST 4. Ways of Faith (3)**
Lec-3  
P/NP available  
This interdisciplinary course introduces the scriptural, symbolic, and artistic traditions of the world’s major faiths: Hinduism, Buddhism, Taoism, Judaism, Christianity, and Islam. The class also considers how knowledge of these religious systems can serve to advance world peace. CSU/UC

**IDST 7. Introduction to the United Nations (3)**
Lec-3, field trips  
P/NP available  
An introduction to the United Nations, including the UN Charter’s mission to achieve international peace, and the function of the organization’s six administrative bodies. In addition to studying the theory and practice of international diplomacy, students evaluate the successes and challenges of collective security, peacekeeping attempts, and technological cooperation. CSU/UC

**IDST 9. Marine Biology (3)**
Lec-3, field trips  
P/NP available  
The natural history of California marine plants and animals with emphasis on the interrelationships between marine life and their environment. CSU/UC  
IDST 9 = BIO 32

**IDST 10D. Prejudice (3)**
Lec-3  
May not be offered every semester.  
This course will investigate the biological and anthropological facts about race and sex and contrast these with the sociological impact of beliefs regarding racial superiority on both majority and minority members of ethnically stratified societies. The historical “causes” of prejudice will be examined. CSU/UC

**IDST 12. Reflection on Service Learning (1)**
Lec-1, field trips  
Coreq.: Concurrent enrollment in a course with a service-learning component (e.g., SOC 1 and 30), or current volunteer work.

Students reflect on connections made between course work, service learning experience and personal development. A learning contract is drawn up by each student. Students document their experience by developing a portfolio. Learning from the experience of service is fostered. CSU

**IDST 14. American Cultures in Literature and Film (3)**
Lec-3, field trips  
P/NP available  
**ADVISOR: ENGL 96 OR PLACEMENT IN ENGL 9A**  
To find unity in diversity in the shifting trajectories of American identities and how they interrelate, the following five groups will be featured to assess their interactive contributions to the unique American mosaic: Native Americans, European Americans, African Americans, Latin Americans, and Asian Americans. Literary works of nonfiction, fiction, drama, and poetry will be supplemented with selected films to accomplish this goal. CSU/UC

**IDST 17. Human Sexuality (3)**
Lec-3  
P/NP available  
A course integrating the biological, psychological, social, anthropological, legal, historical, ethical, and humanities perspectives on human sexuality. CSU/UC

**IDST 27A-27B-27C. Asian Humanities (3-3-1)**
**IDST 27A is not prerequisite to 27B**  
No knowledge of foreign languages required

**IDST 27A-27B. Asian Humanities (3-3)**
Lec-3  
P/NP available  
**ADVISOR: ENGL 93 OR 94 OR PLACEMENT IN ENGL 96**  
A team-taught survey of Asian civilizations, especially Arabic-Islamic, Indian, Chinese, and Japanese cultures. Emphasis on literature, philosophy, religion, and the arts. Explanation, through an interdisciplinary and cross-cultural approach, of the differences and underlying unity of Asian cultures and a comparison with their Western counterparts. Use of the best available English translations of Asian literature along with slides, films, recordings, and field trips. CSU/UC

**IDST 27C. Asian Humanities (1)**
Ind st-5  
P/NP available  
**ADVISOR: IDST 27A OR 27B**  
An independent study/research course under direction of one or more instructors, focusing on a specific area of study. CSU (UC upon review)

**IDST 28. Current Topics and Issues in the Pacific Rim (3)**
Lec-3, field trips  
P/NP available  
May not be offered every semester.  
This course will cover at least five of the following issues: government, religion, the arts, geography and ethnic diversity, education, media, health, recreation, relationships with the United States, economics, and development (including the role of tourism), recent history, sociology, and anthropology. Focus of the course will alternate among countries, such as Russia, the Philippines, China, Latin America, Japan, Indonesia, India, or Pakistan. For exact information, check the Class Schedule.

**IDST 28A. Current Topics in Former USSR. CSU (UC upon review)**
**IDST 28B. Current Topics and Issues in the Philippines. CSU (UC upon review)**
**IDST 28C. Current Topics and Issues in China. CSU (UC upon review)**
IDST 28D. Current Topics in Latin America. CSU (UC upon review)

IDST 28E. Current Topics and Issues in Japan. CSU (UC upon review)

IDST 28F. Current Topics and Issues in Indonesia. CSU (UC upon review)

IDST 28G. Current Topics and Issues in India and Pakistan. CSU/UC

IDST 29. Introduction to Islam (3)
Lec-3, field trips P/NP available
An interdisciplinary survey of the origins, principles, and practices of Islam, comparing and contrasting them with those of other major religions. Focus on the historical development and current practices of Islam and its impact on philosophy, art, music, architecture, gender, media, popular culture, and politics. CSU/UC

IDST 30. Demystifying the Middle East (3)
Lec-3 P/NP available
This interdisciplinary survey of the Middle East introduces students to the cultural and religious diversity of the region, highlighting contributions in various disciplines, including science, art, music, and literature. It also examines depictions of the region and its people in Western art, literature, media, and current political discourse. CSU/UC

IDST 31. Women in the Middle East (3)
Lec-3, field trips P/NP available
An interdisciplinary survey of women in the Middle East focusing on diversity, colonization, nationalism, gender, sexuality, family, law, literature, music, art, and film. CSU/UC

IDST 36. Poetry for the People (3)
Lec-3 P/NP available
An interdisciplinary approach toward development of literacy in multiple popular traditions of poetry, including in social justice movements, by incarcerated people and through alternative media. Includes scrutiny of published poems from multiple cultural traditions, a focus on community, and the cultivation and public presentation of new poems. CSU/UC

IDST 37. Racial and Ethnic Groups in the United States - A Comparative Survey (3)
Lec-3 P/NP available
An interdisciplinary survey of the history, culture, concerns, and conditions of American ethnic and racial groups in the United States. Includes multicultural literacies, immigration experiences, economic opportunities, political and social histories, and social justice movements. CSU/UC

IDST 38. Shakespeare: “for all time” (3)
Lec-3 P/NP available
PREREQ: ELIGIBLE FOR ENGL 1A
ADVISE: ENGL 92 OR ESL 160 OR PLACEMENT IN ENGL 93 OR 94; OR ESL 170
An interdisciplinary introduction to Shakespeare’s plays as theater pieces, literature, and historical chronicles. Three instructors from the Theater Arts, English, and History departments examine Shakespeare’s artistry from their respective points of view, using some of his most popular plays. CSU/UC

IDST 40. Introduction to Contemporary Issues in the Filipino Community (3)
Lec-3, field trips P/NP available
Students identify and critically analyze contemporary social, political, economic, educational, and cultural issues that are important and significantly affect the life of the Filipino American community. Issues include the following areas: defining Filipino and Filipino American identity, immigration and acculturation, socioeconomic status, employment, racial and ethnic diversity, gender, political empowerment, education, and emerging patterns of the Filipino family. CSU/UC

IDST 42. Philippine Humanities (3)
Lec-3, field trips P/NP available
Appreciation and critical understanding of Philippine heritage in philosophy, art, music, architecture, dance, literature, theater and film. CSU/UC

IDST 44. African Literature (3)
Lec-3 P/NP available
An extensive examination of the composite of Africa’s literary art from literature in the oral tradition and in the vernacular to modern literature written in vehicular languages, languages of the colonizers. Analysis of successive attitudes of the Western world toward the Black race as related by African writers from 1890 to 1960, the most important historical period in African literature south of the Sahara. CSU/UC

IDST 45. Pacific Islanders in the United States (3)
Lec-3, field trips P/NP available
This study of Pacific Islanders’ migrations to the United States mainland includes a survey of the history, culture, and development of Hawai’i’s role as a way station for their migration to the mainland. The indigenous cultural heritage and United States immigration experience of Pacific Islanders from Guam, Tonga, Tahiti, Micronesia, Melanesia, Palau, New Zealand, Cook Islands, Marquesans, and the U.S. Territory of Guam will be assessed. CSU/UC

IDST 46. Fa’a Pasefika: Interdisciplinary Cultural Expressions of Oceania (3)
Lec-3, field trips P/NP available
A survey of traditional and contemporary art across Oceania (Pacific Islands). Emphasis on literature, dance, music, visual arts, film, and museums. From an interdisciplinary and cross-cultural approach, the course explores the underlying unity of Pacific cultures and their engagement with both western and non-western societies, colonization, and diasporic communities. CSU/UC

IDST 47. Trauma and the Arts: An Interdisciplinary Approach (3)
Lec-3, field trips P/NP available
A multi-disciplinary examination of works of art, music and literature inspired by both personal and global trauma with an emphasis on the transformative power of the creative process and how it helps individuals and communities heal. CSU/UC

IDST 50. College Success (3)
Lec-3 P/NP available
IDST 50 is equivalent to LERN 50.
Integrates personal growth and values, study strategies and critical analysis into lifelong success in academic, professional and personal development. Includes life management, learning styles, personal and educational values, instructor-student communication, diversity, financial literacy, health, memory, concentration, notetaking, textbook reading, test taking, library skills, problem solving, critical and creative analysis. CSU/UC

IDST 50 = LERN 50

IDST 65. Non-Profit Grants Management (3)
Lec-3 P/NP available
Interdisciplinary instruction in management of social service and community health grants while maintaining accountability to funders,
clients, affected communities, supervisors and boards of directors. How to seek funding, develop work plans, methods for tracking grant activities and expenditures, program evaluation, completing grant reports, and best approaches to communication with funders.

**IDST 80-81. Diversity and Social Justice (.5-1)**
Lec-.5, 1  P/NP available
A series of courses exploring specific forms of social oppression in the United States and social justice interventions. CSU

- IDST 80A. Diversity and Social Justice: Racism
- IDST 80C. Diversity and Social Justice: Sexism
- IDST 80D. Diversity and Social Justice: Heterosexism
- IDST 80E. Diversity and Social Justice: Ableism
- IDST 80F. Diversity and Social Justice: Class and Classism
- IDST 80G. Diversity and Social Justice: Transphobia
- IDST 81A. Diversity and Social Justice: Ageism and Adultism (Age-Based Oppression)
- IDST 81B. Diversity and Social Justice: Anti-Semitism/Anti-Arabism

**IDST 170. Pilgrimage: The Sacred Journey (1)**
Lec-3 (6 wks)  P/NP available
This course traces the pilgrims' journey through time to an awareness of the divine. The course content covers well-traveled pilgrimage roads, saints, relics, sacred time and space, and many holy places of the world, including Rome, Jerusalem, Benares, and Mecca. The secularization of pilgrimage in the 20th century will also be included. For those students interested in history, mysticism, art history, and the great religions of the world, this course will be an enlightening experience. CSU/UC

**Design**

- **DSGN 101. Design Fundamentals (3)**
  Lec-2, lab-4, field trips
  ADVISE: ESL 150 OR ENGL 92
  Fundamental design course, covering the theories, processes, vocabulary, and techniques common to visual design disciplines. Students will develop and apply their knowledge through analysis, critique and individual and collaborative exercises and projects. CSU/UC
  DSGN 101 = VMD 101

- **DSGN 105. Survey of Collaborative Design (3)**
  Lec-3, field trips
  A survey of influences and forces throughout history that drive change in design. Focus will be given to how collaborative processes lead to change. Students will research, analyze, and discuss design case studies. CSU/UC

- **DSGN 110. Rapid Visualization (3)**
  Lec-3, lab-3, field trips
  ADVISE: ESL 150 OR ENGL 92
  A free-hand drawing course for the development of visual thinkers, covering processes, methods, strategies, terminology, conventions, techniques, and skills for the rapid visualization of ideas in design. Practical application of knowledge through individual and group exercises and projects. CSU/UC

- **DSGN 150. Color in Design (3)**
  Lec-3, lab-3, field trips
  Exploration and application of the historical, cultural, symbolic, professional and personal uses of color through individual and collaborative design projects. An interdisciplinary study of the basic properties and theory of color; creating color relationships and harmony; and optical, psychological and spatial effects of color in various media. CSU/UC

**Interior Design*  
*See Architecture**

**Italian**

Office: Art 202  
Phone Number: (415) 239-3223  
Web Site: www.ccsf.edu/forlang

**Announcement of Curricula**

**Italian Major (AA)**

**Program Information.** The Italian program provides instruction in developing a student's ability to communicate in Italian, both written and oral, through the intermediate level and to gain a knowledge of Italian cultures. The program is designed to meet transfer goals as well as personal development and career growth. Students must complete the curriculum with final grades of C or higher in their major preparation.

**Degree Curriculum.** The Degree Curriculum in Italian is a two-year course of study designed to build a strong language foundation as well as expose students to Italian cultural content and some literature. Students who complete the curriculum are better prepared to transfer to the CSU and UC systems as well as other universities with the intent of majoring or minoring in Italian.

**Learning Outcomes**

Upon completion of this degree, students will be able to:

- Demonstrate fluency to interact in Italian in a normal and spontaneous fashion at an intermediate level.
- Understand and analyze publications and current media as well as contemporary prose.
- Compare and contract of geographical and cultural differences in the Italian-speaking world.
- Display an intermediate level of proficiency in speaking, understanding, reading and writing in Italian to perform successfully in upper division courses.

**Courses Required for the Major in Italian**

Students must complete a minimum of 15 units chosen from

<table>
<thead>
<tr>
<th>Courses</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ITAL 2 or 2A + 2B Cont. Elementary Italian</td>
<td>0.5 - 6</td>
</tr>
<tr>
<td>ITAL 3A + 3B Intermediate Italian</td>
<td>0.5 - 6</td>
</tr>
<tr>
<td>ITAL 4A + 4B Cont. of Intermediate Italian</td>
<td>0.5 - 6</td>
</tr>
</tbody>
</table>

An additional three (3) units must be completed from the following courses:

<table>
<thead>
<tr>
<th>Courses</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ITAL 1 or 1A + 1B Elementary Italian</td>
<td>0.5 - 6</td>
</tr>
<tr>
<td>ITAL 10B Beginning Conv. Italian</td>
<td>0.5 - 6</td>
</tr>
<tr>
<td>ITAL 10C Intermediate Conv. Italian</td>
<td>0.5 - 6</td>
</tr>
<tr>
<td>ITAL 10D Cont. of Intermed. Conv. Italian</td>
<td>0.5 - 6</td>
</tr>
<tr>
<td>ITAL 15A - 15B Advanced Conv. Italian</td>
<td>0.5 - 6</td>
</tr>
</tbody>
</table>

**Total Units** 18

**Italian Certificate**

The Certificate of Accomplishment in Italian provides students, prospective employers and others with documented evidence of persistence and academic accomplishment in the language. The certificate
requires completion of 15 units in Italian. Each course must be completed with a final grade of “C” or higher or Pass. At least 9 units must be selected from the core list. The remaining 6 units may be selected from the elective units.

Learning Outcomes
Upon completion of this certificate, students will be able to:

- Understand the main points of standard speech on familiar matters encountered in work, school, leisure, etc., as well as many radio or television programs on current affairs.
- Understand texts which consist mainly of high-frequency everyday or job-related language.
- Deal with most situations likely to arise while traveling in an area where the language is spoken.
- Write simple connected text on topics which are familiar or of personal interest or personal letters describing experiences and impressions.

Courses Required for the Certificate of Accomplishment in Italian

Core Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ITAL 1 Elementary Italian</td>
<td>5</td>
</tr>
<tr>
<td>or ITAL 1A-1B Elementary Italian</td>
<td>3-3</td>
</tr>
<tr>
<td>ITAL 2 Continuation of Elementary Italian</td>
<td>5</td>
</tr>
<tr>
<td>or ITAL 2A-2B Continuation of Elem Italian</td>
<td>3-3</td>
</tr>
<tr>
<td>ITAL 3A-3B Intermediate Italian</td>
<td>3-3</td>
</tr>
<tr>
<td>ITAL 4A-4B Continuation of Intermediate Italian</td>
<td>3-3</td>
</tr>
</tbody>
</table>

Elective Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ITAL 10A Beginning Conversational Italian</td>
<td>3</td>
</tr>
<tr>
<td>ITAL 10B Cont of Beg Conversational Italian</td>
<td>3</td>
</tr>
<tr>
<td>ITAL 10C Intermediate Conversational Italian</td>
<td>3</td>
</tr>
<tr>
<td>ITAL 10D Cont of Inter Conversational Italian</td>
<td>3</td>
</tr>
<tr>
<td>ITAL 15A, 15B Adv Conversational Italian</td>
<td>3-3</td>
</tr>
</tbody>
</table>

Total Units: 15

Announcement of Courses

Students of beginning Italian are directed to consider

Italian 1, 1A and 10A.

Credit, Degree Applicable Courses:

ITAL 1. Elementary Italian (5)

Lec-5, lab-2 P/NP available
Advice: ENGL 93 or 94; or ESL 160 or placement in ENGL 96 or ESL 170 or any City College or University foreign language course

Beginners course. Grammar, composition and reading. Practice in speaking and understanding Italian. CSU/UC

ITAL 1A-1B. Elementary Italian (3-3)

Lec-3, lab-1 P/NP available
Prereq: ITAL 1B: ITAL 1A or demonstration of ITAL 1A exit skills
Advice: For ITAL 1A: ENGL 93 or 94; or ESL 160 or 82 or placement in ENGL 96 or ESL 170 or any City College or University foreign language course.

Grammar, composition and reading. Practice in speaking and understanding Italian. CSU/UC

ITAL 1A + 1B = ITAL 1

ITAL 2. Continuation of Elementary Italian (5)

Lec-5, lab-2 P/NP available
Prereq: ITAL 1 or 1B or demonstration of ITAL 1/B exit skills

Second semester course. Continuation of beginner’s course in grammar, composition and reading. Practice in speaking and understanding Italian. CSU/UC

ITAL 2A-2B. Continuation of Elementary Italian (3-3)

Lec-3, lab-1 P/NP available
Prereq: For ITAL 2A: ITAL 1 or 1B or demonstration of ITAL 1/B exit skills
Prereq: For ITAL 2B: ITAL 2A or demonstration of ITAL 2A exit skills

Continuation of beginner’s course. Grammar, composition, and reading and practice in speaking and understanding Italian. CSU/UC

ITAL 2A + 2B = ITAL 2

ITAL 3A-3B. Intermediate Italian (3-3)

Lec-3, lab-1 P/NP available
Prereq: ITAL 2 or 2B or demonstration of ITAL 2/2B exit skills
May be taken non-sequentially

Review of grammar and composition; reading of cultural and literary materials. Constant practice in the use and comprehension of the spoken language. Conducted in Italian. CSU/UC

ITAL 4A-4B. Continuation of Intermediate Italian (3-3)

Lec-3, lab-1 P/NP available
Prereq: ITAL 3A and 3B or demonstration of ITAL 3A+3B exit skills
May be taken non-sequentially

Review of grammar with emphasis on writing; reading of cultural and/or literary materials. Constant practice in the use and comprehension of the spoken language. Conducted in Italian. CSU/UC

ITAL 10A. Beginning Conversational Italian (3)

Lec-3, lab-1 P/NP available
Not recommended for native speakers of Italian.

Beginner’s course. Intensive oral practice of basic structures and vocabulary most often used in conversation. Designed for students who wish to acquire basic skills of spoken Italian. CSU

ITAL 10B. Continuation of Beginning Conversational Italian (3)

Lec-3, lab-1 P/NP available
Prereq: ITAL 10A or demonstration of ITAL 10A exit skills
Not recommended for native speakers of Italian.

Second semester course. Continuation of oral practice of structures and vocabulary of spoken Italian. CSU

ITAL 10C. Intermediate Conversational Italian (3)

Lec-3, lab-1 P/NP available
Prereq: ITAL 10B or demonstration of ITAL 10B exit skills
Not recommended for native speakers of Italian.

Third semester course. Designed for students who wish to acquire more advanced skills in conversational Italian. CSU

ITAL 10D. Continuation of Intermediate Conversational Italian (3)

Lec-3, lab-1 P/NP available
Prereq: ITAL 10C or demonstration of ITAL 10C exit skills
Recommended for students enrolled in ITAL 2B or 3.
Not recommended for native speakers of Italian.

Continuation of extensive oral training in Italian. Designed for students who wish to acquire more advanced skills in conversational Italian. CSU

ITAL 15A-15B. Advanced Conversational Italian (3-3)

Lec-3, lab-1 P/NP available
Prereq: ITAL 10D or 3A+3B or demonstration of ITAL 10D or 3A+3B exit skills
Japanese
Office: Art 202
Phone Number: (415) 239-3223
Web Site: www.ccsf.edu/forlang

Announcement of Curricula

Japanese Major (AA)

Program Information. The Japanese program provides instruction in developing a student’s ability to communicate in Japanese, both written and oral, through the intermediate level and to gain a knowledge of Japanese culture. The program is designed to meet transfer goals as well as personal development and career growth. Students must complete the curriculum with final grades of C or higher in their major preparation.

Degree Curriculum. The Degree Curriculum in Japanese is a two-year course of study designed to build a strong language foundation as well as expose students to Japanese cultural content and some literature. Students who complete the curriculum are better prepared to transfer to the CSU and UC systems as well as other universities with the intent of majoring or minoring in Japanese.

Learning Outcomes
Upon completion of this degree, students will be able to:

- Demonstrate fluency to interact in Japanese in a normal and spontaneous fashion at an intermediate level.
- Understand and analyze publications as well as media.
- Display understanding of geography and cultural differences in the Japanese speaking world.
- Display an intermediate level of proficiency in speaking, understanding, reading and writing in Japanese to perform successfully in upper division course work. Display sensitivity to different styles of speech. (familiar and formal)

Courses Required for the Major in Japanese
Students must complete a minimum of 15 units chosen from

Courses 
JAPA 2 or 2A+2B Cont. of Elem Japanese ............ 5 or 6
JAPA 3 or 3A+3B Intermediate Japanese ............... 5 or 6
JAPA 4 or 4A+4B Cont. of Intermed Japanese ....... 5 or 6
JAPA 16 Beginning Kanji for Reading and Writing .... 3

An additional three (3) units must be completed from the following courses:

JAPA 1 or 1A+1B Elementary Japanese .............. 5 or 6
JAPA 10B Beginning Conv. Japanese ................. 3

Japanese Certificate

The Certificate of Accomplishment in Japanese provides students, prospective employers and others with documented evidence of persistence and academic accomplishment in the language. The certificate requires completion of 15 units in Japanese. Each course must be completed with a final grade of “C” or higher or Pass. At least 9 units must be selected from the core list. The remaining 6 units may be selected from the elective units.

Learning Outcomes
Upon completion of this certificate, students will be able to:

- Understand the main points of standard speech on familiar matters encountered in work, school, leisure, etc., as well as many radio or television programs.
- Understand texts which consist mainly of high-frequency everyday language.
- Deal with most situations likely to arise while traveling in an area where the language is spoken.
- Write simple connected text on topics which are familiar or of personal interest or personal letters describing experiences and impressions.

Courses Required for the Certificate of Accomplishment in Japanese

Core Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>JAPA 1 Elementary Japanese</td>
<td>5</td>
</tr>
<tr>
<td>or JAPA 1A-1B Elementary Japanese</td>
<td>3-3</td>
</tr>
<tr>
<td>JAPA 2 Continuation of Elementary Japanese</td>
<td>5</td>
</tr>
<tr>
<td>or JAPA 2A-2B Cont of Elementary Japanese</td>
<td>3-3</td>
</tr>
<tr>
<td>JAPA 3 Intermediate Japanese</td>
<td>5</td>
</tr>
<tr>
<td>or JAPA 3A-3B Intermediate Japanese</td>
<td>3-3</td>
</tr>
<tr>
<td>JAPA 4 Continuation of Intermediate Japanese</td>
<td>5</td>
</tr>
<tr>
<td>JAPA 4A-4B Cont of Intermediate Japanese</td>
<td>3-3</td>
</tr>
<tr>
<td>JAPA 16 Beginning Kanji for Reading and Writing</td>
<td>3</td>
</tr>
</tbody>
</table>

Elective Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>JAPA 10A Beginning Conversational Japanese</td>
<td>3</td>
</tr>
<tr>
<td>JAPA 10B Cont of Beg Conversational Japanese</td>
<td>3</td>
</tr>
<tr>
<td>JAPA 10C Intermediate Conversational Japanese</td>
<td>3</td>
</tr>
<tr>
<td>JAPA 10D Cont of Inter Conversational Japanese</td>
<td>3</td>
</tr>
<tr>
<td>JAPA 39 or 49 Japanese Culture and Civilization</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Units ........................................ 15

Announcement of Courses

Students of beginning Japanese are directed to consider JAPA 1, 1A, and 10A.

A placement test is available; call 239-3223.

Credit, Degree Applicable Courses:

JAPA 1. Elementary Japanese (5)
Lec-5, lab-2, P/NP available
ADVISE: ENGL 93 or 94; or ESL 160 or 82 or PLACEMENT IN ENGL 96 or ESL 170 or any City College or University Foreign Language course

Beginner’s course. Grammar, composition and reading. Practice in speaking and understanding simple Japanese. CSU/UC
JAPA 1A. Elementary Japanese (3)
Lec-3, lab-1  P/NP available
**Advising:** ENGL 93 or 94 or higher; or ESL 160 or 82 or higher or Any City College or University foreign language course
Beginner's course in grammar, composition, and reading. Practice in speaking and understanding Japanese. CSU/UC

JAPA 1B. Elementary Japanese (3)
Lec-3, lab-1  P/NP available
**Prerequisite:** For JAPA 1B: JAPA 1A or demonstration of JAPA 1A exit skills
Beginner's course in grammar, composition, and reading. Practice in speaking and understanding Japanese. CSU/UC
JAPA 1A+1B = JAPA 1

JAPA 2. Continuation of Elementary Japanese (5)
Lec-5, lab-2  P/NP available
**Prerequisite:** For JAPA 2A: JAPA 1A or demonstration of JAPA 1A exit skills
Second semester course. Grammar, composition, reading and writing. Continued practice in speaking and understanding Japanese. CSU/UC
JAPA 2A+2B = JAPA 2

JAPA 3. Intermediate Japanese (5)
Lec-5, lab-2  P/NP available
**Prerequisite:** For JAPA 3A: JAPA 2A or demonstration of JAPA 2A exit skills
Third semester course. Grammar, composition, reading, and writing. Practice in speaking and understanding Japanese. CSU/UC
JAPA 3A+3B = JAPA 3

JAPA 4. Continuation of Intermediate Japanese (5)
Lec-5, lab-2  P/NP available
**Prerequisite:** For JAPA 4A: JAPA 3A or demonstration of JAPA 3A exit skills
Fourth semester course. Grammar, reading and writing with emphasis on speaking and understanding Japanese culture. Conducted in Japanese. CSU/UC
JAPA 4A+4B = JAPA 4

JAPA 10A. Beginning Conversational Japanese (3)
Lec-3, lab-1  P/NP available
**Recommended for all beginning students. Not recommended for native speakers of Japanese.**
Beginner's course. Extensive oral practice of the language. Designed for students who wish to acquire basic skills of spoken Japanese. CSU
JAPA 10B. Continuation of Beginning Conversational Japanese (3)
Lec-3, lab-1  P/NP Available
**Prerequisite:** JAPA 10A or demonstration of JAPA 10A exit skills. Not recommended for native speakers of Japanese
Second semester course. Intensive oral practice of basic structures and vocabulary most often used in conversation. Designed for students who wish to acquire basic skills of spoken Japanese. CSU

JAPA 10C. Intermediate Conversational Japanese (3)
Lec-3, lab-1  P/NP available
**Prerequisite:** JAPA 10B or demonstration of JAPA 10B exit skills Not recommended for native speakers of Japanese
Extensive oral practice of basic structures and vocabulary most often used in conversation. Designed for students who wish to continue acquiring more advanced skills in conversational Japanese. CSU

JAPA 10D. Intermediate Conversational Japanese (3)
Lec-3, lab-1  P/NP available
**Prerequisite:** JAPA 10C or demonstration of JAPA 10C exit skills Not recommended for native speakers of Japanese
Fourth semester course. Designed for students who wish to continue acquiring more advanced skills in conversational Japanese. CSU

JAPA 16. Beginning Kanji for Reading and Writing (3)
Lec-3  P/NP available
**Prerequisite:** JAPA 1 or IB or demonstration of JAPA 1 or IB exit skills
Intensive study of elementary Kanji characters to increase competence in reading and writing Japanese and in understanding authentic materials. CSU

JAPA 17. Continuation Beginning Kanji for Reading and Writing (3)
Lec-3  P/NP available
**Prerequisite:** Satisfactory completion of JAPA 16 or equivalent
Intensive study of second level of Kanji characters to increase competence in reading and writing Japanese and in understanding authentic materials. CSU

JAPA 18. Intermediate Kanji for Reading and Writing (3)
Lec-3  P/NP available
**Prerequisite:** Satisfactory completion of JAPA 17 or equivalent
Intensive study of intermediate Kanji characters to increase competence in reading and writing Japanese and in understanding authentic materials. CSU

JAPA 19. Continuation of Intermediate Kanji for Reading & Writing (3)
Lec-3  P/NP Available
Intensive study of the second level of intermediate Kanji characters to increase competence in reading and writing Japanese and in understanding authentic materials. CSU

JAPA 39. Japanese Culture and Civilization (3)
Lec-3
**Advising:** ENGL 96 or placement in ENGL 1A
No knowledge of Japanese required.
Courses Required for the Major in Journalism

Upon completion of this major students will be able to:

Learning Outcomes

- Research, write, and edit news and feature stories for publication in print and in multimedia platforms.
- Contribute to the design and publication of newspapers and magazines.
- Critically discuss the role of journalists in modern society.
- Critically discuss the impact of the mass media on society.

Courses Required for the Major in Journalism

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>JOUR 19 Contemporary News Media</td>
<td>3</td>
</tr>
<tr>
<td>JOUR 21 News Writing and Reporting</td>
<td>3</td>
</tr>
<tr>
<td>VMD 105 Digital Skills for Visual Media</td>
<td>3</td>
</tr>
<tr>
<td>LIBR 51 Intro to Libraries &amp; Lib. Resources</td>
<td>3</td>
</tr>
<tr>
<td>General Education/Graduation Requirements</td>
<td>3</td>
</tr>
</tbody>
</table>

Second Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>JOUR 22 Feature Writing</td>
<td>3</td>
</tr>
<tr>
<td>JOUR 27 Newspaper Design and Pagination</td>
<td>2</td>
</tr>
<tr>
<td>JOUR 35 Internet Journalism</td>
<td>3</td>
</tr>
<tr>
<td>JOUR 37 Introduction to Photojournalism</td>
<td>3</td>
</tr>
<tr>
<td>VMD 100 Orientation to Multimedia</td>
<td>2</td>
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<tr>
<td>Additional Graduation Requirements</td>
<td></td>
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</table>

Third Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>JOUR 23 Electronic Copy Editing</td>
<td>3</td>
</tr>
<tr>
<td>JOUR 24 Newspaper Laboratory</td>
<td>3</td>
</tr>
<tr>
<td>JOUR 38. Intermediate Photojournalism</td>
<td>3</td>
</tr>
<tr>
<td>BCST 110 Introduction to Writing for Electronic Media</td>
<td>3</td>
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<tr>
<td>Additional Graduation Requirements</td>
<td></td>
</tr>
</tbody>
</table>

Fourth Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>JOUR 24 Newspaper Laboratory</td>
<td>3</td>
</tr>
<tr>
<td>or JOUR 29 Magazine Editing and Production</td>
<td>3</td>
</tr>
<tr>
<td>JOUR 25 Editorial Management</td>
<td>3</td>
</tr>
<tr>
<td>JOUR 26 Fundamentals of Public Relations</td>
<td>3</td>
</tr>
<tr>
<td>Additional Graduation Requirements</td>
<td></td>
</tr>
</tbody>
</table>

Total Units: 46

Journalism majors are advised to seek out a broad-based education that will provide a strong liberal arts background. This is considered to be one of the best assets for a journalism professional. The list below is far from inclusive and is simply offered as a suggestion. Consult with an adviser and become familiar with college-wide course offerings.

Recommended Additional Coursework: BCST 130, BCST 135, CINE 20A/B, ENGL 14, ENGL 44A/B, VMD 122, HIST 1, IDST 37, VMD 191, MRKT 170, PHOT 57, PHOT 102B, PHOT 51, PHYC 10, SOC 30.

Certificate Curricula

City College offers two certificate programs in Journalism, On-line Research Techniques and Editorial Management and Design. A student will receive a Certificate of Achievement after finishing the course of study with grades of C or higher in all courses. The Certificate programs are designed for working journalists interested in upgrading skills, students returning to school in search of new career opportunities, or currently enrolled students in the program. A student may receive a certificate while still working on a degree.

Editorial Management and Design Certificate

The Editorial Management and Design certificate combines usage of editorial content with all aspects of creative design techniques. Students will be well versed in the creation of eye-catching page designs for newspapers and magazines.

Learning Outcomes

Upon completion of this certificate, students will be able to:

- Collaborate with editors in creating newspaper and/or magazine typography.
- Assess and employ creative design techniques for newspapers and magazines.
- Collaborate with printers in the production newspapers and magazines.
- Create a professional portfolio of published journalistic work.

Each course must be completed with a grade of “C” or higher.
Courses Required for the Certificate of Achievement in Editorial Management Design

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>First Semester</strong></td>
<td></td>
</tr>
<tr>
<td>JOUR 19 Contemporary News Media</td>
<td>3</td>
</tr>
<tr>
<td>JOUR 21 News Writing and Reporting</td>
<td>3</td>
</tr>
<tr>
<td>VMD 105 Digital Skills for Visual Media</td>
<td>3</td>
</tr>
<tr>
<td>LIBR 51 Intro to Libraries &amp; Lib Resources</td>
<td>3</td>
</tr>
<tr>
<td><strong>Second Semester</strong></td>
<td></td>
</tr>
<tr>
<td>JOUR 22 Feature Writing</td>
<td>3</td>
</tr>
<tr>
<td>LIBR 56 Computers in Libraries</td>
<td>3</td>
</tr>
<tr>
<td>LIBR 57 Internet Research Strategies</td>
<td>2</td>
</tr>
<tr>
<td>PHOT 51 Beginning Photography</td>
<td>3</td>
</tr>
<tr>
<td>JOUR 27 Newspaper Design and Pagination</td>
<td>2</td>
</tr>
<tr>
<td><strong>Third Semester</strong></td>
<td></td>
</tr>
<tr>
<td>VMD 122 Graphic Design II</td>
<td>3</td>
</tr>
<tr>
<td>JOUR 23 Electronic Copy Editing</td>
<td>3</td>
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<tr>
<td>JOUR 25 Editorial Management</td>
<td>3</td>
</tr>
<tr>
<td><strong>Fourth Semester</strong></td>
<td></td>
</tr>
<tr>
<td>JOUR 24 Newspaper Laboratory</td>
<td>3</td>
</tr>
<tr>
<td>JOUR 26 Fundamentals of Public Relations</td>
<td>3</td>
</tr>
<tr>
<td>BCST 110 Introduction to Writing for</td>
<td>3</td>
</tr>
<tr>
<td>Electronic Media</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Units</strong></td>
<td>43</td>
</tr>
</tbody>
</table>

On-line Research Certificate

The On-line Research certificate combines all aspects of information gathering and news/feature writing techniques. Students will be well versed in the creation of news and feature stories for publication in varying media outlets.

Each course must be completed with a grade of “C” or higher.

Learning Outcomes

Upon completion of the certificate, students will be able to:

- Report, write, and edit news and feature stories for various media outlets.
- Understand the changing skill demands of journalists in a modern society.
- Critically discuss career opportunities in the industry.
- Create a professional portfolio of published journalistic works.

Each course must be completed with a grade of “C” or higher.

Courses Required for the Certificate of Achievement in On-line Research

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>First Semester</strong></td>
<td></td>
</tr>
<tr>
<td>JOUR 19 Contemporary News Media</td>
<td>3</td>
</tr>
<tr>
<td>JOUR 21 News Writing and Reporting</td>
<td>3</td>
</tr>
<tr>
<td>VMD 105 Digital Skills for Visual Media</td>
<td>3</td>
</tr>
<tr>
<td>LIBR 51 Intro to Libraries &amp; Lib Resources</td>
<td>3</td>
</tr>
<tr>
<td><strong>Second Semester</strong></td>
<td></td>
</tr>
<tr>
<td>JOUR 22 Feature Writing</td>
<td>3</td>
</tr>
<tr>
<td>LIBR 56 Computers in Libraries</td>
<td>3</td>
</tr>
<tr>
<td>LIBR 57 Internet Research Strategies</td>
<td>2</td>
</tr>
<tr>
<td><strong>Third Semester</strong></td>
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</tr>
<tr>
<td>BCST 110 Introduction to Writing for</td>
<td>3</td>
</tr>
<tr>
<td>Electronic Media</td>
<td>3</td>
</tr>
<tr>
<td>JOUR 24 Newspaper Laboratory</td>
<td>3</td>
</tr>
<tr>
<td>JOUR 23 Electronic Copy Editing</td>
<td>3</td>
</tr>
<tr>
<td>JOUR 35 Internet Journalism</td>
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</tr>
<tr>
<td><strong>Total Units</strong></td>
<td>32</td>
</tr>
</tbody>
</table>

Announcement of Courses

Credit, Degree Applicable Courses:

JOUR 19. Contemporary News Media (3)
Lec-3, field trips
Introduction to modern mass communication, with an emphasis on the development of the news media, analysis of the credibility of the media and its impact on daily life. CSU/UC

JOUR 21. News Writing and Reporting (3)
Lec-3
Prereq.: ENGL 93 or 94 or placement in ENGL 96
Techniques of newspaper writing, with emphasis and practice on developing and writing the news story. Training in information gathering and interviewing news sources. CSU

JOUR 22. Feature Writing (3)
Lec-3
Prereq.: ENGL 93 or 94 or placement in ENGL 96
Fundamentals in feature writing for magazines and newspapers with special emphasis on profile and interpretive news features. Practical experience in interview and in-depth research techniques. Training in how to free-lance a story for publication. CSU

JOUR 23. Electronic Copy Editing (3)
Lec-3
P/NP available
Prereq.: JOUR 21, 22, and VMD 105
This course is for writers, working editors, and those considering a career in editing or copyediting. Students learn to edit newspapers, magazines and web site articles for accuracy, style and organization. The writer-editor relationship, and ways to keep it healthy, is emphasized throughout the course. CSU

JOUR 24. Newspaper Laboratory (3)
Lec-1, lab-6
P/NP available
Prereq.: JOUR 21, 22, and VMD 105
An advanced newspaper laboratory course in which students apply the skills they have learned in previous writing and research courses to the publication of the college newspaper. CSU

JOUR 25. Editorial Management (3)
Lec-3, field trips
Coreq.: JOUR 24
An advanced journalism course that trains prospective print editors on all aspects of operating a publication, including developing a publishing schedule and story assignments, coordinating a writing staff, designing a page, writing headlines and cutlines, sizing photographs, understanding the business side of print journalism, and working with other editors and printers. CSU

JOUR 26. Fundamentals of Public Relations (3)
Lec-3
Prereq.: VMD 105
Advisory: JOUR 24
Prepares students to create an effective public relations campaign which includes writing media releases, “pitch” letters, public service announcements, managing media outlets, coordinating mailings and designing leaflets and posters, as well as setting up news conferences.
Special attention given to in-house public relations duties for corporate and non-profit entities. CSU

JOUR 27. Newspaper Design and Pagination (2)
Lec-2, lab-2 P/NP available
Prerequisite: VMD 105
Fundamentals of newspaper design with special emphasis on tabloid publications. Practical hands-on experience in paginating the campus newspaper, The Guardsman. CSU

JOUR 28. Advertising and Design for Newspapers (2)
Lab-6
Prerequisite: VMD 105 or demonstration of VMD 105 exit skills
A computer-based course designed to provide practical laboratory projects in the design and layout of newspaper advertisements using such applications as Multi-Ad Creator, or other current software. CSU

JOUR 29. Magazine Editing and Production (3)
Lec-2, lab-3
Prerequisite: JOUR 21 or 22
Students will study the editorial, business, graphic, and production skills required for publishing a campus magazine. Course is appropriate for students interested in creative writing, graphic and fine arts, photography, business, and journalism. CSU

JOUR 30. Selected Topics in Journalism (1-3)
Conf-1, ind st-2,3,4
Prerequisite: LIBR 57 or CNIT 131
Supervised individual research and study on topics and issues in the mass media. The research could be an expansion of topics covered in introductory courses or an exploration of new topics. The work must serve to further the knowledge of the journalism student. Topics must be acceptable to both the student and the instructor. CSU

JOUR 30A. Selected Topics (1-3) CSU
JOUR 30B. Orientation to Careers in Journalism (1-3) CSU
JOUR 30C. Selected Topics in Journalism (1-3) CSU

JOUR 31. Internship Experience (2)
Conf-1, work-5
Repeat: Maximum credit: 4 units
Prerequisite: JOUR 24
Internship experience in a branch of journalism or a closely allied field to which the student shows him/herself to be best adapted. This could include experiences such as working on community-based newspapers, publishing on the Internet, or improving the journalism publishing program at CCSF for the betterment of the larger community. CSU

JOUR 35. Internet Journalism (3)
Lec-3, lab-1 P/NP available
Advising: JOUR 21
Internet Journalism focuses on three topic areas: examination of the role of the online journalist, web publishing, and using the Internet for investigative purposes. CSU

JOUR 36. Advanced Reporting (3)
Lec-3, field trips
Prerequisite: JOUR 21
Advanced concepts of news gathering, interviewing and writing. Students will be assigned beats covering neighborhood communities and local government. Extensive research, interviewing, meeting coverage and writing involved. Students will improve and expand their news gathering and writing skills. CSU

JOUR 37. Introduction to Photojournalism (3)
Lec-3
Advising: PHOT 51 or demonstration of equivalent knowledge
Emphasizes concepts of photojournalism such as news and feature photography. Assignments will involve photographing people and visual story-telling at a level appropriate for publication such as in campus publications. Access to Single Lens Reflex (SLR) digital or film camera required CSU

JOUR 38. Intermediate Photojournalism (3)
Lec-3
Prerequisite: JOUR 37
Advising: BCST 119 or equivalent skills
Emphasizes concepts of photojournalism at an intermediate level. Assignments will involve photographing people and visual story-telling at a professional entry-level appropriate for use in publications such as newspapers and magazines. Emphasizes integration of traditional photojournalism with new media technology reflecting current professional trends in photojournalism. Digital SLR required. CSU

JOUR 40. Civic Journalism (3)
Lec-2, lab-2 P/NP available
Advising: JOUR 19 or BCST 103
Through an innovative model of research, discussion, and advocacy, each student will learn new ways to investigate, interpret, report and advocate on stories, issues, political actions and events affecting very low income communities and individuals locally and internationally. CSU

Labor and Community Studies
Office: Evans
Phone Number: (415) 550-4459
Web Site: www.ccsf.edu/labr

Announcement of Curricula

Degree Curriculum
The Labor and Community Studies Department offers a two-year degree program in labor, community and environmental advocacy. It prepares students for transfer to similar programs at four-year colleges and universities and for careers in public interest work. It teaches students the contributions of working class people to American society, with a special focus on organized labor, immigrants, people of color, women and LGBT people. It gives a thorough grounding in the rights of employees, including union rights. It offers specialized instruction in the history and current status of movements for social change and includes classes in organizing, community economics, community arts and political advocacy. It combines class work with internships and connects students to the broader community of public interest advocates.

Students who satisfy the requirements for graduation from the College and complete the required Labor and Community Studies courses with the average grade of “C” (2.00 grade-point average) or higher receive the degree of Associate in Science in Labor and Community Studies.

Admission. Enrollment in Labor and Community Studies is open to all interested students. College counselors orient students to the program and help them set up a course of study that is appropriate to their educational needs.
Course of Study. The course of study includes instruction in working class history, workplace rights, union and community organizing, economics, politics, art and social change, community advocacy, environmental justice, communications, public relations and organizational development, among others.

Electives are recommended to strengthen students' skills in specific areas, to fulfill overall degree requirements and to facilitate transfer to associated four-year programs.

The Faculty. The faculty consists of scholars and practitioners of public interest work in unions, community groups, environmental organizations and government. They bring up to date, cutting edge information from their fields of interest to the students in the classroom, and provide them with a rich range of internship opportunities.

Transfer. Students have a wide range of transfer options to four-year colleges available to them after completion of the Labor and Community Studies program. This program prepares them for continuing education in Labor, Community and Environmental Studies, and in the social sciences and humanities.

Employment. Students are advised to seek a four-year degree as the most direct route to good careers in public interest employment. On the way to achieving that goal, the program helps them obtain internships and entry-level positions. This complements their classroom work and makes them attractive candidates for good jobs once they're done with college. These include positions with unions, labor advocacy organizations, community and environmental groups and government agencies. Union positions include work as negotiators, field representatives, organizers, researchers, educators and lobbyists. Community and environmental positions include those in outreach and development, lobbying, membership and coalition building, education and communication. Work with government agencies includes enforcement, outreach and education.

### Labor and Community Studies Major (AS)

**Learning Outcomes**

Upon completion of this program, students will be able to:

- Identify the main components of the labor relations system of the United States, especially as these relate to working class people.
- Interpret how economic and political power is exercised in the United States, including by working people and their unions.
- Analyze the ways in which working people in the United States and California organized historically to improve their conditions at work and in society.
- Contrast the effectiveness of working class movements for social justice past and present, and differentiate among different organizing strategies and techniques.
- Summarize the main components of working class social movements and assess the relative merits of workplace, community and electoral advocacy, internal and external organizing and effective coalition building.

**Courses Required for the Major in Labor and Community Studies**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>First Semester</strong></td>
<td></td>
</tr>
<tr>
<td>LBCS 70A Who Built America? From the Colonial Era to the Civil War &amp; Reconstruction</td>
<td>3</td>
</tr>
<tr>
<td>POLS 1 American Government</td>
<td>3</td>
</tr>
<tr>
<td>LBCS 81 Organizing for Econ &amp; Soc Justice</td>
<td>3</td>
</tr>
<tr>
<td>Additional graduation requirements</td>
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**Second Semester**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>LBCS 70B Who Built America? From Reconstruction to the Present</td>
<td>3</td>
</tr>
<tr>
<td>LBCS 93A Workers &amp; Unions in Lit &amp; the Arts or LBCS 98A Beg Labor Heritage Chorus and LBCS 98B Inter Labor Heritage Chorus and LBCS 98C Adv Labor Heritage Chorus</td>
<td>3</td>
</tr>
<tr>
<td>SPCH 1A Elements of Public Speaking</td>
<td>3</td>
</tr>
<tr>
<td>Additional graduation requirements</td>
<td></td>
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</table>

**Third Semester**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>LBCS 100 Racial Conflict &amp; Class Solid in Amer</td>
<td>3</td>
</tr>
<tr>
<td>WKEK 303 Gen Career Work Exp-Service Learning Internship</td>
<td>3</td>
</tr>
<tr>
<td>Additional graduation requirements</td>
<td></td>
</tr>
</tbody>
</table>

**Total Units**: 24

**Labor and Community Studies electives**: LBCS 15, 72, 74, 78A, 78B, 78C, 85, 88, 96C, 103

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**Recommended Additional Coursework**: ASAM 20; ECOL 10; BCST 104; CDEV 93; ECON 25, 30; ENGL 55, 57; HLTH 221; HIST 12A/B, 15A/B, 21, 41A/B, 45; IDST 36, 37, 45, 80, 81; JOUR 21; LALS 11; POLS 12, 22, 25; PSYC 23.

**Certificate Curricula**

The programs of study for the Certificates of Accomplishment in Labor and Community Studies prepare students for advocacy careers and for lives as active members of their communities. These programs teach the history of organized labor and social change movements. They teach students how to organize, communicate and motivate. They combine class work with public interest internships and connect students with transfer and career opportunities. The certificates are named for slogans, songs and people from working people-history.

**Admission.** Enrollment is open to all interested students. College counselors orient students to the programs and help them set up a course of study that is appropriate to their educational needs.

**Credit Certificate Programs**

The Labor and Community Studies Program offers two credit certificate programs. They build on the coursework in the noncredit certificate programs and provide a bridge to the major. Students may enroll in the certificate programs after completing work in the noncredit certificates or they may enter the program at the credit level. Like the major, the credit certificates prepare students for transfer to four-year colleges and for advocacy careers.

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**Cesar Chavez Certificate**

Cesar Chavez (1927-1993) was a civil rights and union leader and first president of the United Farm Workers Union.

This certificate requires the student to complete 12 units of coursework from the following list with a grade of “C” or higher for each course.

**Learning Outcomes**

Upon completion of this certificate, students will be able to:

- Identify the main components of the labor relations system of the United States, especially as these relate to working class people.
- Interpret how economic and political power is exercised in the United States, including by working people and their unions.

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**Courses Required for the Certificate of Accomplishment in Level 4: The Cesar Chavez Advocacy Certificate**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>LBCS 70A or 70B Who Built America?</td>
<td>3</td>
</tr>
<tr>
<td>LBCS 81 Organizing for Econ &amp; Soc Justice</td>
<td>3</td>
</tr>
</tbody>
</table>
Solidarity Forever/Si Se Puede Advocacy Certificate

Solidarity Forever is the anthem of the U.S. labor movement. Si Se Puede, “Yes We Can!” is the slogan of the United Farm Workers Union. This certificate requires the student to complete 9 units of coursework from the following list with a grade of “C” or higher for each course. The student must complete the Level 4 certificate prior to completing the Level 5 certificate.

Learning Outcomes
Upon completion of this certificate, students will be able to:

- Identify the main components of the labor relations system of the United States, especially as these relate to working class people.
- Interpret how economic and political power is exercised in the United States, including by working people and their unions.
- Analyze the ways in which working people in the United States and California organized historically to improve their conditions at work and in society.
- Contrast the effectiveness of working class movements for social justice past and present, and differentiate among different organizing strategies and techniques.

Courses Required for the Certificate of Accomplishment in Level 5: The Solidarity Forever/Si Se Puede Advocacy Certificate

<table>
<thead>
<tr>
<th>Core Courses</th>
<th>Units</th>
<th>Lec-3</th>
</tr>
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<tbody>
<tr>
<td>LBCS 100 Racial Conflict &amp; Class Solidarity in America</td>
<td>1.5</td>
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</tr>
<tr>
<td>LBCS elective or elective from collaborating dept.</td>
<td>.5</td>
<td></td>
</tr>
<tr>
<td>WKEX 303 General Career Work Exp-Internship</td>
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</tr>
<tr>
<td>Total Units</td>
<td>9</td>
<td></td>
</tr>
</tbody>
</table>

Labor and Community Studies electives: LBCS 15, 72, 74, 78A, 78B, 78C, 85, 88, 96C, 103

Recommended Additional Coursework: ASAM 20; ECOL 10; BCST 104; CDEV 93; ECON 25, 30; ENGL 55, 57; HLTH 221; HIST 12A/B, 15A/B, 21, 41A/B, 45; IDST 36, 37, 45, 80-81; JOUR 21; LALS 11; POLS 12, 22, 25; PSYC 23.

Announcement of Courses
Credit, Degree Applicable Courses:
LBCS 15. Latin American Workers in the Americas (3)
Lec-3
Advisement: ENGL 92 or ESL 150 or Placement in ENGL 93 or 94; or ESL 160
This course bridges Labor and Community Studies and Latin American/Latino/a Studies by comparing the histories and realities of Latin American workers in the U.S. and Latin America. The course traces the parallel histories of Latin American and Latino workers and discusses the ways in which politics, economics and social movements shape their experiences. CSU/UC

LBCS 70. Who Built America? (3)
Lec-3, field trips
A multicultural history of the United States from the perspective of its working people. The economic, social and cultural trends that have shaped American class, race and gender relations. Emphasis on the struggle for justice at work and in society. Special focus on the history and present status of the American labor movement. CSU

LBCS 70A. Who Built America? From the Colonial Era to the Civil War and Reconstruction (3)
Lec-3, field trips

LBCS 70B. Who Built America? From Reconstruction to the Present (3)
Lec-3, field trips
A multicultural, post-Civil War history of the United States from the perspective of its working people. The growth of the railroads, territorial expansion, Native American wars, the wild west and the Gilded Age. Trusts, trustbusters, an American empire, the Statue of Liberty and Ellis Island. Craft unions, industrial unions, the Progressive movement, the Wobblies and World War I. The Roaring Twenties, the Great Depression, mass unionization, the New Deal and World War II. Cold war, Civil Rights, the Sixties, Asian and Latin American immigration and the global economy. American ideals and American realities. CSU/UC

LBCS 71B. Labor and Politics (1)
Lec-1
P/NP available
Survey of current organizational structure, strategies and activities of labor and unions in the political arena. Current approaches to issues, campaigns and member involvement. CSU

LBCS 72. Workplace Rights (3)
Lec-3
An overview of the legal frameworks and doctrines governing labor-management relations and the workplace rights of minorities and other employees. Designed to provide practical legal background for the study and practice of labor relations. CSU

LBCS 74. Economics for Labor and Community Leadership (3)
Lec-3
A non-technical examination of how the American economy works. Designed to identify important policy choices in dealing with employment and unemployment, inflation, resources allocation to priority needs, poverty, income distribution, and other major domestic and urban problems. Special attention given to economic forces affecting collective bargaining. CSU

LBCS 78B. Women’s Employment Issues (1)
Lec-1
P/NP available
Current issues facing women workers will be discussed. Topics include pay equity, legal rights of women workers, sexual harassment, combining work and family responsibilities and women’s employment issues. CSU

LBCS 80. Rights and Discrimination in the Workplace (3)
Lec-3
P/NP available
Overview of employees’ legal rights under federal, state and local law. Analysis of legal remedies available to unorganized workers. Includes
anti-discrimination laws (dealing with race, sex, sexual preference, national origin, age, disability, etc.), California State Labor Code, Fair Labor Standards Act, and protections against arbitrary discipline and discharge. CSU

LBCS 81. Organizing for Economic and Social Justice (3)
Lec-3, field trips  P/NP available
This class will examine the strategies and tactics of organizing in various social settings including the organizing of workers into modern trade unions. Reviewing legal limitations on workers rights in the United States and the constraints this places on recruiting members and developing leadership in organizing drives will be emphasized. CSU

LBCS 85. History of the Labor Movement in San Francisco and the Bay Area (2)
Lec-2, field trips  P/NP available
Survey of the Bay Area labor movement based on written documents and recollections; comparison to labor history in a national context. Analysis of implications of Bay Area history for contemporary challenges. Simple techniques of historical research and oral history; research projects. CSU

LBCS 88. California Labor History (3)
Lec-3, field trips  P/NP available
The history of California's working men and women and their quest for justice. Includes Native Peoples and the Spanish conquest, Chinese workers and the railroads, robber barons, general strikes, and Central Valley farmworkers. The history of working Californians of all regions, races, and cultures. CSU

LBCS 90A. Steward Training (1)
Lec-1  P/NP available
A comprehensive course of study designed for beginning union shop stewards or job site representatives. Roles and responsibilities of stewards including membership recruitment, communications union and members, mediating between workers and supervisors, and contract interpretation and enforcement. CSU

LBCS 91-93. Special Topics in Labor and Community Studies (1-2-3)
Lec-1,2,3  P/NP available
Exploration of topics of current interest in labor and industrial relations. CSU

LBCS 91D. Gay and Lesbian Issues in the Workplace
LBCS 92A. Unions around the World
LBCS 93A. Workers and The Labor Movement in Literature and the Arts

LBCS 94-95-96. Selected Topics in Labor Relations (1-2-3)
Lec-1,2,3, field trips  P/NP available
Study of labor relations in various industries, including their history, present status, and current issues. Includes ownership patterns, workplace structure, the changing workforce, management philosophies, unionization, workers' rights, and current concerns. Labor relations as they affect the economy, society, and culture. CSU

LBCS 94A. Labor Relations in Childcare: History
LBCS 94B. Labor Relations in Childcare: Present Status
LBCS 94C. Labor Relations in Childcare: Current Issues
LBCS 94D. Labor Relations in Workforce Education
LBCS 95A. Labor Relations in Health Services
LBCS 96C. Labor Relations in the Modern American Workplace

LBCS 97. Current Issues in Labor Relations (0.5)
Lec-8 (total hrs)  P/NP available
A study of contemporary labor relations issues in various industries. Topics include patterns of ownership, the structure of the workplace, the changing work force, management practices, unionization, worker's rights and special concerns. An introductory analysis of labor relations as they affect the workplace and society. CSU

LBCS 97A. History
LBCS 97B. Present Status
LBCS 97C. Current Issues

LBCS 98A. Beginning Labor Heritage Chorus (1)
Lec-3, field trips  P/NP available
Prereq.: LBCS 98A/MUS 48A
The beginning study is an introduction to the songs that reflect workers of diverse cultures such as Native American chants, folk and labor ballads, field hollers, Black cowboy songs, Chicano farm and border songs, Labor Motown, Asian-American work songs and songs of working women's experiences. CSU/UC
LBCS 98A = MUS 48A

LBCS 98B. Intermediate Labor Heritage Chorus (1)
Lec-3, field trips  P/NP available
Prereq.: LBCS 98A/MUS 48A
Intermediate Labor Chorus is designed to further develop choral music techniques and knowledge of labor songs from various periods in American history, as presented in LBCS 98A/MUS 48A. Students will develop more complex choral techniques and repertoire. Increased focus will be on individual achievement and its effect on the progress of the chorus. CSU/UC
LBCS 98B = MUS 48B

LBCS 98C. Advanced Labor Heritage Chorus (1)
Lec-3, field trips  P/NP available
Prereq.: LBCS 98B/MUS 48B
Advanced Labor Chorus focuses on the development of a self-directed creative process and autonomy. Building on the concepts, skills and musical material of LBCS 98B/MUS 48B, students will become section leaders, soloists and conductors. CSU/UC
LBCS 98C = MUS 48C

LBCS 100. Racial Conflict and Class Solidarity in America (3)
Lec-3  P/NP available
Historical examination of the experiences of African American, Asian American, Spanish speaking and other minority workers in the 20th century, with special attention to union organizing. CSU/UC

LBCS 101. Issues in Workplace Health and Safety (1)
Lec-1  P/NP available
An overview of workplace health and safety hazards and how to control them. Update on recent legal developments. CSU

LBCS 103. Peer Counseling - the Basics (1)
Lec-1  P/NP available
Training for volunteer peer counselors in the areas of substance abuse, strike and emergency assistance, unemployment, and related workplace problems. Covers information and referral issues as well as communication skills necessary to peer counseling. CSU

LBCS 104A. Work Tales-Beginning Performance Workshop (3)
Lec-3, field trips
Beginning study of the history of labor and community theater. Creating stories of work and working people. Use of writing exercises and improvisation to create monologues and short scenes. Rehearsals and performance of original work. CSU
LBCS 104B. Work Tales-Intermediate Performance Workshop (3)
Lec-3, field trips
Prereq.: LBCS 104 A
Intermediate study of labor and community theater with a focus on the United States in the Nineteen-Thirties and Nineteen-Sixties. Use of writing exercises and improvisation to create in-depth monologues and complex scenes of working class life. Rehearsal and performance of original work. CSU

LBCS 104C. Work Tales-Advanced Performance Workshop (3)
Lec-3, field trips
Prereq.: LBCS 104B
Advanced study of labor and community theater, internationally and in the United States, from the Nineteen-Seventies to today. Working with labor and community organizations to create storytelling theatrical presentations that express their issues and concerns. Advanced performance training. Introductory directing and project leadership training. CSU

Noncredit Courses:
LACR 9802. Worker’s Rights (18 hrs)
An overview of the rights and responsibilities of employees under federal, state and local law. Topics include wage and hour regulations, workers compensation, disability and unemployment insurance, discrimination laws, health and safety protections, and how unions work. Especially designed for current employees and vocational students. Conducted in English, Cantonese or Spanish.

LACR 9805. San Francisco Labor Today - Its Issues (5 hrs)
An overview of the various organizations within the San Francisco labor community. Attitudes of various unions on matters of wage policy, hours, health, pensions and welfare, automation and environmental problems, organizing the unorganized and community issues as they affect working people and the labor movement.

LACR 9806. Shop Steward Training (3 hrs)
Introduction to the roles and functions of the union steward. Legal rights and responsibilities; contract interpretation; effective use of the grievance procedure in contract enforcement. The human relations aspects of dealing with members and supervisors.

LAIR 9809. Labor Relations in Selected Industries (7 hrs)
An in-depth analysis of labor-management relations in selected industries. Includes a discussion of the nature and evolution of the collective bargaining relationship, the laws governing that relationship and workplace issues particular to that industry. Industries to be analyzed include health care, postal and federal sectors, transportation, garment, construction, retail and food service.

Social Sciences. Oriented toward serving our diverse student body, our courses will allow students to fulfill transfer requirements to CSU, UC and other private universities. The major is comprised of 12 core units and 9 elective units. In the core 12 units of the LALS major, students gain a foundation on the history, culture, and politics of Latin America and Latinos in the Americas. In addition, students will complete a minimum of 9 units in more specialized courses allowing the major to reflect student's individual interests. Upon completion of the major, students will be able to integrate writing, research and presentation skills necessary for the successful attainment of a university degree.

Learning Outcomes
- To prepare students interested in a public, private or nonprofit careers in understanding the Latino/a experience in the state of California and the United States by earning an AA in Latin American and Latino/a Studies.
- To prepare students in successfully transferring to a 4-year B.A. or B.S. programs in Latin American and/or Latino Studies, social sciences or humanities degrees.
- To apply theories and methodologies in Latin American and Latino Studies to further training in upper division course work at a 4-year university.

Courses Required for the Major in Latin American & Latino/a Studies
Core Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>LALS 1 Latino/a Diaspora: The Impact of Latinos/as Living in the U.S.</td>
<td>3</td>
</tr>
<tr>
<td>LALS 10 Latinas in the U.S./Voces</td>
<td>3</td>
</tr>
<tr>
<td>ANTH 11 Latin American Cultures &amp; Societies</td>
<td>3</td>
</tr>
<tr>
<td>HIST 18A or 18 B History of Latin America</td>
<td>3</td>
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<tr>
<td>Total Units:</td>
<td>12</td>
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Option 1: Humanities (9 Units)

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>LALS 14 Diego Rivera Art and Social Change</td>
<td>3</td>
</tr>
<tr>
<td>MUS 25 Music of Latin America and the Caribbean</td>
<td>3</td>
</tr>
<tr>
<td>ART 105 Ancient Art/Arch of Latin America</td>
<td>3</td>
</tr>
<tr>
<td>ART 106 Latin America Art History</td>
<td>3</td>
</tr>
<tr>
<td>LALS 70 Independent Study</td>
<td>3</td>
</tr>
<tr>
<td>HIST 18A or 18B History of Latin America*</td>
<td>3</td>
</tr>
<tr>
<td>DANC 110A Salsa Dance Production</td>
<td>1</td>
</tr>
<tr>
<td>DANC 110B Salsa Dance Production</td>
<td>2</td>
</tr>
<tr>
<td>DANC 155A Latin American Social and Folk Dance Forms</td>
<td>1</td>
</tr>
<tr>
<td>DANC 155B Latin American Social and Folk Dance Forms</td>
<td>1</td>
</tr>
<tr>
<td>(Maximum 3 units of DANC courses)</td>
<td></td>
</tr>
<tr>
<td>Spanish Language Courses</td>
<td></td>
</tr>
<tr>
<td>Any course can be selected (Maximum 3 units)</td>
<td></td>
</tr>
<tr>
<td>Total Units:</td>
<td>21</td>
</tr>
</tbody>
</table>

Option 2: Social Science/Ethnic Studies/ Area Studies (9 Units)

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>LALS 9/LGBT 9 Latin American and Latino/a LGBT</td>
<td>3</td>
</tr>
<tr>
<td>LALS 11 Drug Wars in the Americas</td>
<td>3</td>
</tr>
<tr>
<td>LALS/POLS 13 Latin American &amp; Latino/a</td>
<td></td>
</tr>
<tr>
<td>Cross-Border Social Movement</td>
<td></td>
</tr>
<tr>
<td>LALS 14 Diego Rivera Art and Social Change</td>
<td>3</td>
</tr>
<tr>
<td>LALS 15 Latin American Workers in the Americas</td>
<td>3</td>
</tr>
<tr>
<td>HIST 18A or 18B History of Latin America*</td>
<td>3</td>
</tr>
<tr>
<td>HIST 20 History of Mexico</td>
<td>3</td>
</tr>
<tr>
<td>HIST 21 History of Mexican American/Chicano</td>
<td>3</td>
</tr>
<tr>
<td>POLS 18 Government &amp; Politics of Latin America</td>
<td>3</td>
</tr>
</tbody>
</table>

Latin American and Latino/a Studies

Office: Science 186
Phone Number: (415) 239-3126
Web Site: www.ccsf.edu/lals

Announcement of Curricula

Latin American & Latino/a Studies Major (AA)
The Latin American and Latino/a Studies major is a 21-unit program that offers courses in the Humanities, Ethnic Studies, Ares Studies and
Latin American and Latino/a Studies

POLS 8 Political Problems of Latin Americans ..........3
LALS 70 Independent Study ................................3
Total Units .................................................. 21

* Credit only given for course not taken as one of the Core Courses

Latin American & Latino/a Studies Certificate

The Certificate of Achievement in LALS is a 12-unit program intended for public and private sector employees or anyone who wishes to learn from and about Latino/a communities in the United States and Latin America.

Learning Outcomes

- To prepare students in developing the skills necessary to understand how race, class, gender, ethnicity and sexuality intersect with the Latin/o experience in the United States and Latin America.

Courses Required for the Certificate of Achievement in Latin American & Latino/a Studies

Core Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>LALS I Latino/a Diaspora: The Impact of</td>
<td></td>
</tr>
<tr>
<td>Latinos/as Living in the U.S. ..................</td>
<td>3</td>
</tr>
<tr>
<td>LALS 10 Latinas in the U.S./Voces ............</td>
<td>3</td>
</tr>
<tr>
<td>ANTH II Latin American Cultures &amp; Societies</td>
<td>3</td>
</tr>
<tr>
<td>LALS 15 Latin American Workers in the Americas</td>
<td>3</td>
</tr>
<tr>
<td>Total Units: ........................................</td>
<td>12</td>
</tr>
</tbody>
</table>

Announcement of Courses

Learning Outcomes

To provide students with scholarly courses which address the social, cultural, historical and political complexity of the emerging Latino/a diaspora and its impact on American culture and values; promote cultural understanding and appreciation for the differences and similarities between various peoples in the Western Hemisphere.

Credit, Degree Applicable Courses:

LALS 1. Latino/a Diaspora: The Impact of Latinos/as Living in the United States (3)
Lec-3, field trips P/NP available

Advise: ENGL 92 or ESL 150 or Placement in ENGL 93 or ESL 160
This course examines the impact of the Latino/a Diaspora on the culture, identity and politics of the United States. It begins with the initial period of Spanish exploration in North America and concludes with current events and issues. The course will emphasize an analysis of the Diaspora's effect on American systems and institutions. CSU/UC

LALS 5. Introduction to Statistical Methods in Latin American and Latino/a Studies (4)
Lec-5 P/NP Available

Emphasizes statistical application; topics include: summarizing data on Latin American economic growth, foreign direct investment, income inequality, poverty; descriptive statistics; organization of data, measures of central tendency; probability, statistical inference; Understand how politics influences economic outcomes in Latin America, as well as how class/race/gender affect U.S. Latino/a voting participation. CSU/UC

LALS 9. The Latin American and Latina/o LGBT Experience (3)
Lec-3 P/NP Available

A survey of LGBT culture in Latin America and in Latino/a communities in the US. An examination of indigenous, cultural, sexual, psychological, socio-economic, immigration, literary and artistic elements. CSU/UC

LALS 9=LGBT 9

LALS 10. Latinas in the U.S./VOCES (3)
Lec-3, field trips P/NP available

The course will examine the lives and experience of Latinas living in the U.S. It will explore the effects that their experiences have on self-esteem. Major social and cultural issues and themes will be discussed and analyzed using a multidisciplinary approach. CSU/UC

LALS 11. Drug Wars in the Americas (3)
Lec-3

The course will introduce the student to the impact of drug production and trafficking and their collective influence on the relationship between Latin America, Mexico and the United States; evaluate past and current U.S. drug policy and initiatives and law enforcement strategies; study the link between transnational organized crime and the drug cartels and the extent of the connection between drug production, drug trafficking, insurgency and terrorism in Latin America and Mexico. CSU/UC

LALS 13. Latin American and Latino/a Cross-Border Social Movements (3)
Lec-3 P/NP available

Advise: ENGL 92 or ESL 150 or Placement in ENGL 93 or ESL 160
This course bridges Latin American and Latino/a politics by analyzing the experiences and struggles of social movements in Latin America and the United States. Among other aspects, their relationship to rebellions and revolutions in Latin America and the emergence of U.S. based Latino/a cross-border social movements will be analyzed. CSU/UC

LALS 13=POLS 13

LALS 14. Diego Rivera; Art and Social Change in Latin America (3)
Lec-3, field trips

Mexican muralist Diego Rivera's work exemplifies the use of art to create and awareness of history and to promote social change in Latin America. This interdisciplinary class will explore the work of Diego Rivera and the Latin American cultural movements that developed to address relevant social and political issues. The class will visit local murals, museums and cultural performances. CSU/UC

LALS 15. Latin American Workers in the Americas (3)
Lec-3

Advise: ENGL 92 or ESL 150 or Placement in ENGL 93 or ESL 160
This course bridges Labor and Community Studies and Latin American/Latino/a Studies by comparing the histories and realities of Latin American workers in the U.S. and Latin America. The course traces the parallel histories of Latin American and Latin American workers and discusses the ways in which politics, economics and social movements shape their experiences. CSU/UC

LALS 15 = LBCS 15

LALS 70. Individual Study in Latin American and Latino/a Studies (1-2-3)
Ind st-5,10,15, field trips P/NP available

Advise: ANY LALS course, including any cross-listed Social or Behavioral Science course
Supervised individual or group study on topics and issues in Latin American & Latino/a Studies using an interdisciplinary approach. CSU (UC upon review)
ANTH 11. Latin American Cultures and Societies (3)
Lec-3  P/NP available
Comprehensive and critical analysis of the cultures and traditions of the peoples of Latin America. Critical in-depth study of contemporary society and political systems, inter-ethnic relations, traditional medical and healing methodologies, religion and sorcery. Analysis of the development of Latin American cultures and the impact of civilization on its peoples. Emphasis on the way of life in Latin American cities, barrios, and villages. CSU/UC

ART 105. Ancient Art and Architecture of Latin America (3)
Lec-3, field trips
A survey of the artistic heritage of Pre-Columbian Mexico, Central and South America. Art 105 explores the themes and beliefs which gave unity to the art of this part of the world as well as the diverse cultural characteristics which led to the development of regional styles. CSU/UC

ART 106. Latin American Art History (3)
Lec-3, field trips
A survey of the artistic heritage of Latin America from the sixteenth century AD to the present. All art will be discussed from a critical and historical perspective, with regard to formal visual elements of style and the societies, values, and ideas that gave birth to Latin American art. CSU/UC

HIST 18A-18B. History of Latin America (3-3)
Lec-3  P/NP available
HIST 18A is not prerequisite to 18B
A survey of Latin American history, institutions, culture, and art from pre-Colombian times to present. CSU/UC

HIST 18A. Survey of Latin American history, institutions, culture and art from pre-Colombian times to colonial time.

HIST 18B. Survey of Latin American history from independence in the 19th century to the present.

HIST 20. History of Mexico (3)
Lec-3  P/NP available
A survey of the history of Mexico. Examination of indigenous, cultural, psychological, socio-economic, and artistic elements. CSU/UC

HIST 21. History of the Mexican-American/Chicano (3)
Lec-3  P/NP available
Survey of historical processes undergone by the Mexican-American/Chicano from pre-Conquest to the present. Social, political, economic, artistic, and cultural trends. Emphasis on the history of the United States to explain the contemporary status of Mexican-American/Chicanos. CSU/UC

MUS 25. Music of Latin America and the Caribbean (3)
Lec-3, field trips  P/NP available
Survey of Latin American and Caribbean music. Music as a form of communication and as a social and cultural force in the Americas. CSU/UC

POLS 8. Political Problems of Latin Americans (3)
Lec-3  P/NP available
The relationship between Latin American citizens and American political institutions. Emphasis on the political problems of Latin Americans, proposed solutions to these problems, and practical political techniques for achieving such solutions. CSU/UC

POLS 18. Government and Politics of Latin America (3)
Lec-3  P/NP available
The constitutional systems, political processes, and social problems of Latin American nations. CSU/UC

Spanish Language Courses: See Spanish in this section of the catalog.

Leadership Development Studies
Office: Student Union 205
Phone Number: (415) 239-3212
Web Site: www.ccsf.edu/stuactiv

Mission Statement
Our mission is to provide, in collaboration the Student Activities Office, courses in leadership development studies that promote the holistic development of diverse leaders. These courses focus on student success and offer skills development in the areas of: civic engagement, citizenship, personal growth, and critical thinking.

Learning Outcomes
Upon completion of courses in leadership development studies courses, students will be able to:

- Develop and demonstrate critical thinking skills.
- Develop and understand civic engagement and community service.
- Apply effective communication skills in both written and oral forms.
- Exhibit professional skills and behaviors appropriate for the workplace.
- Identify diversity and opportunities for further learning on campus.

Announcement of Courses
Credit, Degree Applicable Courses:
S L 10. Student Government (1)
Work-2  P/NP only
Repeat: Maximum credit: 4 units
Training in the governance of student activities and representation/advocacy of student concerns. Learning to participate in and chair meetings, allocate funds, and implement agreed upon projects. Students will attend and participate in Associated Student Council meetings, Inter-Club Council meetings, and/or shared governance meetings to receive credit for this course. CSU

S L 12. Leadership Skills (3)
Lec-3  P/NP available
Examination of the principles of leadership and their application to Associated Students Council, clubs, and activities. Specific leadership skills include chairing meetings, organizing events and campaigns, communicating effectively, working collaboratively, resolving conflicts, balancing priorities, and managing one's time. Leadership styles, functions and approaches will be discussed and evaluated. CSU

S L 12A. Leadership Skills: Independent Study (3)
Ind st-54 hrs  P/NP available
An independent leadership project. CSU
LDST 101. Foundations of Leadership (3)
Lec-3, field trips  P/NP Available

This course is designed to provide emerging and existing leaders the opportunity to explore the concept of leadership and to develop and improve their leadership skills. The course integrates readings from the humanities, experiential exercises, films, and contemporary readings on leadership. CSU

Learning Assistance
Office: Rosenberg 207
Phone Number: (415) 452-5502
Web Site: www.ccsf.edu/lac

Mission Statement
Our mission is to provide a supportive environment that promotes active learning and encourages collaboration among members of our diverse community.

Toward this goal, we assist our students in achieving their academic, vocational, and personal goals through our academic-support services that include: student-centered peer tutoring, college and career success courses, workshops and peer-collaborative small groups; an open-access computer lab; and a grant-funded writing project.

Learning Outcomes
Upon completion of courses in the Learning Assistance Discipline, students will be able to:

- Demonstrate personal responsibility for learning.
- Apply study strategies to academic courses.
- Examine and demonstrate critical analysis techniques.
- Assess personal growth and values and apply them to lifelong learning.
- Apply computer and technology skills to facilitate academic achievement.
- Recognize and appreciate diversity in themselves and others.

Announcement of Courses
Credit, Degree Applicable Courses:

LERN 10. Introduction to Tutoring (1)
Lec-1  P/NP only

Prereq.: Acceptance into a CCSF peer tutoring program
Designed for students who wish to tutor in the Learning Assistance Center, other programs, or classrooms.
Introduction to the theories and methods of effective tutoring.
Tutoring purpose, goals and techniques; questioning and positive reinforcement; active listening and study skills; culture and multicultural awareness; learning styles and strategies. CSU

LERN 11. Advanced Tutoring (1)
Conf-1  P/NP only

Prereq.: Completion of or concurrent enrollment in LERN 10
Designed for students who wish to tutor in the Learning Assistance Center, other tutorial programs, or classrooms.
Individualized instruction in tutoring techniques specific to a particular academic discipline. Weekly conferences with instructor by arrangement. Minimum three hours per week of regularly scheduled tutoring. CSU

LERN 12A-12B-12C. Tutoring Work Experience (1-2-3)
Conf-1, work-3, 6, 9  P/NP only

Prereq.: Completion/concurrent enrollment in LERN 10
Repeat: LERN 12A, 12B, and 12C combined, max. credit: 12 units.
Individualized training in subject matter tutoring techniques as presented by the Learning Assistance Center Coordinator or an instructor of a specific course or program. Weekly problem-solving conference with instructor will be arranged for each student. Students will also receive a minimum of 3 hours per week of regularly scheduled, instructor supervised, tutoring per unit. CSU

LERN 50. College Success (3)
Lec-3  P/NP available

Integrates personal growth and values, study strategies and critical analysis into lifelong success in academic, professional and personal development. Includes life management, learning styles, personal and educational values, instructor-student communication, diversity, financial literacy, health, memory, concentration, notetaking, textbook reading, test taking, library skills, problem solving, critical and creative analysis. CSU/UC

LERN 50 = IDST 50

LERN 51. College Success Basics (1)
Lec-1  P/NP only

This brief course introduces students to basic college success strategies: goal setting and time management, memory and concentration, lecture notetaking, textbook studying and test taking. CSU

LERN 52A. Study Strategies: Discipline Specific (0.5)
Lec-0.5  P/NP only

This brief intensive course increases students success by introducing discipline-specific study strategies particular to a targeted academic discipline, or course or section within discipline.

LERN 52B. Study Strategies: Skills Based (0.5)
Lec-0.5  P/NP only

This brief intensive course increases student success by introducing study strategies particular to targeted study skills. CSU

LERN 53. Test Prep: Standardized Exams (0.5)
Lec-8 (total hrs)  P/NP only

Prepares students for standardized, timed tests. Each course focuses on a single test or subtest. Specific content for each course is determined by the particular test for which students are preparing.

LERN 53A. Test Prep: Standardized Exams-CBEST
LERN 53B. Test Prep: Standardized Exams-CBEST
LERN 53C. Test Prep: Standardized Exams-CSET
LERN 53D. Test Prep: Standardized Exams-CSET

LERN 55. Successful Online Learning (1)
Lec-1

Steps for successful online learning. Focuses on technology skills, communication skills and online study strategies such as following online instructions, time management, goal setting, self-motivation and self-responsibility and making realistic commitments. Especially for students new to online learning and those with previously unsuccessful online course attempts. CSU

LERN 64. Financial Planning for Academic/Career (1)
Lec-1  P/NP only

Critical analysis and practical application of topics related to career and financial planning as they relate to success in college. This course
will provide students with financial planning and management tools for academic and career success. Appropriate for new and continuing college students. CSU

Noncredit Courses:
LERN 1000. Supervised Tutoring (50 hrs)
Tutoring and learning support activities outside of class. Assistance in achieving academic course learning outcomes, basic skills (including reading, writing, math and ESL), study strategies and computer skills. Students work tutors who are recommended, trained and supervised by faculty. Students must have a referral by faculty to receive tutoring.

LERN 1062. Job Search Skills (15 hrs)
A job search-course that teaches skills to generate employment options through self-assessment, the use of interview techniques, cover letter and resume development, and job search strategies.

Career Development *

*See Career Development for former LERN career development courses.

Lesbian, Gay, Bisexual, and Transgender Studies
Office: Cloud 126
Phone Number: (415) 239-3876
Web Site: www.ccsf.edu/lgbt
*Formerly: Gay, Lesbian and Bisexual Studies

Announcement of Curricula

Lesbian, Gay, Bisexual, and Transgender Studies Major (AA)
The LGBT Studies Major offers a multidisciplinary and multicultural approach to the study of Lesbian, Gay, Bisexual, Transgender, Queer and Intersex identities, culture, art, literature politics, history and society both globally and domestically. Through the Arts, Humanities, Social Sciences and Behavioral Sciences, the LGBT Studies Major incorporates queer theory, theories of race and ethnicity, feminist theory, and the study of comparative social and political movements to examine the ways that we currently understand and have historically understood various constructions of sexuality, gender identity and behavior depending upon historic time and global location. To support this multidisciplinary approach, the LGBT Studies Department offers course that cover literature, film, art, ethnic studies, history, anthropology, psychology, politics, religion and health. While the LGBT Studies major at City College of San Francisco offers a full and array of General Education and Diversity requirements, it will also prepare students for transfer to numerous LGBT/Queer Studies baccalaureate programs in the United States and Canada.

Learning Outcomes
Upon completion of this degree, students will be able to:
- Think and write critically about key issues concerning LGBTQI people in various regions of the world with a keen understanding of the ways that race, ethnicity, socio-economic status, gender identity, sexual orientation and other factors that forms cultural identity are informed by issues of politics, religion and colonial histories throughout different historical, political, and social contexts.

Courses Required for the Major in Lesbian, Gay, Bisexual and Transgender Studies

Course | Units
--- | ---
**Required Courses for All Students (May Be Taken At Any Time):**
LGBT 5 Introduction to Lesbian, Gay, Bisexual and Transgender Studies | 3
LGBT 15 Pre-Stonewall Writers and Cultures | 3
**Required Courses in the Arts and Humanities (Minimum of 6 units, at least one course from Arts):**
**Arts:**
LGBT 20 LGBT American Art and Culture | 3
LGBT 25 The Lesbian and Gay Avant-Garde of the Fifties: Hot Art/Cold War | 3
LGBT 35 Global LGBT Art and Culture | 3
LGBT 77 Queer Creative Process | 3
**Humanities:**
LGBT 11 The History of Homosexuality in Film | 3
LGBT 12 Recent Queer Cinema | 3
LGBT 18 Transgender Lives, Culture and Art | 3
LGBT 75 Queer Cinema in the 1970’s | 3
ENGL 55 LGBT Literature | 3
**Required Courses in the Social and Behavioral Sciences (Minimum of 6 units):**
LALS/LGBT 9 The Latin American and Latina/o LGBT Experience | 3
LGBT 10 LGBT Culture and Society | 3
LGBT 30 Issues in the Lesbian Community | 3
LGBT 40 LGBT Aging Issues | 3
LGBT 50 LGBT Communities of Color in the United States | 3
LGBT 60 Psychology of Sexual Minorities | 3
LGBT 70 AIDS in America | 3
ANTH 20 LGBT Anthropology | 3
HIST 45 LGBT American History | 3
**Elective Courses (Minimum of 3 units; may include Arts & Humanities and Social & Behavioral courses listed above, if not used to meet minimum requirements):**
LGBT 21 Issues in Lesbian Relationships | 3
LGBT 24 Gay Male Relationships | 3
BCST 103 Mass Media and Society | 3
CDEV 76 Supporting LGBT Families in Edu Settings | 3
HLTH 25 Women’s Health | 3
HLTH 27 Men’s Health | 3
HLTH 67 HIV/STI Prevention | 3
IDST 17 Human Sexuality | 3
IDST 36 Poetry for the people | 3
IDST 80A Diversity: Racism | 0.5
IDST 80C Diversity: Sexism | 0.5
IDST 80D Diversity: Heterosexism | 0.5
IDST 80E Diversity: Ableism | 0.5
IDST 80F Diversity: Classism | 0.5
from multimillion dollar Hollywood representations of queerness to the interrogation of queer sexualities inside and outside of commercial cinema. Examines significant styles from leather to lipstick and from drag to disco and assesses the evolution of sensibility and identity. CSU/UC

LGBT 9. The Latin American and Latina/o LGBT Experience (3)
Lec-3, field trips

A survey of LGBT culture in Latin America and in Latino/a communities in the US. An examination of indigenous, cultural, sexual, psychological, socio-economic, immigration, literary and artistic elements. CSU/UC
LALS 9=LGBT 9

LGBT 10. Lesbian and Gay Culture and Society (3)
Lec-3

Distinct styles in dress, manner, and taste have played a central role in the development of lesbian and gay community, identity and culture. This course examines significant styles from leather to lipstick and from drag to disco and assesses the evolution of sensibility and identity in various lesbian and gay cultures and communities. CSU
Formerly GLST 5

LGBT 11. History of Homosexuality in Film (3)
Lec-3

Surveys significant trends in the representation of queer sexualities in mainstream commercial cinema, as well as underground and independent films from the silent era to the present. Identifies prominent theoretical approaches to the study of queer cinema intended to develop analytical skills for interpreting homophobic subtexts in mainstream films, as well as issues in creating alternative representations. Emphasizes the way social attitudes shape cultural representation, and interrogates the relationship between audience interpretation and filmmakers’ intentions. CSU/UC
Formerly GLST 11

LGBT 12. Homosexuality in Recent Cinema (3)
Lec-3

Examines significant issues in the contemporary cinematic representation of queer sexualities inside and outside of commercial cinema. Defines narrative expressed in each form. Films screened progress from multimillion dollar Hollywood representations of queerness which reflect social prejudices to alternative productions made outside of commercial constraint. The language of film theory and recent writings from a queer studies perspective aid in developing a language for discussing the way cinema both challenges and reinforces societal values. CSU/UC
Formerly GLST 12

LGBT 15. From Greece to Stonewall: Queer Writers, Lives, and Worlds (3)
Lec-3

Examines LGBT writers, lives, friendship networks, and salon cultures from ancient Greece and Rome and pre-Colombian Indigenous cultures of the Americas through pre-World War II Europe and 1950s America. Explores expatriates and travelers, American writers and artists. From Sappho to Carson McCullers; from Oscar Wilde to the Beat Generation. CSU/UC
Formerly GLST 15

LGBT 18. Transgender Lives, Culture and Art (3)
Lec-3

Focuses on Transgender and ‘gender variant’ figures throughout the world who, historically, held a sacred place within ancient cultures as evidenced in art and literature. The course will then move to explore modern and contemporary views of Transgender and ‘gender variant’ people within various cultures including LGBT politics, art and culture. CSU

LGBT 20. Lesbians and Gays in Modern American Culture: The Homosexualization of American Art (3)
Lec-3

Lesbian and gay American artists of the late 19th and 20th centuries and their influences on modern art. This course analyzes the contribution of lesbian and gay artists—and the poets, dancers and writers with whom they associated—on the development of American art. It seeks to restore the specifically lesbian or gay voices of some of the most talked about figures in American cultural history from Thomas Eakins to Jasper Johns against the background of the lesbian and gay movement. CSU/UC
Formerly GLST 20

LGBT 21. Issues in Lesbian Relationships (3)
Lec-3

An exploration of the historical, cultural, and psychological forces that impact lesbian relationships. Examination of the stages relationships go through with an emphasis on the issues of intimacy, commitment, and the sociological repercussions of homophobia and minority status on the lesbian dyad. The complexity of legal, political, and multicultural influences and ramifications will also be explored. CSU
Formerly GLST 21

LGBT 24. Gay Male Relationships (3)
Lec-3

Examines the dynamics of gay male relationships. Provides historical and theoretical perspectives on the impact of homophobia on gay relationships. Provides students with practice in clear communication and conflict resolution in male dating, bonding, and developing lasting relationships. CSU
Formerly GLST 24

LGBT 25. The Lesbian and Gay Avant-Garde of the Fifties: Hot Art/Cold War (3)
Lec-3

This course examines major works of art, music, dance, photography, poetry, and film from the Fifties and early Sixties. In considering the work of artists as diverse as John Cage, Louise Nevelson, and...
Andy Warhol, it analyzes the importance of lesbian and gay figures within the avant-garde and the significance of their contributions to American culture during this repressive period. CSU/UC
Formerly GLST 25

LGBT 30. Issues in the Lesbian Community (3)
Lec-3 P/NP available
Historical analysis and examination of issues central to the development of lesbian identity, culture, and relationships. Exploration and debate of current controversial issues in the political, social, and personal realms of lesbian experience. CSU/UC
Formerly GLST 30

LGBT 40. Lesbian and Gay Aging Issues (3)
Lec-3, field trips P/NP available
An exploration of the lesbian and gay dimensions of aging. Basic concepts in aging are presented and delineated, using examples drawn from autobiographical sources. Existing lesbian and gay institutions and programs that focus on aging are described, current research in lesbian and gay aging is reviewed, and future trends discussed. CSU/UC
Formerly GLST 40

LGBT 50. Gay/Lesbian/Bisexual/Transgender Communities of Color in the U.S. (3)
Lec-3 P/NP available
Examination of the formation of lesbian/gay/bisexual and transgender identities and communities among people of color in the United States. Included are African Americans, Native Americans, Asian Americans, Pacific Islanders, and Chicano/Latinos. CSU/UC
Formerly GLST 50

LGBT 55. Global GLBT Art and Culture (3)
Lec-3 P/NP available
Is there such a thing as a global queer culture? Do gay, lesbian, bisexual, and transgender people from different global regions have different queer cultural norms or is there something that unites queer people despite their regional difference? This class employs film, documentary, photography, art, music and literature to allow students to compare and contrast contemporary queer subcultures from four (4) separate regions of the globe. CSU/UC
Formerly GLST 55

LGBT 60. Psychology of Sexual Minorities (3)
Lec-3 P/NP available
Examination of the psychological experience of lesbian, gay, bisexual, transgendered (LGBT) and homophobic people. Impact of additional minority identities (e.g., ethnicity, aging, HIV status and spirituality) on LGBT identities. Influence of psychology and psychiatry on shaping the experience of LGBT people and people with multiple minority identities. Students will gain practice in essay writing, exam preparation, and literature analysis. CSU/UC
Formerly GLST 60

LGBT 70. AIDS in America (3)
Lec-3 P/NP available
Exploration of the sociological, political, and medical dimensions of AIDS. Emergence of AIDS into the American psyche, noting critical moments in the story of AIDS such as defining of risk factors, the discovery of a test for HIV antibodies, and the impact of public figures coming out as HIV positive. Examination of how AIDS and its metaphors have changed, focusing on ethical and legal issues of today and tomorrow. CSU/UC
Formerly GLST 70

LGBT 75. Queer Cinema in the 70s (3)
Lec-3 P/NP available
Exploration of the overlapping impact of a profoundly significant period in both the gay rights movement and American film history. The resulting images represented queerness more openly than before, while simultaneously painting it as at best ridiculous, and at worst, monstrous. Meanwhile, queer filmmakers were laying the groundwork for the current revolution in independent cinema. CSU/UC
Formerly GLST 75

LGBT 76. Supporting LGBT Families in ECE (3)
Lec-3 ADVISE: CDEV 67
Analysis of issues and challenges faced by lesbian, gay, bisexual and transgender parents and their children in early childhood settings and exploration of the role of early childhood educators and programs in creating inclusive environments. CSU
Formerly GLST 76
LGBT 76=CDEV 76

LGBT 77. Queer Creative Process (3)
Lec-3, field trips P/NP available
Within the context of Queer/LGBT-identity, original art work is explored. Genres include: fiction/non-fiction writing, writing for performance, comedy and film/video. The creative process, peer critiques and analysis, as it relates to Queer-identity and societal reception, form the course's core. CSU/UC
Formerly GLST 77

ANTH 20. LGBT Anthropology (3)
Lec-3 P/NP available
The roles and statuses of homosexuals in various cultures throughout the world, drawing heavily on examples from non-Western people, like those in Native American, Middle Eastern, African and Asian societies. Various aspects of culture which affect homosexuals' status, such as economic participation, religion, social relationships, and attitudes toward sexuality, will be examined in detail. CSU/UC

BCST 106. Queer TV: Television and Lesbian and Gay Identity (3)
Lec-3 P/NP available
Examination of how gays, lesbians, bisexuals, and transgender people are represented in and by the mainstream electronic media with strong emphasis on television. CSU

BIO 15. The Biology of HIV (2)
Lec-3, field trips P/NP available
Introductory survey of the biology of human immunodeficiency virus (HIV) and AIDS. The life cycle of HIV and retroviruses; HIV transmission, epidemiology, immunology, and pathogenesis; and HIV prevention and treatment. CSU/UC

ENGL 55. Gay and Lesbian Literature (3)
Lec-3 P/NP available
Prereq.: ENGL 96 or placement in ENGL 1A
A survey of gay and lesbian literature drawing on examples that present material relevant to present day experience. CSU/UC

HLTH 25. Women's Health (3)
Lec-3, field trips P/NP available
Advis: ESL 150 or placement in ESL 160 or ENGL 92
Explores the social determinants and issues related to women's health on an individual and community level. Emphasis on evaluation of
health resources, behavior change process, and role of risk factors and prevention. CSU/UC

HLTH 27. Men’s Health (3)
Lec-3  P/NP available
ADVISE: ESL 150 or Placement in ESL 160 or ENGL 92
Exploration of the social determinants and issues related to men’s health on the individual and community levels. Emphasis on evaluation of health resources, behavior change process, and role of risk factors and prevention. CSU/UC

HIST 45. Lesbian and Gay American History (3)
Lec-3, field trips  P/NP available
A survey of the origins, development, and current status of the gay, lesbian, and bisexual reform and liberation movements in the United States during the last two centuries, with particular emphasis since the Second World War. The lives, communities, organizations, and resistance movements created by lesbian, gay, and bisexual peoples from diverse racial, ethnic, and class backgrounds. CSU/UC

LBCS 91D. Gay and Lesbian Issues in the Workplace (1)
Lec-1  P/NP available
A survey of issues which affect gay and lesbian workers, including job discrimination and relevant legal protections, techniques for responding to harassment at work, and the use of negotiated grievance procedures and other contractual protections in a unionized workplace. Students will participate in role-playing and other classroom activities to develop effective personal and organizational approaches to on-the-job problems. CSU

MUS 27C. Music and Queer Identity (3)
Lec-3  P/NP available
Examination of the question of how music encodes “queerness” by focusing on various musical styles and musical performers that have become significant for various lesbian and gay communities. CSU

Noncredit Courses:

LGBT 4800. Techniques for Ause Recovery (18 hrs)
Instruction in skills supporting social health needs of survivors of bullying, gay bashing, harassment, rape and gender/sexual abuse. Students discuss and practice recovery techniques applied to seven major energy centers in the body (Hindu chakra system) to assist in furthering recovery and increasing resilience against threats of recurring abuse.

Liberal Arts and Sciences

The Liberal Arts and Sciences degree is designed for students who wish to have a broad knowledge of arts and sciences plus additional knowledge in an “Area of Emphasis.” This degree can be a good option for students planning to transfer to the university as it provides the flexibility for students to satisfy both general education and lower division major requirements for specific universities while meeting associate degree requirements at the same time. For more detailed information on transfer requirements, students should speak with a counselor and refer to www.ASSIST.org.

To complete the requirements for the Associate in Arts or Associate in Science for this degree, a student must:

- Complete 18 units in one “Area of Emphasis” from those outlined below.

Each course used to meet this “area of emphasis” requirement must be completed with a grade of “C” or higher (or “Credit” or “Pass” if the course was taken on a “credit/no credit” or “pass/no pass” basis). Where appropriate, courses in the “area of emphasis” may also be counted for a General Education area.

- Complete all other CSFS graduation requirements (i.e., math, GPA, residency, and unit requirements).

AREAS OF EMPHASIS

Arts and Humanities Emphasis (AA)
Associate in Arts and Humanities

These courses emphasize the study of cultural, literary, humanistic activities and artistic expression of human beings.

Learning Outcomes

Upon completion of this emphasis, students will be able to:

- Evaluate and interpret the ways in which people through the ages and in different cultures have expressed their experiences and interpretations of the world around them through artistic and cultural creation.
- Demonstrate an understanding of aesthetic concepts and incorporate that understanding in creating value judgments of, and contributions to, cultural activities and/or artistic expressions.

Students pursuing this area of emphasis must take at least one course in the arts and at least one course in humanities. Students should meet with a counselor to select appropriate courses.

Arts:
- African American Studies 55;
- Architecture 29A, 31A, 31B, 32, 102, 134;
- Asian Studies 11;
- Cinema 18, 21, 23A, 23B;
- Dance 30, 32, 100A, 107B, 107C;
- Design 101, 105, 110;
- Fashion 23, 55;
- Interdisciplinary Studies 70;
- Interior Design 138;
- Labor and Community Studies 93A, 104A, 104B, 104C;
- Latin American and Latino/a Studies 14;
- Lesbian/Gay/Bisexual/Transgender Studies 20, 25, 55, 77;
- Photography 50A, 50B, 100;
- Speech 38;
- Theatre Arts 30, 31, 32, 71, 150A, 152, 163, 200;
- Visual Media Design 101, 110

Humanities:
- African American Studies 30, 35, 40, 51, 60;
- American Civilization 11A, 11B;
- American Studies 5;
- Asian American Studies 6, 10, 20, 30, 35;
- Asian Studies 12, 30;
- Broadcast Electronic Media Arts 103, 106;
- Chinese 1, 1A, 1B, 2, 2A, 2B, 3, 3A, 3B, 4, 4A, 4B, 10A, 10B, 10C, 10D, 12A, 12B, 12C, 14A, 14B, 14C, 16, 17, 31A, 31B, 39;
Communication Emphasis (AA) Associate in Arts in Communication

These courses emphasize the content of communication as well as the form and should provide an understanding of the psychological basis and social significance of communication.

Learning Outcomes

Upon completion of this emphasis, students will be able to:

- Use language as a tool for logical thought, clear and precise expression, and critical evaluation of communication

Note: See online catalog for an updated list of courses.

Science and Mathematics Emphasis (AS) Associate in Science in Science and Mathematics

These courses emphasize the natural sciences which examine the physical universe, its life forms and its natural phenomena. Courses in Math emphasize the development of mathematical and quantitative reasoning skills beyond the level of intermediate algebra.

Learning Outcomes

Upon completion of this emphasis, students will be able to:

- Demonstrate an understanding of the investigative tools of science.
- Describe the basic definitions and fundamental theories of an introductory natural science.
- Express and manipulate quantitative information in verbal, numeric, graphic, and symbolic form

Students pursuing this area of emphasis must take at least one course in science and at least one course in mathematics. Students should meet with a counselor to select appropriate courses.

Science:

- Anatomy 14, 25;
- Anthropology 1;
- Astronomy 1, 4, 14, 16, 17, 18, 19, 20;
- Biology 9, 11, 15, 30, 31, 32, 33, 32L, 40, 41L 100A, 100B;
- Biotechnology 115, 120;
- Botany 10;
- Ecology 10, 20, 26X;
- Energy 3;
- Environmental Horticulture 76, 77;
- Environmental Monitoring & Assessment Program 26X, 28X
- Genetics 10, 11, 15;
- Geography 1, 1L, 31, 49;
- Geology 10, 10L, 11, 18, 20A, 20B, 20C, 25, 30, 30L;
- Interdisciplinary Studies 9;
- Latin American and Latino/a Studies 5;
- Microbiology 10, 12, 28X, 51;
- Nutrition 12, 51, 52;
- Oceanography 1, 1L;
- Paleontology 1;
- Physical Science 1, 11L;
- Physics 2A, 2AL, 2B, 2BL, 4A, 4AL, 4B, 4BL, 4C, 4CL, 4D, 4DL, 10, 10L, 40, 41;
- Physiology 1, 12, 67;
- Psychology 1B;
- Sustainability 31;
- Zoology 10

Mathematics:

- Economics 5;
- Engineering Technology 50;
- Mathematics 70, 75, 80, 90, 92, 95, 97, 100A, 100B, 110A, 110B, 110C, 11S, 120, 125, 130;
- Philosophy 12A;
- Psychology 5

Note: See online catalog for an updated list of courses.

Social and Behavioral Sciences Emphasis (AS) Associate in Science in Social and Behavioral Sciences

These courses emphasize the perspective, concepts, theories and methodologies of the disciplines typically found in the vast variety of disciplines that comprise study in the Social and Behavioral Sciences (see below).

Learning Outcomes

Upon completion of this emphasis, students will be able to:

- Think critically about ways people have acted in response to their societies.
- Evaluate how individuals, societies, and social subgroups operate.
- Apply the principles, methodologies, value systems, ethics, and thought processes employed in human inquiry.

Students pursuing this area of emphasis must take at least one course in the social sciences and at least one course in the behavioral sciences. Students should meet with a counselor to select appropriate courses.
Behavioral Sciences:
- Academic Achievement Personal Services 100
- Administration of Justice 59, 67;
- African American Studies 30, 31;
- Anthropology 2, 3, 3AC, 4, 8, 11, 12, 15, 20, 25;
- Asian American Studies 8, 27, 35, 40, 42, 61, 62, 63;
- Asian Studies 20
- Broadcast Electronic Media Arts 101, 103, 105;
- Child Development 53, 67, 68, 97;
- Disabled Students Programs and Services 1;
- Fashion 28;
- Health Education 6, 10, 30, 54, 97, 221;
- Interdisciplinary Studies 10D, 17, 37, 40, 45, 80A-G, 81B;
- Labor and Community Studies 91D;
- Latin American and Latino/a Studies 10;
- Lesbian/Gay/Bisexual/Transgender Studies 5, 10, 21, 24, 30, 50, 60;
- Philippine Studies 20, 30;
- Physical Education 13;
- Psychology 1, 2, 4, 10, 11, 14, 15, 17, 21, 23, 25, 26, 40;
- Sociology 1, 2, 3, 25, 30, 35;
- Speech 5;
- Women’s Studies 25, 54

Social Sciences:
- Administration of Justice 57, 67;
- African American Studies 40, 55, 60;
- American Civilization 11A-B;
- American Studies 5;
- Asian American Studies 20, 22, 27, 30, 35;
- Asian Studies 1, 20;
- Biology 31;
- Broadcast Electronic Media Arts 104;
- Disabled Students Programs and Services 1;
- Economics 1, 3, 6, 10, 25, 30;
- Geography 4, 7, 31;
- Health Education 52, 110, 231;
- Interdisciplinary Studies 7, 28G, 29, 30, 31, 37, 45;
- International Business 162;
- Labor and Community Studies 15, 70, 70A, 70B, 71B, 74, 78B, 85, 88, 100;
- Latin American and Latino/a Studies 1, 9, 11, 13, 14, 15;
- Lesbian/Gay/Bisexual/Transgender Studies 5, 9, 50;
- Political Science 1, 2, 3, 4, 4, 5, 6, 7, 8, 9, 10, 12, 13, 18, 20, 22, 25, 30, 35, 43, 45, 46, 47, 48, 53A;
- Sustainability 31
- Women’s Studies 25

Note: See online catalog for an updated list of courses.

Library Information Technology

Office: Rosenberg 517
Phone Number: (415) 452-5519
Web Site: www.ccsf.edu/libintec

Announcement of Curricula

General Information
The curricula in Library Information Technology aims to meet the needs of individuals seeking paraprofessional employment or advancement in a library or related information service agency; or those seeking an introduction to libraries and information services in anticipation of further study in library science.

The associate degree major complements requirements for graduation from the college, while the program leading to a certificate is designed for individuals transferring to a senior college or already possessing an academic degree.

Admission. Enrollment is open to all interested students.

Course of Study. The course of study includes instruction in library organization and services; standard reference materials; supervision; computer applications; the acquisition, processing, and cataloging of print and non-print materials, legal, medical and business resources, and practical experience in a library or resource center. Students are encouraged to augment study with courses from other college departments such as office systems, graphics, or computer networking and communications technologies.

Employment. As employment in the field is competitive, students should assume entry level library work early in their studies. Those who complete the curriculum satisfactorily may find advantages when taking civil-service examinations with federal, state, county, and city agencies.

Students completing the Curriculum are now eligible for the Library Support Staff Certification (LSSC) through the American Library Association – Allied Professional Association, for information see www.ALA-APA.org.

Degree Curriculum
The associate degree program is designed as an academic major for students satisfying requirements for graduation from City College.

Students completing the major requirements listed below and the other graduation requirements will receive the Associate in Science in Library Information Technology. General education, elective and advised courses will be selected according to the student’s educational and occupational objectives.

Library Information Technology Major (AS)

The curricula in Library Information Technology meets the need of individuals seeking paraprofessional employment or advancement in a library or related information service agency; or those seeking an introduction to libraries and information services in anticipation of further study in library science.

The course of study includes instruction in library organization and services; standard reference materials; supervision; computer applications; the acquisition, processing, and cataloging of print and non-print materials, legal, medical and business resources, and practical experience in a library or resource center. Students are encouraged to augment study with courses from other college departments such as office systems, graphic communications, or computer networking and communications technologies.

Because employment in the field is competitive, students should assume entry level library work early in their studies. Those who complete the curriculum may find advantages in civil-service with federal, state, county, and city agencies. The department is currently pursuing course coordination for support staff certification through the ALA-APA.

Learning Outcomes
Upon completion of this degree, students will be able to:
- Demonstrate competent understanding of the acquisition, description, storage, retrieval and use of library information products and services
- Analyze problems of information access encountered by minorities, by the information poor, by the under-served and by special populations within the context of US and state constitutional and statutory law, and the professional ethics of the American Library Association.
- Demonstrate technical and practical skills in the use of library resources vended or distributed worldwide, in practical applications and in library employment.
- Critique the quality of information products and services, and to evaluate them both for agency purchase and for practical or academic use by self and others.
- Demonstrate understanding of library administrative organization, management and supervision; of collegiality, team-building and communication; of job description, employment qualification; of hiring practices for special libraries, non-profits and civil service.

Courses Required for the Major in Library Information Technology

<table>
<thead>
<tr>
<th>Courses</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>LIBR 51 Intro to Libraries and Library Resources</td>
<td>3</td>
</tr>
<tr>
<td>LIBR 53 Library Public Services</td>
<td>2</td>
</tr>
<tr>
<td>LIBR 55A Cataloging and Classification</td>
<td>3</td>
</tr>
<tr>
<td>LIBR 55B Library Technical Services</td>
<td>3</td>
</tr>
<tr>
<td>LIBR 56 Computers in Libraries</td>
<td>3</td>
</tr>
<tr>
<td><strong>Electives (4 units minimum)</strong></td>
<td></td>
</tr>
<tr>
<td>LIBR 57 Internet Research Strategies</td>
<td>2</td>
</tr>
<tr>
<td>LIBR 58A Legal Resources</td>
<td>1</td>
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<tr>
<td>LIBR 58B Medical Resources &amp; Libraries</td>
<td>2</td>
</tr>
<tr>
<td>LIBR 58C Business Resources &amp; Libraries</td>
<td>2</td>
</tr>
<tr>
<td>LIBR 59 Library Work Experience</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Units</strong></td>
<td>18</td>
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</tbody>
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Recommended additional coursework may be taken for skills development in WDPR, MABS, CNET, VMD, and CSCI; or for sophistication in the arts, social sciences and humanities.

Certificate Curriculum

The certificate program is designed for students transferring to a senior college, or for those who already hold academic degrees.

A certificate of accomplishment will be awarded for completing 17 units (14 core units and minimum 3 elective units) in Library Information Technology with a cumulative grade of "C" or higher (2.00 grade-point average). Elective and/or additional advisory courses will be selected according to each student's educational and occupational objectives.

Library Information Technology Certificate

The certificate in Library Information Technology is designed for those already holding academic degrees (associate of higher) who seek paraprofessional employment or advancement in a library or related information service agency; or those seeking an introduction to libraries and information services in anticipation of further study in library science.

The course of study includes instruction in library organization and services; standard reference materials; supervision; computer applications; the acquisition, processing, and cataloging of print and non-print materials, legal, medical and business resources, and practical experience in a library or resource center. Students are encouraged to augment study with courses from other college departments such as office systems, graphic communications, or computer networking and communications technologies.

Because employment in the field is competitive, students should assume entry level library work early in their studies. Those who complete the curriculum may find advantages in civil-service with federal, state, county, and city agencies. The department is currently pursuing course coordination for support staff certification through the ALA-APA.

Students must achieve a C average in their coursework, pass grades will be considered where applicable. Courses may transfer, but half of all work should be completed at City College of San Francisco. All coursework must be taken within a ten year period.

Learning Outcomes

Upon completion students will be able to:

- Demonstrate competent understanding of the acquisition, description, storage, retrieval and use of library information products and services.
- Analyze problems of information access encountered by minorities, by the information poor, by the under-served and by special populations within the context of US and state constitutional and statutory law, and the professional ethics of the American Library Association.
- Demonstrate technical and practical skills in the use of library resources vended or distributed worldwide, in practical applications and in library employment.
- Critique the quality of information products and services, and to evaluate them both for agency purchase and for practical or academic use by self and others.
- Demonstrate understanding of library administrative organization, management and supervision; of collegiality, team-building and communication; of job description, employment qualification; of hiring practices for special libraries, non-profits and civil service.

Courses Required for the Certificate of Accomplishment in Library Information Technology

<table>
<thead>
<tr>
<th>Courses</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>LIBR 51 Intro to Libraries and Library Resources</td>
<td>3</td>
</tr>
<tr>
<td>LIBR 53 Library Public Services</td>
<td>2</td>
</tr>
<tr>
<td>LIBR 55A Cataloging and Classification</td>
<td>3</td>
</tr>
<tr>
<td>LIBR 55B Library Technical Services</td>
<td>3</td>
</tr>
<tr>
<td>LIBR 56 Computers in Libraries</td>
<td>3</td>
</tr>
<tr>
<td><strong>Electives (3 units minimum)</strong></td>
<td></td>
</tr>
<tr>
<td>LIBR 57 Internet Research Strategies</td>
<td>2</td>
</tr>
<tr>
<td>LIBR 58A Legal Resources</td>
<td>1</td>
</tr>
<tr>
<td>LIBR 58B Medical Resources &amp; Libraries</td>
<td>2</td>
</tr>
<tr>
<td>LIBR 58C Business Resources &amp; Libraries</td>
<td>2</td>
</tr>
<tr>
<td>LIBR 59 Library Work Experience</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Units</strong></td>
<td>17</td>
</tr>
</tbody>
</table>

Recommended additional coursework may be taken for skills development in WDPR, MABS, CNET, VMD, and CSCI; or for sophistication in the arts, social sciences and humanities.

Announcement of Courses

Credit, Degree Applicable Courses:

LIBR 51. Introduction to Libraries and Library Resources (3)
Lec-3, field trips
*ADJUSE:* MABS 60

Addresses major foundations, access and technology and reference competencies for library support staff. Surveys historical and contemporary resources and the functions and organization of libraries. Emphasis
on catalogs, databases, and the evaluation and documentation of resources. CSU

LIBR 53. Library Public Services (2)  
Lec-2, field trips  
PREREQ.: LIBR 51  
ADVISE: MABS 60  
Addresses major access, communications, teamwork, foundations and reference competencies for library support staff. Focus includes how professional ethics and institutional goals shape policies and practices in library access, instruction, reference, programs and exhibitions, human resource allocation and public safety. CSU

LIBR 55A. Cataloging and Classification (3)  
Lec-3, field trips  
PREREQ.: LIBR 51  
ADVISE: MABS 38  
Addresses major cataloging and technology competencies for library support staff. Employs current tools and techniques for description and classification in a modern library, explores theory evolving from emerging technologies. CSU

LIBR 55B. Library Technical Services (3)  
Lec-3, field trips  
PREREQ.: LIBR 51  
ADVISE: MABS 60  
Addresses major communications, teamwork, foundations and technology competencies for library support staff. Surveys the philosophy and practice of library technical service functions and personnel categories employed in cataloging, acquisitions, serials, conservation, disaster response, automation and technical support. CSU

LIBR 56. Computers in Libraries (3)  
Lec-3, field trips  
PREREQ.: LIBR 51  
ADVISE: MABS 38  
Addresses major communications, teamwork, foundations and technology competencies for library support staff. Surveys digital technologies in a modern library and networked environment; emphasizes technological change in creating, delivering and using information products and services. CSU

LIBR 57. Internet Research Strategies (2)  
Lec-2, field trips  
PREREQ.: LIBR 51  
ADVISE: MABS 38  
Supports reference, communications, teamwork, foundations and technology competencies for library support staff; introduces the general student to effective strategies for search, research and resource evaluation on the web. CSU

LIBR 58A. Legal Resources and Libraries (1)  
Lec-1  
Students in this course study how to use legal research tools, especially printed and online resources. The course will provide an overview of the American legal system, the different areas of law, and the different sources of law. Students will be asked to locate and examine each source of law, verify that the source is current, and report their findings in writing. CSU

LIBR 58B. Medical Resources and Libraries (2)  
Lec-2, field trips  
Supports reference, communications, teamwork, foundations and technology competencies for library support staff. Surveys need and use of medical information for personal, corporate or academic use from print and online resources. CSU

LIBR 58C. Business Resources and Libraries (2)  
Lec-2  
Supports reference, communications, teamwork, foundations and technology competencies for library support staff. Surveys need and use of business information and libraries for personal, corporate or academic use from print and online resource. CSU

LIBR 59. Work Experience in Library Information Technology (3)  
Work-15, field trips  
PREREQ.: LIBR 51, 53A, 55B, and 56, OR APPROVAL OF LIBR WORK EXPERIENCE COORDINATOR  
ADVISE: MABS 60  
Repeat: Maximum credit: 6 units  
Supports competencies for library support staff through work experience in all aspects of library services or in related industries. CSU

library information skills

Upon completion of courses in Library Information Skills, students will be able to:
- Demonstrate information competency and critical thinking skills through their ability to effectively acquire, interpret, critically evaluate and use information for oral, written and visual expression, with some understanding of its ethical and legal ramifications.

Credit, Degree Applicable Courses:
LIS 10. Use of Information Resources (1)  
Lec-1  
P/NP available  
ADVISE: ESL 150 OR PLACEMENT IN 160  
Students gain understanding of the variety of information research tools and resources available in libraries and on the web, and how to effectively search for, evaluate, and cite information sources. Ethical and legal uses of information are also covered. CSU/UC

noncredit Courses:
LIS 1000. Information Research Skills (15 hrs)  
Course consists of seven online and/or in-class workshops that develop and improve such information competency/research skills as conducting effective online searches using a variety of online search tools, evaluating results for credible and authoritative information and citing sources using a standardized citation format.

life science

see biological sciences

mathematics

Office: Batmale 756  
Phone Number: (415) 239-3478  
Web Site: www.ccsf.edu/math

annoucement of curricula

Learning Outcomes

Upon completion of courses in Mathematics, students will be able to:
- Construct, transform, and interrelate symbolic, graphical, numerical and verbal representations of mathematical struc
Mathematics Major (AS-T)

Associate in Science in Mathematics for Transfer. The Associate in Science in Mathematics for Transfer degree is designed to provide students with sufficient understanding of mathematical concepts, skills, and applications to succeed in upper division coursework in mathematics at a four-year college or university.

Students who complete this degree are guaranteed acceptance to a California State University, but are not guaranteed acceptance to a particular CSU campus or major. Students who plan to transfer to any other college or university should consult that institution’s catalog for specific transfer requirements.

Learning Outcomes

Upon completion of the mathematics major, students will be able to:

- Demonstrate computational and conceptual proficiency in differential and integral calculus, both single and multi-variable.
- Recognize and construct valid mathematical arguments.
- Use appropriate concepts and techniques from calculus and post-calculus mathematics to solve applied problems.
- Understand and apply rules of formal systems.

Degree Requirements: Students who wish to earn the Associate in Science in Mathematics for Transfer (AS-T) must complete 60 CSU transferable units with at least a 2.0 grade point average. This must include the units required for full completion of the IGETC or CSU GE curriculum and the 18-21 units for the major as specified below.

Each course in the major must be completed with a grade of “C” or better. Courses used to meet the major requirement may also be used to meet IGETC or CSU GE requirements.

Courses Required for the Major in Mathematics

Students must complete one of the following two options:

**Option 1:**
- MATH 110A Calculus I ................................. 4
- MATH 110B Calculus II ................................ 4
- MATH 110C Calculus III ................................ 4
- MATH 120 Linear Algebra ............................. 3
- MATH 125 Differential Equations .................... 3

**Option 2:**
- MATH 110A Calculus I ................................. 4
- MATH 110B Calculus II ................................ 4
- MATH 110C Calculus III ................................ 4
- MATH 120 Linear Algebra ............................. 3
  OR MATH 125 Differential Equations
  OR MATH 130 Linear Algebra and
  Differential Equations ............................... 3-5

One course from the Electives listed below.............. 3-4

**Total** .................................................... **18-21**

**Electives for Option 2:**
- MATH 80 Probability and Statistics ..................... 4
- MATH 115 Discrete Mathematics ........................ 3
- CS 110A Intro to Programming: C++ .................... 3
- CS 111A Intro to Programming: Java .................... 3

**Announcement of Courses**

For “Business Mathematics” see “Business”.

A student new to the City College Mathematics Program should first take the appropriate placement exam(s), then consult with a mathematics advisor or counselor before enrolling in a mathematics course.

To enroll in a particular mathematics course, a student must have satisfied the prerequisites for that course.

**Credit, Non-Degree Applicable Courses:**

- **MATH E1. Basic Mathematics (Individualized) (2)**
  Conf-2  \ P/NP only
  Not intended for students who have achieved a satisfactory score on the City College placement examination in mathematics or who have passed MATH E3 or EX.
  Arithmetic with an emphasis on applications. Includes operations with whole numbers, fractions, and decimals; representation of numbers on the number line; solving simple equations; applications involving geometry (length, area, perimeter), unit analysis, rates, ratios, average, percent, increase and decrease, and fractional parts of quantities.
  Formerly MATH E.

- **MATH E3. Basic Mathematics (Lecture/Group) (3)**
  Lec-3, conf-2  \ P/NP only
  Not intended for students who have achieved a satisfactory score on the City College placement examination in mathematics or who have passed MATH E1 or E.
  Arithmetic with an emphasis on applications. Includes operations with whole numbers, fractions, and decimals; representation of numbers on the number line; solving simple equations; applications involving geometry (length, area, perimeter), unit analysis, rates, ratios, average, percent, increase and decrease, and fractional parts of quantities.
  Formerly MATH EX.

- **MATH S. Elementary Algebra Workshop (2)**
  Conf-3  \ P/NP Only
  Coreq: MATH 40 or 840
  Support course for students enrolled in MATH 40. Practice math problems, practice tests, practice quizzes for MATH 40. Math study skills. Collaborative learning emphasized.

- **MATH U. Intermediate Algebra Workshop (2)**
  Conf-3  \ P/NP only
  Coreq: MATH 60 or 860
  Support course for students enrolled in MATH 60. Practice math problems, practice tests, practice quizzes for MATH 60. Math study skills. Collaborative learning emphasized.

- **MATH 30X. Prealgebra with Basic Mathematics (4)**
  Lec-4, conf-1  \ P/NP Available
  Addition, subtraction, multiplication and division of signed numbers. Number fluency with conversions between fractions, decimals and percents. Order of operations, natural number exponents, and square roots. Simplifying and evaluating algebraic expressions and solving single-variable linear equations. Applications involving measurements, rates, ratios, proportions, percents, perimeter, and area.

- **MATH 35. Prealgebra (3)**
  Lec-3, conf-2
  Prereq: MATH E1 or E3 or BSMA G; OR Placement in MATH 35 or 835 or 40 or 840

- **PHYC 4A & 4L Physics for Scientists and Engineers & Lab ............................ 4**
Recommended for students who need additional preparation before taking MATH 40 or introductory courses in chemistry, physics, engineering technology, economics, or business.

Review of basic mathematics; measurement systems, length, area, volume, time, and unit conversions; order of operations, signed numbers, integer exponents, square roots, simple equations and formulas, proportions; calculator use, estimation, and number sense; introduction to statistics and data charts; applications.

**Credit, Degree Applicable Courses:**

**MATH 40. Elementary Algebra (4)**  
Lec-4, conf-1  
Prereq.: MATH E1 or E3 or MATH 35 or 835; OR Placement in MATH 40 or 840  
Operations on real numbers; evaluating, combining, and simplifying polynomials, rational expressions, integer-exponent expressions, and square root expressions; solving linear and quadratic equations, linear inequalities, and systems of linear equations; graphing lines; and applications. Attention to developing proficiency in communication of mathematics, problem solving, and effective learning skills.

**MATH 45. Preparation for Statistics (5)**  
Lec-4, conf-2  
Prereq.: MATH E1 or MATH E3 or MATH 35 or 835  
Accelerated preparation for transfer-level statistics. Principles of arithmetic, pre-algebra, elementary and intermediate algebra, descriptive statistics. Rations, rate, and proportional reasoning; fractions, decimals and percents; evaluating expressions; analyzing algebraic forms of statistical measures; modeling bivariate data with linear and exponential functions; graphical and numerical descriptive statistics for quantitative and categorical data.

The Mathematics Department offers two geometry courses: (1) MATH 50 emphasizes problem solving and applications, and (2) MATH 55 emphasizes proofs and the logical structure of geometry but includes problem solving and applications. Students intending to study advanced algebra, trigonometry, or calculus should take MATH 55.

**MATH 50. Applied Geometry (3)**  
Lec-3  
Prereq.: MATH 40 or 840; OR Placement in MATH 50 or 850  
Not recommended for students who have passed MATH 55  
Points, lines, angles, polygons, special triangles and quadrilaterals, circles, and solids; metric and U.S. customary measurement systems; emphasis on calculations and applications of perimeter, area, volume, similar triangles, and the Pythagorean Theorem.

**MATH 55. Geometry (4)**  
Lec-4, conf-1  
Prereq.: MATH 40 or 840; OR Placement in MATH 55 or 855  
Lines, triangles, quadrilaterals, polygons, circles; congruent triangle and similar triangle proofs; geometric constructions; right triangle trigonometry; analytic geometry; three-dimensional geometry.

**MATH 60. Intermediate Algebra (4)**  
Lec-4, conf-1  
Prereq.: MATH 40 or 840; OR Placement into MATH 60 or 860  
Advisement: MATH 50 or 850 or 55 or 855  
Polynomials and rational expressions; radicals and rational exponents; complex numbers; equations and inequalities; systems of linear equations; distance formula, lines, circles, and parabolas; introduction to functions; introduction to exponential functions and logarithms; and applications. Emphasis on strengthening mathematical communication skills, problem solving skills, and use of multiple representations of functions.

**MATH 70. Mathematics for Liberal Arts Students (3)**  
Lec-3  
Prereq.: MATH 60 or 860 or Placement in MATH 70  
Concepts of mathematics for students with nontechnical goals. Topics include problem solving, set theory, logic, number theory, modeling with functions, geometry, finance, combinatorics, probability, and the role of mathematics. CSU/UC

**MATH 75. Mathematical Analysis for Business (3)**  
Lec-3  
Prereq.: MATH 92 or 60 or 860  
Linear, quadratic, algebraic, exponential, and logarithmic functions with applications to business and economics; interest and ordinary annuity problems; introduction to differential and integral calculus of one variable with applications to business and economics. CSU/UC

**MATH 80. Probability and Statistics (4)**  
Lec-4  
Prereq.: MATH 92 or 60 or 860  
Descriptive statistics: organization of data, sample surveys, experiments and observational studies; measures of central tendency, dispersion, and association; linear regression and correlation. Probability theory. Random variables: expected value, variance, independence, probability distributions, normal approximation. Sampling, sampling distributions, and statistical inference: estimating population parameters, interval estimation, standard tests of hypotheses. Applications. CSU/UC

**MATH 90. Advanced Algebra (4)**  
Lec-4, conf-1  
Prereq.: MATH 60 or 860 AND MATH 50 or 850 or 55 or 855  
Not recommended for students who have passed MATH 92.  
Real functions and their graphs; one-to-one and inverse functions; exponential and logarithmic functions; complex numbers and zeros of polynomials; linear systems and matrices; geometric transformations and conic sections; topics in discrete mathematics. CSU/UC

**MATH 92. College Algebra (5)**  
Lec-5  
Prereq.: MATH 40 or 840 AND MATH 50 or 850 or 55 or 855; OR Placement in MATH 92  
Recommended for students with strong mathematics capabilities. Not recommended for students who have passed MATH 90.  
Polynomials and rational expressions; radicals and rational exponents; equations and inequalities; real functions and their graphs; one-to-one and inverse functions; exponential and logarithmic functions; complex numbers and zeros of polynomials; linear systems and matrices; geometric transformations and conic sections; topics in discrete mathematics; applications. CSU

**MATH 95. Trigonometry (3)**  
Lec-3  
Prereq.: MATH 92 or 60 or 860; AND MATH 50 or 850 or 55 or 855  
Advisement: Students completing MATH 60 should also complete MATH 90 before taking MATH 95. Students are also advised to take MATH 55, rather than MATH 50
Vectors, curves and surfaces in 3-dimensional space; differentiation of multivariate functions, line and surface integrals, and in particular, the theorems of Green, Stokes, and Gauss. CSU/UC/C-ID MATH 230

MATH 115. Discrete Mathematics (3)
Lec-3
Prereq: MATH 110B or 100B
Set theory, logic, mathematical induction, relations and functions, recursion, combinatorics, elementary number theory, trees and graphs, analysis of algorithms, algebraic structures. Emphasis on topics of relevance to mathematics and computer science majors. CSU/UC

MATH 120. Linear Algebra (3)
Lec-3
Prereq: MATH 110C
Real vector spaces, subspaces, linear dependence and span, matrix algebra and determinants, basis and dimension, inner product spaces, linear transformations, eigenvalues and eigenvectors, proofs of basic results. CSU/UC/C-ID MATH 250

MATH 125. Differential Equations (3)
Lec-3
Prereq: MATH 110C
Ordinary differential equations and first order linear systems of differential equations; methods of explicit solution; qualitative methods for the behavior of solutions; theoretical results for the linear structure, existence, and uniqueness of solutions. CSU/UC/C-ID MATH 240

MATH 130. Linear Algebra and Differential Equations (5)
Lec-5
Prereq: MATH 110C
Real vector spaces, subspaces, linear dependence and span, matrix algebra and determinants, basis and dimension, inner product spaces, linear transformations, eigenvalues and eigenvectors. CSU/UC/C-ID MATH 850

Military Science
The University of San Francisco is part of the Consortium of San Francisco Colleges and Universities. Students attending a member of the consortium may enroll in a Military Science course at the University of San Francisco under that agreement at no cost. Full credit will be given by City College of San Francisco to fully enrolled students. Specific inquiries about this program should be directed to the Professor of Military Science, University of San Francisco.

Air Force ROTC is offered through the Aerospace Studies department at U.C. Berkeley. Scholarships (including tuition, book allowance, and stipend) are available for qualified students. Students may enroll and attend one course per semester at the U.C. Berkeley campus at no cost. Topics covered in AFROTC courses include Basic Military knowledge (1-credit), Military History (1-credit), Leadership Training (3-credits), and U.S. National Security Affairs and Preparation for Active Duty (3-credits). Additional components of the ROTC program include 3 hours per week of fitness activities, 2 hours per week of Leadership Lab, and a 4-week Summer Field Training. Upon completion of the program and granting of 4-year degree, students will commission as Second Lieutenants in the United States Air Force. To be eligible for AFROTC, applicants should be a full time student and meet additional fitness, GPA, testing, and other requirements. Interested students, please visit the department website: http://airforcerotc.berkeley.edu, call (510) 642-3572, or e-mail airforce@berkeley.edu.
Music
Office: Art 209
Phone Number: (415) 239-3641
Web Site: www.ccsf.edu/music

Learning Outcomes
Upon completion of courses in Music, students will be able to:

- Demonstrate performance skills in instrumental music, voice, piano, and/or guitar.
- Appraise how musical works are composed through the study of foundational elements: melody, harmony, rhythm, form, instrumentation and texture.
- Assess the aesthetic values in music and the role music plays in the aesthetics of various time periods, styles and world regimes.
- Evaluate how music has evolved throughout history, and in specific styles and world regions.
- Choose and rate the career paths in music and the expectations of each field.

Announcement of Courses

All music students are encouraged to enroll in at least one of the Music Department performing groups each semester. Knowledge of music fundamentals and the ability to read music are recommended for many music theory, instrumental and vocal training, and performance courses. Where a music course has a sequential prerequisite, check with the Department Chair for skill demonstration equal to the prerequisite.

Credit, Degree Applicable Courses:

Music Theory
The MUS 2A-2B-2C-2D series is a four-semester comprehensive theory program for music students which will transfer as fulfillment of the first two years of lower-division music theory requirements. The MUS 1A-1B, 3A-3B series is a two-semester ear-training and harmony program for music students which will transfer as fulfillment of one year of lower-division music theory requirements.

MUS 1A. Beginning Musicianship (2)
Lec-3, field trips P/NP Available
Prereq: MUS 4 or Demonstration of Exit Skills
Development of beginning skills in rhythmic and melodic dictation and sight-singing of diatonic music through solfege, scales, intervals, triads, and seventh chords. The course teaches aural and analytical skills necessary for all musicians, and fulfills the first semester Musicianship requirement for music majors and minors. CSU/UC

MUS 1B. Intermediate Musicianship (2)
Lec-3, field trips P/NP Available
Prereq: MUS 1A or Demonstration of Exit Skills
Development of intermediate skills in rhythmic and melodic dictation and sight-singing, through the visual and aural analysis of functional and non-functional chromaticism, including altered chords, modulations, and atonality. It teaches aural and analytical skills necessary for all musicians, and fulfills the second semester Musicianship requirement for music majors and minors. CSU/UC

MUS 2A-2B. Comprehensive Music Theory (5-5)
Lec-5, field trips P/NP Available
Advising: MUS 4 or Demonstration of Exit Skills
May be taken in any sequence.

The first half of a four-semester comprehensive approach to the chronological study of music theory. Covers music in the style of the medieval, renaissance and baroque eras. Daily sessions involve modal, contrapuntal or harmonic studies and exercises, ear training and musical analysis with the goal of integrating these studies in reference to historical periods. Extensive written assignments are required. CSU/UC

MUS 2C-2D. Comprehensive Music Theory (5-5)
Lec-5, field trips P/NP Available
Advising: MUS 4 or Demonstration of Exit Skills
May be taken in any sequence.

The second half of a four-semester comprehensive approach to the chronological study of music theory. Covers music in the style of the classic, romantic and modern eras. Daily sessions involve modal, contrapuntal or harmonic studies and exercises, ear training and musical analysis with the goal of integrating these studies in reference to historical periods. Extensive written assignments are required. CSU/UC

MUS 3A. Diatonic Harmony (3)
Lec-3, field trips P/NP Available
Prereq: MUS 4 or Demonstration of Exit Skills
Intensive study of common-practice diatonic harmony through the writing of four-part chorale harmonizations, figured bass realizations, and linear and vertical analyses of primarily 18th-century music. Fosters a technical understanding of the compositional process, greater facility in learning new music, and a deeper comprehension of music in general. CSU/UC

MUS 3B. Chromatic Harmony (3)
Lec-3, field trips P/NP Available
Prereq: MUS 1A or Demonstration of Exit Skills
Intensive study of chromatic harmony, including both functional and non-functional chromaticism and modulations through the writing of chorale harmonizations, figured bass realizations, and linear and vertical analyses of primarily 19th-century music. Fosters a technical understanding of the compositional process and a greater facility in learning new music involving chromatism. CSU/UC

MUS 4. Music Fundamentals (2)
Lec-3, field trips P/NP Available
An introduction to music notation and theory, including staff notation, rhythmic notation, intervals, scales, chord construction, sight reading, and ear training. CSU/UC

MUS 5A. Introduction to Composition (3)
Lec-3, field trips P/NP Available
Prereq: MUS 4 or Demonstration of Exit Skills
Advising: MUS 5A: MUS 3A or Demonstration of Exit Skills
Introduction to the study of the principles of musical composition through analysis and creative writing. Pieces may be composed for piano and/or small instrumental and/or vocal ensembles. CSU/UC

MUS 5B. Music Composition (3)
Lec-3, field trips P/NP Available
Prereq: MUS 5A or Demonstration of Exit Skills
Advising: MUS 5A: MUS 3A or Demonstration of Exit Skills
Intermediate study of the principles of musical composition through analysis and creative writing. Pieces may be composed for piano and/or small instrumental and/or vocal ensembles. CSU/UC

Enrollment Limitations on Physical Education and Visual or Performing Arts Courses
Instrumental and Vocal Training

Applied Training: Guitar

MUS 6A. Beginning Classical Guitar (1)
Lec-3, field trips P/NP available
Prereq: MUS 4 or demonstration of exit skills
No prior experience with the guitar necessary. The student must provide a guitar.
This course is an introduction to the guitar, and individualized study of the appropriate techniques and repertoire to master a beginning level of music on the instrument. The emphasis is on the development of beginning skills needed for solo performance. Audition for placement within the class. CSU/UC

MUS 6B. Advanced Beginning Classical Guitar (1)
Lec-3, field trips P/NP available
Prereq: MUS 6A or demonstration of exit skills
Individualized study of classical guitar theory, techniques repertoire at the advanced beginning level. The emphasis is on the advanced beginning skills needed for solo performance. CSU/UC

MUS 6C. Intermediate Classical Guitar (1)
Lec-3, field trips P/NP Available
Prereq: MUS 6B or demonstration of exit skills
Individualized study of classical guitar theory, technique and repertoire at the intermediate level. The emphasis is on the development of intermediate skills needed for solo performance. CSU/UC

MUS 6D. Advanced Intermediate Classical Guitar (1)
Lec-3, field trips P/NP Available
Prereq: MUS 6C or demonstration of exit skills
Individualized study of classical guitar theory, techniques repertoire at the advanced intermediate level. The emphasis is on the development of skills needed for solo performance. CSU/UC

MUS 6E. Beginning Guitar (1)
Lec-3, field trips P/NP Available
This course is an introduction to the guitar, and individualized study of the appropriate techniques and repertoire to master a beginning level of music on the instrument. The emphasis is on the development of beginning skills needed for solo performance. Audition for placement within the class. CSU/UC

MUS 7 Series
(The letter after the 7 indicates the instrument, not the sequence.)
The Music Department recommends that students enrolling in any of the courses in the MUS 7 series enroll concurrently in appropriate music performance courses such as concert band (MUS 16), stage band (MUS 46), pep band (MUS 47), orchestra (MUS 15), string ensemble (MUS 20), brass ensemble (MUS 18), or woodwind ensemble (MUS 17).

Applied Training: Violin/Viola

MUS 7V1. Beginning Violin (1)
Lec - 3, field trips P/NP Available
This course is an introduction to the violin, and individualized study of the appropriate techniques and repertoire to master a beginning level of music on the instrument. The emphasis is on the development of advanced beginning skills needed for solo performance. Audition for placement within the class. CSU/UC

MUS 7V2. Advanced Beginning Violin (1)
Lec - 3, field trips P/NP Available
Prereq: MUS 7V1 or demonstration of MUS 7V1 exit skills
This course is a continuation of the study of violin, and individualized study of the appropriate techniques and repertoire to master an advanced beginning level of music on the instrument. The emphasis is on the development of advanced beginning skills needed for solo violin performance. CSU/UC

MUS 7V3. Intermediate Violin (1)
Lec - 3, field trips P/NP Available
Prereq: MUS 7V2 or demonstration of MUS 7V2 exit skills
This course is a continuation of the study of violin, and individualized study of the appropriate techniques and repertoire to master an intermediate level of music on the instrument. The emphasis is on the development of intermediate skills needed for solo violin performance. CSU/UC
MUS 7V4. Advanced Intermediate Violin (1)
Lec - 3, field trips P/NP Available
Prereq: MUS 7V3 or Demonstration of MUS 7V3 exit skills
Individualized study of violin theory, technique and repertoire at the advanced intermediate level. The emphasis is on the development of skills needed for solo performance. CSU/UC

Applied Training: Woodwinds
MUS 7W1. Beginning Woodwind (1)
Lec-3, field trips P/NP available
This course is an introduction to a specific woodwind instrument, and individualized study of appropriate techniques and repertoire for that instrument. The emphasis is on the progressive development of skills needed for solo performance. CSU/UC

MUS 7W2. Advanced Beginning Woodwind (1)
Lec-3, field trips P/NP available
Prereq: MUS 7W1 or Demonstration of MUS 7W1 exit skills
Individualized study of theory, technique and repertoire on the woodwinds: flute, saxophone, clarinet, at the advanced beginning level. The emphasis is on the advanced beginning skills needed for solo performance. CSU/UC

MUS 7W3. Intermediate Woodwind (1)
Lec-3, field trips P/NP available
Prereq: MUS 7W2 or Demonstration of MUS 7W2 exit skills
Individualized study of woodwind theory, technique and repertoire at the intermediate level. The emphasis is on the development of intermediate skills needed for solo performance. CSU/UC

MUS 7W4. Advanced Intermediate Woodwind (1)
Lec-3, field trips P/NP available
Prereq: MUS 7W3 or Demonstration of MUS 7W3 exit skills
Individualized study of woodwind theory, technique and repertoire at the advanced intermediate level. The emphasis is on the progressive development of skills needed for solo performance. CSU/UC

Applied Training: Jazz Piano
MUS 8A. Beginning Jazz and Other Popular Piano (1)
Lec-3, field trips P/NP available
Advis: MUS 9A or Demonstration of exit skills
Beginning study and exploration of jazz piano technique in myriad forms through the application of jazz theory, blues, Afro-Cuban, Brazilian and other popular styles. CSU/UC

MUS 8B. Intermediate Jazz and Other Popular Piano (1)
Lec-3, field trips P/NP available
Prereq: MUS 8A or Demonstration of exit skills
Advis: MUS 9A or Demonstration of exit skills
An intermediate study of basic jazz, blues, Afro-Cuban, Brazilian and other popular piano techniques. CSU/UC

Applied Training: Piano
MUS 9A. Beginning Piano (2)
Lec-3, field trips P/NP available
Piano studies for beginners, including sight reading, elementary theory, beginning ear training, and a historical view of keyboard instruments and their music. This is an extremely popular course and enables students to begin to express themselves at the keyboard. CSU/UC

MUS 9B. Intermediate Piano (1)
Lec-3, field trips P/NP available
Advis: MUS 9A or Demonstration of exit skills
Piano studies for the intermediate pianist including playing through reading, elementary theory, beginning ear training, and a historical view of keyboard instruments and their music. CSU/UC

MUS 9C. Keyboard Harmony (1)
Lec-3, field trips P/NP Available
Advis: MUS 9A or Demonstration of exit skills
The development of harmonic keyboard skills through the study and practice of chord structures, progressions, and sight reading techniques, enables the student to make different types of accompaniment when just given a melody line. CSU/UC

Applied Training: Voice
Music 10 Series
The Music Department recommends that students enrolling in the Music 10 series should enroll concurrently in a choral-performing group (MUS 12 or 14) or Music Theatre Workshop (MUS 44).

MUS 10A. Beginning Voice (1)
Lec-3, field trips P/NP Available
Introduction to individualized study of the appropriate basic techniques and repertoire for Beginning Voice. Includes alignment, tone production, breathing and musical skills in interpreting vocal music of various periods and styles. Audition for vocal placement within the class. CSU/UC

MUS 10B. Advanced Beginning Voice (1)
Lec-3, field trips P/NP Available
Prereq: MUS 10A or Demonstration of exit skills
An individualized study of the appropriate techniques and repertoire for Advanced Beginning Voice on alignment, tone production, and breathing for singing. Related musical skills used to interpret vocal music of various periods and styles, as well as duet preparation and work with an accompanist. CSU/UC

MUS 10C. Intermediate Voice (1)
Lec-3, field trips P/NP Available
Prereq: MUS 10B or Demonstration of exit skills
An individualized study of the appropriate techniques for Intermediate Voice on alignment, tone production, and breathing for singing. Related musical skills used to interpret vocal music of various periods and styles, as well as duet preparation and work with an accompanist or other instrumentalists and singers of the Intermediate Voice level. CSU/UC

MUS 10D. Advanced Intermediate Voice (1)
Lec-3, field trips P/NP Available
Prereq: MUS 10C or Demonstration of exit skills
An individualized study of the appropriate techniques and repertoire for Advanced Intermediate Voice on alignment, tone production, and breathing for singing. Related musical skills used to interpret vocal music of various periods and styles, as well as duet preparation and work with an accompanist or other instrumentalists and singers of the Advanced Intermediate Voice level. CSU/UC

Performance Courses
Ensemble: Guitar
MUS 11. Guitar Workshop (1)
Lec-3, field trips P/NP Available
Advis: MUS 6A or Demonstration of exit skills
Develop the technique, musicality, note reading ability and the theory to perform ensemble music for guitar. Ensembles include duos, trios, quartets, or larger ensembles. CSU/UC
**Ensemble: Large Traditional Choirs**

MUS 12. Choir (1)
Lec-3, field trips P/NP available

The study, rehearsal and performance of choral literature appropriate for large vocal ensemble, with an emphasis on skills development for performing with an ensemble. Highly recommended for intended music majors, both instrumental and vocal. CSU/UC

MUS 14. Chorale (1)
Lec-3, field trips P/NP available

The beginning study is an introduction to the songs that reflect work of diverse cultures such as Native American chants, folk and labor ballads, field hollers, Black cowboy songs, Chicano farm and border songs, Labor Motown, Asian-American work songs and songs of working women's experiences. CSU/UC

MUS 15. Orchesta (1)
Lec-3, field trips P/NP available

An opportunity for string, woodwind, brass, and percussion players to rehearse and perform works selected from the standard repertory from the baroque through the present. CSU/UC

MUS 16. Concert Band (1)
Lec-3, field trips P/NP available

Study and performance of concert band and wind ensemble literature of various stylistic periods. CSU/UC

**Ensemble: Woodwind**

MUS 17. Woodwind Ensemble (1)
Lec-3, field trips P/NP available

Intermediate to advanced woodwind students perform music in the classical and jazz idioms. Entrance requirements: moderate facility with major scales, sight-reading and improvisation. The class will present a live concert at the conclusion of the semester. CSU/UC

**Ensemble: Brass**

MUS 18. Brass Ensemble (1)
Lec-3, field trips P/NP available

Intermediate to advanced woodwind students perform music in the classical and jazz idioms. Entrance requirements: moderate facility with major scales, sight-reading and improvisation. The class will present a live concert at the conclusion of the semester. CSU/UC

**Ensemble: Piano**

MUS 20. String Ensemble (1)
Lec-3, field trips P/NP available

An exploration of techniques and ensemble literature appropriate for intermediate and advanced violinists, cellists, violists and string bass players. Concerts scheduled during the semester. CSU/UC

**Music Surveys**

MUS 21. Traditional African Music (3)
Lec-3, field trips P/NP available

An introduction to the many styles of African music, with emphasis on the function of traditional music and how it is organized as an integral part of everyday activity. CSU/UC

MUS 22A-22B-22C. History of Music in Western Culture (3-3-3)
Lec-3, field trips P/NP available

May be taken in any sequence.

An intensive critical survey of musical styles in Western culture studied chronologically. Emphasis on works and composers representative of differing styles and periods and on various cultural contexts from which they emerged. CSU/UC

MUS 22A. Medieval and Renaissance Music: Early Christian Chant to 1600
MUS 22B. Baroque and Classical Music: the Seventeenth and Eighteenth Centuries
MUS 22C. Nineteenth Century Romanticism: Beethoven to Mahler

For music of the twentieth century, see MUS 28.

MUS 23. Jazz History, Musical Traditions of the African American (3)
Lec-3, field trips P/NP available

A course composed of lectures, discussions, assigned reading and listening designed to explore African-American musical heritage and
its relationship to other folk expressions and to Western European Art Music. This heritage includes spirituals, work songs, blues, jazz, gospel and a broad range of popular music. CSU/UC

MUS 24. Music of East Asia (3)
Lec-3, field trips P/NP available
A cross-cultural, comparative survey of both historical and recent developments in the music of China, Japan, and Korea, including the relationship of East Asian music to other aspects of East Asian cultures—philosophy, religion, theater, and dance. CSU/UC

MUS 25. Music of Latin America and the Caribbean (3)
Lec-3, field trips P/NP available
An introductory survey to the musical traditions of Latin America, the Caribbean and Latin music in the United States. This course will study music as a form of communication, and as a social and cultural force in the Americas. CSU/UC

MUS 26. Music in American Culture (3)
Lec-3, field trips P/NP available
A survey of music generated by America’s diverse populations including Latino, African American, Hawaiian, Native American, Cajun and Puerto Rican. CSU/UC

MUS 27A. Music Appreciation (3)
Lec-3, field trips P/NP available
A survey of Western art music from the Middle Ages to the present, examined within cultural, social, and political contexts. Topics include musical elements, forms, and stylistic features of each historical period, as well as the individual characteristics of its representative composers. CSU/UC

MUS 27B. Musical Awareness (3)
Lec-3, field trips P/NP available
MUS 27A is not prerequisite for MUS 27B.
Detailed study of opera, and musical theatre. CSU/UC

MUS 27C. Music and Queer Identity (3)
Lec-3, field trips P/NP available
Examination of the question of how music encodes “queerness” by focusing on various musical styles and musical performers that have become significant for the lesbian, gay and bisexual community. CSU

MUS 27R. The History of Rock and Popular Music (3)
Lec-3, field trips P/NP available
The History of Rock and Popular Music is a survey of the origin, major trends, musical forms, styles and genres of rock and popular music from 1945 to the present day. The course will focus on historical and cultural influences that shaped the music as well as the impact of electronic technology. Attention will be given to those artists and groups who have proven to be of the most enduring significance. CSU/UC

MUS 27T. Exploring the World of Music (2)
Lec-1.5, field trips P/NP available
Designed to develop an understanding and recognition of musical elements and forms while promoting a broad international cultural music awareness. The series allows students to examine theories on the origins of music making and the role of music in all cultures. Music structure will be studied with an emphasis on how music inspires human emotion, activity, romance, religion and play. CSU/UC

MUS 28. Contemporary Music (3)
Lec-3, field trips P/NP available
Study of the music of the twentieth century through analysis of their means and methods, recordings illustrating the types of music under discussion and creative projects involving graphic scores, tapes and new instruments. CSU/UC

MUS 29. Electronic Music (3)
Lec-3, field trips P/NP available
A practical study of the historical and technical aspects of electronic music, including compositional techniques of hard- and software synthesis, sampling, MIDI sequencing, audio processing, and multi-track audio recording. CSU/UC

MUS 30. Electronic Music Laboratory (2)
Lec-3, field trips P/NP available
Prereq.: MUS 29
Electronic music composition class for students who have completed Music 29. Students explore advanced concepts in electronic music composition, history, and critical evaluation. CSU/UC

MUS 31. Digital Music Studio (3)
Lec-3, field trips P/NP available
Prereq.: MUS 30
Practical study of the digital music studio, including the functions of hardware and software tools for composition, sequencing, notation, and digital audio recording. Creation and editing digital music files and exploration of current practical applications of the medium. CSU

Other Music Performance Courses

**Ensemble: African Drumming**

MUS 41. African Drumming Ensemble (1)
Lec-3, field trips P/NP available
The content of this course varies. Students may re-enroll without repeating subject matter.
In African Drumming Ensemble students play traditional African music; the class is an in-depth examination of African drumming and performance of African music integral to everyday festivities and life in African society. CSU/UC

**Ensemble: Jazz, Pop, Gospel Choir**

MUS 42. Gospel Choir (1)
Lec-3, field trips P/NP available
The study of the theory, techniques and performance practices of popular, gospel and other African American choir arrangements with piano accompaniment. CSU/UC

**Ensemble: Musical Theatre**

MUS 44. Music Theatre Workshop (3)
Lec-6, field trips P/NP available
An opportunity for students interested in musical theatre to study, rehearse, and participate in performances of musical works for the stage. Equal emphasis given to the musical and dramatic elements involved in such productions. For staged, public performances, roles may be assigned subject to audition. CSU/UC

**Ensemble: Early Music**

MUS 45. Early Music Performance Workshop (2)
Lec-3, field trips P/NP available
An investigation of musical performance styles from the late Middle Ages through the Baroque. Students work and perform in an area of their choice. CSU/UC

**Ensemble: Jazz/Rock Bands**

MUS 46. Stage Band (1)
Lec-3, field trips P/NP available
This course is for the study, rehearsal and public performance of music arranged for large ensembles in a variety of jazz and popular styles,
with an emphasis on the skills needed to perform within an ensemble. All instruments are welcome. Different literature will be studied each semester. CSU/UC

MUS 47. Pep Band (1)  
Lec-3, field trips  
P/NP available  
Rehearsal band for music of historically styles such as marches, polkas and Dixieland as well as current dance music. Learn to play in a large ensemble with rhythm section, brass and winds. Performances at various school sports and other events. CSU/UC

MUS 50. Music Rehearsal and Performance (1)  
Lec-3  
P/NP available  
Coreq.: Enrollment in a music instrumental training or performance course  
An opportunity for students who are enrolled in music courses requiring extra performance and rehearsal hours to receive credit for their work. CSU/UC

MUS 200. Musical Theatre Rehearsal and Presentation (1-3)  
Lab-3, 6, 9  
P/NP Available  
Preparation and interpretive training process that goes into rehearsal and performance presentation of a musical theatre work for the stage. Taught with equal emphasis on musical and dramatic elements. Students must audition for, be cast in, rehearse and perform in a Music and Theatre Arts Department production.

MUS 200A. Ensemble - Musical Theatre Rehearsal and Presentation (1) CSU/UC  
MUS 200B. Supporting Role - Musical Theatre Rehearsal & Presentation (2) CSU/UC  
MUS 200C. Leading Role - Musical Theatre Rehearsal & Presentation (3) CSU/UC

NOTE: The licensing process for becoming a registered nurse in California is under the jurisdiction of the BRN (Board of Registered Nursing). The BRN requires disclosure of all misdemeanor and felony convictions for all license applicants and disclosure of all disciplinary actions taken against a license applicant who already has a practical nurse, vocational nurse or other professional license. Fingerprinting is also required.

Course of Study. The Nursing course of study includes instruction in applied nursing science and related life sciences, and clinical experience in San Francisco Bay Area cooperating clinical settings. The required course of study for Nursing includes courses that may also satisfy certain general education requirements.

Associate in Science Degree. The Nursing curriculum, supplemented by general education courses, is designed so that students may satisfy the requirements for graduation from City College with the degree of Associate in Science. It is required that all students who wish to enroll in the Nursing Program take the CCSF placement test in Algebra.

Enrollment. Enrollment in the Nursing Program follows the City College policy of equal educational opportunity. Because of facility and staffing limitations, as well as health and safety requirements, not all students who wish to enroll in the Nursing Program can be accommodated. Selection from among students who are eligible to enroll is made once a year for Fall and Spring semester. Requests for information regarding enrollment:

Can be found online: www.ccsf.edu/rn
OR
Enrollment Committee
Nursing Department, C340
City College of San Francisco
50 Phelan Avenue
San Francisco, CA 94112

Dates for Filling Required Enrollment Forms. See website or contact Nursing Department at C340 for current filing dates.

Expenses. Students should expect to incur expenses of approximately $2500 covering the two years of nursing curriculum. This does not include expenses that may relate to non-nursing classes. The expenses related to nursing classes include the cost of required books, uniforms, and individual equipment.

Enrollment to the Program. Because of facilities and staff limitations, 50 new students may be enrolled in the Nursing Program each semester. Nursing enrollment form available online. Please check Filing Date. To be considered for enrollment, students must satisfy certain academic prerequisites. The following is a summary of the academic requirements for enrollment in the Nursing Program/ courses. Please see website: www.ccsf.edu/rn

1. a. Complete the following prerequisite courses: No in progress courses will be considered

Anatomy 25  
Physiology 1 or 12  
Microbiology 12  
English 1A  
Math 40 or placed into Math 60

Science courses must have been completed within the last 7 years at the time of enrollment to the Nursing program.

b. Must have an overall GPA of 2.5 in science and English 1A.
2. An applicant can repeat only one of the science courses. More than one (1) repetition of any of the science courses will disqualify the applicant. Repetition of a science course is defined as repeating a course due to a previous grade of "D", "F" or "W". Students may satisfy the above course prerequisites at other institutions, but the courses and grades must be verified prior to consideration for enrollment.

3. File with the Office of Admissions and Records a completed application for admission to City College. No person may attend nursing classes unless he/she is properly admitted to the College.

4. a. If you have taken English 1A and MATH 840 or 40 or higher at CCSF, you must submit official transcript with your application which includes your final grade in English 1A and MATH 840 or 40 or higher.
   b. If you have never taken any college math at any college, you must take the CCSF Math Placement test and score at math 860 or higher. Submit test result with nursing application.
   c. Test waivers for English and Algebra are only for nursing applicants who have satisfied CCSF placement test requirements through external sources such as other colleges attended or (SAT, AP) scores. Bring proof (test score or transcripts) to the Matriculation office, Conlan Hall, Rm. 204 to obtain the waiver. This waiver must accompany your Nursing application.

5. File a completed enrollment form for the Nursing Program. Contact Nursing Department for filing dates.

6. Official transcript in a sealed envelope must be submitted with the enrollment form.

7. Previous ATI TEAS (or equivalent). ATI TEAS will also be administered to those by lottery.

Health and safety requirements. Nursing courses require students to practice nursing skills in the classroom and in cooperating clinical settings. For health and safety reasons, those accepted into the program must demonstrate through a recent, complete medical examination that they are able to participate in the program, have been tested for tuberculosis, and that they have received the following: rubeola, rubella, varicella, mumps, hepatitis B vaccinations and antibody titers which demonstrates immunity to those diseases, current Tetanus/Diphtheria/Pertussis, Seasonal Influenza vaccine.

Enrollees must also provide verification of cardiopulmonary resuscitation basic life support, Health Care Provider certification. Verification of these requirements must be received by the Nursing Department prior to the first day of class. Some hospitals may require students assigned to their hospital to submit to background check and drug screen.

Admission of LVNs, transfer nursing students and RN requirements for BRN of California:

1. LVNs with current, valid California licenses who have been accepted into the Nursing Program through the usual enrollment process may be given advance placement based on space availability and passing grade of Fundamental Challenge Exam or completion of Nursing 50T (LVN to RN Transition course) when available. Please contact the Department Chairperson for further information and counseling.

2. LVN nurses who wish to take the 30-unit option program must have a current, valid California LVN license and must have completed Microbiology 12 and Physiology 1 or 12 with a grade of "C" or higher. Students who qualify for this option should make an appointment with the Nursing Department Chairperson for additional information. 30 unit option placement is on a space available basis.

3. a. Transfer students from other accredited RN nursing programs are considered for enrollment in the Nursing Program. Acceptance is based on equivalent professional nursing education, general education courses and space availability. Transfer students must meet the same enrollment requirements and nursing policies as all students entering the program.
   b. All transfer applicants must have a letter from their previous school of nursing director that states that student was in good standing at the time of withdrawal.

4. RNs who need specific courses required by the BRN for the NCLEX-RN examination should contact the Department Chairperson for additional information. Enrollment is on a space available basis only.

Credit by Examination. All nursing courses are challenging. Consideration for challenge will be based on previous education and/or experience on an individual basis.

Academic Probation and Dismissal. The failure of a nursing student to satisfactorily demonstrate mastery of required knowledge, skills, or abilities that may jeopardize the safety and welfare of others. Depending on the nature of the performance that demonstrates the lack of necessary knowledge, skills, or abilities, students may be placed on clinical probation or may be subject to academic dismissal prior to the end of the semester.

All City College students, including Nursing students, are subject to the Rules of Student Conduct, and must conform their behavior to appropriate standards, both during theory classes and during clinical experiences at cooperating clinical settings.

Registered Nursing Major (AS)

Learning Outcomes

Upon completion of this degree, students will be able to:

1. Pass the NCLEX-RN exam

2. Qualify for entry level positions of R.N. in health facilities and agencies
   - Identify as a member of the health team in rendering holistic care to patients, and provide support to patients’ families;
   - Utilize the Nursing process to formulate a plan of care and provide problem oriented individualized patient care;
   - Demonstrate the ability to prioritize nursing care by application of Maslow’s hierarchy of needs theory.
   - Apply the principles of effective communication in the delivery of health care to the patient and with other health care professionals
   - Apply physical or technical skills that promote patients’ health or welfare;
   - Provide health education to individual patients, families, and the community at large;
   - Demonstrate competencies in basic health care informatics necessary to deliver safe and effective nursing care.
   - Exercise critical thinking skills when applying the nursing process to patient care.
3. Deliver effective nursing care to the patient by utilizing their acquired skills in problem solving and leadership
   - Apply principles of health care ethics to guide professional conduct in the provision of care to patients, families, and community;
   - Identify the cultural or ethnic influences on patients and formulate nursing care according to the patients' values;
   - Identify as a health advocate and participate in activities to benefit patients, families and the community at large;
   - Demonstrate the ability to supervise and delegate patient care based on the skill level of the care provider;
   - Assume the responsibility and accountability for one's nursing actions, self-evaluation, continuing education, and personal growth;
   - Utilize the principles of leadership in the health care setting, community, professional organizations, and legislative & regulatory areas.

Courses Required for the Major in Registered Nursing

A. Nursing Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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<tbody>
<tr>
<td>First Semester</td>
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<tr>
<td>Option 1: Generic Admission:</td>
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<tr>
<td>NURS 50 Fundamentals of Nursing</td>
<td>6</td>
</tr>
<tr>
<td>NURS 50A Pharmacology in Nursing Part I</td>
<td>2</td>
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<tr>
<td>NURS 50L Nursing Skills Lab</td>
<td>1</td>
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<tr>
<td>Option 2: LVN Transition:</td>
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<tr>
<td>NURS 50T LVN to RN Transition</td>
<td>2</td>
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<tr>
<td>Second Semester</td>
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<tr>
<td>NURS 50B Pharmacology in Nursing Part II</td>
<td>2</td>
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<tr>
<td>NURS 51 Basic Medical Surgical Nursing</td>
<td>6</td>
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<tr>
<td>NURS 51L Intermediate Nursing Skills</td>
<td>1</td>
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<tr>
<td>Third Semester</td>
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<tr>
<td>NURS 53 Maternal and Newborn Care</td>
<td>6</td>
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<td>NURS 55 Psychosocial Nursing</td>
<td>6</td>
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<tr>
<td>Fourth Semester</td>
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<tr>
<td>NURS 54 Nursing of Children</td>
<td>6</td>
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<tr>
<td>NURS 56 Adv Medical Surgical Nursing</td>
<td>6</td>
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<tr>
<td>NURS 58 Trends &amp; Issues in Nursing</td>
<td>1</td>
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<tr>
<td>B. Additional Courses Required By The Board Of Registered Nursing (9 Units)</td>
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<tr>
<td>PSYC 1 Gen Psychology</td>
<td>3</td>
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<tr>
<td>SOC 1 Intro Sociology</td>
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<tr>
<td>or ANTH 3 Intro to Social and Cultural Anthropology</td>
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<tr>
<td>or ANTH 3AC Intro to Cultural Anthropology:</td>
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<tr>
<td>Focus on American Cultures</td>
<td>3</td>
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<tr>
<td>SPCH 1A Elements of Public Speaking</td>
<td></td>
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<td>or SPCH 4 Group Communication</td>
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<td>or SPCH 11 Basic Public Speaking</td>
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<td>or SPCH 12 Fundamentals of Oral Communication</td>
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<tr>
<td>or SPCH 20 Interpersonal Communication</td>
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<tr>
<td>or ESL 79 Advanced Speaking &amp; Pronunciation</td>
<td>3</td>
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<tr>
<td>Total</td>
<td>45-52</td>
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</tbody>
</table>

These courses meet the California Board of Registered Nursing Requirement for Licensure and must be completed prior to taking the R.N. Licensure Examination (NCLEX).

Announcement of Courses

Credit, Degree Applicable Courses:

NURS 50. Fundamentals of Nursing (6)
Lec-51, lab-153 (total hrs)
Prereq.: Admission to the RN Nursing Program with successful completion of all prerequisites listed on the application and in the catalog
Coreq.: NURS 50A and 50L
Introduction to nursing fundamentals, principles of care common to all patients, and basic medical-surgical concepts with application of theory and practice of skills in the clinical area. This course lays the foundation for successive nursing courses. The clinical experience is designed to be concurrent with theory. CSU

NURS 50A. Pharmacology in Nursing Part I (2)
Lec-32 (total hrs)
Coreq.: NURS 50 and 50L
Provides an overview of drug classification and then a focus on specific drug therapies related to the integumentary, endocrine, and central nervous systems, sensory organ inflammation, immunity and cancer. Emphasis on nursing implications of drugs, i.e. administration, pharmacologic effects, clinical uses and adverse effects. CSU

NURS 50B. Pharmacology in Nursing Part II (2)
Lec-32 (total hrs)
Coreq.: NURS 51 and 51L
Focuses on specific drugs used in the management of cardiovascular, respiratory, gastrointestinal, neurological, urinary, reproductive, psychiatric and peripheral nervous system disorder. Emphasis on nursing implications of drugs, i.e. administration, pharmacologic effects, clinical uses, and adverse effects. CSU

NURS 50L. Nursing Skills Laboratory (1)
Lab-3
Coreq.: NURS 50 and 50A
P/NP only
Designed to assist students in the development of psychomotor and cognitive skills involved in the performance of selected nursing procedures. The use of the modular approach provides an opportunity for the student to work independently and/or in small groups. CSU

NURS 50T. LVN to RN Transition (2)
Lec-2, Lab-1
Prereq.: Current LVN licensure and completion of RN Program; ANAT 25, PHYS 1 or 12, MB 12, ENGL 1A, MATH 40
Advis: LERN 51 and PHTC 102A
Focus is on the theory and skills essential for the LVN who is eligible for advanced placement in the RN program. Math and skills competencies included in the LVN scope of practice will be assessed at the beginning of the course. CSU

NURS 51. Basic Medical-Surgical Nursing (6)
Lec-50, lab-153 (total hrs)
Prereq.: NURS 50, 50L, and 50A; or current LVN license, NURS 50T
Coreq.: NURS 50B and 51L
Designed to acquaint students with individuals experiencing dysfunction of the cardiac, vascular, respiratory, digestive, liver pancreas, biliary tract, kidney, urinary tract and male reproductive organs. Emphasis on nursing process and integrating principles of nutrition, pharmacology, pathophysiology, psychosocial and biological sciences. Students are assigned to care for patients in acute and nursing home units. CSU
NURS 51L. Intermediate Nursing Skills (3)  
Lab-144 (total hrs) P/NP available  
Prereq.: NURS 50, 50L, 50A  
Coreq.: NURS 51 and 50B  
This course assists the registered nursing student to develop psychomotor and cognitive skills involved in the performance of selected complex nursing procedures. Students will learn in small groups and independently, assigned both in the nursing and computer lab. Emphasis is placed on patient safety, nursing process, physical assessment, legal aspects and detailed nursing documentation. CSU

NURS 53. Maternal and Newborn Care (6)  
Lec-51, lab-153 (total hrs)  
Prereq.: NURS 51 and 55 if taken first in sequence of 3rd semester nursing courses  
NURS 53 and 55 are half-semester courses required in the third semester of students enrolled in the curriculum in Nursing. The sequence in which students will take these courses will be determined by the Nursing Department.  
Principles of and practices in maternal health and care of the newborn. Covers the complete maternity cycle and the growth and development of the newborn from the embryonic stage to neonatal life. Nursing experience in the cooperating hospitals augmented by observations in clinics and community agencies contributing to the welfare of mothers and children. CSU

NURS 54. Nursing of Children (6)  
Lec-51, lab-153 (total hrs)  
Prereq.: NURS 53, 55 (and 56 if taken first in sequence of fourth semester nursing courses)  
NURS 54 and 56 are half-semester courses required in the fourth semester of students enrolled in the curriculum in Nursing. The sequence in which students will take these courses will be determined by the Nursing Department.  
Developmental and physical process of children from birth through adolescence. Health maintenance needs of children, prevention, and treatment of common disease conditions and injuries that affect children. Clinical experience is designed to be concurrent with theory and will incorporate the school, hospital inpatient, and outpatient settings. CSU

NURS 55. Psychosocial Nursing (6)  
Lec-51, lab-153 (total hrs)  
Prereq.: NURS 51 and 53 if taken first in sequence of 3rd semester nursing courses  
NURS 55 and 53 are half-semester courses required in the third semester of students enrolled in the curriculum in Nursing. The sequence in which students will take these courses will be determined by the Nursing Department.  
The study and investigation of the etiology, dynamics, nursing care and therapeutic modalities for persons with psychological dysfunctions, and the understanding of mental health in relation to patient education, growth and development. Emphasis is placed on the interpersonal and problem-solving processes used in the care of all patients. CSU

NURS 56. Advanced Medical-Surgical Nursing (6)  
Lec-51, lab-153 (total hrs)  
Prereq.: NURS 53  
NURS 56 and 54 are half-semester courses required in the fourth semester of students enrolled in the curriculum in Nursing. The sequence in which students will take these courses will be determined by the Nursing Department.  
Introduction of advanced theories from nutrition, pharmacology, psychosocial and biological sciences, with the integration of cultural diversity essential to prepare the student nurse to apply the nursing process, utilizing Maslow's Hierarchy of Needs theory to provide care for the adult patient experiencing major health alterations in the acute care settings and community environments. Care of the older adult in acute and non-acute care settings. Emphasis on the application of leadership and management theory to clinical practice. Instruction is augmented by supervised clinical experience in cooperating hospitals and selected agencies. CSU

NURS 58. Trends and Issues in Nursing (1)  
Lec-17 (total hrs) P/NP only  
Coreq.: enrollment in the RN Program; NURS 54 or 56  
The historical and present trends and issues in nursing. The legal and ethical aspects of nursing and an introduction to the responsibilities of the new graduate nurse. CSU

Noncredit Courses:  
NURS 1000. Registered Nurse Refresher (242 hrs)  
Advisory:  
1. A valid or expired RN nursing license from the United States or abroad. If licensed in the U.S., the candidate must have been out of the field of nursing for at least three years.  
2. If a foreign license holder, a valid California LVN license and six months work experience in a health care facility.  
3. Approval by the California board of Registered Nursing to take the NCLEX-RN licensure examination.  
4. Basic Life Support (BLS) certification valid through the last day of the course.  
5. An ESL level of high-advanced (CCSF level of 160)  
6. Authorization to work in the U.S. and valid social security number.  
An eleven-week course designed to prepare graduates of the LVN Refresher course, as well as other internationally trained nurses and U.S. trained re-entry nurses, for employment as Registered Nurses. The goal is to facilitate direct employment into RN positions for participants who have more advanced English skills and nursing work experience.  
NURS 1001. NCLEX-RN REVIEW - First Time Test Takers (60 hrs)  
Advisory: Completion of ESL 130 or placement in ESL 140  
An NCLEX-RN preparation and review course for first time test takers only. The course will assist the test taker in formulating a review plan, utilizing available resources, reviewing applicable content and answering NCLEX-RN practice questions. Enrollment is limited to 48 students who will be taking the examination for the first time. Enrollees must be eligible to take the registered nurse licensing examination (NCLEX-RN) and must show proof of eligibility. Authorization to work in the U.S. and a valid social security number.

Nursing, Licensed Vocational  
Office: John Adams  
Phone Number: 415 561-1912  
Web Site: www.ccsf.edu/lvn/  

Announcement of Curricula  
The programs offered in this department include credit courses with certificates issued in Home Health Aide/Nurse Assistant and
Additionally, a noncredit course with a certificate issued is Geriatric Home Aide. A variety of courses for care of the elderly may be taken for certified nursing assistant and home health aide continuing education.

**Home Health Aide/Nurse Assistant Certificate**

Graduates of this 18 week full time program will be highly qualified for entry-level positions as health care providers. They are qualified for positions in acute care and convalescent facilities as well as home care agencies and out-patient clinics. Critical thinking concepts and principles will serve as a framework for studying the nursing and behavioral sciences within a health promotion/risk reduction, multicultural based curriculum.

**Program Authorization.** This program is approved by the California State Department of Health Services. Successful completion qualifies the graduate to: 1) take the Nurse Assistant Competency Examination to obtain State Certification for practice; 2) obtain Home Health Aide Certification without further examination.

**NOTE.** The Department of Health Services, Nurse Assistant Certification Division requires fingerprinting and disclosure of misdemeanor and felony convictions for all applicants.

**Enrollment Procedure.** Applicants must take a placement test, attend a program orientation, and meet all program prerequisites. Enrollees must be in good physical and mental health and be over 18 years of age.

**Admission Requirements:**
1. Completion of ENGL L or ESL 140 or placement in ESL 150.
2. A physical examination
3. Immunizations: Hepatitis B, Rubella, Varicella, Mumps, and T.B., TDAP
4. Current CPR certification
5. Department of Health Services Applications ($15 Fee)
6. DHS Application for Criminal Background Check ($32 Fee)

Successful completion of the following courses require an average final grade of “C” or higher (2.00 grade point average) to qualify for a Certificate of Accomplishment.

**Learning Outcomes**

Upon completion of the Home Health Aide/Nurse Assistant Certificate, students will be able to:

- Demonstrate the fundamental nursing skills instructed in the State approved nursing assistant/home health aide training program.
- Use effective communication skills as appropriate while delivering care to clients and families in various nursing practice settings, and in collaboration with the health care team.

**Courses Required for the Certificate of Accomplishment in Home Health Aide/Nurse Assistant**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>VOCN 23 Nurse Assistant: Convalescent Care</td>
<td>6</td>
</tr>
<tr>
<td>VOCN 24 Home Health Aide</td>
<td>3</td>
</tr>
<tr>
<td>VOCN 25 Nurse Assistant/Acute Care</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Units</strong></td>
<td><strong>12</strong></td>
</tr>
</tbody>
</table>

**Vocational Nursing Certificate**

The program of study for the Certificate of Achievement in Vocational Nursing is designed to prepare students for employment in acute care facilities, clinics, long-term care facilities, physician offices, home care, and health centers.

**Admission.** Enrollment is open to all interested students who are in good physical and mental health, and over 17 years of age.

**To Be Admitted To The Program Applicants Must:**
1. Be a graduate of the 12th grade in high school or its equivalent (i.e., GED, High School Proficiency Examination).
2. Attend mandatory program orientation at John Adams site. Application to the program will be handed out during the orientation. Program orientation is valid for one year.
3. File with the Vocational Nursing Department a completed application for admission to City College (for dates, see “Calendar of Instruction”).
4. Apply for admission to the program for the Fall semester between February 15 and May 1, and for the Spring semester, between September 15 to November 1.
5. Take the City College placement tests in English and Mathematics.
6. On the basis of the placement tests and counseling or course work, demonstrate eligibility for ENGL 93 or completion of ESL 160 and MATH 40.
7. Applicants must submit official transcripts.
   a. High school transcripts must show proof of completion of the 12th grade. Transcripts must be submitted in keeping with the application deadline.
   b. Applicants who are accepted in Vocational Nursing and who wish to receive credit for prior nursing education courses completed must submit official transcript within application deadline.
8. Admission of Certified Nurse Assistant, Board Challenge transfer students.
   a. State of California CNA certificate and completion of a CNA program from a credit-granting college within the previous 5 years qualifies a student for at least 4 units.
   b. Transfer students from other accredited L.V.N. or R.N. programs are accepted in the CCSF Vocational Nursing Program. Acceptance is based on equivalent nursing education and availability of space.
   c. Board challenge applicants who need required courses for state boards should contact the vocational nursing office.
   d. Credit may not be given toward satisfying the Vocational Nursing course requirement, for courses completed 5 or more years prior to application for admission.
9. Complete the following prerequisites within 5 years prior to enrollment with a C or higher in each class starting with Fall Semester 2006:
   - Anatomy and Physiology course 3 units (e.g., VOCN 41E or ANAT 14, or ANAT 25, and PHYS 1 or 12)

**Credit by Examination.** Applicants who qualify for admission into the Vocational Program and who have had health training courses in the military, psychiatric technician and certified nurse assistants graduates from noncredit programs who wish to receive credit, or advanced placement should contact the vocational nursing office for additional information. Admission is based on space available only.

Students may obtain the Certificate of Achievement in Vocational Nursing by completing the following courses with a grade of “C” or higher.
Learning Outcomes
Upon successful completion of Vocational Nursing Certificate, students will be able to:

- Use effective communication skills as appropriate while delivering care to patients and families in various nursing practice settings, and in collaboration with the health care team.
- Demonstrate safe and competent nursing care based on scientific principles to patients of any age and cultural background in a variety of work settings under the direction of the registered nurse or physician.
- Apply the Nursing Process to individualize patient care in any health care setting.
- Demonstrate professionalism in their practice of Vocational Nursing.

Courses Required for the Certificate of Achievement in Vocational Nursing

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
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<tbody>
<tr>
<td>First Semester</td>
<td></td>
</tr>
<tr>
<td>VOCN 41A Fundamentals of Voc Nursin..........</td>
<td>4</td>
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<tr>
<td>VOCN 41B Basic Medical/Surgical Nursing ......</td>
<td>7</td>
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<tr>
<td>VOCN 41C Basic Medical/Surgical Skills Lab.</td>
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<tr>
<td>VOCN 41D Pharmacology</td>
<td>3</td>
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<tr>
<td>Second Semester</td>
<td></td>
</tr>
<tr>
<td>VOCN 42A Adult Medical Surgical Nursing I.</td>
<td>5</td>
</tr>
<tr>
<td>VOCN 42B Adult Medical/Surgical Nursing II.</td>
<td>5</td>
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<tr>
<td>VOCN 42C Adult Medical/Surgical Skills Lab.</td>
<td>0.5</td>
</tr>
<tr>
<td>VOCN 42D Mental Health Nursing.</td>
<td>2</td>
</tr>
<tr>
<td>VOCN 42E Nutrition</td>
<td>3</td>
</tr>
<tr>
<td>Third Semester</td>
<td></td>
</tr>
<tr>
<td>VOCN 43A Concepts in Comm Health Nursing.</td>
<td>2</td>
</tr>
<tr>
<td>VOCN 43B Maternity Nursing</td>
<td>4</td>
</tr>
<tr>
<td>VOCN 43C Pediatric Nursing</td>
<td>3</td>
</tr>
<tr>
<td>VOCN 43D Adv Medical Surgical Nursing.</td>
<td>4</td>
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<tr>
<td>VOCN 43E Adv Medical/Surgical Skills Lab.</td>
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<tr>
<td>VOCN 43F Child Growth and Development</td>
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<tr>
<td>Total Units</td>
<td>44.5</td>
</tr>
</tbody>
</table>

Announcement of Courses
Credit, Degree Applicable Courses:
VOCN 22EX. CNA-LVN Bridge (3)
Lec-3, lab-2 P/NP only
Prereq.: Eligibility for Licensed Vocational Nursing Program
The course provides an introduction to information and skills helpful to the pre-nursing student. Course content includes theory and practice in learning and test taking strategies, critical thinking, medical terminology and communication. CSU

VOCN 23. Nurse Assistant/Convalescent Care (6)
Lec-84, lab-126 (total hrs)
This 10 week course presents theory content with concurrent clinical practice that integrates basic nursing concepts and skills in order to provide safe and competent patient care in a long term care setting. The core components include: communication, and interpersonal skills, infection control, safety and emergency procedures, promoting patient independence, patient/resident rights, basic nursing skills, personal care skills, mental health and social service needs, care of the cognitively impaired and basic restorative services. CSU

VOCN 24. Home Health Aide (3)
Lec-40, lab-24 (total hrs)
Prereq.: VOCN 23 and valid CNA license
A short course that provides as introduction to basic patient care in the home setting with a focus on the following core components: liability, safety, infection control, housekeeping chores, food management, laundry, and record keeping. Successful completion of this course will entitle the student to a State Certification as a Home Health Aide. CSU

VOCN 25. Nurse Assistant/Acute Care (3)
Lec-5, lab-16 (6 wks)
Prereq.: VOCN 23 and valid CNA license
The course provides students with the knowledge and skills needed to function in the acute care setting. Emphasis is placed on understanding the needs of the acute care patient and the role of the CNA in meeting those needs. Clinical placement in an acute care setting will provide hands on experience caring for acutely ill patients with a variety of diagnoses with emphasis on teamwork, communication and the importance of accurate observation and assessment. CSU

VOCN 26. Restorative Nurse Assistant (1)
Lec-16 (total hrs)
Prereq.: Current California CNA Certification
Coreq.: Current satisfactory employment as a CNA by a community-based skilled nursing facility
Advisory: One year experience as a CNA in long-term care
Physical strength and flexibility sufficient to provide restorative activities for patients Completion of ENGLISH 140 or ESOL 150, or placement in ESL 150
A two-day Restorative Nursing Assistant certification course for Certified Nursing Assistants employed by a community-based Skilled Nursing Facility. The course provides theory and skill practice to improve the knowledge base and clinical competencies of the CNA to effectively assist residents with restorative care nursing needs. CSU

VOCN 41A. Fundamentals of Vocational Nursing (4)
Lec-4, lab-1
Prereq.: VOCN 41E
Coreq.: VOCN 41B, 41C, and 41D
Provides an introduction to basic patient care in the hospital setting with a focus on the following core components of Vocational Nursing: the nursing process, legal aspects of nursing, medical terminology, therapeutic communication, basic bedside nursing care, client teaching, infection control and basic needs assessment. CSU
Formerly VOCN 33C.

VOCN 41B. Basic Medical/Surgical Nursing (7)
Lec-4, lab-18
Prereq.: VOCN 41A
Coreq.: VOCN 41C
Presents theory content with concurrent clinical practice. Systems focus includes the musculoskeletal, integumentary, and gastrointestinal systems. Nursing care of the geriatric client is emphasized to promote understanding of the core concepts of basic medical-surgical nursing: health and illness, culturally competent and age-appropriate nursing care. CSU
Formerly VOCN 33E.

VOCN 41C. Basic Medical/Surgical Skills Lab (.5)
Lab-2
Introduction to basic medical-surgical assessment skills as well as the nursing skills commonly practiced for clients with integumentary,
musculoskeletal and gastrointestinal disorders. CSU
Formerly VOCN 33D.

**VOCN 41D. Pharmacology (3)**
Lec-3
Introduction to the basic concepts of pharmacology for the vocational nursing student. Basic principles of pharmacology, medication calculations, preparation, administration and storage are emphasized. CSU
Formerly VOCN 33A.

**VOCN 41E. Anatomy and Physiology (3)**
Lec-3
Introduction to the basic concepts of anatomy and physiology for the vocational nursing student. Emphasis is placed on the organization of the body, basic structures, physiological processes, and the structure and function of the body systems. CSU
Formerly VOCN 33F.

**VOCN 42A. Adult Medical Surgical Nursing I (6)**
Lec-44, lab-157 (total hrs)
Prereq.: VOCN 41A-41E
Presents theory content with concurrent clinical practice. System focus includes hematologic, immune cardiovascular, and respiratory systems. Core concepts include: care of the surgical patient, pain management, and fluid and electrolyte balance. CSU
Formerly VOCN 34B.

**VOCN 42B. Adult Medical Surgical Nursing II (6)**
Lec-44, lab-157 (total hrs)
Prereq.: VOCN 41A-41E
Presents theory content with concurrent clinical practice. System focus includes neurological, endocrine, genitourinary and reproductive systems. CSU
Formerly VOCN 34B.

**VOCN 42C. Adult Medical/Surgical Skills Lab (.5)**
Lab-2
Prereq.: VOCN 41A-41E
Presents the nursing skills commonly practiced for clients with hematologic lymphatic, cardiovascular, respiratory, neurological, endocrine, genitourinary and reproductive disorders. CSU
Formerly VOCN 34E.

**VOCN 42D. Mental Health Nursing (2)**
Lec-2
Prereq.: VOCN 41A-41E
Introduction of the basic concepts of mental health nursing for the vocational nursing student with a focus on the current therapeutic interpersonal processes and problem solving techniques helpful in identification and treatment of the mental health disorders which may be present in acutely ill medical/surgical patients. CSU
Formerly VOCN 34A.

**VOCN 42E. Nutrition (3)**
Lec-3
Introduction of the basic concepts of nutrition for the vocational nursing student. Provides knowledge of normal and therapeutic nutrition to serve as a basis for decision-making in providing nursing care. Nutrition is integrated into patient care with emphasis on aspects of disease prevention. CSU
Formerly VOCN 34G.

**VOCN 43A. Concepts in Community Health Nursing (2)**
Lec-1, lab-3
Prereq.: VOCN 42A-42E
Introduction to community health nursing: home health care, long-term care, rehabilitative and hospice care, as well as disaster nursing. CSU
Formerly VOCN 35C.

**VOCN 43B. Maternity Nursing (4)**
Lec-3, lab-5
Prereq.: VOCN 42A-42E
Presents the principles and practice of obstetrical nursing, with an emphasis on the scope of practice of the Vocational Nurse. Individualized, culturally appropriate nursing care for the new mother and neonate are examined. CSU
Formerly VOCN 34C.

**VOCN 43C. Pediatric Nursing (3)**
Lec-2, lab-5
Prereq.: VOCN 42A-42E
Presents the principles and practice of nursing care of children from birth to 18 years old. Health maintenance, disease prevention and common childhood abnormalities are emphasized. CSU
Formerly VOCN 34D.

**VOCN 43D. Advanced Medical Surgical Nursing (4)**
Lec-40, lab-72 (total hrs)
Prereq.: VOCN 42A-42E
Presents theory content with concurrent clinical practice with a focus on current therapeutic treatment modalities and nursing management for advanced medical/surgical patients. Core concepts include: care of the oncology patient; leadership and management; and career development. CSU
Formerly VOCN 35B.

**VOCN 43E. Advanced Medical/Surgical Skills Lab (.5)**
Lab-2
Prereq.: VOCN 42A-42E
Presents the nursing skills commonly practiced in maternity and pediatric nursing as well as the client with advanced medical-surgical disorders. CSU
Formerly VOCN 35B.

**VOCN 43F. Child Growth and Development (1)**
Lec-1
Presents basic concepts of normal growth and development from birth through adolescence. The growth and development theories proffered by Abraham Maslow, Eric Erickson, and Jean Piaget will be examined. The impact of age-appropriate nursing interventions will be discussed. CSU
Formerly VOCN 34F.

**Noncredit Courses:**

**VOCN 9194. Home Health Aide-Theory/Special (120 hrs)**
Advis: ESLN 3500
A short term course that provides the basic knowledge on Home Health Care, housekeeping, good nutrition and meal planning procedures to prepare students to provide Home Health Care for frail elderly. Successful completion of this course will entitle the student to State Certification as a Home Heath Aide.
VOCN 9195. Home Health Aide-Clinical/Special (50 hrs)
Advising: ESLN 3800
Clinical application of theory prepares the individual to render home care to the adult and geriatric client. Designed for re-entry students and those with Cantonese/Mandarin bilingual skills. Certification by the State of California upon successful completion of theory and clinical components.

VOCN 9200. Nursing Refresher (455 hrs)
Prereq: Eligibility for ENGL 93 or 94 or ESL 160; LVN license or RN license from U.S. or abroad
A one-semester course designed for international and U.S. trained re-entry LVNs and RNs. The course provides review and refreshing of knowledge and skills needed for employment in nursing through didactic, skills lab, and clinical experience.

Oceanography
See Earth Sciences listings.

Older Adults
Office: Ocean
Phone Number: (415) 452-5839
Web Site: www.ccsf.edu/olad

General Information
The Older Adults Department offers free classes at thirty sites around San Francisco for anyone over fifty-five years of age. For further information, please call (415) 452-5839.

Learning Outcomes
Upon completion of courses in the Older Adults discipline, students will be able to:

- Exhibit improved written and/or oral expression and critical thinking skills;
- Demonstrate skills that improve mental and/or physical health to maintain or increase quality of life and to stay active;
- Demonstrate skills to become active participants in current computer technology;
- Identify aptitudes in the Arts, understand arts-related concepts, and demonstrate skills that improve technique, mental acuity, and creativity to complete projects.

Announcement of Courses

Noncredit Courses:

General Classes
OLAD 7000. Encore Adventures (90 hrs)
A full-day program of diverse activities that may include lectures, crafts, music, exercise, discussions, service projects, field trips, holiday celebrations, and opportunities to learn various new skills.

OLAD 7006. Understanding Changing Times (36 hrs)
Activities focus on personal, social, political, and wellness issues; field trips may be included.

Health
OLAD 7200. Exercise and Relaxation Techniques (36 hrs)
Through instruction, demonstration and practice learn techniques that improve balance, strength, flexibility and endurance.

OLAD 7205. Wellness Exercises (18 hrs)
Moderate exercises designed for either older adults with limited physical abilities or those who are re-introducing themselves into a physical fitness program. The T’ai Chi Chuan sections of this class emphasize proper body alignment, stances, and coordination, using the principles of the art to promote relaxation and health.

OLAD 7209. Mind-Body Health (36 hrs)
Through lecture, discussion and practice learn about the mind body connection.

OLAD 7210. Medical Options for Older Adults (45 hrs)
A survey of western and alternative medical models incorporating exercises in breathing and stretching and journal keeping, as well as a peer support group. There are guest lecturers in acupuncture, massage, chiropractic, and hypnotherapy. The objective is to enable students to become more active and knowledgeable participants in their own health care.

OLAD 7211. Memory and Mental Fitness for Older Adults (36 hrs)
Older adults discover and practice memory and mental fitness techniques in practical and creative ways. Learn how memory works, and what factors affect how well our brain functions. Students discover and use their own learning style to improve their ability to retain and retrieve information.

OLAD 7212. Aging and Social Relations (36 hrs)
Research has shown that social engagement is a key to healthy aging. Learn what research and practice have uncovered about different aspects of social relations in later life, such as intergenerational/cross-generational activities, family relations, civic engagement, intimacy, care giving, and death and grieving. Discover free and low-cost opportunities for social engagement, including intellectual, social and physical activities in and around San Francisco.

OLAD 7214. Healthier Living (15 hrs)
This course provides older adults with pertinent information, effective strategies, and skills to assist them in managing personal health conditions and to maintain an active and fulfilling life.

The Arts
OLAD 7300. Art for Older Adults (45 hrs)
Open to beginning and advanced students. Using oil paints or watercolors, students will study and work to develop different painting techniques through a series of exercises. Students will receive individual instruction on how to mix colors, work from still life materials, work from landscapes and eventually work from live models. Students provide their own materials.

OLAD 7301. Arts and Crafts for Older Adults (45 hrs)
This course develops formal artistic skills such as color, composition, form, harmony, texture and contrast through physical and tactile skills such as painting, weaving, and sculpture. Completed projects are two or three-dimensional using a variety of materials and mediums.

OLAD 7303. Figure Drawing - Older Adults (54 hrs)
Studio class in drawing the human figure from a live model. For beginners to professionals. Pencil, charcoal, ink, and watercolors. Field trips will be included in the program to study and evaluate other artists’ works.
OLAD 7307. Music Appreciation for Older Adults (36 hrs)
Study of and familiarization with the music of western civilization. Students are introduced to a sampling of music from ballets, operas, and symphonies.

OLAD 7309. Theater Appreciation for Older Adults (54 hrs)
Students read plays, attend performances, and develop critical skills in review discussions. The history of theater, elements of dramatic literature, and production techniques.

OLAD 7310. Stitchery for Older Adults (45 hrs)
In this hands on course, students will learn skills related to stitchery and textile arts including patchwork, quilting, applique, trapunto, and embroidery stitches. Beginning students will complete several small projects to learn the basic techniques. Advanced students will complete personal or group projects.

OLAD 7313. Art Appreciation - Older Adults (36 hrs)
Introduction to art, painting and sculpturing from the Lascaux cave paintings to modern day artists. Topics include: biographies and personalities of various artists; different art styles; the basic elements of art; the basic periods of art history and their characteristic styles along with the reasons such styles were developed.

OLAD 7316. Life Sculpture for Older Adults (90 hrs)
In a supportive studio atmosphere, students will learn and gain proficiency in constructing clay sculpture working primarily from a live model.

Writing and Literature

OLAD 7400. Journal Writing for Older Adults (36 hrs)
Development of writing skills through journal keeping. Students acquire insight and awareness by the practice of writing techniques such as creative exercises, dialogues and monologues, stories, description, dreams, letters, memoirs, and poetry.

OLAD 7401. Writers' Workshop for Older Adults (45 hrs)
Develop writing skills in a peer support group. Students may choose to work on prose and/or poetry and read their work in class. Learning how to respond to writing, guided creative exercises and assignments, sentence and story structure.

OLAD 7402. English - Women's Literature (54 hrs)
Survey of works by and about women, including novels, short stories, essays, biography, and poetry. Development of reading and critical thinking skills. Each semester focuses on either American or international authors.

OLAD 7403. Modern Literature - Older Adults (45 hrs)
Survey of modern literature, including novels, short stories, essays, biography, and poetry. Development of reading and critical thinking skills. Each semester focuses on different cultures and themes.

OLAD 7406. Intergenerational Storytelling (36 hrs)
Examine techniques of storytelling including developing original ideas and themes and enhancing presentational practice through vocal modulation, gestures, and memory exercises. Students present and rehearse different stories each week. The course encompasses mutual critiques, field trips, guest storytelling speakers, and presentations to children and older adults in community based organizations.

OLAD 7410. Life Review for Older Adults (45 hrs)
This course gives each participant an opportunity to reflect on his/her past, consider how past occurrence have influenced his/her present, and look at how the past and present might shape his/her future. It uses non-traditional approaches (i.e., thematic, rather than chronological) to reminisce and review students' own lives. Opportunities to be creative, to share, and to learn about oneself and others in a supportive environment are created.

Computers

OLAD 7501. Introduction to Computers (54 hrs)
An introduction, for older adults, to the basic concepts and techniques of personal computers, presented in an unhurried, non-competitive environment with guided practice and skill building exercises. Topics include computer concepts of basic software and hardware, operating systems, word processing, email and the Internet.

OLAD 7502. Introduction to the Internet (54 hrs)
ADVISE: OLAD 7501
A survey of the concepts and techniques of the Internet, presented in an unhurried, non-competitive environment. Students learn how to: access to the web; use e-mail; surf the web using browsers; participate in chat and social media; conduct research using search engines; and create a web page or blog.

OLAD 7503. Art and Photography Using Digital Media (54 hrs)
ADVISE: OLAD 7501
Presentations, demonstrations and hands-on projects provide an introduction to the concepts and techniques of using the computer to create digital art and photographs utilizing digital cameras, scanners, and other media. The course provides strategies for enhancing and manipulating images with photo editing programs.

OLAD 7504. Introduction to Computers II (54 hrs)
This course is a continuation of Introduction to Computers and will emphasize working with Microsoft Office programs including Word, Excel and PowerPoint.

Paleontology

See Earth Sciences listings.

Philippine Studies

Office: Batmale 360
Phone Number: (415) 239-3740
Web Site: www.ccsf.edu/philstd

Learning Outcomes

Upon completion of courses in Philippine Studies, students will be able to:

- Identify and apply basic research methods in the study of Philippine society and culture.
- Critically analyze the various historical, social, and cultural factors that have influenced Philippine society and culture.
- Evaluate the impact of historical and contemporary social movements such as colonization and immigration on the situation and conditions of various Philippine regions and groups.
- Apply knowledge and skills towards cross-cultural competence and appreciation of one's and others' cultures.
Announcement of Courses

Credit, Degree Applicable Courses:

PHST 10. Independent Study (3)  
Ind st-15  P/NP available  
Independent reading and research in Philippines Studies. The student is required to submit an essay or project on a topic that the instructor has approved in advance. This project must have strong relevancy within the area of Philippines Studies and meets the student's own educational resources and needs. CSU (UC upon review)

PHST 20. The Filipino Family (3)  
Lec-3  P/NP available  
A survey of internal and external adaptation to forces of change that have buffeted and changed the modern Filipino family. Description and analysis of traditional and contemporary Filipino family systems as they respond to the nature and changes within the larger society and culture. CSU/UC

PHST 30. Philippine Society and Culture Through Film (3)  
Lec-3  P/NP available  
An examination of Philippine films for expressions of various cultural themes and sociopolitical influences on the Filipino experience; includes: images of Filipinos, language, interpersonal relations, sex roles, the "Filipino Dream", immigration, and bicultural alienation. CSU/UC

ANTH 15. Philippine Culture and Society (3)  
Lec-3  P/NP available  
The development of Philippine culture and the impact of Western civilization on the people; emphasis on the ways of life in Philippine cities and barrios. Tribal cultures. CSU/UC

ASAM 8. Filipino American Community (3)  
Lec-3  P/NP available  
Examination of the experiences, histories, and contributions of Filipina/o Americans, past and present. Includes study of U.S. history and government through the experience of immigrants from the Philippines. Topics include U.S. colonial and neocolonial history in the Philippines, immigration experiences, economic and educational opportunities, family, community, political and social history. CSU/UC

LGBT 50. Gay/lesbian/bisexual/transgender Communities of Color in the U.S. (3)  
Lec-3  P/NP available  
Examination of the formation of lesbian/gay/bisexual and transgender identities and communities among people of color in the United States. Included are African Americans, Native Americans, Asian Americans, Pacific Islanders, and Chicano/Latinos. CSU/UC

Formerly GLST 50

HIST 36. History of Southeast Asia (3)  
Lec-3  P/NP available  
A survey of the history of southeast Asia, with emphasis on the post World War II developments and events. CSU/UC.

HIST 37. History of the Philippines (3)  
Lec-3  P/NP available  
The historical and cultural growth of the Philippines, including the development of national culture, political and social institutions, and foreign relations. CSU/UC

HIST 39. The United States Presence in the Western Pacific Rim: An Introduction (3)  
Lec-3  P/NP available  
A survey course on the evolution of US interests, expansion and foreign policies in the Western Pacific Rim area, specifically the countries in East Asia and Southeast Asia. CSU/UC

IDST 36. Poetry for the People (3)  
Lec-3  P/NP available  
An interdisciplinary poetry course which explores the poetry of African Americans, Latino(a)s, Asian Americans, and Native Americans, including poetry by incarcerated people and by poets of all sexual orientations. Use of tapes, recordings, films, poetry readings, and discussions, close readings, guest lectures and performances to 1) identify poetry that is accessible to the general community and 2) develop strategies and various media for making poetry available to diverse communities. CSU/UC

IDST 37. Racial and Ethnic Groups in the United States - A Comparative Survey (3)  
Lec-3  P/NP available  
An interdisciplinary survey of the history, culture, concerns, and conditions of American ethnic and racial groups in the United States. Includes multicultural literacies, immigration experiences, economic opportunities, political and social histories, and social justice movements. CSU/UC

IDST 40. Introduction to Contemporary Issues in the Filipino Community (3)  
Lec-3, field trips  P/NP available  
Students identify and critically analyze contemporary social, political, economic, educational, and cultural issues that are important and significantly affect the life of the Filipino American community. Issues include the following areas: defining Filipino and Filipino American identity, immigration and acculturation, socioeconomic status, employment, racial and ethnic diversity, gender, political empowerment, education, and emerging patterns of the Filipino family. CSU/UC

IDST 42. Philippine Humanities (3)  
Lec-3, field trips  P/NP available  
Appreciation and critical evaluation of Filipino philosophy, literature, art, music, and dance for the purpose of developing an aesthetic sense and cultural acceptance. Exposure to the best of these forms through readings, recordings, films, and field trips. CSU/UC

Pilipino Language Courses: See Pilipino in this section of the catalog.

POLS 47. Government and Politics of Southeast Asia (3)  
Lec-3  P/NP available  
A survey of political developments and changes in Southeast Asian states (the Philippines, Indonesia, Malaysia, Thailand, and Singapore) and such other states as Viet Nam, Laos, Cambodia, and Burma. Internal politics and international relations. CSU/UC

PSYC 23. The Psychology of Race and Ethnic Relations (3)  
Lec-3  P/NP available  
Examination of race as a social construction, attitude formation, social psychological principles, forms of racism and discrimination, privilege and social power, psychological response to racism, and racial identity development. Psycho-historical analysis of the experiences and contributions of African Americans, Asian Americans, Latino(a) Americans, and Native Americans. Completion of a research project. CSU/UC
Philosophy
Office: Batmale 656
Phone Number: (415) 239-3330
Web Site: www.ccsf.edu/socialsci

Learning Outcomes
Upon completion of courses in Philosophy, students will be able to:

- Demonstrate skills of conceptual analysis and argument comprehension, construction, and evaluation.
- Apply conceptual analysis skills to the fundamental problems involved in building reliable theoretical knowledge or formulating sound ethical judgments.
- Analyze and demonstrate an understanding of the science of logic, with emphasis on the concept of proof and symbolic systems for calculating truth-value relationships.
- Actively examine theories of the philosophical-scientific tradition from its ancient beginnings to its contemporary developments.

Announcement of Courses
Credit, Degree Applicable Courses:
Except for PHIL 12B, philosophy courses may be taken in any order. Both PHIL 2 & 4 are recommended as introductory courses.

PHIL 2. Introduction to Philosophy: Morality and Politics (3)
Lec-3
An examination of such questions as: Are value and moral judgments only the conventional prejudices of society or are there conditions under which value judgments can be rationally defended? If there are such grounds, what are they? If not, what consequences, if any, follow from ethical skepticism? Can value judgments about individuals or societies be justified on rationally acceptable grounds? CSU/UC

PHIL 4. Introduction to Philosophy: Knowledge and Its Limits (3)
Lec-3
The tools and techniques of philosophical reasoning: reading argumentative prose; analyzing conceptual models; writing critical essays. Problems of knowledge: the criteria of reliable knowledge; the formulation and justification of beliefs; the sources and limits of knowledge; beliefs about the physical world, the past and future, and other minds. Critical standards applied to related metaphysical issues: theism, mind and self-identity, determinism. CSU/UC/C-ID PHIL 100

PHIL 12A. Symbolic Logic (4)
Lec-5
Prereq.: MATH 60 or 92, or placement in MATH 90, or 2 yrs. high school algebra, or demonstration of MATH 60 exit skills
The study of logical relationships (consistency, equivalency, and entailment) by way of models and procedures in a symbolic system. The concept of proof and the demands of formal proofs. Methods of demonstrating logical relationships, including truth tables, derivations in sentence and predicate logic, and semantic interpretations. The relation between conventional languages and symbolic encodings. A selection of related theoretical topics, including proofs of soundness and consistency for the calculi, and elementary set theory. CSU/UC

PHIL 12B. Symbolic Logic (3)
Lec-3
Prereq.: PHIL 12A
Semantic interpretations and the predicate calculus; identity; meta- theorems; proofs of completeness, consistency and soundness; axiomatics; formalized theories; the history of logic. CSU/UC

PHIL 25A. Ancient Philosophy (3)
Lec-3
The origins of the philosophical-scientific tradition. Early attempts at rational explanations of the natural world. Socrates and the foundations of moral criticism. Plato: his articulation of the problems of knowledge, and contributions to moral and political theory. Aristotle: his organization of scientific inquiry, formulation of ethical theory, and development of the science of logic. The philosophic tradition after Aristotle. CSU/UC/C-ID PHIL 130

PHIL 25C. Modern Philosophy through Kant (3)
Lec-3
The philosophical tradition from the Renaissance to the nineteenth century. Emphasis on new models of human knowledge and human nature formulated in reaction to scientific and social revolutions. Positions of thinkers such as Descartes, Hume and Kant on basic questions such as “Can anything be known with certainty?”, “Are there any justifiable moral principles?”, “Is there any purpose to existence?” CSU/UC/C-ID PHIL 140

PHIL 40. Logic: An Introduction to Critical Thinking (3)
Lec-3
P/NP available
A course in practical reasoning. How to distinguish between reasons that are rational and those that are not. Methods of evaluating arguments that will lead to the truth. CSU/UC

PHIL 51-52-53. Selected Topics in Philosophy (1-2-3)
Lec-1,2,3
Investigation of a broad range of ideas, issues, figures, and movements. CSU

PHIL 53A. Wilderness, Society and Self

Photography
Office: Visual Arts 160
Phone Number: (415) 239-3422
Web Site: www.ccsf.edu/photo

Announcement of Curricula
General Information
The City College of San Francisco’s Photography Department is one of the oldest and largest programs in the country, with over two dozen courses and thirty-plus instructors. We offer a broad choice of classes from History and Aesthetics of Photography, Advanced B&W Darkroom Techniques, and Advanced Studio Lighting to Photoshop, Mixed Media and Business Practices of Photography.

Our faculty and staff consist of experienced professionals who create an environment that encourages creativity, technical aptitude, and critical thinking. Whether your interest is as a fine artist, commercial photographer, or enthusiast, we will provide the means and guidance that will help you achieve your goals.

Students who plan to continue as photography majors at the university are advised to review major requirements specific to their transfer university on www.assist.org.

Learning Outcomes
Students will be able to:

- Use the traditional tools and techniques of photography
- Develop skills in evolving digital technologies
• Apply concepts and aesthetics to create and evaluate photographic images
• Satisfy academic transfer requirements to institutions of higher learning

Career Opportunities
• Commercial Photography
• Portrait Photography
• Fine Art Photography
• Editorial Photography
• Documentary Photography
• Photographic Retouching
• Photo Assisting
• Digital Imaging

Photography Major (AS)

Associate in Science Degree with Major in Photography. The program is designed so that students may satisfy the requirements for graduation from the College. The program adviser of the Photography Department will help students who desire to plan special programs of study.

Courses Required for the Major in Photography

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>First Semester</strong></td>
<td></td>
</tr>
<tr>
<td>PHOT 50A or 50B History &amp; Aesthetics of Photography</td>
<td>4</td>
</tr>
<tr>
<td>PHOT 51 Beginning Photography</td>
<td>3</td>
</tr>
<tr>
<td>PHOT 53 Photographic Design and Concepts or DSGN 101 Design Fundamentals</td>
<td>2 or 3</td>
</tr>
<tr>
<td>Additional graduation requirements</td>
<td></td>
</tr>
<tr>
<td><strong>Second Semester</strong></td>
<td></td>
</tr>
<tr>
<td>PHOT 55 Color Theory of Photography</td>
<td>3</td>
</tr>
<tr>
<td>PHOT 81A Inter. Black &amp; White Photography</td>
<td>3</td>
</tr>
<tr>
<td>PHOT 83 View Camera Techniques</td>
<td>2</td>
</tr>
<tr>
<td>PHOT 85A Beginning Lighting Techniques</td>
<td>4</td>
</tr>
<tr>
<td>Additional graduation requirements</td>
<td></td>
</tr>
<tr>
<td><strong>Third Semester</strong></td>
<td></td>
</tr>
<tr>
<td>PHOT 60A Beginning Photoshop</td>
<td>2</td>
</tr>
<tr>
<td>PHOT 85B Adv. Studio Lighting Techniques</td>
<td>4</td>
</tr>
<tr>
<td>PHOT 93 Editorial Photography</td>
<td>2</td>
</tr>
<tr>
<td>PHOT 95A Beginning Color Printing</td>
<td>4</td>
</tr>
<tr>
<td>Additional graduation requirements</td>
<td></td>
</tr>
<tr>
<td><strong>Fourth Semester</strong></td>
<td></td>
</tr>
<tr>
<td>PHOT 81B Adv. B+W Darkroom Techniques</td>
<td>4</td>
</tr>
<tr>
<td>PHOT 90 Portraiture</td>
<td>4</td>
</tr>
<tr>
<td>PHOT 99 Business Practices of Photography</td>
<td>3</td>
</tr>
<tr>
<td>Photography elective</td>
<td>2</td>
</tr>
<tr>
<td>Additional graduation requirements</td>
<td></td>
</tr>
<tr>
<td><strong>Total Units</strong></td>
<td>46–47</td>
</tr>
</tbody>
</table>

Elective Courses: In choosing electives, students should take at least two units from the following list of courses. Students should select Recommended Additional Coursework: in consultation with their program adviser. PHOT 52, 57, 60B, 67, 80, 82, 86, 89, 95B, 101-104, 118, 130.

Architectural Photography Certificate

This certificate provides instruction in architectural photography and the use of large format cameras. Additionally, hands-on experience is gained in the manipulation of ambient and artificial light sources and the application of professional lighting techniques. Students completing this certificate program will be qualified for employment in the fields of architectural photography, real estate photography, commercial photography, editorial photography, and to work as a photographer's assistant.

Learning Outcomes

Upon completion of this certificate, students will be able to:
• Use the traditional tools and techniques of photography, such as but not limited to: measure light, estimate depth of field and motion.

Digital Photography Certificate

This certificate provides a foundation in photography and design, and includes in-depth instruction in image manipulation technologies (i.e. Adobe Lightroom™ & Photoshop™).

Students completing this certificate program will be qualified for employment in fields that heavily rely on post-production and retouching such as wedding photography, product photography, fashion photography, graduation photography, and portrait photography. Additionally students will be prepared for entry-level positions in image conservation and restoration, digiscoping, emerging media and start-up companies. This certificate is also recommended for students seeking to upgrade skills for career advancement or transition.

Learning Outcomes

Upon completion of this certificate, students will be able to:
• Use the traditional tools and techniques of photography, such as but not limited to: measure light, estimate depth of field and motion.
- Apply design concepts, such as but not limited to: aesthetic elements and principles, create and evaluate photographic images, use iterative processes.
- Demonstrate the use of digital hardware and software technologies, such as but not limited to: scanners, printers, image compression and transfer, Photoshop and Lightroom.
- Apply specific photographic business practices, such as but not limited to: compare equipment needs, produce a portfolio, develop client relationships, and determine fees and licensing.

Students must complete each course with a grade of “C” or higher. Where applicable, grades of Pass may be used.

Students must complete 4 of 6 courses at City College of San Francisco. All courses must be taken within a 4-year period.

**Courses Required for the Certificate of Accomplishment in Digital Photography**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHOT 51 Beginning Photography</td>
<td>3</td>
</tr>
<tr>
<td>DSGN 101 Design Fundamentals</td>
<td>3</td>
</tr>
<tr>
<td>PHOT 57 Photography for the Web</td>
<td>3</td>
</tr>
<tr>
<td>PHOT 60A Beginning Photoshop</td>
<td>2</td>
</tr>
<tr>
<td>PHOT 60B Intermediate</td>
<td>3</td>
</tr>
<tr>
<td>PHOT 99 Business Practices of Photography</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>17</strong></td>
</tr>
</tbody>
</table>

**Recommended Additional Coursework:** PHOT 52, 67, 80, 85A, 130.

**Portrait Lighting Certificate**

This certificate provides hands-on instruction in both ambient and electronic strobe equipment and lighting techniques as applied to professional portrait photography. Includes a foundation in design. Students completing this certificate program will be qualified for employment in the fields of portrait photography, wedding photography, public relations, event and fashion photography, documentary photography, photojournalism, sports photography, travel photography, and to work as a photographer’s assistant.

**Learning Outcomes**

Upon completion of this certificate, students will be able to:
- Use the traditional tools and techniques of photography, such as but not limited to: measure light, estimate depth of field and motion.
- Apply design concepts, such as but not limited to: aesthetic elements and principles, create and evaluate photographic images, use iterative processes.
- Apply the proper use of the techniques and aesthetics of light to the requirements of photography, such as but not limited to: studio equipment and accessories, natural and auxiliary light sources, exposure value and contrast control.
- Apply techniques for portraiture, such as but not limited to: posing and subject control, 3-light settings, and intensity balance.

Students must complete each course with a grade of “C” or higher. Where applicable, grades of Pass may be used.

Students must complete 3 of 5 courses at City College of San Francisco. All courses must be taken within a 4-year period.

**Courses Required for the Certificate of Accomplishment in Portrait Lighting**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHOT 51 Beginning Photography</td>
<td>3</td>
</tr>
<tr>
<td>DSGN 101 Design Fundamentals</td>
<td>3</td>
</tr>
<tr>
<td>PHOT 80 Outdoor and Ambient Light Photography</td>
<td>3</td>
</tr>
<tr>
<td>PHOT 85A Beginning Lighting Techniques</td>
<td>4</td>
</tr>
<tr>
<td>PHOT 90 Portraiture</td>
<td>4</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>17</strong></td>
</tr>
</tbody>
</table>

**Recommended Additional Coursework:** PHOT 52, 85B, 93, 99, 101C, 130.

**Studio Lighting Certificate**

This certificate provides hands-on instruction in electronic strobe equipment and lighting techniques as applied to professional studio photography. Includes a foundation in design. Students completing this certificate program will be qualified for employment in the fields of commercial photography, product photography, portrait photography, event and fashion photography, food photography, and entry-level positions in medical and forensic photography.

**Learning Outcomes**

Upon completion of this certificate, students will be able to:
- Use the traditional tools and techniques of photography, such as but not limited to: measure light, estimate depth of field and motion.
- Apply design concepts, such as but not limited to: aesthetic elements and principles, create and evaluate photographic images, use iterative processes.
- Apply the proper use of the techniques and aesthetics of light to the requirements of photography, such as but not limited to: studio equipment and accessories, natural and auxiliary light sources, exposure value and contrast control.
- Apply specific photographic business practices, such as but not limited to: compare equipment needs, produce a portfolio, develop client relationships, and determine fees and licensing.

Students must complete each course with a grade of “C” or higher. Where applicable, grades of Pass may be used.

Students must complete 3 of 5 courses at City College of San Francisco. All courses must be taken within a 4-year period.

**Courses Required for the Certificate of Accomplishment in Studio Lighting**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHOT 51 Beginning Photography</td>
<td>3</td>
</tr>
<tr>
<td>DSGN 101 Design Fundamentals</td>
<td>3</td>
</tr>
<tr>
<td>PHOT 85A Beginning Lighting Techniques</td>
<td>4</td>
</tr>
<tr>
<td>PHOT 85B Adv. Studio Lighting Techniques</td>
<td>4</td>
</tr>
<tr>
<td>PHOT 99 Business Practices of Photography</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>17</strong></td>
</tr>
</tbody>
</table>

**Recommended Additional Coursework:** PHOT 52, 80, 90.

**Collaborative Design Certificate**

The 17-unit certificate program in Collaborative Design provides students with a strong foundation in multidisciplinary approaches to design and collaboration.

* See Interdisciplinary Studies section of the Catalog.
Announcement of Courses

Photography

Credit, Degree Applicable Courses:
PHOT 50A. History and Aesthetics of Photography (4)  
Lec-4, field trips  P/NP available  
Illustrated lectures on the achievements of important photographers. Designed to stimulate visual thinking and creative problem solving. Visits to museums, films and slide lectures. CSU/UC

PHOT 50B. History and Aesthetics of Photography Since 1945 (4)  
Lec-4, field trips  P/NP available  
This course examines various aspects of photography, including photographers, photographs and technical innovations, within their historical, social and cultural contexts. Although students will study photography as it has been applied to journalism, science, fashion, advertising, etc., emphasis will be on photography as art. CSU/UC

PHOT 51. Beginning Photography (3)  
Lec-3, lab-3, field trips  P/NP available  
A basic course introducing photographic capture, processing and output practices. Introduction to small format cameras including both film and digital; exposure calculations, film and digital capture, scanning, digital printing, and presentation techniques. This course explores both the technical and aesthetic aspects of photography. CSU/UC

PHOT 52. Photographers and Their Images (1)  
Lec-1, field trips  P/NP available  
Professional photographers present and discuss their work in technical and aesthetic terms, a unique opportunity for photography students to meet renowned photographers and discuss topics in question and answer format. CSU

PHOT 53. Photographic Design and Concepts (2)  
Lec-3, lab-1, field trips  P/NP available  
Prereq: PHOT 51 or Demonstration of Exit Skills  
Design and concept elements necessary for the formulation of photographic images; communication and expression of photographic ideas; exploration of conceptual and formal design of photography. CSU

PHOT 55. Color Theory of Photography (3)  
Lec-3, field trips  P/NP available  
Prereq: PHOT 51 or Demonstration of Exit Skills  
Advis: Completion/Concurrent Enrollment in PHOT 53  
Basic principles of photographing with slide film; special demands of color technique; color relationships; light qualities; kinds of films; class demonstrations; critiques of color transparencies. CSU

PHOT 57. Photography for the Web (3)  
Lec-3, lab-1  P/NP available  
Prereq: PHOT 51 or Demonstration of Exit Skills  
Coreq: VMD 140  
Introduction to the role of photography in multimedia. Beginning digital imaging, image acquisition, and the production process. Emphasis on the application of these skills integrated with other digital media. Using these techniques, students will explore conceptually the use of photographic images in multimedia. Includes lab assignments and demonstrations of hardware and software necessary for the contemporary photographer to succeed in the electronic age. CSU

PHOT 60A. Beginning Photoshop (2)  
Lec-2, lab-1, field trips  P/NP available  
Prereq: VMD 105 or CS 100M or Demonstration of Exit Skills  
Advis: PHOT 51  
A beginning level lecture/lab course introducing the student to Photoshop. Technical aspects of digital photography will be emphasized. This emphasis includes demonstration of the software and hardware necessary for a photographer to succeed in the contemporary photographic marketplace. Students will complete lab exercises in class as well as assignments to be completed outside of class time. CSU

PHOT 60B. Intermediate Photoshop (3)  
Lec-2, lab-3, field trips  P/NP available  
Prereq: PHOT 51, 60A; and DSGN 101 or Demonstration of Exit Skills  
An intermediate level lecture/lab course for students to expand their capabilities in Photoshop. Intermediate techniques in the manipulation, alteration and enhancement of digital photography will be emphasized. This in-depth exploration of the digital photograph will provide the student with skills to create their own expressive images and explore the various electronic methods of output. Students will integrate the technical resources that are available to them in preparation for a rapidly changing field. Class demonstrations, projections and critiques of student work will be used. Students will complete lab exercises in class. CSU

PHOT 67. Digital Negatives for Darkroom Printing (3)  
Lec-3, lab-1  P/NP available  
Prereq: PHOT 51 and PHOT 60A  
Advis: PHOT 81A, PHOT 86  
Creation of film negatives from digital files for use in a traditional darkroom. Students will perfect their negatives in the digital realm, output them using digital techniques and then print them using traditional, historical and alternative printing methods in the darkroom. CSU

PHOT 80. Outdoor and Ambient Light Photography (3)  
Lec-3, lab-1, field trips  P/NP available  
Prereq: PHOT 51  
Advis: DSGN 101  
A hands-on, how-to course in managing natural light. Emphasis is on outdoor and existing light; designed to relate lighting to photo-aesthetics and visual communication. CSU

PHOT 81A. Intermediate Black and White Photography (3)  
Lec-3, lab-3  P/NP available  
Prereq: PHOT 51 and DSGN 101 or Demonstration of Exit Skills  
An intermediate black & white film photography course with emphasis on film processing and darkroom printing. Topics include camera exposure, black & white films and enlarging papers, contrast control, camera filters, elementary lighting, electronic flash, medium format cameras, finishing techniques and aesthetics of photography. CSU/UC

PHOT 81B. Advanced Black and White Darkroom Techniques (4)  
Lec-3, lab-3, field trips  P/NP available  
Prereq: PHOT 81A and DSGN 101 or Demonstration of Exit Skills  
An intensive exploration of the controls and materials of the black and white photographic process. The course emphasizes fine printing, optimization of the negative, archival processing procedures and an exploration into various films, papers and developing chemistry. CSU
PHOT 81D. Intermediate Photo: Digital (3)
Lec-2, lab-3, field trips P/NP Available
Prereq.: PHOT 51
Advis: DSGN 101; and ENGL 93 or ESL 160
A digital photography course advancing the technical and creative concepts introduced in Beginning Photography. Topics include: Digital camera configurations, exposure control, workflow management, non-destructive editing, image manipulation and enhancement, archiving, printing options, and presentation. Discussions on visual literacy and contemporary photography as well as review of student work are integral. CSU

PHOT 82. Zone System Techniques (3)
Lec-2, lab-3, field trips P/NP available
Prereq.: PHOT 81A and DSGN 101 or demonstration of exit skills
An exploration of the Photographic Zone System through use of special light metering, processing, and fine printing techniques. A study of the integration of aesthetics, calibration of camera and exposure meter, calibration of film to photographic printing papers, development of film for specific lighting conditions, printing and other techniques associated with the Photographic Zone System required for assignments. The production of a fine portfolio of images using the Zone System for presentation to clients or galleries and museums. CSU

PHOT 83. View Camera Techniques (2)
Lec-2, lab-1, field trips P/NP available
Prereq.: PHOT 51 or demonstration of exit skills
Advis: PHOT 53, 55, and 85A (Concur.)
An exploration of the 4x5 view camera through hands-on experience. Investigation of perspective control, camera movements, film, processing, and printing as applied to studio, architectural and fine art photography. The department will provide students with 4x5 cameras. CSU

PHOT 85A. Beginning Lighting Techniques (4)
Lec-3, lab-3, field trips P/NP available
Prereq.: PHOT 51 or demonstration of exit skills
Advis: PHOT 53, 55, 83, and DSGN 101 (Concur.)
Through demonstration and hands-on experience students explore the basic and technical use of ambient, tungsten and electronic flash illumination as it is used in photography. Students will work with a variety of lighting equipment and accessories. CSU

PHOT 85B. Advanced Studio Lighting Techniques (4)
Lec-4, lab-2, field trips P/NP available
Prereq.: PHOT 55, 85A, and DSGN 101 or demonstration of exit skills
Advis: PHOT 83
Advanced lighting techniques with an emphasis on electronic strobe and mixed lighting techniques as used in advertising and product photography. Emphasis on client-photographer relationships, solving photographic problems imaginatively, and building a quality portfolio. CSU

PHOT 86. Mixed Media and the Photographic Image (3)
Lec-2, lab-3, field trips P/NP available
Prereq.: PHOT 81A and DSGN 101 or demonstration of exit skills
Advis: PHOT 53
This is a beginning, intermediate, and advanced exploration of the photographic image through various alternative and non-silver processes. Students will learn a variety of traditional non-silver printing methods which can also be combined with more contemporary mediums. CSU

PHOT 89. Large Format Transparency (3)
Lec-1, lab-3
Prereq.: PHOT 83 and 85A or demonstration of exit skills
Advis: PHOT 55
An advanced, large format transparency (4x5) course with emphasis on color principles carried to further refinement and practical applications in studio and location photography. Special emphasis on product, interior and exterior photography, solving mixed lighting problems, utilization of special effects, and the building of a professional portfolio for job applications and presentations. CSU

PHOT 90. Portraiture (4)
Lec-3, lab-3
Prereq.: PHOT 85A and DSGN 101 or demonstration of exit skills
Advis: PHOT 83
This advanced studio lighting course introduces students to the technical, aesthetic and historical aspects of photographic portraiture. Students have hands on experience with classic and contemporary lighting techniques using tungsten lights and studio strobes. Students work individually and in teams. CSU

PHOT 93. Editorial Photography (2)
Lec-2, lab-1, field trips P/NP available
Prereq.: PHOT 81A and DSGN 101 or demonstration of exit skills
Advis: PHOT 83
Techniques leading to a creative treatment of typical editorial assignments, including use of several format cameras, variable lenses, multiple electronic flash and typical effects essential to quality storytelling pictures. Students produce a portfolio including feature news, publicity, public relations, and feature story photographs. CSU

PHOT 95A. Beginning Color Printing (4)
Lec-3, lab-3, field trips P/NP available
Prereq.: PHOT 55 or demonstration of exit skills
Exploration of color negative printing through an understanding of exposure, color films and papers, processing, color temperature and color theory. Sensitometry and densitometry as they apply to color negative printing. Emphasis on the aesthetics of color photography. CSU

PHOT 95B. Intermediate Color Printing (4)
Lec-3, lab-3
Prereq.: PHOT 95A or demonstration of exit skills
Refinement of techniques learned in PHOT 95A emphasizing professional color output. Students produce color prints from color transparencies, negatives and internegatives. Methods include masking techniques when necessary. Explorative techniques such as combination printing, instant print material, collage, and painting with light. A specific color project will be completed that should be of the quality to be included in the students' portfolio for employment. CSU

PHOT 99. Business Practices of Photography (3)
Lec-3
P/NP available
A business course for photographers, students will learn practical and essential business skills such as marketing, self-promotion strategies, networking, pricing, and estimating taxes. CSU
PHOT 101B. Hand Tinting Photographs
PHOT 101C. Self Portraiture
PHOT 101D. Landscape Photography
PHOT 101E. Informal Portraiture
PHOT 101F. Polaroid and Emulsion Transfer
PHOT 101G. Pinhole Photography
PHOT 101H. Digital Negatives for Black and White Contact Printing

PHOT 102A. Architectural Photography (2)
Lec-2, lab-1, field trips P/NP available
Prereq: PHOT 85A or demonstration of exit skills
Advised: PHOT 55, 83
The process of documenting buildings and other structures in their environments. Interiors and exteriors of domestic places are photographed for architectural applications. Topics specifically related to issues of architectural photography include: perspective control, use of different format cameras, filtration for incompatible light sources, attention to detail, and daylight effect on form. The role of the relationship of photographer to designer will be examined. CSU

PHOT 102B. Documentary/News Photography (2)
Lec-2, lab-1, field trips P/NP available
Prereq: PHOT 81A and DSGN 101 or demonstration of exit skills
Advised: PHOT 55
An exploration of photojournalism and documentary photography as applied to newspaper and magazine work, photo essay assignments and book projects. Legal and business issues, including fund raising and grant writing to support extended projects. Captioning and writing text to accompany photographic work. Mastering of story format using a variety of photo equipment and materials including location lighting, available light photography with high speed films, color transparency materials, and developing and printing in Black and White. CSU

PHOT 118. Independent Study (2)
Ind st-10 P/NP available
Prereq: PHOT 85B and either 81B or 95A or demonstration of exit skills
Work on an independent photographic project having significant learning value in photography and acceptable to both the student and the instructor. Projects may be in photographic research, photographic criticism, computer imagery, or any other photographic performance area. CSU

PHOT 130. Portfolio Production (3)
Lec-3, lab-3, field trips P/NP available
Prereq: DSGN 101 and PHOT 81B or 85B or 90 or 93 or 95A
Students will produce a portfolio to begin the process of preparing them for a professional photography career, photographic gallery exhibition, or transfer to a four-year institution. The class will address technical and aesthetic issues as well as portfolio presentation and marketing strategies. CSU

PHOT 501A. Photography for the Enthusiast (2)
Lec-2 P/NP available
A basic course introducing photography and camera use to the general enthusiast. Introduction to small format cameras, color films, elementary lighting, and the aesthetics of photography. CSU

Physical Education and Dance
Office: Wellness113
Phone Number: (415) 239-3411
Web Site: www.ccsf.edu/pe

Learning Outcomes

Overall

Students participating in Dance, Activity, Kinesiology/theory and/or Intercollegiate Courses will be able to:

- Apply knowledge from a Physical Education/Dance class towards achieving academic endeavors such as an Associate’s Degree or transfer to baccalaureate institution, enhance career opportunities, and become further engaged in the college and community’s social fabric through lifelong learning and cultural enrichment.

Intercollegiate Athletics

- Identify and demonstrate good sportsmanship, communicative and social interaction skills including the understanding of leadership and contributing roles while participating and/or competing on an intercollegiate team.

Activity

- Identify and analyze the importance of health concerns, safety and proper use of equipment while performing activity based movements.
- Identify and demonstrate the appropriate sequence of physical movements to successfully perform an activity/sport.

Theory/Kinesiology

- Integrate the knowledge/content in consideration of an Associate’s Degree in Kinesiology, Certificates in Physical Education, Coaching, Yoga or Strength and Conditioning, strengthen career opportunities in the health, fitness, and wellness fields, and synthesize community and global awareness through life long learning.

Announcement of Curricula

Degree Curricula

Dance-Performance Art Major (AA)

The Dance Program has been an integral part of City College of San Francisco’s Physical Education Department since its inception, over 70 years ago. Due to the integrity, diversity and excellence in teaching this program has steadily grown, evidenced by student enrollment in dance that exceeds 3,000 per semester. Owing to the longevity of high standards and quality of instruction the prestigious Izzy Award for Sustained Achievement was awarded to the CCSF Dance Department in 2007.

The curriculum for the Associate Degree in Dance allows students to develop skills to pursue careers in choreography, dance performance, dance anthropology, dance education, and performance studies as well as fulfills most of the lower division requirements for many four-
year institutions. We are dedicated to creating the “whole” dancer: nurturing mind, body, and spirit. The Dance Program provides comprehensive studies including history, theory, choreography, technique, and performance. Additional classes such as: Anatomy, Nutrition, Music, and Theater Arts are included to support the student’s development.

The program highlights dance technique (ballet, modern, and African Haitian) and performance, while providing the student with all of the tools necessary to become a healthy and well-rounded dancer. The student will also have the opportunity to explore the sciences, history, and the Theater Arts as part of our diverse program. Good nutrition and proper alignment are emphasized and ample performance, choreography, and production opportunities are available. Special focus is given to prepare the dancer for transfer to upper division courses at a four year college or university.

Learning Outcomes

Upon completion of the Associate of Art Degree in Dance, the student will be able to:

- Demonstrate skills in critical thinking, creative and innovative thinking, adaptive competence, problem solving, observation, evaluation, and be able to apply these skills to other aspects of life.

- Synthesize the knowledge taught in the major in order to meet academic and industry standards in the following areas: dance areas: dance technique, aesthetic sensibility, performance technique, and dance composition.

- Synthesize theoretical and aesthetic components of the dance degree program and integrate them to meet both practical and philosophical applications to dance as a performing art: dance history, the cultural context of dance, anatomy and physiology, nutrition, and the role of dance as a community asset.

- Demonstrate a professional attitude and ethics and may elect to use units earned in this course of study to meet requirements for transfer to a 4-year educational institution.

Prerequisites. DANC 120A, 125A

A placement audition will be required prior to enrollment in the major program. Students not placed into Intermediate or Advanced level Ballet or Modern classes will be required to take beginning level classes as prerequisites.

Courses Required for the Major in Dance - Performance Art

<table>
<thead>
<tr>
<th>Courses</th>
<th>Units</th>
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<tbody>
<tr>
<td><strong>First Semester</strong></td>
<td></td>
</tr>
<tr>
<td>DANC 100A Dance Composition</td>
<td>3</td>
</tr>
<tr>
<td>DANC 125B Intermediate Modern Dance or DANC 125C Advanced Modern Dance</td>
<td>1-2</td>
</tr>
<tr>
<td>DANC 135A Beginning Tap Dance</td>
<td>1</td>
</tr>
<tr>
<td>DANC 132A Beginning African-Haitian Dance</td>
<td>1</td>
</tr>
<tr>
<td>DANC 34A Dance Conditioning</td>
<td>1</td>
</tr>
<tr>
<td><strong>Second Semester</strong></td>
<td></td>
</tr>
<tr>
<td>DANC 30 Dance Hist. – Dance in Cultural Context</td>
<td>3</td>
</tr>
<tr>
<td>NUTR 12 Introduction to Nutrition or NUTR 52 Introduction to Nutrition</td>
<td>3</td>
</tr>
<tr>
<td>DANC 120B Intermediate Ballet or DANC 120C Advanced Ballet</td>
<td>1-2</td>
</tr>
<tr>
<td>DANC 135B Intermediate Tap Dance</td>
<td>1</td>
</tr>
<tr>
<td>DANC 132B Intermediate African-Haitian Dance</td>
<td>1</td>
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</tbody>
</table>

Third Semester

<table>
<thead>
<tr>
<th>Courses</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>DANC 32 Black Traditions in American Dance</td>
<td>3</td>
</tr>
<tr>
<td>DANC 126B Intensive Modern Dance</td>
<td>2</td>
</tr>
<tr>
<td>DANC 130A Beginning Jazz Dance or DANC 130B Intermediate Jazz Dance</td>
<td>1</td>
</tr>
<tr>
<td>DANC 137A Beginning Hip-Hop Dance or DANC 137B Intermediate Hip-Hop Dance</td>
<td>1</td>
</tr>
<tr>
<td>DANC 140A Beginning European Folk Dance or DANC 145A Beginning Ballroom Dance</td>
<td>2</td>
</tr>
<tr>
<td>DANC 150A Beginning Swing Dance or DANC 160A Beginning Argentine Tango</td>
<td>1</td>
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</table>

Fourth Semester

<table>
<thead>
<tr>
<th>Courses</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>ANAT 14 Intro to Human Anatomy &amp; Physiology</td>
<td>4</td>
</tr>
<tr>
<td>DANC 130B Intermediate Jazz Dance or DANC 130C Advanced Jazz Dance</td>
<td>1</td>
</tr>
<tr>
<td>DANC 121B Intensive Ballet</td>
<td>2</td>
</tr>
<tr>
<td>DANC 101B Dance Performance Production or DANC 102B Repertory Dance Company</td>
<td>2</td>
</tr>
</tbody>
</table>

Total Units ........................................ 33-35

Certificate Curricula

Dance

The curriculum for the Certificate of Accomplishment in Dance will allow students to develop the skills required to pursue careers in dance performance and dance education. The Dance Program provides comprehensive studies including history and theory, choreography, and technique and performance. To meet diverse students’ needs various options are available. All students must meet with a faculty member or file a dance program application and select a program of course totaling 17 units. Each course needs to be completed with a C or higher grade. At least 12 units need to be completed at CCSF. Students wishing to use equivalent courses from other colleges are responsible for providing supporting documentation in a timely manner. For further information call 452-5697, or visit the website at www.ccsf.edu/Resources/ccsfgrams (link: Dance)

Option 1 - Classical Dance Performance Certificate

Learning Outcomes

Upon completion of the Classical Dance Performance Certificate, students will be able to:

- Demonstrate a foundation in technical dance and movement skills.
- Develop skills in critical and creative thinking, problem solving, focus, observation, and evaluation through a course of study including dance technique, choreography, performance technique, body alignment, dance history, and nutrition.
- Demonstrate knowledge of correct body mechanics.
- Compose short dance studies.
- Apply knowledge of cultural backgrounds and their influence on different style of dance.

Courses Required for the Certificate of Accomplishment in Classical Dance Performance

**Courses in Workshop and Theory (8 units required)**

<table>
<thead>
<tr>
<th>Required Courses:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>DANC 100A Dance Composition</td>
<td>3</td>
</tr>
<tr>
<td>DANC 30 Dance History – Dance in Cultural Context</td>
<td>3</td>
</tr>
</tbody>
</table>
Option 2 - African Heritage Performance Certificate

Learning Outcomes
Upon completion of the African Heritage Performance Certificate, students will be able to:

- Demonstrate a foundation in technical dance and movement skills.
- Demonstrate skills in critical and creative thinking, problem solving, focus, observation, and evaluation through a course of study including dance technique, choreography, performance technique, body alignment, dance history, and nutrition.
- Demonstrate knowledge of correct body mechanics.
- Compose short dance studies.
- Apply knowledge of cultural backgrounds and their influence on different style of dance.

Courses Required for the Certificate of Accomplishment in African Heritage Performance

Courses in Workshop and Theory (9 units)

Required:
- DANC 100A Dance Composition .................. 3
- DANC 32 Black Traditions in American Dance .......... 3

Required 2 units selected from:
- DANC 34A Dance Conditioning .................. 1
- DANC 101A Dance Performance Production ......... 1
- DANC 101B Dance Performance Production ........ 2
- DANC 102A Dance Repertory .................. 1
- DANC 102B Dance Repertory .................. 2

Courses in Technique Electives (6 units at Intermediate/Advanced level)
- DANC 103A Beginning Jazz Dance .................. 1
- DANC 103B Intermediate Jazz Dance ............... 1
- DANC 103C Advanced Jazz Dance .................. 2
- DANC 132A Beginning African Haitian Dance ....... 1
- DANC 132B Intermediate African Haitian Dance .... 1
- DANC 133A Beginning Tap Dance .................. 1
- DANC 135B Intermediate Tap Dance ............... 1
- DANC 136B Intermediate Tap Dance ............... 2
- DANC 137A Beginning Hip Hop Dance ............... 1
- DANC 137B Intermediate Hip Hop Dance ............ 1

Electives (3 units)
- AFAM From Funk to Hip Hop ...................... 3
- DANC 104 Feldenkrais for Dance ................. 1
- HUM 48 African American Music, Art, Lit ......... 3
- MUS 23 Jazz Hist, Musical Trad of the Afr Am .... 3
- MUS 21 Traditional African Music ................. 3
- Technique electives from Options 1, 2, 3, or 4 .... 1-3

Total Units ........................................... 17

Option 3 - Social and Folk Dance Performance Certificate

Learning Outcomes
Upon completion of the Social and Folk Dance Performance Certificate, students will be able to:

- Demonstrate a foundation in technical dance and movement skills.
- Develop skills in critical and creative thinking, problem solving, focus, observation, and evaluation through a course of study including dance technique, choreography, performance technique, body alignment, dance history, and nutrition.
- Demonstrate knowledge of correct body mechanics.
- Create short dance studies.
- Apply knowledge of cultural backgrounds and their influence on different style of dance.

Courses Required for the Certificate of Accomplishment in Social and Folk Dance Performance

Courses in Workshop and Theory (9 units required)

Required:
- DANC 102 Analysis of Folk and Social Dance .... 2

Additional 3-5 units selected from:
- DANC 107A Folk Dance Production .................. 1
- DANC 107B Folk Dance Production ............... 1
- DANC 108A Ballroom Dance Prod & Comp ........ 1
- DANC 108B Ballroom Dance Prod & Comp ......... 2

Additional 2-4 units selected from:
- DANC 109A Swing Production ...................... 1
- DANC 109B Swing Production ...................... 2
- DANC 110A Salsa Production ...................... 1
- DANC 110B Salsa Production ...................... 2
- DANC 111A Argentine Tango Production .......... 1

Courses in Technique Electives (8 units at Int/Adv level)
- DANC 140A Beg Latin American Dance ........ 1
- DANC 140B Int. European Folk Dance ............ 1
DANC 141A Beg. International Folk Dance ..........................1
DANC 141B Int. International Folk Dance ..........................1
DANC 142A Beg. Contra Square & Sequence ........................1
DANC 142B Int. Contra Square & Sequence ..........................1
One unit from Option 1, 2, or 4 ..........................1

Select 3- 6 units from the following:
DANC 145B Ballroom Dance ..........................1
DANC 146A Beg. Waltz Styles & Techniques ..........................1
DANC 146B Int. Waltz Styles & Techniques ..........................1
DANC 150B Int. Swing Dance Forms ..........................1
DANC 150C Adv. Swing Dance Forms ..........................1
DANC 151 Lindy Hop ..........................1
DANC 155B Int. Latin Amer Social Folk Dance ..........................1
DANC 155C Adv. Latin Amer Social Folk Dance ..........................1
DANC 160B Int. Argentine Tango ..........................1
DANC 160C Adv. Argentine Tango ..........................1
DANC 161 Argentine Tango Follower’s Tech ..........................1

Total Units .................................. 17

Option 4 - Dance Aerobics and Fitness Certificate

Learning Outcomes
Upon completion of the Dance Aerobics and Fitness Certificate, students will be able to:

- Demonstrate a foundation in technical dance and movement skills.
- Demonstrate skills in critical and creative thinking, problem solving, focus, observation, and evaluation through a course of study including dance technique, choreography, performance technique, body alignment, dance history, and nutrition.
- Demonstrate knowledge of correct body mechanics.
- Compose short dance studies.
- Apply knowledge of cultural backgrounds and their influence on different style of dance

Courses Required for the Certificate of Accomplishment in Dance Aerobics and Fitness

Courses in Workshop and Theory (7 units)
DANC 100A Dance Composition ..........................3
DANC 34A Dance Conditioning ..........................1
P E 219B or demonstration of PE 219B exit skills ..........................1
P E 20 Intro to Fitness & Training ..........................1
P E 219B or demonstration of PE 219B exit skills ..........................1
P E 20/106 Sports Nutrition ..........................3

Courses in Technique Electives (7 units)
DANC 137A Beginning Hip Hop Dance ..........................1
DANC 137B Intermediate Hip Hop Dance ..........................1
DANC 170 Dance Aerobics ..........................1
P E 200A-B-C Fitness Center Super Circuit ..........................5-2
P E 208 Aerobic Fitness ..........................1
P E 209 Step Aerobics ..........................1
P E 210 Boxercise ..........................1
P E 217 Stretching and Flexibility Devel ..........................1
P E 219A Beginning Yoga ..........................1
P E 221 Yoga Movement ..........................1
One unit technique from Option 1, 2, or 3 ..........................1

Electives (3 units)
P E 9 Fit or Fat ..........................2
P E 14 Women’s Fitness and Aging ..........................3
P E 222 Introduction to Feldenkrais ..........................1
Technique electives from Options 1, 2, or 3 ..........................1-2

Total Units .................................. 17

Yoga Instruction Certificate

Program Goals and Objectives. The Certificate of Accomplishment in Yoga Instruction is comprehensive in nature, reflecting a commitment to benefit local populations by offering lifelong learning opportunities which can be summarized as: (a) general and liberal education, (b) career and vocational education, and (c) adult and continuing education. The Yoga Instructor Certificate offers pathways for students to meet any and/or all of these three goals.

Learning Outcomes
Upon completion of the Certificate of Accomplishment in Yoga Instruction, students will be able to:

- Integrate the knowledge/content of the course of study to meet international industry-standard requirements to teach beginning level yoga in a variety of settings, thereby strengthening career opportunities in the health, fitness, and wellness fields.
- Identify and demonstrate the appropriate sequence of physical movements to successfully perform yoga poses.
- Identify and analyze the importance of health concerns, safety, and proper use of equipment while performing and teaching yoga based movements.
- Synthesize knowledge in order to work independently in creating, and teaching, safe and efficient yoga lesson plans to a variety of students.
- Display a value of diversity and ethical practice as a yoga teacher.

This 2-year college level program exceeds the requirements of the nationally recognized Yoga Alliance, a non-profit organization that has established national industry standards for yoga teacher training. Potential employment opportunities for Yoga teachers include teaching in a variety of settings from private practice to health clubs, spas, yoga studios, hospitals, and private schools, as well as in after school and preschool settings. Most yoga teachers find it necessary to supplement their teaching income with additional income.

Program prerequisites include. A.) completion of P E 219B or P E 219B exit skills; B.) demonstration of yoga skills; C.) filing a program application; and, D.) an informational interview with the Yoga Program Coordinator. At the interview the student will get a program orientation and will select a program of courses totaling 17 units that can be completed in 2 years. Each course needs to be completed with a C or higher grade. At least 12 units must be completed at CCSF. Students wishing to use equivalent courses from other colleges are responsible for providing all supporting documentation before the informational interview. In addition to the required coursework, students will be informed of a range of recommended courses that are not required for the certificate, but may assist with transfer to a 4-year college, personal growth, and student expertise. Students will work closely with a yoga mentor and are encouraged to consult with a CCSF academic counselor to ensure they are moving towards fulfillment of their goals.

Program Prerequisites. P E 219A or demonstration of PE 219A exit skills.
Courses Required for the Certification of Accomplishment in Yoga Instructor

<table>
<thead>
<tr>
<th>Courses</th>
<th>Units</th>
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<tbody>
<tr>
<td>First Semester</td>
<td></td>
</tr>
<tr>
<td>P E 219B Intermediate Yoga</td>
<td>1</td>
</tr>
<tr>
<td>ONE course from the following</td>
<td></td>
</tr>
<tr>
<td>ANAT 14 Introduction to Human Anatomy and Physiology</td>
<td>4</td>
</tr>
<tr>
<td>or ANAT 25 General Human Anatomy</td>
<td></td>
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<tr>
<td>or PHYS 12 Introduction to Human Physiology</td>
<td></td>
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<tr>
<td>Second Semester</td>
<td></td>
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<tr>
<td>P E 220 Intensive Yoga</td>
<td>2</td>
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<tr>
<td>P E 218 Restorative Yoga</td>
<td>1</td>
</tr>
<tr>
<td>ONE course from the following</td>
<td></td>
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<tr>
<td>DANC 34A Dance Conditioning</td>
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<tr>
<td>or DANC 37 Feldenkrais for Dance</td>
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<tr>
<td>or P E 214 Weight Training</td>
<td></td>
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<tr>
<td>or P E 217 Stretch and Flexibility</td>
<td></td>
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<tr>
<td>or P E 222 Introduction to Feldenkrais</td>
<td>2</td>
</tr>
<tr>
<td>Third Semester</td>
<td></td>
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<tr>
<td>P E 21 Teaching Movement</td>
<td>3</td>
</tr>
<tr>
<td>P E 221 Yoga Movement</td>
<td>1</td>
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<tr>
<td>WKEX 805 Work Experience</td>
<td>1</td>
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<tr>
<td>Fourth Semester</td>
<td></td>
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<tr>
<td>WKEX 806 Work Experience</td>
<td>2</td>
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<tr>
<td>Total Units</td>
<td>17</td>
</tr>
</tbody>
</table>

Announcement of Courses

Dance

Credit, Degree Applicable Courses:
DANC 30. Dance History – Dance in Cultural Context (3)
Lec-3
Advis: ENGL 94
Lectures, readings, films and discussions on theory and development of dance from its evolution in anthropological sources to 20th century contemporary dance. This survey history course will touch on the historical basis of dance and will emphasize the history of classical ballet, American/European modern dance, African-Haitian dance and the American idioms of tap and jazz. CSU/UC
Formerly P E 30

DANC 32. Black Tradition in American Dance (3)
Lec-3, field trips
Advis: ENGL 94
This course examines the use of the African American dance aesthetic by performers, dancers, choreographers, historians, and dance theorists, from the 19th century through 21st century, as they created and contributed to the idioms of modern, jazz, ballet, street vernacular and traditional African based dance forms in the United States. CSU/UC
Formerly P E 33

DANC 33. Folk, Ballroom, and Square Dance Activities Analysis (2)
Lec-2
Advis: EXPERIENCE IN FOLK AND BALLROOM DANCE RECOMMENDED
In depth analysis of past and present ballroom, folk, and square dances learned to strengthen career opportunities. Dance notations and directions will be compiled of dances learned, with sequencing analyzed for teaching or performing purposes, as well as event preparation. CSU/UC
Formerly P E 12

DANC 171. Cheer/Dance Squad (2)
Lec-1, lab-4, field trips
Designed to provide the student with information and training in order to create, execute, and perform dance/cheer moves in a competitive/performance setting. CSU/UC
Formerly P E 537

Enrollment Limitations on Physical Education and Visual or Performing Arts Courses

Per title 5 Section 55041, effective Fall 2013, students may not enroll more than four times in “active participatory courses that are related in content” in the areas of physical education or visual and performing arts, which includes art, dance, music, and theatre. This limitation applies even if a student receives a substandard grade or “W” during one or more of the enrollments in such a course or if the student petitions for repetition due to extenuating circumstances.

Dance courses that are related in content are grouped together in “families” of courses below. The families are indicated by their headings, e.g., Integrative Movement, Dance Composition, etc. For the most up-to-date listing of courses and families, refer to the online catalog, www.ccsf.edu/catalog.

Integrative Movement: Mind/Body Approach to Improving Quality of Movement and Conditioning for Dance
DANC 34A. Dance Conditioning (1)
Lab-2
P/NP available
An introduction to conditioning techniques which promote body awareness, improve body alignment, enhance and expedite dance skills and prevent injury. CSU/UC
Formerly DANC 34

DANC 37. Feldenkrais for Dance (1)
Lab-2
P/NP available
Advis: DANC 120A or 125A or 130A or 132A or 137A
Instruction and practice in applying the Feldenkrais Method to address specific issues of dance technique and performance. Processes which enhance refinement of motor learning as related to human expression will be explored. Participants improve muscular habits and kinesthetic awareness, refine coordination, relieve tension, and prevent injury. CSU/UC

P E 223A. Feldenkrais, Level 1 (1)
Lab-2
P/NP Available
Prereq: P E 222
Advis: PE 222 and ESL 130 or ENGL 91 or Placement in ESL 140 or ENGL 92
Refine coordination and performance using the Feldenkrais Method’s unique learning process. Emphasis is on sensing coordinated actions of the whole body, making distinctions between movement variations, adapting personal strategies, and recognizing changes in tension, ease, balance, and freedom of motion. CSU/UC

P E 223B. Feldenkrais, Level 2 (1)
Lab-2
P/NP Available
Prereq: P E 223A
Advis: PE 223A or DANC 37; ESL 130, ESL 140 or ENGL 92
Exploration of novel movement material with refinement of underlying patterns and skill. Emphasis is on transitions in level and orientation, developmental movements, balance, stability, rhythm, and new learning. Historical context included. CSU/UC
Dance choreography will be learned and performed in a theatrical or classroom environment. Participation in the theatrical disciplines of lighting, costumes and makeup as it relates to performance will also be learned. CSU/UC
Formerly P E 17A, B, C

DANC 102A-102B-102C. CCSF Repertory Dance Company (1-2-3)
Lab-3,6,9, field trips
P/NP available
This course is designed as a touring dance company. Students will learn dance works from faculty and guest choreographers. Touring venues include CCSF, San Francisco high schools, San Francisco Bay Area colleges, local theatres, and public events. Includes workshops on performance techniques and lectures on choreographic theory. CSU/UC
Formerly P E 18A, B, C

Ballet: Classical Dance Form That Defies Gravity
DANC 120A. Beginning Ballet (1)
Lab-2
P/NP available
Introduction to the theory and practice of beginning ballet technique and vocabulary. Application of basic technical ballet vocabulary at the barre and in center practice. CSU/UC
Formerly P E 504A

DANC 120B. Intermediate Ballet (1)
Lab-2
P/NP available
PREREQ: DANC 120A or demonstration of DANC 120A EXIT SKILLS
A continuation of the theory and practice of classical ballet with an emphasis on intermediate ballet technique and vocabulary. Application of intermediate ballet ballet vocabulary at the barre and in center practice. CSU/UC
Formerly P E 504B

DANC 120C. Advanced Ballet (2)
Lab-4
P/NP available
PREREQ: DANC 120B or demonstration of DANC 120B EXIT SKILLS
A continuation of the theory and practice of classical ballet with an emphasis on advanced ballet technique and vocabulary. Application of advanced ballet vocabulary at the barre and in center practice. CSU/UC
Formerly P E 504C

DANC 121B. Intensive Ballet (2)
Lab-4
P/NP available
PREREQ: DANC 120A or demonstration of DANC 120A EXIT SKILLS
A continuation of the theory and practice of classical ballet with an emphasis on intermediate ballet technique and vocabulary. Application of intermediate ballet vocabulary at the barre and in center practice. CSU/UC or ENGL or DANC or PREREQ: DANC 120B or OR demonstration of DANC 120B EXIT SKILLS
A continuation of the theory and practice of classical ballet with an emphasis on advanced ballet technique and vocabulary. Application of advanced ballet vocabulary at the barre and in center practice. CSU/UC
Formerly P E 604B

DANC 122. Beginning Pointe Technique (1)
Lab-2
P/NP available
PREREQ: DANC 120B OR 120C AND/OR A SCREENING TEST EVALUATING TECHNIQUE
Theory and practice of basic pointe technique which includes a historical review, relevant foot anatomy, selection, preparation, and care of pointe shoes, pre-pointe exercises, elementary pointe vocabulary, and safety guidelines to prevent injury. CSU/UC
Formerly P E 569
Modern: Contemporary American Dance Form Utilizing Gravity
DANC 125A-125B-125C. Modern Dance (1-1-2)
Lab-2, 4 P/NP available
ADVISE FOR DANC 125B: DANC 125 A
ADVISE FOR DANC 125C: DANC 125B
Beginning, intermediate and advanced dance techniques. Emphasis on body movement through modern dance, improving alignment, muscular endurance, flexibility, coordination, musicality, performance technique, and dance vocabulary appropriate to training. Includes improvisation and choreography. Techniques explored: Graham, Hawkins, Cunningham, Limon, Horton, and Dunham. CSU/UC Formerly P E 526A, B, C
DANC 125A. Beginning
DANC 125B. Intermediate
DANC 125C. Advanced
DANC 126B. Intensive Modern Dance (2)
Lab-4 P/NP available
Emphasis on body movement through modern dance improving alignment, muscular endurance, flexibility, coordination, musicality, performance technique, and dance vocabulary appropriate to intermediate and beginning advanced dance training. Course work includes ensemble work, contact improvisation and choreography. Examples of the techniques explored: Graham, Ailey, Hawkins, Cunningham, Limon, Horton, and Dunham. CSU/UC Formerly P E 626B

Jazz Dance: American Dance Form Utilizing African Rhythms and Body Isolations
DANC 130A-130B-130C. Jazz Dance (1-1-1)
Lab-2 P/NP available
Beginning, intermediate, and advanced jazz dance techniques, patterns, routines, choreography, and improvisation. CSU/UC Formerly P E 523A, B, C
DANC 130A. Beginning
DANC 130B. Intermediate
DANC 130C. Advanced

African-Haitian Dance: Haitian Traditional Ritual Dances
DANC 132A-132B-132C. African-Haitian Dance (1-1-1)
Lab-2 P/NP available
Beginning, intermediate, and advanced study of African-Haitian Dance as a vehicle to understand and appreciate the impact and manifestation of the African Culture in the Caribbean and North America. CSU/UC Formerly P E 500A, B, C
DANC 132A. Beginning
DANC 132B. Intermediate
DANC 132C. Advanced

Tap Dance: Musical Theater Dance Form Originating in Vaudeville
DANC 135A. Beginning Tap Dance (1)
Lab-2 P/NP available
Beginning Tap Dance briefly reviews the history of tap and examines beginning level tap dance skills through demonstration and practice. Emphasis is on rhythm and the acquisition of beginning level tap vocabulary and technique. CSU/UC Formerly P E 541A
DANC 135B. Intermediate Tap Dance (1)
Lab-2 P/NP available
Intermediate Tap Dance reviews the history of tap and examines intermediate level tap dance skills through demonstration and practice. Emphasis is on performance of more complex rhythm and the acquisition of Intermediate level tap vocabulary and technique. CSU/UC Formerly P E 541B
DANC 136. Tap Dance Intensive (2)
Lab-4 P/NP available
Prereq.: DANC 135B OR DEMONSTRATION OF DANC 135B EXIT SKILLS
Tap Dance Intensive refines intermediate tap dance skills and explores improvisation and choreography through demonstration and practice. Focus is on tap history and its relationship to Jazz music which provide guidelines for tap improvisation and choreography. CSU/UC Formerly P E 641B

Hip-Hop Dance: Modern Vernacular Street Dance
DANC 137A-137B. Hip-Hop Dance (1)
Lab-2 P/NP available
Beginning and intermediate hip-hop dance techniques, patterns, routines, choreography and improvisational group projects/presentations. CSU/UC
DANC 137A. Beginning
DANC 137B. Intermediate

Folk Dance: Traditional Country Dances From Different Cultures
DANC 107A-107B-107C. Folk Dance Production (1-2-3)
Lab-2, 4, 6, field trips P/NP only
Courses may be taken in any sequence.
Students will have the opportunity to learn and perform intermediate-advanced level folk dance choreographies in 3-5 on and off campus venues each semester in traditional style costumes. CSU/UC
DANC 107A. Beginning
DANC 107B. Intermediate
DANC 107C. Advanced

DANC 140A. Beginning European Folk Dance (1)
Lab-2 P/NP available
Introduction to various European Folk dances. Styles and forms will be examined through demonstration and practice. Emphasis will be on step patterns and dance positions appropriate within and between the nations that comprise the European Union. CSU/UC
DANC 140B. Intermediate European Folk Dance (1)
Lab-2 P/NP available
Prereq.: DANC 140A, DANC 141A OR DEMONSTRATION OF BEGINNING EXIT SKILLS
Intermediate level of various European Folk dances. Partner and non-partner styles and forms will be examined through demonstration and practice. Emphasis will be on expanding the dance repertoire, to include more complex step patterns, rhythms, and structures appropriate within and between nations that comprise the European Union. CSU/UC
DANC 141A. Beginning International Folk Dance (1)
Lab-2 P/NP available
International Folk Dance provides a foundation for the study of dance. Folk dance offers experience in varied rhythms, formations, dance
DANC 141B Intermediate International Folk Dance (1)  
Lab-2  P/NP available  
Intermediate International Folk Dance emphasizes partner and non-partner dances from various countries, selected to offer experience in more challenging rhythms, formations, dance structures and movement vocabularies. Beginning level repertory is practiced and maintained. Students learn to demonstrate, lead and teach International Folk dances. CSU/UC  
Formerly P E 518A

DANC 142A. Beginning Contra, Square & Sequence Dance (1)  
Lab-2  P/NP available  
Introduction to various contra, square & sequence dances. Styles and forms will be examined through demonstration and practice. Emphasis will be on patterns and dance positions appropriate within and between the selected forms. CSU/UC  
Formerly P E 591A

DANC 142B. Intermediate Contra, Square & Sequence Dance (1)  
Lab-2  P/NP available  
Prereq: DANC 142A or demonstration of beginning exit skills  
Intermediate figures to various contra, square & sequence dances. Styles and forms will be examined through demonstration and practice. Emphasis will be on patterns and dance positions appropriate within and between the selected forms. CSU/UC  
Formerly P E 591B

DANC 145A-145B. Ballroom Dance (1-1)  
Lab-2  P/NP available  
Beginning and intermediate ballroom dance; emphasis on step patterns and dance positions for a complete range of dances such as waltz, swing, cha-cha, salsa, rumba, foxtrot, merengue, samba, w.c. swing, quickstep, Viennese waltz and nightclub two step. CSU/UC  
Formerly P E 535A, B

DANC 145A. Beginning  
DANC 145B. Intermediate

DANC 146A. Beginning Waltz Styles and Techniques (1)  
Lab-2  P/NP available  
Introduction to beginning waltz steps. Students will learn both beginning slow waltz and Viennese Waltz. CSU/UC  
Formerly P E 538A

DANC 146B. Intermediate Waltz Styles and Techniques (1)  
Lab-2  P/NP available  
Prereq: DANC 146A  
Continuation of various waltz styles and techniques, including American Bronze, Silver, Cross step, and Viennese, will be examined through lecture and practice. Emphasis will be on intermediate step patterns and combinations appropriate to each genre, as well as improved musicality, leading and following techniques, and styling expression. CSU/UC  
Formerly P E 538B

DANC 146C. Advanced Intermediate Waltz Styles (1)  
Lab-2  P/NP available  
Prereq: DANC 146B or demonstration of intermediate exit skills  
Continuation of various waltz styles and techniques, including American Bronze, Silver, Cross step, and Viennese, will be examined through lecture and practice. Emphasis will be on advanced intermediate step patterns and combinations appropriate to each genre, as well as improved musicality, leading and following techniques, and styling expression. CSU/UC

DANC 146D. Advanced Waltz Styles (1)  
Lab-2  P/NP available  
Prereq: DANC 146C or demonstration of exit skills  
Continuation of various waltz styles and techniques, including American Silver, Cross step, and Viennese, will be examined through lecture and practice. Emphasis will be on advanced step patterns and combinations appropriate to each genre, as well as improved musicality, leading and following techniques, creativity and styling expression. CSU/UC

Dance Sport: Competitive Dance Forms Emphasizing Specific Techniques of International and American Styles  
Lab-3,6,9  P/NP available  
Courses may be taken in any sequence.  
Performance of past and present ballroom dance choreographies in a theatrical or competitive setting. CSU/UC  
Formerly P E 25A, B, C

DANC 147A. Beginning International Ballroom Dance (1)  
Lab-2  P/NP available  
International ballroom dance with emphasis on step patterns from both the Standard and Latin Styles. Standard dances included are Waltz, Foxtrot, American Tango, Viennese Waltz and Quickstep. Latin dances are Samba, Cha-Cha-Cha, Paso Doble, Jive and Rumba. A selection of dances to be learned will be from both styles. CSU/UC

DANC 147B. Intermediate International Ballroom Dance (1)  
Lab-2  P/NP available  
Prereq: DANC 147A  
Intermediate level ballroom dance with emphasis on step patterns from the bronze and silver level International Standard and Latin syllabus. Standard dances included are Waltz, Foxtrot, American Tango, Viennese Waltz and Quickstep. Latin dances are Samba, Cha-Cha, Paso Doble, Jive and Rumba. CSU/UC

DANC 148A. Beginning Smooth Ballroom Dance (1)  
Lab-2  P/NP available  
Beginning ballroom dance with emphasis on step patterns from the bronze level American Smooth syllabus. The class will include a selection from Waltz, Foxtrot, American Tango and Viennese Waltz. CSU/UC

DANC 148B. Intermediate Smooth Ballroom Dance (1)  
Lab-2  P/NP available  
Prereq: DANC 148A  
Intermediate ballroom dance with emphasis on step patterns from the bronze and silver level American Smooth syllabus. The class will include a selection from Waltz, Foxtrot, American Tango and Viennese Waltz. CSU/UC
Swing: Early American Dance Form Associated with Swing Music of the 1930's, 40's and 50's
DANC 109A-109B. Swing Dance Production (1-2)
Lab-3,6 P/NP only
**Prereq:** DANC 150C or equivalent
Swing styles, including Lindy, West Coast, Balboa, Shag, and Blues techniques leading to group or solo performances will be learned. Styles and forms will be examined through demonstration and practice. Emphasis will be on the effective presentation of patterns. CSU/UC
Formerly P E 22A, B

**DANC 150A. Beginning Swing Dance (1)**
Lab-2 P/NP available
An introduction to the popular American social dances known as Swing. The main emphasis will be on step patterns and dance positions for East Coast Swing, West Coast Swing and Lindy Hop. Other swing related dances may be learned. CSU/UC
Formerly P E 570A

**DANC 150B-150C. Intermediate/Advanced Swing Dance Forms (1-1)**
Lab-2 P/NP available
Intermediate and advanced skills in the popular American dances known as “Swing,” while exploring the cultural scene that created them. CSU/UC
Formerly P E 570B, C

**DANC 151A. Beginning Lindy Hop (1)**
Lab-3 P/NP available
An introduction to the original American swing dance known as the Lindy Hop. The student will develop basic skills in Lindy Hop and explore the history of the dance from the late 1920's to the present. CSU/UC
Formerly P E 571A

**DANC 151B. Intermediate Lindy Hop (1)**
Lab-3 P/NP available
**Advisement:** DANC 151A
Develops intermediate skills in the popular American swing dance known as Lindy Hop. Students will build on basic skills learned in beginning classes. Students should be familiar with the Swing Out, Circle and Lindy Charleston. CSU/UC
Formerly P E 571B

**DANC 152A. Beginning West Coast Swing (1)**
Lab-2 P/NP Available
Students will learn to execute beginning dance steps in West Coast Swing, California's official dance. West Coast Swing originated in California and is danced to both bluesy and modern music at a slow tempo. CSU/UC

**Latin American Dance: Survey of Informal Social Dances From the Caribbean, Central and South America**
DANC 110A-110B. Salsa Dance Production (1-2)
Lab-2,4 P/NP only
**Prereq:** DANC 155B
Various salsa styles and techniques leading to group or solo performances will be learned. Styles and formations, including rueda, will be examined through demonstration and practice. Emphasis will be on the effective presentation of patterns. CSU/UC
Formerly P E 24A, B

**DANC 155A. Beginning Salsa and Latin Dances (1)**
Lab-2 P/NP Available
Explorations of various Latin-American dance forms with emphasis on Salsa. Students will learn to execute beginning dance steps in Salsa and other Latin dance forms. Emphasis will be on social dances. CSU/UC
Formerly PE 560A

**DANC 155B. Intermediate Salsa and Latin Dances (1)**
Lab-2 P/NP Available
**Prereq:** DANC 155A or demonstration of exit skills
Explorations of various Latin-American dance forms with emphasis on Salsa. Students will learn to execute intermediate dance steps in Salsa and other Latin dance forms. Emphasis will be on social dances. CSU/UC
Formerly PE 560B

**DANC 155C. Advanced Salsa and Latin Dances (1)**
Lab-2 P/NP Available
**Prereq:** DANC 155B or demonstration of exit skills
Explorations of various Latin-American dance forms with emphasis on Salsa. Students will learn to execute advanced dance steps in Salsa and other Latin dance forms. Emphasis will be on social dances. CSU/UC
Formerly PE 560C

**Argentine Tango: An Improvisational Social Dance Form from Argentina with a specialized vocabulary and musicality**
DANC 111A. Argentine Tango Productions (1)
Lab-2, field trips P/NP Available
Performance-oriented course: development, critique and rehearsal of tango sequences for public performance informed by analysis of videotaped footage of professional tango choreography. CSU/UC
Formerly P E 578

**DANC 160A-160B-160C. Argentine Tango (1-1-1)**
Lab-2, field trips P/NP Available
Course covers the social, improvisational form of Argentine tango and an exploration of its culture as manifested in film, visual art and the printed word. Students learn to dance, arranging essential elements of tango vocabulary in an infinite number of ways with different partners. CSU/UC
Formerly P E 576A, B, C

**DANC 161. Follower's Technique for Argentine Tango (1)**
Lab-2 P/NP available
Refinement of placement, styling of leg & footwork, carriage of the upper body, adornments, lead/follow and musicality in Argentine tango through exercises done at the barre and on the center floor, with and without partners. Focus on the role of the follower in the tango dance. Course highlights the contribution of women in the construction of tango culture past and present. CSU/UC
Formerly P E 577
Physical Education

Credit, Degree Applicable Courses:
P E 6. Prevention and Care of Athletic Injuries (3)
Lec-2, lab-2  P/NP available
Introduces injuries commonly experienced by competitive athletes, discusses conditioning and evaluation methods used to identify and prevent injuries, and the basic management approaches used to treat injuries. Includes clinical experience and laboratory learning. CSU/UC

P E 7. Coaching and Officiating (3)
Lab-3  P/NP available
This course will develop and augment the student's knowledge of coaching and officiating skills in sports. CSU/UC

P E 8. Introduction to Fitness, Training and Human Performance (3)
Lec-3
Provide the student sound information for developing a systematic program of exercise and physical activity that best fits the individual needs. Emphasis is on personal fitness assessments, physical training and preparation for personal training certification. CSU

P E 9. Fit or Fat: Exercise and Diet (2)
Lec-2  P/NP available
Comparison of obesity theories, current weight loss methods and associated technology. Determine and track change in fitness levels, plan a fitness program, and participate in a variety of exercises to promote and active, healthy lifestyle. CSU
Formerly P E 9A

P E 13. Sport and Society (3)
Lec-3
An introduction to the sociology of sport, to discuss and analyze issues about sports as a part of society. The history of sport, competition, children's programs, deviance, aggression, coaches in the sport experience, gender, ethnicity, social mobility, the economy, the media, and politics in sports. CSU

P E 14. Women's Fitness and Aging - A New Paradigm (3)
Lec-3, field trips  P/NP available
Investigation of a new paradigm for women's fitness and active aging which recognizes the revolutionary impact fitness has on women's longevity. Additional topics include body image and fitness, physical activity's contribution to brain health, and the development of fitness action plans to enhance women's lives before, during, and after midlife. CSU/UC

P E 20. Sports Nutrition (3)
Lec-3
Overview of the science of sports nutrition, with emphasis on nutrition as it applies to fitness, sport-specific training, and athletic performance. Topics include nutrient requirements and dietary recommendations, energy metabolism, weight management, special nutrient needs during training and competition, nutritional ergogenics. CSU
P E 20=HLTH 176

P E 21. Teaching Movement (3)
Lec-3, field trips  P/NP available
Prereq.: ENGL 92 or ESL 160 or placement in ENGL 93; and previous PE or DANC coursework or demonstration of exit skills Coreq.: Any CCSF PE or DANC activity course (except PE 200 or 202)

Advise: ANAT 14 or 25 or PHYS 1 or 12
Teaching Movement examines how humans of different ages learn movement skills and how class participants, as future movement teachers, can facilitate the acquisition of movement skills in a wide variety of movement forms. Also recommended for students who want to understand and improve their movement skills. CSU

P E 40. Appreciation and Analysis of Aquatics (2)
Lec-2  P/NP available
Emphasis on systems of play, strategy, rules, training programs, organizational procedures, and background for both spectators and participants. CSU/UC
Formerly P E 10A

P E 41. Appreciation and Analyses of Baseball (2)
Lec-2  P/NP available
The mechanics, appreciation and analysis of individual and team play, strategy, rules, training programs, organizational methods, and mental aspects of the game. Course is designed for spectators as well as coaches and participants. CSU/UC
Formerly P E 10B

P E 42. Appreciation and Analysis of Basketball (2)
Lec-2  P/NP available
This course will build an emphasis on systems of play, strategy, rules, training programs, organization procedures, and background for both spectators and participants for the sport of Basketball. CSU/UC
Formerly P E 10C

P E 43. Appreciation and Analysis of Football (2)
Lec-5  P/NP available
This course provides in-depth examination of the rules, offensive, defensive and special teams strategies for the sport of football. CSU/UC
Formerly P E 10D

P E 45. Appreciation and Analysis of Soccer (2)
Lec-2  P/NP available
This course emphasizes soccer system of play, strategy, rules, training programs, organizational procedures and background from the perspectives of coaches, players and spectators. CSU/UC
Formerly P E 10F

P E 46. Appreciation and Analysis of Track and Field (2)
Lec-2  P/NP available
Emphasis on systems of play, strategy, rules, training programs, organizational procedures, and background for both spectators and participants. CSU/UC
Formerly P E 10G

P E 203. Intramural Competition (0)
Competition in individual and team sports under game conditions; emphasis on coeducational participation. Students may compete individually or as members of teams representing clubs or special interest groups, but always subject to supervision and to the approval of the instructor. CSU
Formerly P E 70

Enrollment Limitations on Physical Education and Visual or Performing Arts Courses

Per title 5 Section 55041, effective Fall 2013, students may not enroll more than four times in "active participatory courses that are related in content" in the areas of physical education or visual and perform
Physical Education and Dance

ing arts, which includes art, dance, music, and theatre. This limitation applies even if a student receives a substandard grade or ”W” during one or more of the enrollments in such a course or if the students petition for repetition due to extenuating circumstances.

Physical Education courses that are related in content are grouped together in “families” of courses below. The families are indicated by their headings, e.g., Public Safety, Fitness Center, etc. For the most up-to-date listing of courses and families, refer to the online catalog, www.ccsf.edu/catalog.

Physical Education for Special Needs

P E 2. Corrective Physical Education (1)
Lec-1, lab-2
An adaptive exercise class designed to meet specific rehabilitative needs for people with chronic or temporary disabilities, especially those with muscular/skeletal and/or mild/moderate neurological conditions. Body awareness and conditioning techniques are presented to improve body alignment, increase muscular strength and flexibility, and release muscular tension. CSU/UC
Formerly P E 512

P E 15. Workplace Ergonomics (2)
Lec-2, field trips
Overview of anatomy and body mechanics and how design and placement of commonly used objects influences productivity and safety. Students will learn to assess and develop a workspace based on sound ergonomic principles, working within individual budgetary constraints, to help prevent some common workplace injuries. CSU

P E 218. Senior and Restorative Yoga (1)
Lec-2
A gentle approach to Hatha Yoga that includes a representative samole of beginning and restorative yoga postures, breathing exercises, and relaxation techniques. Adaptation of the poses to improve alignment, increase blood circulation, flexibility, muscular strength, and to alleviate stress is emphasized. CSU/UC
Formerly P E 554C

P E 222. Introduction to Feldenkrais (1)
Lec-2
Advise: ESL 130 or ENGL 91 or Placement in ESL 140 or ENGL 92
The Feldenkrais Method is a body-mind approach to improving movement comfort, function, and physical skill. Emphasis is on applying the unique learning process of the Feldenkrais Method to improve habits, relieve tension, refine coordination and performance. Appropriate for all fitness levels, including restorative needs. CSU/UC
Formerly P E 582

DANC 175. Basic Movement (2)
Lec-1, lab-3
Basic Movement defines general movement vocabulary and employs movement studies that develop skills needed for successful participation in physical activities, particularly dance. CSU/UC
Formerly P E 4

Public Safety

P E 29. Firefighting and Public Safety Conditioning (2)
Lec-1, lab-2
A specifically scaled class to develop functional physical performance capacity required for firefighters and law enforcement personnel through a series of traditional strength and conditioning protocols as well as individual and group related task based activities. CSU

P E 250. Lifeguard Training (1)
Lab-2
Training in life guarding (no beach) situations; recognizing and preventing life threatening situations. American Red Cross Life Guarding Certificate granted upon successful completion. CSU/UC
Formerly P E 525

Fitness Center

P E 200A-200B-200C. Fitness Center Super Circuit (0.5-1-2)
Lab-4,2,4
Repeat: combination max. 3 times
The super circuit located in the Fitness/Wellness Center utilizes an interactive fitness network system providing feedback to the user with an emphasis on proper use of free weights, strength equipment and interval training on cardio machines and individualized fitness programs to promote strength, muscle toning and cardiac fitness. CSU/UC
Formerly P E 50A, B, C

P E 200D. Super Cardio Circuit (2)
Lec-1, lab-3
Prereq: PE 200A, 200B, or 200C
The super cardio circuit located in the Fitness/Wellness Center utilizes an interactive fitness network system providing feedback to the user with an emphasis on aerobic and anaerobic cardiovascular fitness programs to promote advanced cardiac fitness. CSU/UC

P E 200E. Super Strength Circuit (2)
Lec-1, lab-3
Prereq: PE 200A, 200B, or 200C
The super circuit located in the Fitness/Wellness Center utilizes an interactive fitness network system providing feedback to the user with an emphasis on proper use of strength equipment and the development of an advanced individualized strength training program. CSU/UC

P E 202. Interactive Fitness (2)
Lab-4
Interactive Fitness will allow students to improve fitness levels utilizing pulse/heart rate monitoring, strength training, flexibility exercises and dietary information. Students will learn to create a balanced lifelong exercise program using the outlined training techniques to develop cardiovascular fitness, muscular strength and endurance, flexibility and improvement of dietary knowledge. CSU/UC
Formerly P E 52

Physical Fitness

P E 204A-204B-204C. Physical Fitness (1-1-1)
Lab-2
Prereq: P E 204B; P E 204A; P E 204C
Physical fitness classes at all levels are scheduled to help students fit a vigorous and satisfying period of exercise into a pattern for future use. The aim is to help students gain insight into their own personal aptitudes and abilities and also motivate students to explore their own range of movement in terms of agility, flexibility, strength, and endurance. CSU/UC
Formerly P E 527A, B, C

P E 204A. Beginning
P E 204B. Intermediate
P E 204C. Advanced
P E 205A. Beginning Running and Conditioning (1)
Lab-2 P/NP Available
An introduction to running and cardiovascular conditioning basics alternating running and fitness walking, flexibility work, strength exercises, and body alignment as vehicles for increased physical activity, cardiovascular conditioning, and range of motion. This course will serve the needs of many students who have not recently been physically active. CSU/UC
Formerly P E 205

P E 205B. Intermediate Running and Conditioning (1)
Lab-2 P/NP Available
Prereq.: PE 205A or demo of exit skills
A review of running form and cardiovascular basics as well as an introduction to the next level of running ability using heart rate measurement to determine high and low aerobic zones. It will also emphasize range of motion, body alignment, and intermediate strength building. The course will expand cardiovascular health parameters, running endurance, flexibility, and core strength for students. CSU/UC

P E 205C. Advanced Running and Conditioning (1)
Lab-2 P/NP Available
Prereq.: PE 205B or demo of exit skills
Advanced endurance and speed techniques will be introduced to enable running greater distances toward a 5K event. Additional flexibility work and core strengthening will be covered, as well as ways to avoid common distance injuries. CSU/UC

Walking for Wellness
P E 206A. Beginning Walking for Wellness (1)
Lab-2 P/NP Available
An introduction to exercise walking and cardiovascular conditioning basics. Emphasis is placed on techniques to improve physical endurance, body alignment, flexibility, and overall wellness. This course will serve the needs of many students who do not have extensive movement experience. CSU/UC
Formerly PE 206

P E 206B. Intermediate Walking for Wellness (1)
Lab-2 P/NP Available
Prereq.: PE 206A or demo of exit skills
An introduction to power walking and the next level of strength building, flexibility, and endurance to expand cardiovascular health, walking speed, and distances. It is designed to be the next wellness step for students already familiar with introductory exercise walking form and conditioning. CSU/UC

P E 206C. Advanced Walking for Wellness (1)
Lab-2 P/NP Available
Prereq.: PE 206B or demo of exit skills
An introduction to race walking techniques for cardiovascular fitness with an emphasis on increasing flexibility, strength, and injury prevention. Walking speed and distance is increased from Intermediate Walking for Wellness. It is particularly suited for students wanting an advanced aerobic challenge without the added pressure on joints produced by running. CSU/UC

Aerobics
DANC 170. Dance Aerobics (1)
Lab-2 P/NP available
Course designed to use the dance vocabulary of contemporary street funk, jazz, ballet, modern and traditional African dance to develop, increase and maintain cardiovascular strength, muscular coordination, agility and postural awareness. CSU/UC
Formerly P E 567

P E 208A-208B-208C. Aerobic Fitness (1-1-1)
Lab-2 P/NP Available
Prereq.: P E 208B: P E 208A; P E 208C: P E 208B
Beginning, intermediate and advanced techniques with emphasis on cardiovascular endurance utilizing physical activity which increases the heart rate to each individual's target zone. CSU/UC
Formerly P E 558A, B, C

P E 208A. Beginning
P E 208B. Intermediate
P E 208C. Advanced

P E 209A. Beginning Step Aerobics (1)
Lab-2 P/NP Available
An introduction to step workout. Learning the skill of stepping up and down on an adjustable platform, using balance and coordination to create an intense, low-impact workout at 120 beats per minute while learning to use both left and right sides of the body equally. CSU/UC
Formerly P E 209

P E 209B. Intermediate Step Aerobics (1)
Lab-2 P/NP Available
Prereq.: P E 209A
An intermediate aerobic step workout using large muscle groups by learning the of stepping up and down on an adjustable platform, with balance and coordination to create an intense, low-impact workout at 120-130 beats per minute. Build on beginning level routines for increased coordination and balance. CSU

P E 210. Boxercise (1)
Lab-2 P/NP available
Boxercise is a conditioning fitness class utilizing aerobic/boxing techniques with an emphasis on cardiovascular and muscular endurance. CSU/UC
Formerly P E 579

Competitive Lifting
P E 212. Olympic Weightlifting (1)
Lab-2 P/NP available
Students will be instructed in the proper protocols to successfully execute the Clean and Jerk and the Snatch. Principles of Olympic Weightlifting, training techniques and safety guidelines will be presented. CSU/UC
Formerly P E 585

P E 212B. Beginning - Intermediate Olympic Weightlifting (1)
Lab-2 P/NP Available
Instruction in gross motor skills required to enhance the Olympic Weightlifting experience. Analysis and correction of technical errors, official judging and application of the rules of Olympic Weightlifting are also covered. CSU/UC

P E 212C. Advanced Olympic Weightlifting (1)
Lab-2 P/NP Available
Instruction in advanced Cubanito and Hungarian technical protocols leading to the refinement of fine motor skills required of
Olympic Weightlifting. Mechanics and infrastructure of an Olympic Weightlifting competition and the role of the athlete is presented. CSU/UC

P E 212D. Competitive Olympic Weightlifting (1)
Lab-2
P/NP Available
Instruction in synchronizing gross motor and fine motor skills to achieve successful Olympic Weightlifting attempts. Methodology from Eastern Bloc, Soviets, and China will be used. In addition, students will organize and manage an un-sanctioned Olympic Weightlifting Meet. CSU/UC

P E 213. Competitive Powerlifting (1)
Lab-2
Repeat: max. 3 units
Students will be instructed in the proper protocols to successfully execute the Dead Lift, Bench Press, and Squat for maximal strength gains. Principles of Competitive Powerlifting, training techniques and safety guidelines will be presented. CSU/UC
Formerly P E 586

Strength Training
P E 214A Beginning Weight Training (1)
Lab-2
P/NP available
Beginning Weight Training emphasizes instruction and implementation of machine weight and free weight training programs. CSU/UC
Formerly P E 214

P E 214B. Intermediate Weight Training (1)
Lab-2
P/NP available
PREREQ.: PE 214A
Intermediate Weight Training emphasizes instruction and implementation of intermediate level machine weight and free weight training programs. CSU/UC

P E 215A. Beginning Strength and Circuit Training (1)
Lab-2
P/NP available
Beginning Strength and Circuit Training emphasizes free weight and machine weight training via a set number of exercises completed with in a timed circuit. CSU/UC
Formerly P E 555A

P E 215B. Intermediate Strength and Circuit Training (1)
Lab-2
P/NP available
Intermediate Strength and Circuit Training emphasizes free weight and machine weight training via an intermediate set number of exercises completed with in a timed circuit. CSU/UC
Formerly P E 555B

P E 216A. Beginning Body Sculpting (1)
Lab-2
P/NP Available
An introduction to the principles and practices of body sculpting through weight training and the use of various exercise modalities; as well as cardiovascular fitness through circuits and interval training. CSU/UC

P E 216B. Intermediate Body Sculpting (1)
Lab-2
P/NP Available
PREREQ.: PE 216A OR DEMONSTRATION OF PE 216A EXIT SKILLS
Intermediate Body Sculpting course builds strength in the major muscles of the body with a special emphasis on the upper body, core, and back through weight training with the use of a wide variety of modalities; as well as refining body alignment while performing the body sculpting skills. CSU/UC

Stretching and Flexibility
P E 217A. Beginning Stretching and Flexibility Development (1)
Lab-2
P/NP Available
Stretching is a fundamental component of fitness. Emphasis is on techniques to improve flexibility safely and effectively, while enhancing overall fitness and fluidity of movement. Basic muscle groups and types of stretches will be included. CSU/UC
Formerly PE 217

P E 217B. Intermediate Stretching & Flexibility Development (1)
Lab-2
P/NP Available
PREREQ.: PE 217A OR DEMO OF EXIT SKILLS
Builds on knowledge and skills from PE 217A Beginning Stretching and Flexibility. Includes isometric and combination stretches, identification of muscle group pairs, basic anatomical terminology, stretching sequences for specific activities or sports. CSU/UC

Yoga
P E 219A. Beginning Yoga (1)
Lab-2
P/NP available
An introduction to the principles and practice of yoga as a physical discipline. Basic yoga postures, breathing exercises, alignment principles, combination of poses, and relaxation techniques will be included. An overview of yoga history and philosophy will be presented. CSU/UC
Formerly P E 554A

P E 219B. Intermediate Yoga (1)
Lab-2
P/NP available
PREREQ.: P E 219A OR DEMONSTRATION OF BEGINNING EXIT SKILLS
Intermediate yoga will build upon skills learned in beginning yoga. Emphasis will be placed on a representative sample of intermediate level postures and yoga combinations, breathing exercises, and relaxation techniques. A continuation of yoga history, philosophy, and current trends will be presented. CSU/UC
Formerly P E 554B

P E 219C. Advanced Yoga (1)
Lab-2
P/NP available
PREREQ.: P E 219B
Advanced yoga will build upon skills learned in intermediate yoga. Emphasis will be placed on a representative sample of advanced level postures and yoga combinations, breathing exercises, and relaxation techniques. A continuation of Hatha Yoga history, philosophy, and current trends will be presented. CSU/UC

P E 220. Intensive Yoga (2)
Lec-1, lab-3
P/NP available
PREREQ.: P E 219B OR DEMONSTRATION OF BEGINNING EXIT SKILLS
Intensive yoga offers further practice and refinement of intermediate level yoga postures, breathing and meditation techniques. A continuation of yoga history, philosophy, and current trends will be presented. There is an emphasis on alignment techniques and practical application of yoga principles in daily life. CSU/UC
Formerly P E 654B

Archery
P E 230A. Beginning Archery (1)
Lab-2
P/NP Available
Beginning archery includes archery skills, rules, etiquette, safety, methods of shooting and scoring. Students will be instructed to analyze their form and techniques to perform and enjoy the basic sport of archery. Archery falls within the Archery Family. CSU/UC
Formerly P E 501A
P E 230B. Intermediate Archery (1)  
Lab-2   P/NP Available  
Prereq: P E 230A  
Intermediate archery will review basic skills, rules, safety, and scoring. Additional skills and techniques will include improved consistency, an increase in shooting distances, shooting endurance, and mental concentration. Archery is within the Archery family. CSU/UC  
Formerly P E 503

P E 230C. Advanced Archery (1)  
Lab-2   P/NP Available  
Prereq: P E 230B  
Advanced archery skills to develop improved accuracy and an understanding of archery training for competition. CSU

Badminton  
P E 231A. Beginning Badminton (1)  
Lab-2   P/NP Available  
An introduction to badminton basic skills and game play. Emphasis is placed on learning the ready position, grips, overhead and underhand clear, overhead drop, doubles forehand, and forehand and backhand drive. Basic rules and strategy for doubles game play will also be covered. CSU/UC  
Formerly P E 503A

P E 231B. Intermediate Badminton (1)  
Lab-2   P/NP Available  
Prereq: P E 231A or demonstration of P E 231A exit skills  
A review of basic badminton strokes such as the clear, forehand doubles serve, overhead drop, and drive. Additional skills will be introduced such as the net drop, smash, block, offensive drive, singles serve, backhand clear, deep forehand clear, and backhand doubles serve. Intermediate singles and doubles footwork, court coverage, and strategies will also be covered. It is the next step for students already familiar with the introductory skills of badminton. CSU/UC  
Formerly P E 503B

P E 231C. Advanced Badminton (1)  
Lab-2   P/NP Available  
Prereq: PE 231B or demo of exit skills  
A review of intermediate badminton techniques and an introduction to advanced badminton court skills ad strokes. Rotation systems for doubles, mental and physical preparation for games, and increasingly complex game strategies will also be covered. The course is designed for students who want to continue developing into highly skilled players. CSU/UC

Baseball/Softball  
P E 232A. Beginning Baseball (1)  
Lab-2, field trips   P/NP available  
Analysis and practice of the basic skills, techniques, and theories of baseball through active participation. Students will participate in basic lessons and fundamental drills designed to improve and increase their awareness of the skills involved in learning the fundamental skills of baseball. CSU/UC  
Formerly P E 505A

P E 232B. Intermediate Baseball (1)  
Lab-2, field trips   P/NP available  
Prereq: P E 232A  
Analysis and practice of the basic skills, techniques, and theories of baseball through active participation. Students will participate in intermediate lessons and fundamental drills designed to improve and increase their awareness of the skills involved in learning an intermediate level of fundamental skills in baseball. CSU/UC  
Formerly P E 505B

P E 232C. Advanced Baseball (1)  
Lab-2, field trips   P/NP available  
Prereq.: PE 232B  
Analysis and practice of skills, techniques, theories and advanced training of baseball through active participation. Students will participate in advanced lessons and fundamental drills designed to improve and increase their awareness of the skills and training involved for baseball. CSU/UC  
Formerly P E 505C

P E 239. Softball (1)  
Lab-2   P/NP available  
Fundamentals of elementary slow and fast pitch softball with an emphasis on development of team offense and defense. CSU/UC  
Formerly P E 536

Basketball  
P E 233A. Beginning Basketball (1)  
Lab-2   P/NP Available  
This course will emphasize skill development such as dribbling, shooting, passing, rebounding and defensive techniques necessary to play a beginning level game of basketball. CSU/UC  
Formerly P E 506A

P E 233B. Intermediate Basketball (1)  
Lab-2   P/NP Available  
Prereq.: P E 233A  
This course will emphasize intermediate levels of skill, agility, body conditioning and endurance as required playing basketball at an intermediate level. CSU/UC  
Formerly P E 506B

P E 233C. Advanced Basketball (1)  
Lab-2   P/NP Available  
Prereq.: P E 233B  
This course will emphasize skill, agility, body conditioning and endurance. It will also assess and evaluate advanced theories and systems of play. CSU/UC  
Formerly P E 506C

Fencing  
P E 234A-234B-234C. Fencing (1-1-1)  
Lab-2   P/NP available  
Beginning, intermediate, and advanced fencing; emphasis on bouting, judging, directing, scoring, parries, ripostes, and fencing with electrical equipment. CSU/UC  
Formerly P E 513A, B, C

P E 234A. Beginning  
P E 234B. Intermediate  
P E 234C. Advanced

P E 237. Saber Fencing (1)  
Lab-2   P/NP available  
An entry-level course that surveys the sport of saber fencing, the general rules and regulations for governing a bout. CSU/UC  
Formerly P E 529
**Football**

P E 235A. Beginning Football (1)
Lab-2 P/NP available
Introduction to the basic fundamentals of touch football that includes basic skills, schematics, rules and play. CSU/UC
Formerly P E 519A

P E 235B. Intermediate Football (1)
Lab-2 P/NP available
Prereq.: P E 235A
Review of basic football skills such as running, throwing, and catching. Additional skills will be introduced such as intermediate skills and offensive and defensive formations and strategies, as well as the kicking game. CSU/UC
Formerly P E 519B

P E 235C. Advanced Football (1)
Lab-2 P/NP available
Prereq.: P E 235B
Review of beginning and intermediate football skills and offensive and defensive strategies with an emphasis on game situations. Advanced skills and strategies will be introduced and teaching will be supplemented through video analysis. CSU/UC
Formerly P E 519C

**Golf**

P E 236A. Beginning Golf (1)
Lab-2 P/NP Available
This course demonstrates the basic skills needed to be able to play a round of golf. The structure of the course emphasizes the principles of the full swing, chip shot, putting, basic rules of play, golf etiquette, and terminology. CSU/UC
Formerly PE 520A

P E 236B. Intermediate Golf (1)
Lab-2 P/NP Available
Prereq.: PE 236A
This course demonstrates more advanced skills needed to be able to play a round of golf. The structure of the course emphasizes the principles of the full swing, chip shot, putting, advanced knowledge of the rules of golf, demonstration of golf etiquette, and capability to play nine holes of golf. CSU/UC
Formerly PE 520B

**Volleyball**

P E 240A. Beginning Volleyball (1)
Lab-2 P/NP Available
Prereq.: PE 240C
Beginning, intermediate, and advanced tennis. Emphasis on rules, etiquette, basic skills, strokes and footwork, scoring, and strategy. CSU/UC
Formerly P E 542A, B, C

P E 240B. Intermediate Volleyball (1)
Lab-2 P/NP Available
Prereq.: P E 240B; P E 240A; P E 240C;
Beginning, intermediate, and advanced tennis. Emphasis on rules, etiquette, basic skills, strokes and footwork, scoring, and strategy. CSU/UC

P E 240C. Advanced

**Aquatics Exercise**

P E 252A. Beginning Water Aerobics (1)
Lab-2 P/NP Available
Prereq.: PE 252A
A non-swimming and low impact water exercise course designed to improve muscular strength, flexibility, balance and cardiovascular fitness. Exercises will involve variations in movement and tempo to achieve these fitness improvements. CSU/UC

P E 252B. Intermediate Water Aerobics (1)
Lab-2 P/NP Available
Prereq.: PE 252A
A review of water aerobics form and cardiovascular basics as well as an introduction to moderate intensity water exercises, using heart rate measurement to determine aerobics zones. Increased range of motion, muscular strength, flexibility, agility, balance, core strength and cardio-
vascular fitness will be emphasized, while reducing stress on the body. CSU/UC

**Aquatics Swim Development**

**PE 254. Novice Swimming (1)**  
Lab-2  
P/NP Available  
A course designed for the non-swimmer, introducing water safety and basic swimming skills, including physical and mental adjustments to water, floating and basic strokes. CSU/UC

**PE 255A. Beginning Swimming (1)**  
Lab-2  
P/NP Available  
**Prereq.: PE 254**  
A course designed for non-swimmer, providing instruction in aquatic skill, fundamental swimming skills and personal water safety skills. CSU/UC

**PE 255B. Advanced Beginning Swimming (1)**  
Lab-2  
P/NP Available  
**Prereq.: PE 254**  
A course designed to support students in improving fundamental aquatic skills and provides instruction in swimming stroke development. Deep water swimming and survival techniques will be emphasized. CSU/UC

**PE 255C. Intermediate Swimming (1)**  
Lab-2  
P/NP Available  
**Prereq.: PE 255B**  
In-depth instruction in long axis competitive swimming strokes (freestyle backstroke). Current practices and development of competitive swimming, biomechanics of long axis swimming strokes, turns, water safety will be covered. CSU

**PE 255D. Advanced Swimming (1)**  
Lab-2  
P/NP Available  
**Prereq.: PE 255C**  
An advanced level stroke development course emphasizing short axis strokes (breaststroke and butterfly) leading to increased stroke proficiency. It refines aquatic posture line and balance and improves coordination of parts of a stroke into whole strokes and racing turns and finishes. CSU

**PE 256A. Beginning Fitness Swimming (2)**  
Lab-4  
P/NP Only  
**Prereq.: PE 254C**  
An introduction to fitness swimming and cardiovascular conditioning basics. Emphasis is placed on techniques to improve physical endurance, body alignment, flexibility, and overall wellness. CSU/UC

**PE 256B. Advanced Beginning Fitness Swimming (2)**  
Lab-4  
P/NP Only  
**Prereq.: PE 256A**  
A review of swimming form and cardiovascular basics as well as an introduction to the next level of fitness swimming ability using heart rate measurement to determine high and low aerobic zones. It will also emphasize range of motion, body alignment, and strength building. CSU/UC

**PE 256C. Intermediate Fitness Swimming (2)**  
Lab-4  
P/NP Only  
**Prereq.: PE 256B**  
An introduction to more advanced endurance and speed techniques to enable swimming greater distance leading up to an 1K event. Additional flexibility work and core strengthening will be introduced, as well as ways to avoid common swimming injuries. CSU/UC

**Judo**

**PE 271A. Beginning Judo (1)**  
Lab-2  
P/NP Available  
An introduction to Kodokan judo, an Olympic sport, focusing on fundamental judo techniques, skills and physical fitness. An examination of judo’s development, philosophy, etiquette and principles. CSU/UC  
Formerly PE 524A

**PE 271B. Intermediate Judo (1)**  
Lab-2  
P/NP Available  
In addition to new skills and techniques, students will be required to demonstrate greater proficiency in basic skills and techniques covered in the introductory course. Students will be eligible to test for the next judo belt rank during the semester. CSU/UC  
Formerly PE 524B

**PE 271C. Advanced Judo (1)**  
Lab-2  
P/NP Available  
Advanced skill instruction and application of Nage-waza (Throwing), Osae-waza (Grappling/Submission), with Randori (Free Exercise). Principles of Sei-ryo-ku Zenyou and Jita-Kyoei, the training of mind and body of a person that contributes to society will be examined. Tournament supervision of the judo tournament will be covered. CSU/UC  
Formerly PE 524C

**PE 271D. Competition Judo (1)**  
Lab-2  
P/NP Available  
Instruction and participation in judo competition. Student will develop basic, intermediate and advance skills and knowledge necessary to participate in judo safely. Competition strategy and tactics will be covered in detail. Students will have the opportunity to test for their next rank during the semester. CSU/UC

**Ju-Jitsu**

**PE 274. Ju-Jitsu (1)**  
Lab-2  
P/NP available  
Instruction and practice in the basic skills of Ju-Jitsu. Course will cover the terminology, etiquette along with throwing, grappling, and submission techniques with an emphasis on self-defense techniques. CSU/UC  
Formerly PE 572

**PE 274B. Intermediate Ju-Jitsu (1)**  
Lab-2  
P/NP Available  
Intermediate ju-jitsu provides the student the opportunity to continue their study of Brazilian ju-jitsu, to develop greater self confidence with social and leadership skills. In addition to new skills and techniques, students will be required to demonstrate greater proficiency in basic skills and techniques covered in the introductory course. CSU/UC

**PE 274C. Advanced Ju-Jitsu (1)**  
Lab-2  
P/NP Available  
Advance ju-jitsu emphasis will be on a solid defense with the ability to escape from all the major positions with relative ease. The use of combinations and the momentum of one's own weight as well as that of your opponent to achieve movement objectives will be highlighted. The administration of the ju-jitsu tournament will be covered. CSU/UC
Intercollegiate Courses will be able to:

Students participating in Dance, Activity, Kinesiology/theory and/or Intercollegiate Athletics will be able to:

- Identify and demonstrate the appropriate sequence of physical movements to successfully perform an activity/sport.
- Identify and demonstrate good sportsmanship, communicative and social interaction skills including the understanding of leadership and contributing roles while participating and/or competing on an intercollegiate team.

Activity

- Identify and analyze the importance of health concerns, safety and proper use of equipment while performing activity based movements.

Theory/Kinesiology

- Integrate the knowledge/content in consideration of an Associate's Degree in Kinesiology, Certificates in Physical Education, Coaching, Yoga or Strength and Conditioning, strengthen career opportunities in the health, fitness, and wellness fields, and synthesize community and global awareness through lifelong learning.

Credit, Degree Applicable Courses:

Intercollegiate Athletics for Men (3)
Lab-10 P/NP available
Prereq.: athletic clearance (eligible by rules of the CACC and medical clearance verified by a physician)
Repeat: max. 12 units
Course numbers, activities and semesters as indicated below
Instruction for competition and participation in the Coast Conference of the California Association of Community Colleges (CACC). CSU/UC

PE A 60. Soccer fa
Formerly P E 450
PE A 61. Badminton sp
Formerly P E 451
PE A 62. Swimming
Formerly P E 461
PE A 63. Tennis sp
Formerly P E 453
PE A 65. Basketball fa, sp
Formerly P E 455
PE A 66. Track and Field sp
Formerly P E 456
PE A 67. Softball sp
Formerly P E 457
PE A 68. Volleyball fa
Formerly P E 458
PE A 69. Cross-country fa
Formerly P E 459

Intercollegiate Athletics for Women (3)
Lab-10 P/NP available
Prereq.: athletic clearance (eligible by rules of the CACC and medical clearance verified by a physician)
Repeat: max. 12 units
Course numbers, activities and semesters as indicated below
Instruction for competition and participation in the Coast Conference of the California Association of Community Colleges (CACC). CSU/UC

PE A 60. Soccer fa
Formerly P E 450
PE A 61. Badminton sp
Formerly P E 451
PE A 62. Swimming
Formerly P E 461
PE A 63. Tennis sp
Formerly P E 453
PE A 65. Basketball fa, sp
Formerly P E 455
PE A 66. Track and Field sp
Formerly P E 456
PE A 67. Softball sp
Formerly P E 457
PE A 68. Volleyball fa
Formerly P E 458
PE A 69. Cross-country fa
Formerly P E 459

Physical Education Athletics

Learning Outcomes

Overall

Students participating in Dance, Activity, Kinesiology/theory and/or Intercollegiate Courses will be able to:

- Apply knowledge from a Physical Education/Dance class towards achieving academic endeavors such as an Associate's Degree or transfer to baccalaureate institution, enhance career opportunities, and become further engaged in the college and community's social fabric through lifelong learning and cultural enrichment.

Intercollegiate Athletics

- Identify and demonstrate good sportsmanship, communicative and social interaction skills including the understanding of leadership and contributing roles while participating and/or competing on an intercollegiate team.
Courses Required for the Major in Physics

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>PHYC 4A Physics for Scientists and Engineers</td>
<td>3</td>
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<tr>
<td>PHYC 4AL Physics Laboratory for Scientists and Engineers</td>
<td>1</td>
</tr>
<tr>
<td>PHYC 4B Physics for Scientists and Engineers</td>
<td>3</td>
</tr>
<tr>
<td>PHYC 4BL Physics Laboratory for Scientists and Engineers</td>
<td>1</td>
</tr>
<tr>
<td>PHYC 4C Physics for Scientists and Engineers</td>
<td>3</td>
</tr>
<tr>
<td>PHYC 4CL Physics Laboratory for Scientists and Engineers</td>
<td>1</td>
</tr>
<tr>
<td>MATH 110A Calculus I</td>
<td>4</td>
</tr>
<tr>
<td>MATH 110B Calculus II</td>
<td>4</td>
</tr>
<tr>
<td>MATH 110C Calculus III</td>
<td>4</td>
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<tr>
<td>Total</td>
<td>28</td>
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</tbody>
</table>

Physics Major (AS)

The Associate in Science in Physics provides a broad background in fundamental physics through introductory course work with a full complement of laboratory courses. Physics graduates are prepared to transfer to California State University, University of California, and other universities for career paths in high tech industries, education, management consulting, medicine, and law. Physics majors develop strong mathematical, analytical, and laboratory skills, and a solid understanding of the fundamental physical laws that govern the universe.

Learning Outcomes

Upon completion of this program, students will be able to:

- Apply the principles of mechanics, electromagnetism, thermodynamics, waves, optics, and modern physics to theoretical problems as well as to experimental applications.
- Demonstrate laboratory skills including how to take and analyze data, keep an organized lab book, and write a lab report.
- Apply mathematics through multivariable calculus to solve physics problems.
- Transfer to a 4-year degree in physics.

Courses Required for the Major in Physics

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</tr>
<tr>
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</tr>
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<td>MATH 110C Calculus III</td>
<td>4</td>
</tr>
<tr>
<td>Total</td>
<td>28</td>
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</tbody>
</table>
Announcement of Courses

Credit, Degree Applicable Courses:

**PHYC 2A. Introductory Physics (3)**
Lec-3, conf-1
PREREQ.: MATH 95.
COREQ.: PHYC 2AL.
ADVICE: PHYC 40

Required of premedical, biology, and some architecture students
First course in a two semester sequence required of most premedical, biology, veterinary, physical therapy, and architecture degrees. Core topics include kinematics, dynamics, work and energy, momentum, rotations, simple harmonic motion, fluids, heat and thermodynamics. CSU/UC

**PHYC 2B. Introductory Physics (3)**
Lec-3, conf-1
PREREQ.: PHYC 2A.
COREQ.: PHYC 2BL.

Required of premedical, biology, and some architecture students
Second course in an algebra/trigonometry-based two semester sequence. Core topics include electricity and magnetism, light, and selected topics in modern physics. CSU/UC

**PHYC 2AC. Introductory Physics--Calculus Supplement (0.5)**
Lec-1, conf-0.5 (9 wks.)

**Required of some premedical, biology, and architecture students**
PREREQ.: MATH 110A or 100A; Completion/concurrent enrollment in PHYC 2A.
The application of calculus to topics in mechanics, fluids, heat and sound. CSU/UC

**PHYC 2BC. Introductory Physics--Calculus Supplement (0.5)**
Lec-1, conf-0.5 (9 wks.)

**Required of some premedical, biology, and architecture students**
PREREQ.: PHYC 2A and PHYC 2AC, and MATH 110A or MATH 100A
PHYC 2BC expands on topics covered in PHYC 2B with applications of calculus to problems in physics. PHYC 2BC satisfies the requirement of some professional and graduate schools for calculus in Physics 2B. CSU/UC

**PHYC 2AL. Introductory Physics Laboratory (1)**
Lab-3
PREREQ.: MATH 95
COREQ.: PHYC 2A
ADVICE: PHYC 40

Required of premedical, biology, and some architecture students
First laboratory course in an algebra-based two semester sequence. Core topics include experiments in kinematics, dynamics, energy, momentum, rotation, oscillations, fluids, and thermodynamics. CSU/UC

**PHYC 2BL. Introductory Physics Laboratory (1)**
Lab-3
PREREQ.: Completion/concurrent enrollment in PHYC 2B

Required of premedical, biology, and some architecture students
Laboratory experiments that accompany PHYC 2B. Experiments include electricity and magnetism, electric circuits, light, and radioactivity. CSU/UC

**PHYC 4A. Physics for Scientists and Engineers (3)**
Lec-3, conf-1
PREREQ.: MATH 110A
COREQ.: PHYC 4AL
ADVICE: PHYC 41 and concurrent enrollment in MATH 110B
First course in a calculus-based four semester sequence. Core topics include kinematics, dynamics, energy, momentum, rotation, gravitation, oscillations, and fluids. CSU/UC/C-ID PHYS 205 (PHYC 4A + 4AL); C-ID PHYS 200S (PHYC 4A + 4AL + 4B + 4BL + 4C + 4CL + 4D + 4DL)

**PHYC 4B. Physics for Scientists and Engineers (3)**
Lec-3, conf-1
PREREQ.: PHYC 4A, PHYC 4AL, and MATH 110B
COREQ.: PHYC 4BL
ADVICE: Concurrent enrollment in MATH 110C
Second course in a calculus-based four semester sequence. Core topics include electric and magnetic fields, electric potential, capacitance, resistance, inductance, DC and AC circuits and Maxwell’s Equations. CSU/UC/C-ID PHYS 210 (PHYC4B + 4BL); C-ID PHYS 200S (PHYC 4A + 4AL + 4B + 4BL + 4C + 4CL + 4D + 4DL)

**PHYC 4C. Physics for Scientists and Engineers (3)**
Lec-3, conf-1
PREREQ.: PHYC 4B, PHYC 4BL
COREQ.: PHYC 4CL
ADVICE: MATH 110C
Third course in a calculus-based four semester sequence. Core topics include mechanical, sound and light waves; geometrical and physical optics; and thermodynamics. CSU/UC/C-ID PHYS 200S (PHYC 4A + 4AL + 4B + 4BL + 4C + 4CL + 4D + 4DL)

**PHYC 4D. Physics for Scientists and Engineers (3)**
Lec-3, conf-1
PREREQ.: PHYC 4B, 4BL
COREQ.: PHYC 4DL
ADVICE: MATH 110C and PHYC 4C and 4CL and 4DL
This is the fourth course in a calculus-based four semester sequence. Core topics include special relativity, quantum mechanics, and atomic physics. CSU/UC/C-ID PHYS 200S (PHYC 4A + 4AL + 4B + 4BL + 4C + 4CL + 4D + 4DL)

**PHYC 4AL-4BL-4CL-4DL. Physics Laboratory for Scientists and Engineers (1-1-1-1)**
Lab-3

Required of physics, chemistry, and engineering majors planning to transfer to the University of California, Berkeley, or into other engineering or physical science transfer programs.
PREREQ.: PHYC 4AL; Completion/concurrent enrollment in PHYC 4A; PHYC 4DL; PHYC 4B and PHYC 4BL
COREQ.: PHYC 4BL: PHYC 4B; PHYC 4CL: PHYC 4C; PHYC 4DL: PHYC 4D

Laboratory experiments.

**PHYC 4AL. Mechanics, measurements, fluids. CSU/UC/ C-ID PHYS 205 (PHYC4A + 4AL); C-ID PHYS 200S (PHYC 4A + 4AL + 4B + 4BL + 4C + 4CL + 4D + 4DL)

**PHYC 4BL. Electricity and magnetism; emphasis on oscilloscope measurement techniques. CSU/UC/C-ID PHYS 210 (PHYC4B + 4BL); C-ID PHYS 200S (PHYC 4A + 4AL + 4B + 4BL + 4C + 4CL + 4D + 4DL)**
PHYC 4CL. Experiments in sound, Fourier analysis, electrical oscillations and waves, geometrical and physical optics. CSU/UC/C-ID PHYS 200S (PHYC 4A + 4AL + 4B + 4BL + 4C + 4CL + 4D + 4DL)

PHYC 4DL. Laboratory experiments in modern physics. CSU/UC/C-ID PHYS 200S (PHYC 4A + 4AL + 4B + 4BL + 4C + 4CL + 4D + 4DL)

PHYC 10. Conceptual Physics (3)
Lec-3
Advise: MATH 40 or placement in MATH 60
An overview of physics. Content is taught at a conceptual level using basic math such as ratios, square roots, scientific notation, graph interpretation, slope and simple algebra. Topics include mechanics, properties of matter, heat, sound, electricity, magnetism, light, and nuclear physics. CSU/UC

PHYC 10L. Conceptual Physics Laboratory (1)
Lab-3
Required for students enrolled in the curriculum in RADL.
Prereq.: Completion/concurrent enrollment in PHYC 10
Laboratory course covering basic concepts in physics. Core topics include mechanics, energy, heat, sound, electricity, magnetism, light, and nuclear physics. CSU/UC

PHYC 40. Elementary Physics (3)
Lec-3
Prereq.: completion/concurrent enrollment in MATH 95
A single semester course introducing concepts and algebra based analysis of such topics as kinematics, dynamics, energy, and momentum. This course prepares students to take a trigonometry-based physics course and may also serve as preparation for a calculus based physics course. CSU/UC

PHYC 41. Preparatory Physics (3)
Lec-3
Prereq.: MATH 90 or 92; and 95; or placement in MATH 110A
Advise: Concurrent enrollment in MATH 110A
A single semester course emphasizing concepts and problem solving in kinematics, dynamics, energy, momentum, rotational motion and electricity. This course is intended to prepare students to take a college level, problem solving based, physics course using calculus. CSU/UC

Physical Science

Announcement of Courses
Credit, Degree Applicable Courses:
P SC 11. Physical Science (3)
Lec-3, conf-1
Advise: MATH 40 or 840 or placement in MATH 60 or 860
Not recommended for students who have completed a college-level course in physics, physical science, chemistry, geology, or astronomy with a final grade of “C” or higher.
An overview of the physical sciences: physics, chemistry, Earth science and astronomy. Content is taught at a conceptual level using basic math such as ratios, square roots, scientific notation, graph interpretation, slope and simple algebra. Intended for non science majors looking for a broad understanding of the physical universe. CSU/UC

P SC 11L. Physical Science Laboratory (1)
Lab-3
Coreq.: P SC 11
Physical Science laboratory intergrates concepts from physics, chemistry, and earth science and astronomy. Data handling, critical thinking, and laboratory skills are emphasized. CSU/UC
Formerly P SC 12A

Pilipino
Office: Art 202
Phone Number: (415) 239-3223
Web Site: www.ccsf.edu/forlang

Announcement of Curricula
Pilipino Certificate
The Certificate of Accomplishment in Pilipino provides students, prospective employers and others with documented evidence of persistence and academic accomplishment in the language. The certificate requires completion of 16 units in Pilipino. Each course must be completed with a final grade of “C” or higher or Pass.

Learning Outcomes
• Understand the main points of standard speech on familiar matters encountered in work, school, leisure, etc.
• Understand texts which consist mainly of high-frequency everyday or job-related language.
• Understand and respond to most situations likely to arise while traveling in an area where the language is spoken.
• Write simple connected text on topics which are familiar or of personal interest or personal letters describing experiences and impressions.

Courses Required for the Certificate of Accomplishment in Pilipino

Core Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PIL 1 Elementary Pilipino</td>
<td>5</td>
</tr>
<tr>
<td>PIL 2 Continuation of Elementary Pilipino</td>
<td>5</td>
</tr>
</tbody>
</table>

Elective Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PIL 10A, 10B, 10C Conversational Pilipino</td>
<td>3–3</td>
</tr>
<tr>
<td>PIL 39A, 39B Philippine Lit in Translation</td>
<td>3-3</td>
</tr>
<tr>
<td>Total Units</td>
<td>16</td>
</tr>
</tbody>
</table>

Announcement of Courses
Credit, Degree Applicable Courses:
PIL 1. Elementary Pilipino (5)
Lec-5, lab-2
P/NP available
Advise: ENGL 93 or 94; or ESL 160 or placement in ENGL 96 or ESL 170 or completion of any City College or University foreign language course
Introductory course in Pilipino grammar, composition, and reading. Practice in speaking and understanding Pilipino. CSU/UC

PIL 2. Continuation of Elementary Pilipino (5)
Lec-5, lab-2
P/NP available
Prereq.: PIL 1 or demonstration of PIL 1 exit skills
Second semester course. Completion of elementary grammar, composition, and reading; continued practice in speaking and understanding Pilipino. CSU/UC
Upon completion of this degree, students will be able to:

Learning Outcomes

- Demonstrate an awareness and understanding of American political principles.
- Analyze and critique current political topics and issues.
- Understand the forms and processes of political participation, at the local, state, national, and/or international levels.
- Evaluate the structure and function of other nations’ political systems and the international system.
- Analyze different political theories, including liberalism and conservatism.
- Analyze the historical and philosophical foundations of the United States and California constitutions.
- Evaluate information by selection and using appropriate social science methodologies and approaches, including the use of primary sources.
- Examine complex issues and develop, evaluate, and test solutions and hypotheses using the scientific method.

Political Science

Office: Batmale 656
Phone Number: (415) 239-3330
Web Site: www.ccsf.edu/socialsci

Learning Outcomes

Upon completion of courses in Political Science, students will be able to:

- Demonstrate an awareness and understanding of American political principles.
- Analyze and critique current political topics and issues.
- Demonstrate an understanding of the forms and processes of political participation at the local, state, national and/or international levels.
- Evaluate the structure and functions of a variety of other nation’s political systems and the international system.
- Analyze different political theories, including liberalism and conservatism.
- Analyze the historical and philosophical foundations of the United States and California constitutions.
- Evaluate information utilizing appropriate social sciences methodologies and approaches, including the use of primary sources.
- Examine complex issues and develop, evaluate, and test solutions and hypotheses.

Associate in Arts in Political Science for Transfer (AA-T)

Associate in Arts in Political Science for Transfer. Political science is the study of governments, power relations, public policies, political theories, political processes, and political behavior. The Political Science major is designed to develop knowledge, analytical skills, and critical insight into the nature of politics and political problems. Political science subfields include American government, political theory, comparative politics, and international relations, and the major introduces each of these, as well as allowing additional coursework. The aim is to prepare students for active participation in political life, whether as informed citizens or residents, and to prepare students for transfer to a four-year university in the field of Political Science, and then to a range of possible careers.

Learning Outcomes

Upon completion of this degree, students will be able to:

- Demonstrate an awareness and understanding of American political principles.
- Analyze and critique current political topics and issues.
- Understand the forms and processes of political participation, at the local, state, national, and/or international levels.
- Evaluate the structure and function of other nations’ political systems and the international system.
- Analyze different political theories, including liberalism and conservatism.
- Analyze the historical and philosophical foundations of the United States and California constitutions.
- Evaluate information by selection and using appropriate social science methodologies and approaches, including the use of primary sources.
- Examine complex issues and develop, evaluate, and test solutions and hypotheses using the scientific method.

Degree Requirements: Students who wish to earn the Associate in Arts in Political Science for Transfer (AA-T) must complete 60 CSU transferable units with at least a 2.0 grade point average. This must include the units required for full completion of the IGETC or CSU GE curriculum and the 18-19 units for the major as specified below. Each course in the major must be completed with a grade of “C” or better. Courses used to meet the major requirement may also be used to meet IGETC or CSU GE requirements.

Courses Required for the Major in Political Science

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>POLS 1 American Government</td>
<td>3</td>
</tr>
<tr>
<td>POLS 2 Comparative Government</td>
<td>3</td>
</tr>
<tr>
<td>POLS 3 Political Theory</td>
<td>3</td>
</tr>
<tr>
<td>POLS 5 International Relations</td>
<td>3</td>
</tr>
</tbody>
</table>

Elective Courses: Choose any 6 Units from the following options:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON 5 Introduction to Statistics</td>
<td>4</td>
</tr>
<tr>
<td>or PSYC 5 Statistics for the Behavioral Sciences</td>
<td>4</td>
</tr>
<tr>
<td>POLS 4 Politics of Globalization</td>
<td>3</td>
</tr>
<tr>
<td>POLS 6 Problems of Political Association</td>
<td>3</td>
</tr>
<tr>
<td>POLS 7 American Politics and the African American Community</td>
<td>3</td>
</tr>
<tr>
<td>POLS 8 Political Problems of Latin Americans</td>
<td>3</td>
</tr>
<tr>
<td>POLS 9 Campaigns and Elections</td>
<td>3</td>
</tr>
<tr>
<td>POLS 10 United States Foreign Policy</td>
<td>3</td>
</tr>
<tr>
<td>POLS 12 Ethnic Politics in the United States</td>
<td>3</td>
</tr>
<tr>
<td>POLS 13/LALS 13 Latin American and Latino/a Cross-Border Social Movements</td>
<td>3</td>
</tr>
<tr>
<td>POLS 18 Government and Politics of Latin America</td>
<td>3</td>
</tr>
<tr>
<td>POLS 20 The Politics and Policies of Cities</td>
<td>3</td>
</tr>
<tr>
<td>POLS 22 Environmental Politics and Policy</td>
<td>3</td>
</tr>
<tr>
<td>POLS 25 Political Action</td>
<td>3</td>
</tr>
<tr>
<td>POLS 30 Voter Education &amp; Mobilization</td>
<td>3</td>
</tr>
<tr>
<td>POLS 35 Governments and Politics of East Asia</td>
<td>3</td>
</tr>
<tr>
<td>POLS 43 The Constitution and Individual Rights</td>
<td>3</td>
</tr>
<tr>
<td>POLS 45 Government and Politics of Middle East</td>
<td>3</td>
</tr>
<tr>
<td>POLS 47 Government and Politics of Southeast Asia</td>
<td>3</td>
</tr>
<tr>
<td>POLS 48 Government and Politics of Africa</td>
<td>3</td>
</tr>
<tr>
<td>POLS 41 Independent Studies in Political Science</td>
<td>1</td>
</tr>
<tr>
<td>POLS 42A-42B-42C-42D Discussions in Political Science</td>
<td>1</td>
</tr>
<tr>
<td>POLS 51-52-53 Selected Topics in Political Science</td>
<td>variable 1-3</td>
</tr>
</tbody>
</table>

Total: 18-19
Announcement of Courses

Credit, Degree Applicable Courses:

**POLS 1. American Government (3)**
**Lec-3**
An introduction to the institutions, operations, policies, and problems of American government today. Examination of such issues as U.S. Constitutional development; the impact of the President, the Congress, the bureaucracy, and the courts on daily life; civil rights and liberties; the press and the mass media; political parties, lobbies, and citizen action groups; voting and elections; the domestic and foreign policies of the federal government; the problems of state and local government; public administration of and the theories, values, and behavior underlying the American political system. CSU/UC

**POLS 2. Comparative Government (3)**
**Lec-3** P/NP available
A comparative study of the constitutional principles, governmental institutions, and political problems of selected governments abroad. CSU/UC

**POLS 3. Political Theory (3)**
**Lec-3** P/NP available
Various theoretical approaches to politics and basic political problems and proposed solutions to them. An introduction to ways of thinking about politics and to the language and concepts of political theory. CSU/UC/C-ID POLS 120

**POLS 4. The Politics of Globalization (3)**
**Lec-3** P/NP available
*Advise: ENGL 92 or ESL 150 or Placement in ENGL 93 or ESL 160*
This course analyzes competing political theories and perspectives on the origins of globalization and how they relate to actual policies and practices across different regions, nations and cultures. To this end, students will learn about the possibilities and limitations that globalization offers to, and imposes on, daily life. CSU/UC

**POLS 5. International Relations (3)**
**Lec-3** P/NP available
An introductory survey of world politics involving a historical and theoretical analysis of the relations among states and international organizations. Contemporary problem-areas and issues in an international arena of conflict and order, such as: American foreign policy; diplomacy and international bargaining; global problems of war and nuclear armament; international finance and the world economy; economic development and the world’s resources; terrorism and human rights; and, on a voluntary basis, student participation in the Model United Nations. CSU/UC/C-ID POLS 120

**POLS 6. Problems of Political Association (3)**
**Lec-3** P/NP available
An introduction to modern Western Civilization, from a political perspective, providing an overview of politics from the origins of the nation-state to super-power confrontation, with a focus on the triangular relationship of Europe, the U.S., and the U.S.S.R. The nature of government, law, ideology, revolution, and political and economic integration are discussed. CSU/UC

**POLS 7. American Politics and the African American Community (3)**
**Lec-3** P/NP available
American political institutions and their relationship to African Americans. The unique manner in which Black people have had to function both within and outside of the political system. The future of African American politics. CSU/UC

**POLS 8. Political Problems of Latin Americans (3)**
**Lec-3** P/NP available
The relationship between Latin American citizens and American political institutions. Emphasis on the political problems of Latin Americans, proposed solutions to these problems, and practical political techniques for achieving such solutions. CSU/UC

**POLS 9. Campaigns and Elections (3)**
**Lec-3** P/NP available
*Offered spring and fall semesters of general election years*
Survey of the theory and practice of American political campaigns and elections. Emphasis on candidates, their issue positions, strategies and experience; ballot propositions, pros and cons, role and effect of the media, money, polls, and the changing impact of political parties and interest groups. CSU/UC

**POLS 10. United States Foreign Policy (3)**
**Lec-3** P/NP available
An introductory course emphasizing the study of current problems and issues in United States foreign policy. Major units of study include the making and carrying out of foreign policy, historical changes in American foreign relations, recent events influencing America’s role as a world power, and future challenges to the United States in international affairs. CSU/UC

**POLS 12. Ethnic Politics in the United States (3)**
**Lec-3**
This course surveys the contemporary history and role of a race and ethnicity in the American political system. Theories of race, migration, and ethnic political patterns are discussed in an integrative, comparative, and multidisciplinary approach. The interplay of ethnic and racial factors in the political process is systematically examined and analyzed in the context of at least three of the following groups: African Americans, Asian Americans, Chicano/Latino, Native Americans, and European Americans. Meets the American Cultures requirement at UC, Berkeley. CSU/UC

**POLS 13. Latin American and Latino/a Cross-Border Social Movements (3)**
**Lec-3** P/NP available
*Advise: ENGL 92 or ESL 150 or Placement in ENGL 93 or ESL 160*
This course bridges Latin American and Latino/a politics by analyzing the experiences and struggles of social movements in Latin America and the United States. Among other aspects, their relationship to rebellions and revolutions in Latin America and the emergence of U.S.-based Latino/a cross-border social movements will be analyzed. CSU/UC

**POLS 18. Government and Politics of Latin America (3)**
**Lec-3** P/NP available
The constitutional systems, political processes, and social problems of Latin-American nations. CSU/UC.

**POLS 20. The Politics and Policies of Cities (3)**
**Lec-3** P/NP available
An analysis of the problems, politics, and policies of American city governments, with special emphasis on the San Francisco Bay Area. CSU
POLS 22. Environmental Politics and Policy (3)
Lec-3, field trips  P/NP available
This course examines the politics of environmental issues, including but not limited to, pollution, water quality, air quality, global climate, natural resources, endangered species, environmental justice, and development. The course focuses on the political, economic and social origins of environmental change and degradation and the policy and political activities of environmental movements, government agencies, interest groups, and political parties. The course examines the environmental politics of the United States, other nations comparatively and the global community as a whole, and also examines the theoretical underpinnings of ecological destruction and protection (ecopolitical thought). CSU/UC

POLS 25. Political Action (3)
Lec-3, field trips  P/NP available
A practical guide to citizen political participation. Emphasis on institutional possibilities of change as well as the development of political strategies. Practical political experience encouraged. CSU

POLS 30. Voter Education & Mobilization (3)
Lec-3  P/NP available
An introduction to non-partisan voter education and mobilization. Students research electoral issues and work on strategies to educate and mobilize fellow CCSF students to vote and participate in the political process. Practical hands-on civic engagement activities and critical reflections on voting and democracy are emphasized. CSU

POLS 35. Governments and Politics of East Asia (3)
Lec-3  P/NP available
A survey of political developments and changes in East Asia, with emphasis on the governments and politics of China and Japan. The role of other world powers in this region, including the Soviet Union and the United States. CSU/UC

POLS 41. Independent Studies in Political Science (1)
Lec-1
An individualized reading or research program. CSU (UC upon review)

POLS 42A-42B-42C-42D. Discussions in Political Science (1-1-1-1)
Lec-1  P/NP available
Lectures on varied subjects given by political scientists and practicing politicians (national, state and local). Seminar-type discussions and occasional field trips. CSU (UC upon review)

POLS 43. The Constitution and Individual Rights (3)
Lec-3, field trips  P/NP available
A citizen's civil and criminal rights under the Constitution. Analysis of leading cases and legal principles which protect individual freedom. CSU/UC

POLS 45. Government and Politics of Middle East (3)
Lec-3  P/NP available
A survey of political developments and changes in the Middle East, with emphasis on the Arab states and Israel. CSU/UC

POLS 46. American Political Systems (3)
Lec-3, field trips  P/NP available
A survey of the relevant aspects of events and policies that have brought about change at all levels of government on the American scene—local, state, and national. Emphasis on basic political problems and on an analysis and evaluation of the solutions offered historically, with consideration of relationships between California and the United States, as well as consideration of local government in the San Francisco Bay Area. CSU/UC

POLS 47. Government and Politics of Southeast Asia (3)
Lec-3  P/NP available
A survey of political developments and changes in Southeast Asian states (the Philippines, Indonesia, Malaysia, Thailand, and Singapore) and such other states as Viet Nam, Laos, Cambodia, and Burma. Internal politics and international relations. CSU/UC

POLS 48. Government and Politics of Africa (3)
Lec-3  P/NP available
A survey of political development and change in contemporary Africa, with emphasis on Africa south of the Sahara. Major factors shaping African politics and institutions; ideology, nationalism, colonialism, political groups, and nation-building. CSU/UC

POLS 51-52-53. Selected Topics in Political Science (1-2-3)
Lec-1,2,3  P/NP available
Selected topics in political science will be explored through lectures, discussions, film, video, and/or television leading to a critical analysis and understanding of the topic under discussion. CSU

POLS 53A. "Tales of the City": San Francisco Government and Politics

Psychology
Office: Batmale 354
Phone Number: (415) 239-3433
Web Site: www.ccsf.edu/behavior

Announcement of Curricula

Psychology Major (AA-T)

Associate in Arts in Psychology for Transfer. This program is designed to prepare students who wish to transfer to pursue studies in psychology. It is STRONGLY advised that potential majors meet with the Behavioral Sciences Chair to discuss educational goals, course options and transfer issues.

Learning Outcomes
Upon completion of this degree, students will be able to:

- Contrast the major contemporary theoretical perspectives in psychology
- Identify research methods and statistical methods appropriate to psychology
- Recognize the interactions between biological and environmental forces and interpret how these relationships help explain cognition, affect and behavior
- Analyze the major subfields of psychology and assess their contributions to the understanding of cognition, affect and behavior

Courses Required for the Major in Psychology

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYC 1 General Psychology</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 1B Biological Psychology</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 2 Research Methods</td>
<td>3</td>
</tr>
</tbody>
</table>
Announcement of Courses

Credit, Degree Applicable Courses:

PSYC 1. General Psychology (3)
Lec-3 P/NP available
**ADVICE: ENGL 92 or ESL 160 or Placement in ENGL 93 or 94; or ESL 170**
A scientific approach to the study of behavior and mental processes designed for both majors and non-majors. Topics include: research methods, physiology of behavior, sensory systems, learning, memory, life-span development, motivation, emotion, personality theories, social psychology, abnormal psychology and psychotherapy. CSU/UC/C-ID PSY 110

PSYC 1B. Biological Psychology (3)
Lec-3 P/NP available
**PREREQ: PSYC 1**
Exploration of the interaction between behavior and biological factors. Includes heritability of behavior, the nervous system, the endocrine system, the senses, and the biological factors underlying behaviors such as learning and memory, food and sexual motivation, speech, emotions, altered states of consciousness, psychosis, and depression. CSU/UC/C-ID PSY 150

PSYC 2. Research Methods (3)
Lec-3 P/NP available
**PREREQ: PSYC 1; and PSYC 5 or MATH 80**
*Primarily for psychology majors, related majors, and students interested in the scientific method.*
Introduction to experimental method and design in behavioral science. Designed to develop an understanding of the concepts and logic of experimentation and to develop clear and concise thinking for the evaluation and criticism of information regarding human behavior. CSU/UC

PSYC 4. Forensic Psychology (3)
Lec-3 P/NP available
**ADVICE: PSYC 1; and ENGL 92 or ESL 160 (or Placement in ENGL 93 or ESL 170)**
Examination of the interface between psychology and law. Many legal issues involve questions that are psychological in nature. Controversies which lie at the intersection of psychology and law are examined, e.g. jury selection, false confessions, polygraph tests, eyewitness testimony, repressed memories, insanity defense, and forensic psychological evaluations. CSU

PSYC 5. Statistics for Behavioral Sciences (4)
Lec-5 P/NP available
**PREREQ: MATH 60 or 92 OR DEMONSTRATION OF THEIR EXIT SKILLS**
**ADVICE: ENGL 92 or ESL 160 or Placement in ENGL 93 or 94; or ESL 170**
Primarily for prospective majors and related majors.
An introduction to data analysis including measurement and research design. Intended for general education and prospective behavioral science majors. Students will examine, interpret, and apply both descriptive (e.g., organization of data, central tendency and variability, linear regression) and inferential statistics (e.g., probability and sampling theory, hypothesis testing, and confidence intervals). CSU/UC

PSYC 9. Psychology of Stress (3)
Lec-3 P/NP available
Critical exploration of psychological research as it applies to understanding the causes, physiology, and consequences of stress. Emphasis is on practical applications for better managing stress through review of cognitive, communication, problem solving, healthy lifestyle and relaxation based coping strategies. CSU

PSYC 10. Abnormal Psychology (3)
Lec-3 P/NP available
**ADVICE: PSYC 1**
An examination of the major psychological disorders as described in the latest edition of *The Diagnostic and Statistical Manual of the American Psychiatric Association*. Diagnostic criteria will be described and explicated, and research, theory and clinical practice will be reviewed to improve understanding of the etiology and most promising treatments of the various disorders. CSU/UC/C-ID PSY 110

PSYC 11. Theories of Personality (3)
Lec-3 P/NP available
**ADVICE: PSYC 1**
An introduction to the theoretical constructs describing personality, including the ways in which personality is explained, the dynamics that govern human behavior, and the ways in which personality develops. Current research and approaches to understanding personality and consideration of the contributions and limitations of each theory will also be a focus. CSU/UC

PSYC 14. Psychology of Shyness and Self-Esteem (1)
Lec-1 P/NP available
An examination of psychological theories and research on the development of shyness and self-esteem. Techniques for reducing shyness and raising self-esteem. CSU

PSYC 15. Assertive Behavior (1)
Lec-1 P/NP available
Emphasis on cognitive-behavioral theories and communication skills and their application to assertive behavior. Assertiveness techniques in a variety of situations, including communication with family, friends, and at the workplace are a major focus. CSU
PSYC 17. Psychology of Eating, Food, and Weight (1)
Lec-1  P/NP available
An examination of psychological theories and research on eating, weight and food. Includes examination of eating disorders, dieting, the diet industry, and weight management. CSU

PSYC 21. Lifespan Development (3)
Lec-3  P/NP available
_Advise: PSYC 1, ENGL 93 or placement in ENGL 96_
The multidisciplinary study of human development from conception through death. Examination of current research and theories with an emphasis on the interplay of nature and nurture throughout the lifespan and the biological, psychological, sociocultural, and environmental forces that impact development. CSU/UC/C-ID PSY 180

PSYC 23. Psychology of Race and Ethnic Relations (3)
Lec-3  P/NP available
Examination of race as a social construction, attitude formation, social psychological principles, forms of racism and discrimination, privilege and social power, psychological response to racism, and racial identity development. Psycho-historical analysis of the experiences and contributions of African Americans, Asian Americans, Latino(a) Americans, and Native Americans. Completion of a research project. CSU/UC

PSYC 25. Psychology of Gender (3)
Lec-3  P/NP available
This course is an analysis of sex similarities and differences and the gender continuum, including transgender, in individuals from various psychological, physiological, and sociocultural perspectives. It is an exploration of psychological topics, including the impact of sex and gender on development, emotions, relationships, achievement, and attitudes. CSU/UC

PSYC 26. Applied Psychology (3)
Lec-3  P/NP available
Critical exploration of psychological theory, research findings, and concepts relevant to human adjustment. Emphasis on the proactive and practical application of psychology to improve self awareness, facilitate personal growth, and enhance social relationships. CSU

PSYC 40. Child and Adolescent Psychology (3)
Lec-3  P/NP available
_Advise: PSYC 1_
Introduction to the psychology of children from conception through adolescence. Examination of research and theory, emphasizing how child development isenchanted or restricted. Emotional, social, and cognitive development are discussed, including the role of heredity and the environment. Practical information is given for parents, teachers, counselors, and other concerned adults. CSU/UC

Public Safety
See listings at Administration of Justice and Fire Science Department.

Radiologic Sciences
Office: Cloud 239
Phone Number: (415) 239-3431
Web Site: www.ccsf.edu/dmi

Mission Statement
Mission Statement of the Radiologic Sciences Department. The Radiologic Sciences Department at City College of San Francisco is dedicated to the advancement of the allied health care industry by providing educational opportunities that foster ethical and compassionate behavior, professional development, and a respect for human diversity. The accomplishment of this mission is embedded in our values through the department's acronym: CCSF RADSCI

Our Values:
Compassionate patient care
Continued pursuit of learning
Sensitivity to the learning needs of our students
Fair and equitable treatment for all
Respect for all
Accountability and ethical behavior
Diversity consciousness
Service to the community and the advancement of the Radiologic Technology Profession
Commitment to excellence in the Radiologic Technology Profession
Integrity of the Education

Our Vision
To provide superior didactic and clinical educational opportunities that ensure CCSF RadSci graduates are among the highest qualified radiologic technologists in the industry.

How we Achieve our Vision
Currency in Didactic Instruction. When our teachers speak from experience, it is current. Most of them continue to practice in the field, and are lecturing on their work experiences that occurred in the very recent past. Many faculty members serve on various statewide and national committees that determine the future of Radiologic Technology practice, and hold multiple degrees and credentials.

Superior Laboratory Facilities. The CCSF RadSci Department strives to maintain equipment that reflects what is currently used in the clinical setting. This ensures that students develop strong skills that accompany them into the medical environment.

Strong Clinical Affiliates. Both programs in the CCSF RadSci Department are affiliated with two of the mostly highly rated hospitals in the country: UCSF Medical Center, and California Pacific Medical Center which provides innovative radiation oncology equipment and treatment procedures. The diagnostic Medical Imaging Program is affiliated with one of the leading Level I trauma centers in the nation: San Francisco General Hospital. Our affiliates are set in a dynamic urban environment, which provides experience with a diverse patient and professional population.

This combination of excellence in didactic and clinical instruction opportunities ensures that CCSF RadSci Department will fulfill its vision, now and in the future.

Diagnostic Medical Imaging
Mission Statement, Goals and Student Learning Outcomes
The Radiologic Sciences Department at City College of San Francisco is dedicated to the advancement of the allied health care industry by providing educational opportunities that foster ethical and compassionate behavior, professional development, and a respect for human diversity.

Upon graduation from the City College of San Francisco Diagnostic Medical Imaging Program, students will have demonstrated proficiency with the following goals and outcomes:

Goal 1. Communication-Students will display effective communication skills as appropriate to a given situation or encounter.
• Communicate effectively with patients, clinical staff, instructors, and fellow students.
• Display competence in verbal and written communication.
• Respond appropriately to requests from patients, clinical staff, instructors, and fellow students.

Goal 2. Critical Thinking/Problem Solving-Students will demonstrate evidence of critical thinking and problem solving methods as appropriate to a given situation or encounter.
  • Describe/demonstrate how to produce a diagnostic quality radiograph when one or more exposure parameters are changed.
  • Describe/demonstrate appropriate care and imaging techniques of the injured or critically ill patient.
  • Evaluate a radiograph for diagnostic quality.
  • Demonstrate appropriate patient care skills for patients of different age groups and cultural backgrounds.

Goal 3. Clinical Performance-Students will effectively apply technical expertise, patient care skills, and radiation protection measures to ensure optimal outcomes when conducting diagnostic radiologic examinations.
  • Demonstrate safe and effective radiation protection measures.
  • Deliver efficient and safe general patient care skills.
  • Produce diagnostic quality radiographs.
  • Demonstrate safe operation of the radiographic equipment.
  • Perform radiographic procedures efficiently.

Goal 4. Professional Development-Students will exhibit professionalism in their practice of diagnostic medical imaging.
  • Employ a professional work ethic in the classroom and clinical setting.
  • Exhibit reliability in the classroom and clinical setting.
  • Demonstrate initiative in the performance of classroom and clinical duties.
  • Function effectively as a team player.

Goal 5. Program Effectiveness-Graduates will be prepared for successful and productive careers as a Diagnostic Medical Imaging Technologist.
  • CCSF graduates, who wish to do so, find employment in the DMI discipline within 6 months of graduation.
  • Graduates indicate positively that the program prepared them for a career in Diagnostic Medical Imaging.
  • The program completion rate does not fall below 70%.
  • Graduates pass the ARRT examination on the first attempt.
  • Employers indicate satisfaction with the performance of CCSF graduates.

Announcement of Curricula
Degree Curricula
The curriculum in Diagnostic Medical Imaging is approved by the Joint Review Committee on Education in Radiologic Technology, located at 20 N. Wacker Drive, Suite 2850, Chicago, IL 60606-3182 Tel: (312) 704-5300, and by the California Department of Public Health.

The program Maintains an affiliation with multiple San Francisco hospital radiology departments for the purpose of clinical education.

For more information, please visit www.ccsf.edu/dmi

Consideration for Admission to the Curriculum. To be considered for admission to the curriculum, applicants must—

1. Have completed the following prerequisite courses within 7 years prior to application, with a grade of “C” or higher and overall GPA of 2.5 or higher:
   a.) MATH 40 or 840 (Elementary Algebra) or placement in MATH 60 or 860
   b.) CHEM 32 or CHEM 40
   c.) PHYC 10 and 10L
   d.) ANAT 25
   e.) ENGL 93 or 94 (or placement in ENGL 96); or ESL 160 (or placement in ESL 170)
   f.) PHYS 12

2. Complete 40 hours of volunteer service in a hospital Radiology Department. Consult the Diagnostic Medical Imaging (DMI) application (available at www.ccsf.edu/dmi) for more details about this requirement.

3. Completion of MATH 60 or MATH 860 and ENGL 1A are strongly recommended prior to entering the program.

4. Have at least a 2.0 cumulative grade point average in college work previously completed.

5. Be in good physical and mental health.

6. File with the Office of Admissions and Records a complete application for admission to City College (for dates, see in this catalog the “Calendar of Instruction”).

7. Complete City College of San Francisco Mathematics/Algebra and English placement examinations, or the equivalent thereof.

8. Submit an application to the Radiologic Sciences Office. Contact Radiologic Sciences Department for filing deadline dates. (Applications are available at www.ccsf.edu/dmi).

Health Clearance Requirements. In addition to academic requirements and orientation, enrollment in the Diagnostic Medical Imaging Program is subject to evidence of immunizations per the San Francisco Health Department. In addition, upon program admission, the student must satisfactorily complete a physical examination given by an appropriately licensed health care provider.

Background Check Requirement. A background check will be required by the clinical affiliates. The cost for this will be incurred by the student. Students must complete this background check upon admission to the program.

Drug Screening. Drug screening is required by the clinical affiliate. The student is responsible for the cost.

Program Orientation. Upon admission, students are required to attend two scheduled program orientations.

Instruction in the Major. The course of study includes instruction in radiologic theory and techniques, pathology, patient care, radiation protection, anatomy, physics and physiology. The curriculum is 30 months in length, including two academic years, with a summer session between the first and second semesters, and ending with a clinical internship of 32 weeks. Clinical education in diagnostic medical imaging is taught in the radiology departments of the hospitals affiliated with the College in offering the program. Members of the professional and technical staffs of these departments serve as instructors.
Upon satisfactory completion of the Program and college graduation requirements, the student is awarded the Associate in Science degree. Upon satisfactory completion of the clinical internship in an affiliate hospital, the student is eligible for the ARRT national examination for certification.

Scholarship Requirements and Basis for Disqualification. A final grade lower than C (75%) in any of the required Diagnostic Medical Imaging courses, or a grade point average below 2.0 will be cause for dismissal from the Diagnostic Medical Imaging Program. Students may also be disqualified prior to the end of the semester should they receive a grade lower than C in their clinical performance. Students may be suspended or dismissed for excessive absences either on campus or at the clinical affiliate, according to the attendance policy, or for other reasons consistent with College policy, as set forth in the Catalogue under General Information.

Readmission of Students Disqualified Because of Unsatisfactory Scholarship. Students who have been disqualified from continuing in the curriculum because they received a final grade lower than C and who desire to be readmitted must submit a new application to the Radiologic Sciences Department Review Committee. As Part of the procedure, the Committee will meet with the applicant prior to making a decision. The Committee will base its recommendations on the current policy of the Diagnostic Medical Imaging Program, which is available from the department office.

Associate in Science Degree. The course of study is designed so that students may satisfy the requirements for graduation from the College. Students who these requirements, complete the required courses in the curriculum, including the 32-week clinical internship, with final grades of C or higher, will receive A.S. degree with a Major in Diagnostic Medical Imaging.

State and National Certification. State certification is required for employment in California. Graduates are eligible for and must take the certification examination given by the American Registry of Radiologic Technologists (ARRT), a national certification board recognized by the Joint Review Committee for Education in Radiologic Technology. All employers require national certification. Upon notification of successful ARRT results, the graduate must apply for certification from the state of California.

Purchase of Uniforms and Clinical Supplies. Students are required to purchase the uniforms required in the courses in radiologic technology. The cost of uniforms and other supplies is approximately $500.

Sequence of Courses. The following sequence of courses is for students starting in the fall. Sequence changes for students starting in the spring. Contact the Radiologic Technology office for further information.

### Diagnostic Medical Imaging Major (AS)

#### Courses Required for the Major in Diagnostic Medical Imaging

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>First Semester</strong></td>
<td></td>
</tr>
<tr>
<td>DMI 49 Intro to Radiologic Technology</td>
<td>3</td>
</tr>
<tr>
<td>DMI 50A Intro to Med Radiography</td>
<td>3</td>
</tr>
<tr>
<td>DMI 52 Patient Care and Staff Relationships</td>
<td>2</td>
</tr>
<tr>
<td>SPCH 11, 12 or 1A Basic Public Speaking</td>
<td>2</td>
</tr>
<tr>
<td>or Fundamentals of Oral Communication</td>
<td>2</td>
</tr>
<tr>
<td>or Elements of Public Speaking</td>
<td>2</td>
</tr>
<tr>
<td><strong>Second Semester</strong></td>
<td></td>
</tr>
<tr>
<td>DMI 50B Radiologic Phyc and Equip</td>
<td>2</td>
</tr>
<tr>
<td>DMI 51A Radiographic Anat and Position</td>
<td>4</td>
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#### Summer Session

<table>
<thead>
<tr>
<th>Course</th>
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<tbody>
<tr>
<td>DMI 51B Radiographic Exposure Factors</td>
<td>2</td>
</tr>
<tr>
<td>PSYC 1 or 26 Gen Psyc or Applied Psyc</td>
<td>3</td>
</tr>
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<td>Additional graduation requirements</td>
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#### Summer Session

<table>
<thead>
<tr>
<th>Course</th>
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<tbody>
<tr>
<td>DMI 62 (seven weeks) Clinical Educ in DMI I</td>
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#### Third Semester

<table>
<thead>
<tr>
<th>Course</th>
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<tr>
<td>DMI 55 Skull Radiography and Resrch Project</td>
<td>2</td>
</tr>
<tr>
<td>DMI 56 Pathology</td>
<td>2</td>
</tr>
<tr>
<td>DMI 63 Inter Diagnostic Proc</td>
<td>2</td>
</tr>
<tr>
<td>DMI 64 Clin Educ in DMI II</td>
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<td>Additional graduation requirements</td>
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#### Fourth Semester

<table>
<thead>
<tr>
<th>Course</th>
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</tr>
</thead>
<tbody>
<tr>
<td>DMI 57 Multiplanar Imaging</td>
<td>3</td>
</tr>
<tr>
<td>DMI 54 Vascular and Interven Proc</td>
<td>2</td>
</tr>
<tr>
<td>DMI 65 Adv Imaging Proc</td>
<td>2</td>
</tr>
<tr>
<td>DMI 66 Clinical Educ in DMI III</td>
<td>2</td>
</tr>
<tr>
<td>DMI 70 Radiation Protection</td>
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<tr>
<td>Additional graduation requirements</td>
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<td>(All General Education graduation requirements should be completed by the end of this semester.)</td>
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#### Internship

<table>
<thead>
<tr>
<th>Course</th>
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<tbody>
<tr>
<td>DMI 68 Clinical Educ in DMI IV</td>
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<tr>
<td>DMI 69 Clinical Educ Internship Summer Bridge</td>
<td>4</td>
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<tr>
<td>DMI 100 Registry Examination and Career</td>
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<td>Total Units</td>
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#### Recommended Additional Coursework:

Courses in keyboarding, computer science, HLTH 10, 25, 27, 33, 53, 64, and 67*

* These health courses teach current health issues faced by the local patient population.

### Announcement of Courses

#### Credit, Degree Applicable Courses

**DMI 49. Introduction to Radiologic Technology (3)**<br>Lec-3, field trips<br>Open to all students who may be interested in a career in Radiologic Technology and required of students accepted into either the Diagnostic Medical Imaging or the Radiation Therapy Technology programs.<br>History of radiologic technology, imaging equipment, procedures, patient care, radiation safety, ethics, and professional organizations.<br>Applications of medical terminology. CSU

**DMI 50A. Introduction to Medical Radiography (3)**<br>Lec-2, lab-3, field trips<br>Prereq.: Admission to the Curriculum in Radiologic Technology; Completion/concurrent enrollment in DMI 49 Introduction to radiation physics, X-ray equipment, and imaging factors governing film exposure, processing and quality. CSU

**DMI 50B. Radiologic Physics and Equipment (2)**<br>Lec-2, lab-2<br>Prereq.: Completion/concurrent enrollment in DMI 50A Physics as applied to radiography, fluoroscopy, and radiotherapy. X-ray circuits. The interaction of ionizing radiation with matter. Radiation protection. Equipment used in radiology. CSU

**DMI 51A. Radiographic Anatomy and Positioning (4)**<br>Lec-4, lab-3, field trips<br>Intended to be taken concurrently with DMI 50B and 51B. Anatomy and positioning of the axial and appendicular skeleton
(except skull) and internal organs. Preliminary steps in radiography, radiation protection, patient relations, and universal precautions as it pertains to radiographic examinations. CSU

DMI 51B. Radiographic Exposure Factors (2)
Lec-2, lab-1
Coreq.: DMI 50B and 51A
Theoretical and practical application of exposure factors. Technical requirements in order to both produce and critique radiographic images for optimum diagnostic quality. CSU

DMI 52. Patient Care and Staff Relationships (2)
Lec-3
Coreq.: DMI 50A

Students with prior clinical experience admitted to the Diagnostic Medical Imaging or Radiation Therapy Technology Program may challenge this course.

Introduction to the organization of healthcare systems in this country. Communication, ethical and interpersonal responsibilities of radiologic technologists. Analysis of illness and therapies from the patient’s point of view. Patient assessment, care and management. CSU

Formerly RADL 52

DMI 54. Vascular and Interventional Procedures (2)
Lec-2
Prereq.: DMI 63; completion/concurrent enrollment in DMI 64 or 66
Coreq.: DMI 65 and 66
Emphasis on vascular imaging trends, related equipment considerations, patient care, and interventional radiography. CSU

DMI 55. Skull Radiography and Research Project (2)
Lec-2, field trips
Coreq.: DMI 62, 64, and 63
Anatomy of the skull and facial bones, topical landmarks, radiographic positioning and technical factors, radiographic equipment and usage, pathological conditions. CSU

DMI 56. Pathology (2)
Lec-2
Coreq.: DMI 62, 64 or 66
Discussion and illustration of normal variations and abnormal changes due to disease as manifested through diagnostic imaging procedures. Description of modifications of standard and special techniques necessary to obtain adequate diagnostic imaging studies. CSU

DMI 57. Multiplanar Imaging in Radiologic Sciences (3)
Lec-3
Prereq.: ANAT 25
Coreq.: DMI 63
Anatomy from multiplanar perspectives as visualized on computed tomography (CT), PET, and MRI. Imaging protocols and treatment planning. Comparative analysis of CT, PET, and MRI.

DMI 62. Clinical Education in DMI I (2)
Conf-16
Prereq.: SPCH 11 or 12 or 1A; and EMT 14
First semester of clinical education experience in a hospital radiology department. CSU

DMI 63. Intermediate Diagnostic Procedures (2)
Lec-2, lab-1
Coreq.: DMI 62, 64, or 66
Basic theories underlying many diagnostic imaging procedures. Relationship of clinical indications, special precautions, quality assurance, equipment, and positioning. Introduction to the use of computers in radiology. CSU

DMI 64. Clinical Education in Diagnostic Medical Imaging II (2)
Conf-16
Prereq.: DMI 62
Second semester of clinical education in a hospital radiology department. CSU

DMI 65. Advanced Imaging Procedures (2)
Lec-2
Prereq.: Completion/concurrent enrollment in DMI 64 or 66
Fundamentals of Computed Tomography and Magnetic Resonance Imaging. Emphasis on patient reassurance and professional conduct. CSU

DMI 66. Clinical Education in DMI III (2)
Conf-16
Prereq.: DMI 64
Third semester of clinical education in a newly assigned hospital radiology department. CSU

DMI 68. Clinical Education in Diagnostic Medical Imaging IV(6)
Conf-40
Prereq.: DMI 66
Clinical performance of internship objectives. Bi-weekly on-site rotating conferences by the faculty. CSU

DMI 69. Clinical Education Internship Summer Bridge (4)
Conf-40
Prereq.: DMI 66
Students commencing internships in the summer will take DMI 69 before 68.
Performance of clinical internship competencies. On-site meetings with CCSF faculty. CSU

DMI 70. Radiation Protection (2)
Lec-2, lab-1, field trips
Prereq.: DMI 50A
Methods of reducing radiation exposure to patients, and safe practices for protection of personnel. State and national regulations pertaining to the use of diagnostic radiography, and fluoroscopy. CSU

Formerly RADL 70

DMI 100. Registry Examination and Career (1)
Lec-1
Coreq.: DMI 68 or 69
Consolidation of Diagnostic Medical Imaging topics designed to prepare students for the certification examination in Radiography administered by the American Registry of Radiologic Technologists. CSU

DMI 120. Ultrasound Physics and Instrumentation (2)
Lec-2, field trips
Introduction to the physical principles of ultrasound. Analysis of the routine parameters of a diagnostic ultrasound beam; utilization of ultrasound scanners for the production of ultrasound waves used to interact with tissue; biological safety and risks. CSU

DMI 122. Sectional Anatomy for Sonographers (2)
Lec-2, lab-1, field trips
Introduction to the related anatomy and physiology of the abdomen and pelvis as it appears in sagittal, coronal, and transverse sections
Radiologic Sciences

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on ultrasound scans. Emphasis on normal anatomy as visualized on sonograms. CSU

DMI 123. OB/GYN Sonography (2)

Lec-2
Identification of sectional anatomy used in OB/GYN scanning, both normal and abnormal, as it appears in sagittal, coronal, and axial scans. Field trips as required. CSU

DMI 125. Ultrasound Clinical Education (6)

Lab-35

PREREQ.: HAVE COMPLETED AN ALLIED HEALTH PROGRAM WITH A DIRECT PATIENT-CARE COMPONENT
COREQ.: ENROLLMENT IN ULTRASOUND LECTURE COURSE.

Course is designed to give the student appropriate time in the clinical setting to become adept at scanning, while understanding the principles of quality assurance, patient care and the integration of clinical findings with patient history. CSU

Radiation Therapy Technology

Mission Statement, Goals and Student Learning Outcomes
The Radiologic Sciences Department at City College of San Francisco is dedicated to the advancement of the allied health care industry by providing educational opportunities that foster ethical and compassionate behavior, professional development, and a respect for human diversity.

Upon graduation from the City College of San Francisco Radiation Therapy Technology Program, students will have demonstrated proficiency with the following goals and outcomes:

Goal 1. Students will be competent in the delivery of Radiation Therapy treatments & simulation.

- Students will offer appropriate radiation, patient and radiation safety in a manner that is safe and effective.
- Students will demonstrate technical skills and knowledge to deliver a prescribed course of treatment adhering to acceptable departmental, institutional, governmental and professional standards.

Goal 2. Students will utilize critical thinking skills and apply knowledge in a changing clinical environment.

- Students will demonstrate the ability to develop and execute daily clinical practice plans while responding to new situations.
- Students will assess and manage radiation induced patient side effects and complications as part of the interdisciplinary management strategy.
- Students will recognize emergency situations and respond appropriately.

Goal 3. Students will effectively communicate using oral and written communication.

- Students will demonstrate the ability to use written communication skills.
- Students will demonstrate the ability to use appropriate oral communication skills.

Goal 4. Students will exhibit professionalism in their practice of radiation therapy.

- Students will employ a professional work ethic including reliability, initiative and attitudes congruent with the profession's standards and ethics.
- Students will function effectively applying concepts of teamwork.
- Students will demonstrate professional characteristics necessary to promote lifelong learning in radiation therapy and patient care.

Announcement of Curricula
Degree Curricula
The Radiation Therapist (R.T.T.) is an essential member of the team responsible for the treatment of malignant diseases. The Option in Radiation Therapy Technology is approved by the Joint Review Committee on Education in Radiologic Technology, located at 20 N. Wacker Drive, Suite 2850, Chicago, IL 60606-2901, Tel: (312) 704-5300, and by the California Department of Health, and is offered in affiliation with the Radiation Therapy Department of the University of California San Francisco Medical Center and several other Bay Area hospitals.

Consideration for Admission to the Curriculum. To be considered for admission to the curriculum, applicants must:

1. Have completed the following prerequisite courses within 7 years prior to application, with a grade of “C” or higher and overall GPA of 2.5 or higher:
   a.) MATH 40 or 840 (Elementary Algebra) or placement in MATH 60 or 860
   b.) CHEM 32 or CHEM 40
   c.) PHYC 10 and 10L
   d.) ENGL 93 or 94 (or placement in ENGL 96); or ESL 160 (or placement in ESL 170)
   e.) ANAT 25
   f.) PHYS 12
2. Have at least a 2.0 cumulative grade point average in college work previously completed.
3. Be in good physical and mental health.
4. File with the Office of Admissions and Records a completed application for admission to City College (for dates, see in this catalog the “Calendar of Instruction”).
5. Take the City College of San Francisco placement tests on the date or dates stated in the notice mailed by the College all applicants must take the City College placement tests (mathematics, English).
6. Submit an application to the Radiologic Sciences Office.
   For application deadline, contact Radiologic Sciences Department.
   (Applications are available at www.ccsf.edu/dmi)

Health Clearance Requirements. In addition to academic requirements and orientation, enrollment in the Radiation Therapy Technology Program is subject to evidence of immunizations per the San Francisco Health Department. In addition, the student must satisfactorily complete a physical examination given by an appropriately licensed health care provider.

Background Check Requirement. A background check will be required by the clinical affiliates. The cost for this will be incurred by the student. Students must complete this background check upon admission to the program.

Instruction in the Major. The Option in Radiation Therapy Technology is 24 months in length. The course of study includes
instruction in the following: radiation therapy techniques, radiobiology, oncology, treatment planning, radiation protection, anatomy, physics, patient care, film processing and exposure factors and simulation. Clinical education in Radiation Therapy Technology consists of courses spanning 3 semesters, plus two summer sessions and is taught in radiotherapy departments affiliated with the program. Members of the professional and technical staffs of those departments serve as instructors. Students have the opportunity to rotate to four different cancer centers. Since any clinical course may require attendance at a center away from San Francisco, students must have access to reliable personal transportation.

Program Orientation. Upon admission, students are required to attend two scheduled program orientations.

Drug Screening. Drug screening is required by the clinical affiliate. The student is responsible for the cost.

Scholarship Requirements and Basis for Disqualification. A final grade lower than C (75%) in any of the required Radiation Therapy Technology courses or a grade point average below 2.0 will be cause for dismissal from the Radiation Therapy Technology Program. Students may also be disqualified prior to the end of the semester should they receive a grade lower than C in their clinical performance. Students may be suspended or dismissed for excessive absences either on campus or at the clinical affiliate, according to the attendance policy, or for other reasons consistent with College policy, as set forth in the Catalogue under General Information.

Readmission of Students Disqualified Because of Unsatisfactory Scholarship. Students who have been disqualified from continuing in the curriculum because they received a final grade lower than C and who desire to be readmitted must submit a new application to the Radiologic Sciences Department Review Committee. As part of the procedure, the Committee will meet with the applicant prior to making a decision. The Committee will base its recommendations on the current policy of the Radiation Therapy Technology Program, which is available from the department office.

Associate in Science Degree. The course of study is designed so that students will satisfy the requirements for graduation from the College. Students who satisfy these requirements, complete the required courses in the curriculum with final grades of “C” or higher, and complete the internship, receive an A.S. degree with a major in Radiation Therapy Technology.

State and National Certification. Graduates of the Major in Radiation Therapy Technology are eligible to apply for the certification examination administered by the American Registry of Radiologic Technologists, State license is also required for employment in California.

Sequence of Courses. The following sequence of courses is for students starting in the fall. The sequence changes for students starting in the spring. Contact the Radiologic Sciences office for further information.

Radiation Therapy Technology Major (AS)

<table>
<thead>
<tr>
<th>Courses Required for the Major in Radiation Therapy Technology.</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>First Semester</td>
<td></td>
</tr>
<tr>
<td>DMI 49 Intro to Radiology</td>
<td>3</td>
</tr>
<tr>
<td>DMI 50A Intro to Med Radiography</td>
<td>3</td>
</tr>
<tr>
<td>DMI 52 Patient Care and Staff Relationships</td>
<td>2</td>
</tr>
<tr>
<td>DMI 57 Multi Planar Imaging</td>
<td>3</td>
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<td>Additional graduation requirements</td>
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<tr>
<td>Second Semester</td>
<td></td>
</tr>
<tr>
<td>DMI 50B Radiologic Physics and Equipment</td>
<td>2</td>
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<tr>
<td>RTT 61 Clinical Radiation Therapy I</td>
<td>3</td>
</tr>
<tr>
<td>RTT 71 Orientation to Radiation Therapy</td>
<td>4.5</td>
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Summer Session

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<tr>
<th>Courses</th>
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<tr>
<td>RTT 73 Patient Care in Radiation Therapy</td>
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<tr>
<td>RTT 72 Principles &amp; Practice of Radiation Therapy I</td>
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<tr>
<td>RTT 62 Clinical Radiation Therapy II</td>
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Third Semester (Fall)

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<tr>
<td>RTT 81 Radiation Therapy Physics</td>
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<tr>
<td>RTT 82 Applied Dosimetry</td>
<td>2</td>
</tr>
<tr>
<td>RTT 83 Radiation Oncology</td>
<td>3</td>
</tr>
<tr>
<td>RTT 63 Clinical Radiation Therapy III</td>
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Fourth Semester (Spring)

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<tr>
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<tr>
<td>RTT 84 Applied Dosimetry II</td>
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<tr>
<td>RTT 86 Principles of Radiation Therapy II</td>
<td>3</td>
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<tr>
<td>RTT 64 Clinical Radiation Therapy IV</td>
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Summer Session

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<tbody>
<tr>
<td>RTT 87 Principles of Radiation Therapy</td>
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<tr>
<td>RTT 65 Clinical Radiation Therapy V</td>
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<tr>
<td>Total Units</td>
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Recommended Additional Coursework: Courses in keyboarding, computer science, HLTH 10, 25, 27, 33, 53, 64, and 67*

*These health courses teach current health issues faced by the local patient population.

Announcement of Courses

Credit, Degree Applicable Courses:

RADL 107. Principles and Techniques of Fluoroscopy (3)
Lec-3, lab-var
Prereq: A California Certified Radiologic Technologist (CRT) or, course may be taken concurrently in the last two semesters of training in a Radiologic Technology Program
Fluoroscopy principles including anatomy of appropriate structures, image intensifiers, image recording systems, illumination and photometry, regulatory provisions, radiation safety and quality assurance. CSU

RTT 61. Clinical Radiation Therapy I (3)
Lab-16
Prereq: DMI 49, DMI 50A, DMI 52, EMT 14
Coreq: RTT 71, DMI 50B, DMI 57
Introduction to radiation therapy clinical education with extensive department orientation. Provides a foundation for the student's specific role in the clinical setting with an emphasis on teamwork, ethics, radiation protection, clinical assignments, patient-centered clinical practice and professional development. CSU

RTT 62. Clinical Radiation Therapy II (4)
Lab- 352 total hours
Prereq: RTT 61, RTT 71
Coreq: RTT 72, RTT 73
Beginning level practical clinical experience in a radiation therapy department. Observation and participation in simple treatment
set-ups with an emphasis on concepts of team practice, professional development and patient-centered care. Familiarity with a variety of equipment as used in simple treatment protocols. CSU

RTT 63. Clinical Radiation Therapy III (6)
Lab-32
Prereq.: RTT 62, RTT 72, RTT 73
Coreq.: RTT 81, RTT 82, RTT 83
Intermediate level practical experience in a radiation therapy department. Active participation in simple and complex treatment set-ups with an emphasis on concepts of team practice and professional development. Patient-centered care focusing on management of treatment side effects, pre-procedural education and nutrition. CSU

RTT 64. Clinical Radiation Therapy IV (6)
Lab-32
Prereq.: RTT 63, RTT 81, RTT 82, RTT 83
Coreq.: RTT 84, RTT 85, RTT 86
Clinical participation including advanced radiation therapy treatments with an introduction to simulation. Concepts of team practice, patient-centered clinical practice and professional development. Concentration on completing procedures under supervision, but without assistance, using independent judgment. CSU

RTT 65. Clinical Radiation Therapy V (4)
Lab-320 total hours
Prereq.: RTT 64, RTT 84, RTT 85, RTT 86
Coreq.: RTT 87
Professional level clinical participation in radiation therapy treatments and simulation. Students assist in treatment planning, perform simulations, and participate in radiation treatments. Concentration on completing procedures under supervision, but without assistance, using independent judgment at the level of an entry-level radiation therapist. CSU

RTT 71. Orientation to Radiation Therapy (4.5)
Lec-4, lab-2
Prereq.: DMI 49, DMI 50A, DMI 52
Coreq.: DMI 50B, RTT 61
Overview of foundations in radiation therapy and practitioner’s role in health care delivery system. Principles, practices and policies of educational program, health care organizations, principles of radiation and professional responsibilities of the radiation therapist; concepts related to disease neoplasia, and associated diseases in the radiation therapy patient. CSU

RTT 72. Principles of Radiation Therapy I (1.5)
Lec-24 total hours
Prereq.: RTT 71, RTT 61
Coreq.: RTT 73, RTT 62
Overview of equipment used in radiation therapy with a historical perspective. Emphasis on external beam radiotherapy machines; production and recording of radiographic images for patient simulation, treatment planning and treatment verification in radiation oncology are discussed. CSU

RTT 73. Patient Care in Radiation Therapy (1.5)
Lec-24 total hours
Prereq.: RTT 71, RTT 61
Coreq.: RTT 72, RTT 62
Content is designed to provide the student with foundation concepts and competencies in assessment and evaluation of the radiation therapy patient with an emphasis on cultural competency in health care. Psychological and physical needs and factors affecting treatment outcome will be presented and examined. Routine and emergency care procedures as encountered in the radiation therapy departments will be presented. CSU

RTT 81. Radiation Therapy Physics (3)
Lec-2, lab 3
Prereq.: RTT 72, RTT 73, RTT 62
Coreq.: RTT 63, RTT 82, RTT 83
Advanced radiation physics as applied to radiation therapy, detailed analysis of the structure of matter, properties of radiation, nuclear transformations, x-ray production and interactions of ionizing radiation. Treatment units used in external radiation therapy, measurement/quality of ionizing radiation produced, absorbed dose measurement, dose distribution, scatter analysis and QA. CSU

RTT 82. Applied Dosimetry I (2)
Lec-2
Prereq.: RTT 72, RTT 73, RTT 62
Coreq.: RTT 81, RTT 63
Study of factors that influence and govern clinical planning of radiation therapy treatments with an emphasis on hand dosimetric calculations of prescribed dose. Interrelationships of various factors used in treatment calculations will be explored and examined. CSU

RTT 83. Radiation Oncology (3)
Lec-3
Prereq.: RTT 72, RTT 73, RTT 62
Coreq.: RTT 81, RTT 82, RTT 63
Management of neoplastic disease using knowledge in arts and sciences, while promoting critical thinking and the basis of ethical clinical decision making. Epidemiology, etiology, detection, diagnosis, patient condition, treatment and prognosis of neoplastic disease as related to histology, anatomical site and patterns of spread. CSU

RTT 84. Applied Dosimetry II (2)
Lec-2
Prereq.: RTT 82, RTT 83, RTT 63
Coreq.: RTT 85, RTT 86, RTT 64
Advanced study of factors that influence and govern clinical planning of radiation therapy treatments with an emphasis on isodose characteristics, patient contouring, dosimetric calculations, compensation and clinical application of treatment beams. Optimal treatment planning is emphasized along with IMRT. Stereotactic Radiotherapy and emerging technologies. CSU

RTT 85. Radiation Biology (2)
Lec-2
Prereq.: RTT 81, RTT 82, RTT 83, RTT 63
Coreq.: RTT 84, RTT 86, RTT 64
Basic concepts and principles of radiation biology. Interactions of radiation with cells, tissues, systems, total body and resultant biophysical events. Discussion of theories and principles of tolerance dose, time-dose relationships, fractionation schemes and the relationship to the clinical practice of radiation therapy. CSU

RTT 86. Principles of Radiation Therapy II (3)
Lec-2, lab-3
Prereq.: RTT 81, RTT 82, RTT 83, RTT 63
Coreq.: RTT 84, RTT 85, RTT 64
Focus on complex technical skills required in radiation therapy clinical practice with emphasis on tumor volume localization and treatment
simulation. Radiation therapy operational issues, human resource concepts impacting the radiation therapist, in addition to billing and reimbursement issues pertinent to the radiation therapy department.

CSU

RTT 87. Principles of Radiation Therapy III (1.5)
Lec-24 total hrs
Prereq.: RTT 84, RTT 85, RTT 86, RTT 64
Coreq.: RTT 65
Consolidation of Radiation Therapy topics designed to prepare students for the certification examination administered by the American Registry of Radiologic Technologists. CSU

Announcement of Courses

Students of beginning Russian are directed to consider RUSS 1, 1A, and 10A.

Credit, Degree Applicable Courses:

RUSS 1. Elementary Russian (5)
Lec-5, lab-2
Advised: ENGL 93 or 94; or ESL 160 or 82 or Placement in ENGL 96 or ESL 170 or Any City College or University Foreign Language Course
Not recommended for students who are enrolled in or who have completed RUSS 21.
Beginner's course. Grammar, composition and reading. Practice in speaking and understanding Russian. CSU/UC

RUSS 1A-1B. Elementary Russian (3-3)
Lec-3, lab-1
Prereq.: For RUSS 1B: RUSS 1A or Demonstration of RUSS 1A Exit Skills
Advised: RUSS 1A: ENGL 93 or 94; or ESL 160 or 82 or Placement in ENGL 96 or ESL 170 or Any City College or University Foreign Language Course
RUSS 1A: Not recommended for students who are enrolled in or who have completed RUSS 21A-21B. RUSS 1A + 1B = RUSS 1
RUSS 1B: Not recommended for students who are enrolled in or who have completed RUSS 21B. RUSS 1A + 1B = RUSS 1
Grammar, composition and reading. Practice in speaking and understanding Russian. CSU/UC

RUSS 1A + 1B = RUSS 1

RUSS 2. Continuation of Elementary Russian (5)
Lec-5, lab-2
Prereq.: RUSS 1 or 1B or Demonstration of RUSS 1/1B Exit Skills
Not recommended for students who are enrolled in or who have completed RUSS 22
Second semester course: Continuation of elementary grammar, composition and reading; continued practice in conversation. CSU/UC

RUSS 2A-2B. Continuation of Elementary Russian (3-3)
Lec-3, lab-1
Prereq.: For RUSS 2A: RUSS 1 or 1B or Demonstration of RUSS 1/1B Exit Skills
Prereq.: For RUSS 2B: RUSS 2A or Demonstration of RUSS 2A Exit Skills
Not recommended for students who are enrolled in or who have completed RUSS 22A-22B. RUSS 2A+2B = RUSS 2
Continuation of elementary grammar, composition and reading; continued practice in conversation. CSU/UC

RUSS 3. Intermediate Russian (5)
Lec-5, lab-2
Prereq.: RUSS 2 or 2B or 22 or 22B or Demonstration of RUSS 2/2B or 22/22B Exit Skills
Review of grammar and composition; reading of cultural materials; continuing practice in the use and comprehension of spoken Russian. CSU/UC

Russian Certificate

The Certificate of Accomplishment in Russian provides students, prospective employers and others with documented evidence of persistence and academic accomplishment in the language. The certificate requires completion of 15 units in Russian. Each course must be completed with a final grade of "C" or higher or Pass. At least 9 units must be selected from the core list. The remaining 6 units may be selected from the elective units.

Learning Outcomes

Upon completion of this certificate, students will be able to:

- Understand the main points of standard speech on familiar matters encountered in work, school, leisure, etc.
- Understand texts which consist mainly of high-frequency everyday or job-related language.
- Deal with most situations likely to arise while traveling in an area where the language is spoken.
- Write simple connected text on topics which are familiar or of personal interest or personal letters describing experiences and impressions.

Courses Required for the Certificate of Accomplishment in Russian

Core Courses

<table>
<thead>
<tr>
<th>Units</th>
<th>Courses</th>
</tr>
</thead>
<tbody>
<tr>
<td>RUSS 1A Elementary Russian ..................5</td>
<td></td>
</tr>
<tr>
<td>RUSS 1A, 1B Elementary Russian ............. 3–3</td>
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</tr>
<tr>
<td>RUSS 2 Continuation of Elementary Russian ......5</td>
<td></td>
</tr>
<tr>
<td>RUSS 2A, 2B Cont of Elementary Russian ........3–3</td>
<td></td>
</tr>
<tr>
<td>RUSS 3 Intermediate Russian .................5</td>
<td></td>
</tr>
<tr>
<td>RUSS 3A, 3B Intermediate Russian ............3–3</td>
<td></td>
</tr>
<tr>
<td>RUSS 21 Elem Russian for Bilingual Students ....5</td>
<td></td>
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<tr>
<td>RUSS 21A, 21B Elem Russ for Biling Students ...3–3</td>
<td></td>
</tr>
<tr>
<td>RUSS 22 Cont of Elem Russ/Bilingual Students ..5</td>
<td></td>
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<tr>
<td>RUSS 22A, 22B Intermediate Russian ...........3–3</td>
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</table>

Elective Courses

<table>
<thead>
<tr>
<th>Units</th>
<th>Courses</th>
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<tbody>
<tr>
<td>RUSS 10A Beg Practical Spoken Russian .......3</td>
<td></td>
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<tr>
<td>RUSS 10B Cont of Beg Prac Spoken Russian ......3</td>
<td></td>
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<tr>
<td>RUSS 10C Intermed Conversational Russian ....3</td>
<td></td>
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<tr>
<td>RUSS 10D Cont of Inter Conversational Russian ..3</td>
<td></td>
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<tr>
<td>RUSS 39A-39B Russ Literature in Translation ....3–3</td>
<td></td>
</tr>
<tr>
<td>RUSS 41 Russian Culture and Civilization .......3</td>
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</tbody>
</table>

Total Units ............................. 15

Totals listed above are calculated to include RUSS 1A + 1B = RUSS 1 and RUSS 2A + 2B = RUSS 2. Other combinations of courses from the above lists do not constitute the Certificate of Accomplishment in Russian.

Announcement of Curricula

Russian Office: Art 202
Phone Number: (415) 239-3223
Web Site: www.ccsf.edu/orlang
RUSS 3A-3B. Intermediate Russian (3-3)
Lec-3, lab-1  P/NP available
Prereq.: FOR RUSS 3A: RUSS 2, 2B, or 22B or demonstration of RUSS 2/2B/22/22B exit skills
Prereq.: FOR RUSS 3B: RUSS 3A or demonstration of RUSS 3A exit skills
Review of grammar and composition; reading of cultural materials; continuing practice in the use and comprehension of spoken Russian. CSU/UC
RUSS 3A+3B = RUSS 3

Fourth Semester Russian
Available through the cross-registration policy of the San Francisco Consortium. See the Department Chair of the Foreign Language Department.

RUSS 10A. Beginning Practical Spoken Russian (3)
Lec-3, lab-1  P/NP available
Not recommended for native speakers of Russian
Beginner's course. Extensive oral training in Russian. Emphasis on practical vocabulary and idiom rather than on formal grammar. CSU

RUSS 10B. Continuation of Beginning Practical Spoken Russian (3)
Lec-3, lab-1  P/NP available
Prereq.: RUSS 10A OR demonstration of RUSS 10A exit skills
Native speaker of Russian are encouraged to speak with the instructor prior to enrolling.
Second semester course. Extensive oral training in Russian. Emphasis on practical vocabulary and idiom. CSU

RUSS 10C. Intermediate Conversational Russian (3)
Lec-3, lab-1  P/NP available
Prereq.: RUSS 10B OR demonstration of RUSS 10B exit skills
Native speaker of Russian are encouraged to speak with the instructor prior to enrolling.
Third semester course. Continuation of extensive oral training in Russian. Designed for students who wish to continue acquiring advanced skills of spoken Russian with a minimum of formal grammar. CSU

RUSS 10D. Continuation of Intermediate Conversational Russian (3)
Lec-3, lab-1  P/NP available
Prereq.: RUSS 10C OR demonstration of RUSS 10C exit skills
Native speaker of Russian are encouraged to speak with the instructor prior to enrolling.
Fourth semester course. Continuation of extensive oral training in Russian. Designed for students who wish to continue acquiring advanced skills of spoken Russian with a minimum of formal grammar. CSU

RUSS 15A-15B. Advanced Russian Conversation (3-3)
Lec-3, lab-1  P/NP available
Prereq.: RUSS 10C or 10D or 3 or 3B or demonstration of RUSS 10C, 10D, 3, or 3B exit skills
RUSS 15A is not prerequisite to RUSS 15B
Advanced conversation on Russian culture and civilization. CSU/UC

RUSS 21. Elementary Russian for Bilingual Students (5)
Lec-5  P/NP available
Prereq.: Oral fluency in Russian
Designed for bilingual students who are effective in oral communication in Russian, but who have little knowledge and/or no formal training in the written forms of the language. Not recommended for students who are enrolled in or who have completed RUSS 1.
Beginner's course for bilingual students; elementary grammar, compositions and reading; special emphasis on the written aspect of the language. CSU/UC

RUSS 21A-21B. Elementary Russian for Bilingual Students (3-3)
Lec-3  P/NP available
Prereq.: FOR RUSS 21A: ORAL FLUENCY IN RUSSIAN
Prereq.: FOR RUSS 21B: ORAL FLUENCY IN RUSSIAN or RUSS 21A
Designed for bilingual students who are effective in oral communication in Russian, but who have little knowledge and/or no formal training in the written forms of the language. Not recommended for students who are enrolled in or who have completed RUSS 1A+1B. RUSS 21A+21B = RUSS 21
Beginner's courses for bilingual students; elementary grammar, composition, and reading; special emphasis on the written aspect of the language. CSU/UC
RUSS 21A+21B = RUSS 21

RUSS 22. Continuation of Elementary Russian for Bilingual Students (5)
Lec-5  P/NP available
Prereq.: Oral fluency in Russian or RUSS 21 or 21B
Designed for bilingual students who are effective in oral communication in Russian, but who have little knowledge and/or no formal training in the written forms of the language. Not recommended for students who are enrolled in or who have completed RUSS 2.
Second level courses for bilingual students; continuation of elementary grammar, composition and reading; special emphasis on the written aspect of the language. CSU/UC

RUSS 22A-22B. Continuation of Elementary Russian for Bilingual Students (3-3)
Lec-3  P/NP available
Prereq.: FOR RUSS 22A: ORAL FLUENCY IN RUSSIAN or RUSS 21 or 21B
Prereq.: FOR RUSS 22B: ORAL FLUENCY IN RUSSIAN or RUSS 22A
RUSS 22A: Designed for bilingual students who are effective in oral communication in Russian within their communities, but who have little and/or no formal training in the written forms of the language. Not recommended for students who are enrolled in or who have completed RUSS 2 or 2A+2B.
RUSS 22B: Designed for bilingual students who are effective in oral communication in Russian, but who have little knowledge and/or no formal training in the written forms of the language. Not recommended for students who are enrolled in or who have completed RUSS 2 or 2A+2B. RUSS 22A+22B = RUSS 22
Second level courses for bilingual students; continuation of elementary grammar, composition and reading; special emphasis on the written aspect of the language. CSU/UC
RUSS 22A+22B = RUSS 22

RUSS 39A-39B. Russian Literature in Translation (3-3)
Lec-3  P/NP available
Advise: ENGL 96 or placement in ENGL 1A
RUSS 39A is NOT PREREQUISITE TO RUSS 39B
No knowledge of Russian required
Reading and discussion of Russian literature in English translation. CSU/UC

RUSS 39A. Russian literature and selected authors of the twelfth to nineteenth centuries, with main emphasis on the nineteenth century.
RUSS 39B. Russian literature and selected authors of the twentieth century.

RUSS 41. Russian Culture and Civilization (3)
Lec-3 
P/NP available

**Announce: Eligible for ENGL 1A**
No knowledge of Russian required.

A consideration of the major achievements of Russian culture as reflected in language, history, literature, the arts, philosophy, religion and daily life. CSU/UC.

### Sociology

**Office:** Batmale 354  
**Phone Number:** (415) 239-3433  
**Web Site:** www.ccsf.edu/behavior

#### Sociology Major (AA-T)

**Associate of Arts in Sociology Transfer.** The program is designed to prepare students who wish to transfer to pursue studies in sociology. It is STRONGLY advised that potential majors meet with the Behavioral Sciences Chair to discuss educational goals, course options and transfer issues.

#### Learning Outcomes

Upon completion of this degree, students will be able to:

- Contrast the major contemporary theoretical perspectives in sociology to explain culture and social structure
- Identify and apply research methods and statistical methods appropriate to sociology
- Apply the sociological perspective and theories to contemporary issues and analyze social problems, political decisions and actions directed toward social and public policy
- Apply sociological principles and theories to everyday interactions with people from diverse backgrounds

### Courses Required for the Major in Sociology

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOC 1 Introduction to Sociology</td>
<td>3</td>
</tr>
<tr>
<td>SOC 3 Social Problems</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 5 Statistics for Behavioral Sciences or ECON 5 Introductory Statistics or MATH 80 Probability and Statistics</td>
<td>4</td>
</tr>
</tbody>
</table>

#### Choose TWO classes from the following options:

- SOC 2 Social Deviance & Social Issues                                | 3     |
- SOC 25 Sex/Gender in American Society                               | 3     |
- SOC 30 Social Psychology                                            | 3     |
- SOC 35 Sex, Marriage and Family                                      | 3     |
- PSYC 23 Psychology of Race and Ethnic Relations                     | 3     |

#### Choose ONE class from the following options:

- PSYC 1 Introduction to Psychology                                   | 3     |
- ANTH 3 Introduction to Social and Cultural Anthropology             | 3     |
- ANTH 3AC Introduction to Cultural Anthropology:
  - Focus on American Culture                                          | 3     |
- POLS 1 American Government                                           | 3     |
- IDST 17 Human Sexuality                                             | 3     |

**Total**                                                               **19**

### Announcement of Courses

**Credit, Degree Applicable Courses:**

**SOC 1. Introduction to Sociology (3)**
Lec-3 
P/NP available

Announce: ENGL 92 or ESL 160 or Placement in ENGL 93 or ESL 170

Designed for general education or those students majoring in one of the behavioral sciences. Introduction to human interaction from the sociological perspective and through the utilization of sociological concepts, theories and principles. Topics include culture, socialization, organizations, deviance, stratification, institutions, population, and social change. CSU/UC/C-ID SOCI 110

**SOC 2. Social Deviance and Social Issues (3)**
Lec-3 
P/NP available

The study of the nature of deviance, with special attention to the theories that underly its definition, as well as the social practices that are derived from them. Analyses range from social psychological processes to the structure of social institutions (such as family, business, government, religion and law). CSU/UC

**SOC 3. Social Problems (3)**
Lec-3 
P/NP Available

Critical exploration of sociological research and thinking about contemporary social problems, including the types and causes of discrimination, as well inequalities in society. Using a variety of sociological perspectives, this course explores the causes and consequences of social problems on individuals and societies, and the methods for social change and problem solutions. CSU/UC/C-ID SOCI 115

**SOC 21. Introduction to Research Methods (3)**
Lec-3 
P/NP Available

Prereq: SOC 1

Study of the fundamental elements of empirical research and the variety of ways in which sociology applies them. Attention to the logic between theory, concept, hypothesis, and variable and the relationship between population, sample and data. CSU/C-ID SOCI 120

**SOC 25. Sex and Gender in American Society (3)**
Lec-3 
P/NP available

This course explores historical and systemic (institutional) sex-and gender-based inequalities in the U.S. and abroad. Emphasis on differences between sex, gender, and sexual orientation/expression from multiple sociological perspectives, the contemporary status of American women, and the strategies, policies, and laws necessary to eliminate sexism. CSU/UC

**SOC 30. Social Psychology (3)**
Lec-3 
P/NP available

The dynamics of human behavior from the perspective of social psychology, emphasizing the social-psychological orientations of contemporary sociology. Investigation of interaction processes in the person-environment relationship. Topics such as communication, socialization, role taking, self-identity, personal organization, and social structure. CSU/UC

**SOC 35. Sex, Marriage, and Family Relationships (3)**
Lec-3 
P/NP available

A cross-cultural and cross-social study of family relationships, their development and diversity. Focus on family structure and on the functions of family relations, both contemporary and historical, in such areas as sex, reproduction, child-rearing, economics and social support; family problems and marital dissolution. CSU/UC/C-ID SOCI 130
**Spanish**
Office: Art 202  
Phone Number: (415) 239-3223  
Web Site: www.ccsf.edu/forlang

**Announcement of Curricula**

**Spanish Major (AA)**

**Program Information.** The Spanish program provides instruction in developing a student's ability to communicate in Spanish, both written and oral, through the intermediate level and to gain a knowledge of Hispanic cultures throughout the world. The program is designed to meet transfer goals as well as personal development and career growth. Students must complete the curriculum with final grades of C or higher in their major preparation.

**Degree Curriculum.** The Degree Curriculum in Spanish is a two-year course of study designed to build a strong language foundation as well as expose students to Hispanic cultural content and some literature. Students who complete the curriculum are better prepared to transfer to the CSU and UC systems as well as other universities with the intent of majoring or minoring in Spanish.

**Learning Outcomes**

Upon completion of this degree, students will be able to:

- Demonstrate fluency to interact in Spanish in a normal and spontaneous fashion at an intermediate level.
- Understand and analyze publications and current affairs media as well as contemporary literary prose.
- Demonstrate understanding of geography and cultural differences in the Spanish-speaking world.
- Display an intermediate level of proficiency in speaking, understanding, reading and writing in Spanish to perform successfully in upper division course work.

**Courses Required for the Certificate of Accomplishment in Spanish**

**Core Courses**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>SPAN 1 Elementary Spanish</td>
<td>5</td>
</tr>
<tr>
<td>SPAN 1A, 1B Elementary Spanish</td>
<td>3–3</td>
</tr>
<tr>
<td>SPAN 2 Continuation of Elementary Spanish</td>
<td>5</td>
</tr>
<tr>
<td>SPAN 2A, 2B Cont of Elementary Spanish</td>
<td>3–3</td>
</tr>
<tr>
<td>SPAN 3 Intermediate Spanish</td>
<td>5</td>
</tr>
<tr>
<td>SPAN 3A, 3B Intermediate Spanish</td>
<td>3–3</td>
</tr>
<tr>
<td>SPAN 5, 5S Adv Spanish: Conversation on</td>
<td></td>
</tr>
<tr>
<td>Hispanic Culture and Civilization</td>
<td></td>
</tr>
<tr>
<td>SPAN 6 or 6A+6B Cont. of Inter. Spanish</td>
<td>5 or 6</td>
</tr>
<tr>
<td>SPAN 7 Introduction to Literature in Spanish</td>
<td>3</td>
</tr>
<tr>
<td>SPAN 22A+22B. Grammar Review and Composition</td>
<td>6</td>
</tr>
<tr>
<td>SPAN 31A–31B Inter. Spanish for Bilingual Students</td>
<td>3–3</td>
</tr>
</tbody>
</table>

**Elective Courses**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPAN 10A Beg Conversational Spanish</td>
<td>3</td>
</tr>
<tr>
<td>SPAN 10B Cont of Beg Conversational Spanish</td>
<td>3</td>
</tr>
<tr>
<td>SPAN 10C Intermediate Conversational Spanish</td>
<td>3</td>
</tr>
<tr>
<td>SPAN 10D Cont of Inter Conversational Spanish</td>
<td>3</td>
</tr>
<tr>
<td>SPAN 41 Culture and Civilization of Spain</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Units ..................................................................... 15

**Announcement of Courses**

Students of beginning Spanish are directed to consider Spanish courses numbered 1, 1A, and 10A.

A placement test in Spanish is available for guidance in selecting the appropriate course. For information, call 239-3223.

**Credit, Degree Applicable Courses:**

**SPAN 1. Elementary Spanish (5)**

Lec-5, lab-2  
P/NS available  
**ADVICE:** ENGL 93 or 94; OR ESL 160 or 82 OR PLACEMENT IN ENGL 96 OR ESL 170 OR ANY CITY COLLEGE OR UNIVERSITY FOREIGN LANGUAGE COURSE.

Beginner’s course. Grammar, composition and reading. Practice in speaking and understanding Spanish. CSU/UC

**SPAN 1A-1B Elementary Spanish (3-3)**

Lec-3, lab-1  
P/NS available  
**Prereq:** FOR SPAN 1B: SPAN 1A OR DEMONSTRATION OF SPAN 1A EXIT SKILLS  
**ADVICE:** SPAN 1A: ENGL 93 or 94; OR ESL 160 or 82 OR PLACEMENT IN ENGL 96 OR ESL 170 OR ANY CITY COLLEGE OR UNIVERSITY FOREIGN LANGUAGE COURSE.
SPAN 6A. Continuation of Intermediate Spanish (3)
Lec-3, lab-1    P/NP available
Prereq.: SPAN 3 or 3B or Demonstration of Exit Skills
Intensive review of grammar, culture and composition. Designed for students who need reinforcement and expansion of the structures of the Spanish language. Conducted in Spanish. CSU/UC/C-ID SPAN 210 (SPAN 3A + SPAN 3B)

SPAN 6B. Continuation of Intermediate Spanish (3)
Lec-3, lab-1    P/NP available
Prereq.: SPAN 6A or Demonstration of Exit Skills
Intensive review of grammar, culture and composition. Designed for students who need reinforcement and expansion of the structures of the Spanish language. Conducted in Spanish. CSU/UC/C-ID SPAN 210 (SPAN 3A + SPAN 3B)

SPAN 7. Introduction to Literature in Spanish (3)
Lec-3, lab-1    P/NP available
Prereq.: SPAN 6 or 6B or Demonstration of Exit Skills
Readings of literary and cultural selections; composition; review of selected grammar. CSU/UC

SPAN 10A. Beginning Conversational Spanish (3)
Lec-3, lab-1    P/NP available
Advise: Concurrent Enrollment in SPAN 1, 1A or 1B
Not recommended for native speakers of Spanish
Beginner's course. Intensive oral practice of basic structures and vocabulary most often used in conversation. Designed for students who wish to acquire basic skills of spoken Spanish. CSU

SPAN 10B. Continuation of Beginning Conversational Spanish (3)
Lec-3, lab-1    P/NP available
Prereq.: SPAN 10A or Demonstration of SPAN 10A Exit Skills
Advise: Concurrent Enrollment in SPAN 2, 2A, or 2B
Not recommended for native speakers of Spanish
Second semester course: Extensive oral practice of basic structures and vocabulary most often used in conversation. Designed for students who wish to acquire basic skills of spoken Spanish. CSU

SPAN 10C. Intermediate Conversational Spanish (3)
Lec-3, lab-1    P/NP available
Prereq.: SPAN 10B or Demonstration of SPAN 10B Exit Skills
Advise: Concurrent Enrollment in SPAN 3 or 4
Not recommended for native speakers of Spanish
Third semester course: Extensive oral practice of basic structures and vocabulary most often used in conversations. Designed for students who want to acquire more advanced skills of spoken Spanish. CSU

SPAN 10D. Continuation of Intermediate Conversational Spanish (3)
Lec-3, lab-1    P/NP available
Prereq.: SPAN 10C or Demonstration of SPAN 10C Exit Skills
Advise: Concurrent Enrollment in SPAN 3, 3A, 3B, 4, or 5
Not recommended for native speakers of Spanish
Fourth semester course. Extensive oral practice of basic structures and vocabulary most often used in conversation. Designed for students who wish to acquire basic skills of spoken Spanish. CSU

SPAN 22A-22B. Grammar Review and Composition (3)
Lec-3, lab-1    P/NP available
Prereq.: SPAN 3 or Equivalent
Advanced review of grammar and composition with attention to style, vocabulary development, and grammatical structure. Course taught in Spanish. CSU/UC
Learning Outcomes

- Typically transfer into a broad array of communication studies majors.
- Students will develop listening, reading, and writing skills.
- Students completing this major will communicate with others within and across cultural boundaries.
- Students will develop organizational, critical thinking, and delivery skills.
- Students will learn the theory and principles behind the communication process and acquire skills needed to effective communicate.
- Students will develop organizational, critical thinking, and delivery skills.
- Students will display effective strategies.
- Students will acquire skills needed to effectively communicate with diverse cultural understandings.
- Students will display effective strategies.
- Students will exhibit advanced critical thinking skills to structure logical, credible, and well researched arguments that re-enforce or effectuate change in people’s attitudes, beliefs, relationships, and social and political policies.
- Students will prepare for transfer to colleges of universities in rhetoric, communication studies, or related.

Courses Required for the Major in Communication Studies

Course | Units
--- | ---
Core Courses
SPCH 1A Elements of Public Speaking | 3
SPCH 5 Intercultural Communication | 3
ENGL 1B Reading, Writing, and Critical Thinking or ENGL 1C Advanced Composition | 3
Choose any 2 courses from the following:
SPCH 3 Argumentation and Debate | 3
SPCH 20 Interpersonal Communication | 3
SPCH 4 Small Group Communication | 3
Choose 1 course from the following:
SPCH 7 Oral Interpretation of Literature | 3
SPCH 37 Intracollegiate Forensics | 3
SPCH 38 Intercollegiate Forensics | 3
Total | 18

Speech Communication Certificate

This 12 unit course of study gives students a brief introduction to the discipline of Speech Communication.

Learning Outcomes

Upon completing the certificate, students will be able to:

- Recognize, understand, and articulate the ways in which communication, both verbal and non-verbal, affects meaning-making in various social contexts (e.g., interpersonal, intercultural, and group).
- Locate, read, and evaluate research (traditional and electronic) and learn to effectively incorporate support for ideas and construct arguments in written and spoken communication.
- Construct and responsibly present different types of organized presentations, demonstrating effective communication practices.
- Explore, compare and evaluate the basic theories of the communication discipline.

Courses Required for the Certificate of Accomplishment in Speech Communication

Course | Units
--- | ---
SPCH 12 Fundamentals of Oral Communication | 3
SPCH 4 Group Communication | 3
or SPCH 20 Interpersonal Communication .......... 3
SPCH 1A Elem of Public Speaking
or SPCH 11 Basic Public Speaking ..................... 3
SPCH 3 Argument and Debate
or SPCH 37 Intracollegiate Sph Comp
or SPCH 38 Intercollegiate Sph Comp ............... 3
Total Units ........................................... 12

Announcement of Courses
Credit, Non-Degree Applicable Courses:
SPCH G. Oral Communication for Teams (1)
Lec-1  P/NP available
An introduction to the basic principles and methods of oral communication with emphasis on improving speaking and listening skills in the context of small group discussion.

SPCH H. Oral Presentation Skills (1)
Lec-1  P/NP available
An introduction to the theory, basic principles, and methods of oral communication with emphasis on improving speaking and listening skills in the context of public speaking.

SPCH I. One-on-One Oral Communication (1)
Lec-1  P/NP available
An introduction to the theory, basic principles, and methods of oral communication with emphasis on improving speaking and listening skills in the context of interpersonal communication.

Credit, Degree Applicable Courses:
SPCH 1A. Elements of Public Speaking (3)
Lec-3  P/NP available
Prereq.: ENGL 96
Mastery of the research, organization and delivery of extemporaneous speeches. Focus on rhetorical theory, listening, audience analysis, speech construction, language, evidence testing, and visual aids.
CSU/UC/C-ID COMM 110

SPCH 2. Introduction to Rhetorical Criticism (3)
Lec-3  P/NP available
Prereq.: ENGL 1A
Studies of the rhetorical tradition and significant rhetorical artifacts. Analysis of public discourse through the application of rhetorical methodologies. Rhetorical strategies are evaluated for support, reasoning, language use, message construction, and understanding of the situation. Emphasizes critical thinking principles alongside techniques of effective written and spoken discourse. CSU/UC

SPCH 3. Argumentation and Debate (3)
Lec-3  P/NP available
Advis: ENGL 96 or Placement in ENGL 1A
Primary emphasis on argumentation as the study of analysis, evidence, reasoning, refutation, and rebuttal, etc. in oral and written communication. Significant component of instruction in oral argumentation. Critical Thinking approaches to commercial, legal, political, and academic argumentation and persuasion. CSU/UC/C-ID COMM 120

SPCH 4. Group Communication (3)
Lec-3  P/NP available
Advis: ENGL 96 or Placement in ENGL 1A
Understanding of the principles of group interaction and decision making, including the study of leadership, teamwork, and conflict resolution. Participation in groups to share information, solve problems, and reach consensus. CSU/UC/C-ID COMM 140

SPCH 5. Intercultural Communication (3)
Lec-3  P/NP available
Prereq.: ENGL 92 or ESL 160 or Placement in ENGL 93 or 94; or ESL 170
Develops communication competence to manage conflict and interact with people who are culturally different. Students participate in discussions and complete written and oral assignments, developing communication strategies and skills that result in deliberate and fruitful intercultural outcomes. CSU/UC/C-ID COMM 150

SPCH 6. Workplace Communication (3)
Lec-3  P/NP available
Prereq.: ENGL 93 or ESL 160
The study and application of workplace communication principles. Focus on mastering the communication skills that can promote professional and career opportunities, workplace relationships, team building and effective business presentation skills. CSU

SPCH 7. Oral Interpretation of Literature (3)
Lec-3  P/NP available
Focus on interpretation as a creative and analytical meaning-making process. Training in solo, duet and group readings of drama, prose and poetry. Through selecting, reading, analyzing, editing and interpreting current and culturally diverse literature, students will better understand the structural and aesthetic components of narrative and performance. CSU/UC/C-ID COMM 170

SPCH 8. Rhetoric of Popular Culture (3)
Lec-3  P/NP available
Studies U.S. popular culture as a means to communicate cultural values and attitudes. Communication methods are used to evaluate examples of popular culture's messaging. Different mediums, such as social media, video blogs as well as advertisements, television, film, and politics are studied for their varied effects. CSU

SPCH 11. Basic Public Speaking (3)
Lec-3  P/NP available
Prereq.: ENGL 93 or ESL 160 or Placement in ENGL 96 or ESL 170
Effective organization and presentation of ideas in public speaking situations. Major topics include audience analysis and overcoming speaking anxiety. This course is designed for beginning public speakers wishing to learn basic public speaking skills. CSU

SPCH 12. Fundamentals of Oral Communication (3)
Lec-3  P/NP available
Prereq.: ENGL 93 or ESL 160 or Placement in ENGL 96 or ESL 170
An introduction to the theory, basic principles, and methods of oral communication with emphasis on improving speaking and listening skills in the context of interpersonal communication, small group discussion, and public speaking. CSU

SPCH 20. Interpersonal Communication (3)
Lec-3  P/NP available
Focus on the impact that communication has on the interaction between individuals in settings including family, friendship, intimate and work situations. Students are expected to demonstrate and apply these skills through individual and group presentations and activities. CSU/UC/C-ID COMM 130
Among the skills developed:

- Apply learned knowledge and skills to new and varied situations.
- Use feedback to improve performance.
- Implement time management skills to complete a task.
- Identify an objective and devise and implement a plan of action.

Learning Outcomes

- Recognize and apply standard practices of ensemble playing in a rehearsal/performance environment.
- Demonstrate skill for technical aspects of acting, including physical, vocal, imaginative, analytical and emotional elements.
- Compare and contrast theatrical periods and styles in terms of acting, directing, playwriting, and technical elements.
- Analyze theatre as a dynamic art form influencing society.
- Apply technical processes, including lighting, set, costume, and/or stage make-up design, as they pertain to a given dramatic script.

The Theatre Arts Department provides both academic and production experience in all aspects of theatre. A comprehensive set of courses fulfills general education and transfer requirements.

Purpose. Students participating in the theatre arts program learn to express themselves creatively through application of the theatrical skills of acting, directing, design, technical production, and stagecraft. They develop critical thinking and analytical abilities related to interpreting and criticizing dramatic literature. Students collaborate as effective team members in performing established material or in creating original work.

Among the skills developed:

- Apply learned knowledge and skills to new and varied situations.
- Use feedback to improve performance.
- Implement time management skills to complete a task.
- Identify an objective and devise and implement a plan of action.

Learning Outcomes

- Recognize and apply standard practices of ensemble playing in a rehearsal/performance environment.
- Demonstrate skill for technical aspects of acting, including physical, vocal, imaginative, analytical and emotional elements.
- Compare and contrast theatrical periods and styles in terms of acting, directing, playwriting, and technical elements.
- Analyze theatre as a dynamic art form influencing society.
- Apply technical processes, including lighting, set, costume, and/or stage make-up design, as they pertain to a given dramatic script.

Theatre Arts courses that are related in content are grouped together in “families” of courses below. The families are indicated by their headings, e.g., Play Rehearsal and Performance, Stagecraft, etc. For the most up-to-date listing of courses and families, refer to the online catalog, www.ccsf.edu/catalog.

Announcement of Courses

Credit, Degree Applicable Courses:

TH A 30. Introduction to Theatre (3)
Lec-3, field trips
Designed to compare, contrast and examine the aspects of live theatre including dramatic structure, theater production, history and performance. CSU/UC

TH A 31. Survey of Classical Drama (3)
Lec-3, field trips
Readings and analysis of the plays that form the historical foundation of modern European and American drama. Lectures, reading and discussion of plays from ancient Greece, through Shakespeare to the 19th century. CSU/UC
Formerly TH A 104

TH A 32. Survey of Modern Drama (3)
Lec-3, field trips
Readings and analysis of plays that illustrate the major types of drama written for the modern stage. Lectures, reading and discussion of play scripts dating from the advent of 19th Century realism, through the writing of contemporary authors. CSU/UC
Formerly TH A 105

TH A 61. Technical Theatre Production (1-2-3)
Work-5, 10, 15
P/NP Available
Repeat: max. 12 units
On campus college work experience in technical theatre production, house management and stage management subject to approval and under supervision of a Theatre Arts Department instructor. CSU/UC
Formerly TH A 55

TH A 107. Directing for the Theatre (3)
Lec-3
Examination of the function of a stage director and the techniques of stage direction with opportunities for practical experience. CSU/UC

TH A 164. Character Voices: Voice-Over (3)
Lec-3
ADVISE: TH A 150A
An acting skill class focusing on the vocal aspects of commercial acting. Development of the actor’s voice to be used in the recorded media for commercial and industrial purposes, selection of materials and practical application for the creation of characters. CSU
Formerly TH A 143

Enrollment Limitations on Physical Education and Visual or Performing Arts Courses

Per title 5 Section 55041, effective Fall 2013, students may not enroll more than four times in “active participatory courses that are related in content” in the areas of physical education or visual and performing arts, which includes art, dance, music, and theatre. This limitation applies even if a student receives a substandard grade or “W” during one or more of the enrollments in such a course or if the students petition for repetition due to extenuating circumstances.

Theatre Arts courses that are related in content are grouped together in “families” of courses below. The families are indicated by their headings, e.g., Play Rehearsal and Performance, Stagecraft, etc. For the most up-to-date listing of courses and families, refer to the online catalog, www.ccsf.edu/catalog.
Stagecraft
TH A 60. Stagecraft (3)
Lec-2, lab-4, field trips   P/NP only
Introduction and practical experience in stage scenery construction, stage properties selection, lighting execution, sound design, scenic painting techniques, and stage management through class lab work and participation in departmental theatrical productions. CSU/CU

Set Design
TH A 62. Introduction to Stage Design (3)
Lec-3   P/NP available
Introduction to the basic techniques used in stage design with emphasis on script analysis, research, freehand sketching, drafting techniques, ground plans and model making. CSU/UC
Formerly TH A 6

Lighting Design
TH A 63. Introduction to Lighting Design (3)
Lec-3, lab-3
Introduction to the basic techniques used in lighting design for live performance with emphasis on the art of lighting design, script analysis, lighting equipment needs and uses, drafting techniques, color theory. The class includes practical application of these concepts in a performance setting as well as a crew assignment. CSU
Formerly TH A 70

Make Up and Costume
TH A 71. Introduction to Make-up and Costume Design (3)
Lec-2, lab-4   P/NP available
Introductory instruction and practical experience in the study of facial and body anatomy, facial design, make-up materials, construction and decorative materials for costumes, theory of color, study of play scripts, laboratory/shop practice and participation in theatre productions. CSU/UC
Formerly TH A 3A

TH A 72. Intermediate Make-up and Costume Design (3)
Lec-2, lab-4   P/NP available
Intermediate instruction and practical experience in the study of facial and body anatomy, facial design, make-up materials, construction and decorative materials for costumes, theory of color, study of play scripts, laboratory/shop practice and participation in theatre productions. CSU/UC
Formerly TH A 3B

TH A 73. Advanced Make-up and Costume Design (3)
Lec-2, lab-4   P/NP available
Advanced instruction and practical experience in the study of facial and body anatomy, facial design, make-up materials, construction and decorative materials for costumes, theory of color, study of play scripts, laboratory/shop practice and participation in theatre productions. CSU/UC
Formerly TH A 3C

Acting Fundamentals
TH A 150A. Beginning Acting Fundamentals (3)
Lec-3
Beginning level examination, practice and execution of the fundamentals of acting. Staging techniques, improvisation, theatre games, stage movement, and acting terminology. Classroom preparation and presentation of monologues and ensemble work. CSU/UC
Formerly TH A 150

TH A 150B. Intermediate Acting Fundamentals (3)
Lec-3   PREREQ: TH A 150A
Intermediate level examination, practice and execution of the fundamentals of acting. The focus on using staging techniques, improvisation, theatre games, stage movement, and applying acting terminology. Classroom preparation and presentation of monologues and ensemble work. CSU/UC

TH A 150C. Advanced Acting Fundamentals (3)
Lec-3   PREREQ: TH A 150B
Advanced level examination, practice and execution of the fundamentals of acting. The focus on masterings staging techniques, improvisation, theatre games, stage movement, and acting terminology. Classroom preparation and presentation of monologues and ensemble work at an advanced level. CSU/UC

Scene Study
TH A 151A. Beginning Character Development and Scene Study (3)
Lec-3   ADVISE: TH A 150A
Beginning level analysis, development and creation of believable characters, and portray them in class. Concentration in studying scene evolution in an ensemble setting of plays selected from diverse dramatic literature. CSU/UC
Formerly TH A 151

TH A 151B. Intermediate Character Development and Scene Study (3)
Lec-3   PREREQ: TH A 151A
Intermediate level analysis, development and creation of believable characters, and portray them in class. Special emphasis on the playwright's "Given Circumstances" and character development. Communication onstage demonstrated through scene presentation. CSU/UC

TH A 151C. Advanced Character Development and Scene Study (3)
Lec-3   PREREQ: TH A 151B
Advanced level analysis, development and creation of believable characters, and portray them in class. Advanced text analysis in relation to characters from diverse material, both historically and culturally. Concentration in demonstration of playwright's "Given Circumstances." CSU/UC

Performance Projects
TH A 152. Performance Projects (3)
Lec-3   ADVISE: TH A 150A AND TH A 151A OR CAN DEMONSTRATION SKILLS ACQUIRED IN TH A 150A AND TH A 151A.
Development of class projects and workshops that will be performed in a studio setting. Investigation of the development of performance skills as they relate to the audience and to specific studio space. CSU/UC
Formerly TH A 103

TH A 152A. Performance Projects: Student Original Works (3)
Lec-3
Development of student original projects and workshops that will be performed in a studio setting. Investigation of the development of performance skills as they relate to the audience and to the specific studio space. CSU/UC
TH A 152B. Performance Projects: Unpublished Plays (3)
Lec-3
Development of unpublished plays, projects and workshops that will be performed in a studio setting. Investigation of the development of performance skills as they relate to the audience and to the specific studio space. CSU/UC

TH A 152C. Performance Projects: Contemporary Plays (3)
Lec-3
Development of contemporary plays that will be performed in a studio setting. Investigation of the development of performance skills as they relate to the audience and to the specific studio space. CSU/UC

TH A 165. Playwright’s Performance Workshop (3)
Lec-3, lab-1, field trips
PREREQ.: ENGL 93 or 94 or placement in ENGL 96 or demonstration of ENGL 93 or 94 exit skills
This course is specifically designed to teach the elements of playwriting using all the components of live theatre: directors, writers, and actors. Playwrights work with actors and directors to create, write and revise scenes and scripts based on workshop performances. CSU
Formerly TH A 106

Physical Theatre

TH A 153A. Beginning Improvisation (3)
Lec-3
Beginning level instruction in the acting skill of creating original material by performers for presentation through techniques of improvisation and scenario. Beginning level actor generated narrative and play script development in an ensemble setting. CSU/UC
Formerly TH A 153

TH A 153B. Intermediate Improvisation (3)
Lec-3
PREREQ.: TH A 153A
Intermediate level instruction in the acting skill of creating characters through original and spontaneous material created by performers for presentation through techniques of improvisation and scenario. Focus on actor’s improvised communication and character relationships. CSU/UC

TH A 153C. Advanced Improvisation (3)
Lec-3
PREREQ.: TH A 153B
Advanced level instruction in the acting skill of creating characters through original and spontaneous material created by performers for presentation through techniques of improvisation and scenario. Focus on spontaneous group presentations with character interaction and given circumstances, in the long-form improvisation structure. CSU/UC

TH A 162A. Beginning Physical Comedy, Masks and Clowning (3)
Lec-3
PREREQ.: TH A 10A
Beginning level instruction in the acting skills focusing on clowning; the creation and use of masks with special attention to the physical characteristics of comic acting. CSU/UC
Formerly TH A 162.

TH A 162B. Intermediate Physical Comedy, Masks and Clowning (3)
Lec-3
PREREQ.: TH A 162A
Intermediate level instruction in the acting skills focusing on clowning; the creation and use of masks with special attention to circus skills. CSU

TH A 162C. Advanced Physical Comedy, Masks and Clowning (3)
Lec-3
PREREQ.: TH A 162B
Advanced level instruction in the acting skills focusing on scenario; the creation and use of masks with special attention to the study of the Commedia dell’Arte. CSU

Acting in Media

TH A 154A. Beginning Acting for the Camera (3)
Lec-3, lab-4
Beginning level development of performance skills for video, film and electronic media applications with emphasis on identifying presentation of self and defining an on-camera persona in a production context. CSU/UC
Formerly TH A 154

TH A 154B. Intermediate Acting for the Camera (3)
Lec-3, lab-4
PREREQ.: TH A 154A
Intermediate level development of performance skills for video, film and electronic media applications with emphasis on dramatic characterization in a production context utilizing text to performance techniques. CSU/UC

TH A 154C. Advanced Acting for the Camera (3)
Lec-3, lab-4
PREREQ.: TH A 154B
Advanced level development of performance skills for video, film and electronic media applications with emphasis on application of practical skills to transition to a professional environment. CSU/UC

TH A 166A. Beginning Performance Art New Media Workshop (3)
Lec-3, lab-3
ADVISE: IDST 125
Beginning level development of performance art pieces integrating state-of-the-art digital art, computer software used for theatrical and electronic music productions, focus on the use of applicable software and hardware. CSU/UC
Formerly TH A 166

TH A 166B. Intermediate Performance Art: New Media Workshop (3)
Lec-3, lab-3
PREREQ.: TH A 166A
Intermediate level development of performance art pieces integrating state-of-the-art digital art, computer software used for theatrical and electronic music productions, focus on the creation of a piece with applicable software and hardware. CSU

TH A 166C. Advanced Performance Art: New Media Workshop (3)
Lec-3, lab-3
PREREQ.: TH A 166B
Advanced level development of performance art pieces integrating state-of-the-art digital art, computer software used for theatrical and electronic music productions, focus on the performance of a piece with applicable software and hardware. CSU

Shakespeare for Actors

TH A 155A. Beginning Acting Shakespeare (3)
Lec-3
ADVISE: TH A 150A
Beginning instruction in the use of text techniques interpreting poetic imagery and vocal exercises for the actor used in the performance of
Shakespearean verse and prose. The class will develop the student's approach to address analytic skills, historical research, vocal skills and interpretive skills to perform William Shakespeare's canon. CSU/UC
Formerly TH A 155

TH A 155B. Intermediate Acting Shakespeare (3)
Lec-3
Prereq.: TH A 155A
Intermediate instruction in the use of text techniques interpreting poetic imagery and exercises for the actor used in the performance of Shakespearean verse and prose focusing the actor's voice. The class will develop the student's use of Standard American Speech in order to perform William Shakespeare's canon for an American audience. CSU/UC

TH A 155C. Advanced Acting Shakespeare (3)
Lec-3
Prereq.: TH A 155B
Advanced instruction in the use of text techniques interpreting poetic imagery and vocal exercises for the actor used in the performance of Shakespearean verse and prose and apply to scene work. The class will develop the student's approach to address character development from William Shakespeare's "Tragic" and "Historic" plays. CSU/UC

TH A170A. Beginning Shakespeare for Actors (3)
Lec-3
Beginning instruction in the use of text techniques interpreting poetic imagery and vocal exercises for the actor used in the performance of Shakespearean verse and prose. The class will develop the student's approach to address analytic skills, historical research, vocal skills and interpretive skills to perform William Shakespeare's canon. CSU

TH A170B. Intermediate Shakespeare for Actors (3)
Lec-3
Intermediate instruction in the use of text techniques interpreting poetic imagery and exercises for the actor to use in the performance of Shakespearean verse and prose focusing the actor's voice, developing the use of Standard American Speech in order to perform William Shakespeare's canon for an American audience. CSU

TH A170C. Advanced Intermediate Shakespeare for Actors (3)
Lec-3
Advanced intermediate instruction in the use of text techniques interpreting poetic imagery, vocal exercises for the actor to use in the performance of Shakespearean verse and prose applied to scene work. The class will develop the student's approach to address character development from William Shakespeare's "Comic" and "Romance" plays. CSU

TH A170D. Advanced Shakespeare for Actors (3)
Lec-3
Advanced instruction of text techniques of interpreting poetic imagery, vocal exercises for the actor to use in the performance of Shakespearean verse and prose applied to scene work. The class will develop the student's approach to address character development from William Shakespeare's "Tragic" and "Historic" plays. CSU

Vocal Production and Audition
TH A 160A. Beginning Vocal Production and Audition (3)
Lec-3
Beginning instruction in the study of the anatomy of the vocal mechanism. Practice of voice and articulation with an emphasis on Standard American English for the stage to develop the actor's process in preparation for performance and audition, selection of materials, and presentation of self in various audition settings. CSU/UC
Formerly TH A 160

TH A 160B. Intermediate Vocal Production and Audition (3)
Lec-3, field trips
Prereq.: TH A 160A
Intermediate instruction in the study of the anatomy of the vocal mechanism. Practice of transcription into International Phonetics for voice and articulation with an emphasis on Standard American English for the stage to develop the actor's process in preparation for performance and selection of materials for various audition settings. CSU

TH A 160C. Advanced-Intermediate Vocal Production and Audition (3)
Lec-3, field trips
Prereq.: TH A 160B
Advance-Intermediate instruction in the study of the anatomy of the vocal mechanism. Practice of voice and articulation in preparation of classical and contemporary auditions. Focused auditioning exercises for the stage to develop the actor's process in preparation for performance and audition, selection of materials in various audition settings. CSU

TH A 160D. Advanced Vocal Production and Audition (3)
Lec-3, field trips
Prereq.: TH A 160C
Advanced instruction in the study of the anatomy of the vocal mechanism. Practice of voice and articulation with an emphasis on Dialects for the stage to develop the actor's process in preparation for performance and audition, selection of materials, and presentation of self in various audition settings. CSU

Performing Storytelling
TH A 161A. Beginning Storytelling (3)
Lec-3, field trips
Beginning instruction in the acting skill of storytelling through performance exercises, improvisations, writing of original work, and the use of the literature of folklore, myth, and monologue focusing on narrative, creation of character and the telling of stories in an ensemble setting. CSU/UC
Formerly TH A 161

TH A 161B. Intermediate Storytelling (3)
Lec-3, field trips
Prereq.: TH A 161A
Intermediate level instruction in the acting skill of editing for the presentation of stories through performance exercises, improvisations, writing of original work, and the use of the literature of folklore, myth, and monologue focusing on narrative, creation of character and the telling of stories in an ensemble setting. CSU

TH A 161C. Advanced Storytelling (3)
Lec-3, field trips
Prereq.: TH A 161B
Advanced level instruction in the acting skill of storytelling with a focus on individual skill through performance exercises, improvisations, writing of original work, and the use of the literature of folklore, myth, and monologue focusing on narrative, creation of character and characters' narrative monologues. CSU

TH A171A. Beginning Storytelling and Performance (3)
Lec-3, field trips
Beginning instruction in the acting skill of storytelling through performance exercises, improvisations, writing of original work, and the
use of the literature of folklore, myth, and monologue focusing on narrative, creation of character and the telling of stories in an ensemble setting. CSU

**TH A 201. Comedy-Play Rehearsal and Presentation (1-3)**
Lec-3, field trips
Intermediate level instruction in the acting skill of editing for the presentation of stories through performance exercises, improvisations, writing of original work, and the use of the literature of folklore, myth, and monologue focusing on narrative, creation of character and the telling of stories in an ensemble setting. CSU

**TH A 201B. Supporting Role Comedy-Play Rehearsal and Presentation (1) CSU/UC**
Lec-2, lab-4

**TH A 201C. Principal Role Comedy-Play Rehearsal and Presentation. (3) CSU/UC**
Lec-6, lab-9

**Tragedy-Play Rehearsal and Performance**

**TH A 204. Tragedy-Play Rehearsal and Presentation (1-3)**
Lab-3, 6, 9
P/NP Only
The preparation and interpretive training process that goes into rehearsal and performance presentation in a Theatre Arts Department production. Students must audition for, be cast in, rehearse and perform in a “tragedy” in order to receive credit.

**TH A 204A. Ensemble Role Tragedy-Play Rehearsal. (1) CSU/UC**

**TH A 204B. Supporting Role Tragedy-Play Rehearsal Presentation. (2) CSU/UC**

**TH A 204C. Principal Role Tragedy-Play Rehearsal and Presentation. (3) CSU/UC**
Lec-6

**Related Courses:**

**MUS 44. Music Theatre Workshop (3)**
Lec-6, field trips
P/NP available

**BCST 115. Announcing and Performance (3)**
Lec-3
**ADVICE: BCST 120**
Introduction to interpretation of copy, pronunciation, and announcer’s duties for radio, television, cable, and webcast. Practical experience announcing commercials, news, public service, and other kinds of programs. Performance skills are developed through regular use of audio and video facilities and equipment. CSU

**BCST 140. Studio Video Production (3)**
Lec-2, lab-4
Theory and operation of video production equipment and facilities. Video production planning and organization, concept development, program design, project documentation, and production management. Production of studio-based video programming for Cable Television Channel 27 and the district’s Media Services video production unit. CSU

**IDST 38. Shakespeare: “for all time” (3)**
Lec-3
P/NP available
**PREREQ: ELIGIBLE FOR ENGL 1A**
An interdisciplinary introduction to Shakespeare’s plays as theater pieces, literature, and historical chronicles. Three instructors from the Theater Arts, English, and History departments examine Shakespeare’s artistry from their respective points of view, using some of his most popular plays. CSU/UC
Announcement of Curricula

General Information
The Transitional Studies Department offers ongoing instruction in CCSF High School Diploma Program, General Educational Development (GED), Adult Basic Education (ABE), and Vocational Foundation Skills. The curriculum consists of noncredit courses in reading, writing, mathematics and specific subjects at elementary, intermediate and advanced levels. Instructional methodology includes both individualized and traditional classroom instruction.

All courses are free of charge and are without college credit.

Program Goals. Provide a comprehensive program leading to the CCSF High School Diploma; prepare students to pass the GED examination; help students to achieve competency in Adult Basic Education; provide students with basic skills for living, employment; develop student readiness to succeed in college credit classes and Career/Technical Certificate programs.

Admission Requirements. All skill levels are accepted. After testing in reading, writing and mathematics, students are enrolled at a level matching their skills and geared toward their educational objectives. Students entering the GED in Spanish program are required to be fluent and literate in Spanish.

Offered at the following centers:
Instruction in Spanish is offered only at the Mission Campus.
John Adams ........................................ 561-1900
Adult Learning Center .......................... 241-2300
Mission ............................. 920-6043
Southwest .............................. 550-4300
African American Scholastic Program .......... 452-5315

CCSF High School Diploma Program
The City College of San Francisco High School Diploma Program is open to adult students who meet placement requirements. The program is also open to concurrently enrolled high school students who are in the 11th or 12th grades and who require high school credits to transfer to their home high schools.

Concurrently enrolled high school students may earn high school credits that transfer to their home high school by enrolling in Transitional Studies courses by arrangement with the student’s high school counselor.

Adult students enroll through the New or Continuing CCSF Counseling Department for a placement test, orientation and educational planning appointment.

Credits may be earned in two ways: by completing coursework or by earning a standard score of 410 or greater in a GED content area examination. Each subtest for the GED is equivalent to 10 high school credits.

The GED Tests (2002 Series) measure knowledge in five different areas: Language Arts, Writing; Social Studies; Science; Language Arts, Reading; and Mathematics. An important feature of the GED Tests is an essay that documents your ability to write and communicate effectively. The minimum passing standard set by the GED Testing Service is an average standard score of 450 or greater across the five content area tests (a total standard score of 2250 or greater) and, in addition, a standard score of 410 or greater on each content area test.

Equivalent high school courses taken at other schools, or comparable college credit classes, may satisfy coursework requirements. Credits may be fulfilled by successful completion of courses in Transitional Studies, CCSF Vocational programs, English as a Second Language (ESL), CCSF credit classes or, with the TRST Department Chair’s permission, any CCSF course. Additionally, courses earned at other high school or college institutions may be transferred to the CCSF HS Diploma Program.

Residency requirement: At least 20 credits must be earned in the Transitional Studies Department or, with the Department Chair’s permission, in other CCSF departments. English requirement: to qualify for the CCSF HS Diploma, a student must have completed with a grade of “C” or better, at least one of the Transitional Studies core required English classes, or a CCSF degree-applicable class in the English Department.

Mathematics requirement: to qualify for the CCSF HS Diploma, a student must have completed with a grade of “C” or better, at least one of the Transitional Studies core required mathematics classes, or a CCSF degree-applicable class in the Mathematics Department.

The CCSF High School Diploma’s Program Learning Outcomes are derived from the following: Common Core State Standard and CASAS competencies.

Learning Outcomes
Upon completion of CCSF high school diploma, students will be able to:

- Read clearly to determine what the text says explicitly and to make logical references from it.
- Cite specific textual evidence when writing or speaking to support conclusions drawn from text.
- Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose and audience.
- Initiate and participate in a range of collaborative discussions (one-on one, in groups, and teacher-led) with diverse partners on topics, texts, and issues, building on others’ ideas and expressing their own clearly.
- Conduct short as well as more sustained research projects to answer a question or solve a problem.
• Use technology, including the Internet, to produce, publish, and update individual or shared writing.

• Use diverse electronic resources to acquire, organize, analyze and communicate information.

Students who complete courses in the Science Core Area will be able to:

• Use mathematical reasoning to solve problems.

• Evaluate the hypotheses, data, analysis and conclusions in a science text, verifying the data when possible and corroborating or challenging conclusions with other sources of information.

• Synthesize information from a range of sources (e.g., texts, experiments, simulations) into coherent understanding of a process, phenomenon, or concept, resolving conflicting information when possible.

• Recognize the relationships between the natural sciences and society and the application of science to societal challenges.

Students who complete courses in the Humanities Core Area will be able to:

• Cite specific textual evidence to support analysis of primary and secondary sources, connecting insights gained from specific details to an understanding of the text as a whole.

• Determine the central ideas or information of a primary or secondary source; provide an accurate summary the makes clear the relationship among the key details and ideas.

• Evaluate various explanations for actions or events and determine which explanation best accords with textual evidence.

• Evaluate author’s differing points of view on the same historical, current event or issue by assessing the author’s claims, reasoning, and evidence.

• Integrate and evaluate multiple sources of information presented in diverse formats and media.

• Interpret statistical information used in reports and article.

Students who complete courses in the Social Science Core Area will be able to:

• Critically analyze ideas and diverse cultural values and articulate their own values and beliefs and compare them with those of diverse cultures and identify the relationships between them.

• Identify universal themes reflected in the humanities.

Students who complete courses in the English Core Area will be able to:

• Analyze how and why individuals, events, and ideas develop and interact over the course of a text.

• Assess how point of view or purpose shapes the content and style of a text.

• Analyze how two or more texts address similar themes or topics in order to build knowledge or to compare the authors’ take.

• Develop and strengthen writing as need by planning, revising, editing, rewriting, or trying a new approach.

• Present information, findings and supporting evidence such that listeners can follow the line of reasoning and the organization, development, and style are appropriate to task, purpose, and audience.

• Make strategic use of digital media and visual displays of data to express information and enhance understanding of presentation.

Students who complete courses in Math Core Area will be able to:

• Reason abstractly and quantitatively.

• Construct variable arguments and critique the reasoning of others.

• Model with mathematics.

• Demonstrate the ability to use symbolic, graphical, numerical, and written representations of mathematical ideas.

• Estimate and check answers to mathematical problems determining reasonableness, and correctness of solution.

Total 160 High School Credits:

110 Minimum Required Core Credits plus 50 Elective Credits

(A) Natural Sciences ........................ 20 Credits

(B) Social & Behavioral Sciences ............. 30 Credits

(C) Humanities .................................. 10 Credits

(D) English ...................................... 30 Credits

(E) Mathematics ................................. 20 Credits

(F) Electives ..................................... 50 Credits

Total ............................................. 160

Noncredit Certificate Curricula

Area of Study: Elementary and secondary basic skills. Workforce preparation classes, in the basic skills of speaking, listening, reading, writing, mathematics, decision-making, and problem solving skills that are necessary to participate in job-specific technical training.

Adult Basic Education

Level 1 Noncredit Certificate

A certificate of completion will lead to improved employability or job placement opportunities. This certificate requires successful completion of two courses with a minimum of 144 hours of Instruction.

Learning Outcomes

Upon completion of this certificate, students will be able to:

• Apply phonics and word analysis skills in decoding words.

• Read with accuracy and fluency to support comprehension.

• Determine two or more main ideas of a text and explain how they are supported by key details.

• Demonstrate command of the conventions of Standard English grammar and usage when writing.

• Write opinion pieces on topics or texts, supporting a point of view with reasons and information.

• Write informative/explanatory texts to examine a topic and convey ideas and information clearly.

• Initiate and participate in a range of collaborative discussions (one-on one, in groups, and teacher-led) with diverse partners on topics, texts, and issues, building on others’ ideas and expressing their own clearly.

• Use technology, including the Internet, to produce, publish, and update individual or shared writing.

Courses Required for the Certificate of Completion in Adult Basic Education Level 1

Courses Hours
TRST 0038 Orientation to Academic Success ............ 8–25
TRST 0035 Individualized Reading & Writing ........... 54–450
TRST 0036 Reading/Writing Lab .......................... 90–180

Total hours ........................................... 144–745
**Adult Basic Education**  
**Level 2 Noncredit Certificate**

A certificate of completion will lead to improved employability or job placement opportunities. This certificate requires successful completion of two courses with a minimum total of 144 hours of instruction. Students will be prepared to continue on with GED test preparation instruction.

**Learning Outcomes**

Upon completion of this certificate, students will be able:

- Read clearly to determine what the text says explicitly and to make logical references from it.
- Demonstrate command of the conventions of Standard English grammar and usage.
- Write informative/explanatory texts to examine a topic and convey ideas and information clearly.
- Initiate and participate in a range of collaborative discussions (one-on one, in groups, and teacher-led) with diverse partners on topics, texts, and issues, building on others’ ideas and expressing their own clearly.
- Compute using whole numbers, decimal fractions, fractions, percent, ratio and proportion.
- Use mathematical reasoning, expressions, equations, and formulas to solve problems.
- Interpret data from graphs and compute averages.

**Courses Required for the Certificate of Completion in Adult Basic Education Level 2**

<table>
<thead>
<tr>
<th>Courses</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>TRST 0038 Orientation to Academic Success</td>
<td>8–25</td>
</tr>
<tr>
<td>TRST 0039 ABE/Pre GED Preparation</td>
<td>54–540</td>
</tr>
<tr>
<td>TRST 2422 Math Skills Lab</td>
<td>36–180</td>
</tr>
<tr>
<td>Total hours</td>
<td>144–745</td>
</tr>
</tbody>
</table>

**Adult Secondary Education**  
**Level 3 Noncredit Certificate**

A certificate of completion will lead to improved employability or job placement opportunities. This certificate requires successful completion of two courses with a minimum of 144 hours of instruction. Students will be prepared to pass the General Education Development Examination.

**Learning Outcomes**

Upon completion of this certificate, students will be able to:

- Determine central ideas and summarize the key supporting details.
- Cite specific textual evidence when writing or speaking to support conclusions drawn from text.
- Interpret words including connotative and figurative meanings.
- Demonstrate command of the conventions of Standard English grammar and usage when writing.
- Write informative/explanatory texts to examine a topic and convey ideas.
- Initiate and participate in a range of collaborative discussions (one-on one, in groups, and teacher-led) with diverse partners on topics, texts, and issues, building on others’ ideas and expressing their own clearly.
- Use technology, including the Internet, to produce, publish, and update individual or shared writing.
- Compute using whole numbers.
- Describe and compare fractions and decimals.
- Use mathematical reasoning to solve problems.

**Courses Required for the Certificate of Completion in Academic Skills Elementary Level 1**

<table>
<thead>
<tr>
<th>Courses</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>TRST 0038 Orientation to Academic Success</td>
<td>8–25</td>
</tr>
<tr>
<td>TRST 1321 Academic Reading 1</td>
<td>180</td>
</tr>
<tr>
<td>TRST 1322 Academic Reading/Writing 1.5</td>
<td>90</td>
</tr>
<tr>
<td>TRST 1324 Academic Writing 1</td>
<td>180</td>
</tr>
<tr>
<td>TRST 1422 Math Skills Development 1</td>
<td>90–180</td>
</tr>
<tr>
<td>Total Hours</td>
<td>144–655</td>
</tr>
</tbody>
</table>
Academic Skills Intermediate Level 2 Noncredit Certificate

A certificate of completion will lead to improved employability or job placement opportunities and basic skills. This certificate requires successful completion of two courses with a minimum of 144 hours of instruction.

Learning Outcomes

Upon completion of this certificate, students will be able to:

- Cite the textual evidence that supports an analysis of what the text says explicitly as well as inferences drawn from the text.
- Determine a central idea of a text and analyze its development over the course of the text, including its relationship to supporting ideas.
- Determine an author’s point of view or purpose in a text.
- Write informative/explanatory texts to examine a topic and convey ideas and information through the selection.
- Initiate and participate in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on topics, texts, and issues, building on others’ ideas and expressing their own clearly.
- Use technology, including the Internet, to produce, publish, and update individual or shared writing.
- Conduct short as well as more sustained research projects to answer a question or solve a problem.
- Use technology, including the Internet, to produce, publish, and update individual or shared writing.
- Use diverse electronic resources to acquire, organize, analyze and communicate information.

Courses Required for the Certificate of Completion in Vocational Foundation Skills

<table>
<thead>
<tr>
<th>Courses</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>TRST 0038 Orientation to Academic Success</td>
<td>8–25</td>
</tr>
<tr>
<td>TRST 4600 Pre-Vocational Foundations Skills</td>
<td>45–90</td>
</tr>
<tr>
<td>TRST 4601 On the Job Communication Skills</td>
<td>54–90</td>
</tr>
<tr>
<td>TRST 4602 Literacy Tutor Training</td>
<td>12</td>
</tr>
<tr>
<td>TRST 4603 Graphic Arts Academics</td>
<td>36–180</td>
</tr>
<tr>
<td>TRST 4604 Vocational Foundation Skills</td>
<td>36–180</td>
</tr>
<tr>
<td>TRST 4640 Vocational Foundation Skills-Reading, Writing &amp; Study Skills</td>
<td>22.5</td>
</tr>
<tr>
<td>TRST 4644 Vocational Foundation Skills-Mathematics &amp; Job Readiness</td>
<td>22.5</td>
</tr>
<tr>
<td>Total Hours</td>
<td>144–622</td>
</tr>
</tbody>
</table>

Vocational Foundation Skills Noncredit Certificate

A certificate of completion will lead to improved employability or job placement opportunities. This certificate requires successful completion of two courses with a minimum of 144 hours of instruction.

Learning Outcomes

Upon completion of this certificate, students will be able to:

- Cite the textual evidence that supports an analysis of what the text says explicitly as well as inferences drawn from the text.
- Demonstrate command of the conventions of Standard English grammar and usage when writing or speaking.
- Write informative/explanatory texts to examine a topic and convey ideas and information through the selection.
- Initiate and participate in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on topics, texts, and issues, building on others’ ideas and expressing their own clearly.
- Perform basic arithmetic operations.
- Use mathematical reasoning to solve problems
- Conduct short as well as more sustained research projects to answer a question or solve a problem.
- Use technology, including the Internet, to produce, publish, and update individual or shared writing.
- Use diverse electronic resources to acquire, organize, analyze and communicate information.

Courses Required for the Certificate of Completion in Vocational Foundation Skills

<table>
<thead>
<tr>
<th>Courses</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>TRST 0038 Orientation to Academic Success</td>
<td>8–25</td>
</tr>
<tr>
<td>TRST 4600 Pre-Vocational Foundations Skills</td>
<td>45–90</td>
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<td>22.5</td>
</tr>
<tr>
<td>Total Hours</td>
<td>144–622</td>
</tr>
</tbody>
</table>

Announcement of Courses

Noncredit Courses:

Individualized Learning Labs, Self-paced, Open-entry, Multi-level, Ongoing Classes

TRST 0035. Individualized Reading and Writing (54-450 hrs.)

**Advisement:** Placement in TRST 0035

A basic reading and writing individualized program. Instruction is open-entry and open-exit and self-paced to meet the individual needs of student. Emphasizes comprehension and study skills and will prepare students for further educational and/or job demands.

TRST 0036. Reading/Writing Lab (90-180 hrs)

**Advisement:** Placement in TRST 0036

Reading, writing, and communication skills to prepare students for high school courses, GED, entry into the workplace, vocational and retraining programs.

TRST 0037. High School Learning Lab (54-810 hrs)

**Advisement:** Placement in TRST 0037

A competency-based, self-paced lab offering all required high school courses. Subject areas and objectives vary for each student according to previously acquired high school credit and student goal (diploma, test or college preparation, self-enrichment). Emphasis is on the development of independent, critical thinking skills applied to each subject. SCANS competencies are integrated into the curriculum as indicated in specific subject areas.

TRST 0038. Orientation to Academic Success (8-25 hrs)

Tools for students to succeed in the educational setting. Emphasis is on combining use of resources and skills with suggestions for techniques that lead to success in school.

TRST 0039. ABE/Pre-GED Preparation (54-540 hrs)

**Advisement:** Placement in TRST 0039

Writing, reading and mathematics skills development from intermediate through pre-GED level. Prepares the student to enter GED 0040. Self-paced, individualized or small group instruction. Offered in Spanish at Mission Center.
TRST 0040. GED Preparation (54-540 hrs)
Advising: TRST 0039 or placement in TRST 0040
Prepares the student to pass the five GED Tests: Writing, Social Studies, Science, Literature, and Mathematics. Individual and/or small group instruction. Offered in Spanish at Mission Center.

TRST 053. Test Prep: Standardized Tests (8 hrs)
Prepares students for standardized, timed tests. Each course focuses on a single test or subtest. Specific content for each course is determined by the particular test for which students are preparing.

TRST 053E. Test Prep: Ability to Benefit
TRST 053F. Test Prep: CAHSEE English-Language Arts
TRST 053G. Test Prep: CAHSEE Mathematics

Level I
Beginning and Basic Instruction in Reading, Writing, Communicating and Mathematics

TRST 1321. Academic Reading 1 (180 hrs)
Advising: ESL Level 7, placement in TRST 1321
A beginning course designed to develop reading, critical thinking skills, and vocabulary development. Oral/written communication and computer literacy skills will also be developed.
Formerly TRST 1200.

TRST 1322. Academic Reading and Writing 1.5 (90 hrs)
Advising: ESL Level 7, placement in TRST 1322
A beginning course designed to develop reading, critical thinking skills, and paragraph and essay writing.
Formerly TRST 1201.

TRST 1324. Academic Writing 1 (180 hrs)
Advising: ESL Level 7, placement in TRST 1324
This is a beginning course in paragraph/essay writing. Emphasis is on sentence mechanics. Oral communication, reading, and computer literacy skills will also be developed.
Formerly TRST 1301.

TRST 1422. Math Skills Development 1 (90-180 hrs)
Advising: Placement in TRST 1422
Addition, subtraction, multiplication, and division of whole numbers and their application to everyday situations. Introduction to number theory, measurement, basic geometry, and elementary algebra.
Formerly TRST 1400.

Level II
Intermediate Instruction in Reading, Writing, Communicating and Mathematics

TRST 2322. Academic Reading/Writing 2.5 (90hrs)
Advising: TRST 1321 AND/OR TRST 1324, placement in TRST 2322
This course is the second level academic reading and writing course with an emphasis on reading expository text and literature as a basis for writing.
Formerly TRST 2201.

TRST 2323. Media Literacy (90 hrs)
Students will learn the basic tools needed to decipher media messages and their impact on personal decision-making and society.
Formerly TRST 3201.

TRST 2421. Math Skills Development 2 (90-180 hrs)
Advising: TRST 1422 or placement in TRST 2421
Study of decimal and common fractions, percents, basic algebra and geometry. Applications with measurement, graphic representations and development of critical thinking through word problems in functional contexts. Competency based.
Formerly TRST 2400.

TRST 2422. Math Skills Lab (36-180 hrs)
Individualized instruction in basic mathematics including whole numbers, fractions, decimals, percents, measurement, and introduction to algebra and geometry. Applications to life and workplace skills are integrated into this open entry, open exit, and competency based, self-paced course. May be repeated. No prerequisites.
Formerly TRST 0041.

TRST 2522. Focus on the Future (90 hrs)
Advising: Placement in TRST 2522
Course is divided into six flexible modules emphasizing developing skills for success in academic and vocational pursuits. Students will explore the world of work as well as the world of higher education. They will have opportunities to shadow college students or workers in business and industry. Selected students may apply for internships. Appropriate for all students returning to school. Modules components may be offered separately.
Formerly TRST 3505.

TRST 2533. Health Education (90 hrs)
Student's accesses, analyzes, and applies basic health information that addresses the promotion of physical, mental, emotional, and social dimensions of health.
Formerly TRST 3204.

TRST 2731. The Americas in Film (45 hrs)
Students will study the history of Latin America and the United States using film. Themes such as conformity, rebellion, racism and feminism will be explored.
Formerly TRST 3206.

Level III
Advanced classes in reading, writing, communicating, mathematics and critical thinking in specific High School subjects. Required coursework for the City College of San Francisco High School Diploma Program. Courses also prepare students for subject matter examinations on the GED and for transfer to credit.

TRST 3331. HS Academic Reading/Writing (90 hrs)
Advising: TRST 1321 or TRST 1324
This course is high school level academic reading and writing course with an emphasis on reading expository text and literature as a basis for writing.
Formerly TRST 3200.

TRST 3332. Grammar and Writing (90 hrs)
Prerequisite: TRST 1324 or placement in TRST 3332
This course will focus on grammar as a tool to think, write more clearly and explore the ways ideas are connected to make meaning. Students will also go through the steps of the writing process focusing on rewriting to create coherent final drafts.
Formerly TRST 3202.
TRST 3333. Elements of Speech (90 hrs)
This course is designed to give students basic skills to deliver oral presentations that convey clear perspectives and solid reasoning.
Formerly TRST 3203.

TRST 3334. Discovering Literature (90 hrs)
**Prereq:** TRST 3331 or placement in TRST 3334
A beginning course designed to develop critical reading and writing skills, and to introduce significant works of literature, studying recurrent patterns and themes.
Formerly TRST 3330.

TRST 3335. Exploring Literature (90 hrs)
**Advising:** TRST 3334 or placement into TRST 3335
Students read and respond to culturally significant works of literature and conduct in-depth analyses of recurrent patterns and themes.

TRST 3346. HS English: Literature and Composition (90 hrs)
**Advising:** Placement into TRST 3346
Students interpret, analyze, and respond to multi-cultural literature, art, and media. Students develop awareness of their own ideological framework and writing style, strengthening their writing, editing, and critical thinking skills.
Formerly TRST 3300.

TRST 3347. HS English Literature: Contemporary American Writers (90 hrs)
**Advising:** Placement into TRST 3347
Students interpret, analyze, and respond to contemporary American writers: poets, dramatists, and fiction and non-fiction writers from different regions, ethnic backgrounds, and historical circumstances.
Formerly TRST 3301.

TRST 3348. Writing Academic Papers (90 hrs)
**Advising:** TRST 3346, TRST 3347 or placement into TRST 3348
This class will focus on the steps used in writing research papers and reports. Students will research and write coherent and focused essays that convey a well-defined argument.
Formerly TRST 3302.

TRST 3421. High School Algebra 1 A (90 hrs)
**Advising:** Placement in TRST 3421
A first course in High School Algebra: Operations on integers and rational numbers; properties of rational numbers; exponents and square roots; powers often; scientific notation; constants, variables, and expressions; polynomial expressions; laws of exponents; factoring polynomial expressions; simplifying polynomial and rational expressions.
Formerly TRST 3401.

TRST 3422. High School Algebra 1 B (90 hrs)
**Advising:** Placement into TRST 3422 or completion of TRST 3421
A second course in Algebra: properties of equations and inequalities, linear equations, quadratic equations and introduction to graphing.
Formerly TRST 3402.

TRST 3423. Geometry 1A (90 hrs)
**Advising:** TRST 3421
Develop the ability to construct formal, logical arguments and proofs in geometric settings through the exploration of plane and solid geometry. Measure, draw, analyze and compare shapes that can be drawn on a flat surface called a plane, and use those ideas to construct solid forms.
Formerly TRST 3403.

TRST 3424. Geometry 1B (90 hrs)
**Advising:** TRST 3423 or placement in TRST 3424
Further development of the skills mastered in TRST 3423, Geometry 1A. Aside from learning the skills and concepts of angles, triangles, polygons, polyhedra and spheres, students will develop their ability to construct formal, logical arguments and proofs in geometric settings and problems.
Formerly TRST 3404.

TRST 3531. HS United States History 1 (90 hrs)
**Advising:** Placement in TRST 3531
U.S. History up to the Civil War, emphasizing the influence of past events on the present. Analysis of historical cause and effect from political, social, and economic viewpoints.
Formerly TRST 3500.

TRST 3532. High School U.S. History 2 (90 hrs)
A brief review covering from the Progressive Era to Contemporary American Society, emphasizing the influence of past events on the present. Analysis of historical cause and effect from different political, social, economic and cultural viewpoints.
Formerly TRST 3501.

TRST 3533. Civics (90 hrs)
**Advising:** Placement in TRST 3533
The Constitution, the rights and responsibilities of citizens, elections, and the party system. Introduces students to a practical understanding of the law.
Formerly TRST 3502.

TRST 3534. Economics (90 hrs)
**Advising:** Placement in TRST 3534
Basic economic principles and their applications to the free enterprise system. Economic concepts applied to students' personal financial decisions.
Formerly TRST 3503.

TRST 3535. Modern World History (90 hrs)
**Advising:** Placement in TRST 3535
A study of the major turning points that shaped the modern world, from the late eighteenth century through the present, including the cause and course of two world wars.
Formerly TRST 3506.

TRST 3536. Social Justice (90 hrs)
Students will examine issues of social, economic and environmental justice in the United States in order to develop an understanding of patterns of injustice and methods of obtaining justice. They may also examine similar patterns in the international community.
Formerly TRST 3508.

TRST 3537. High School United States History 3 (0-5)
A high school history survey of the eras between the Great Depression and the present. Fulfills Social Science Core high school credits. Complies with Historical Thinking Standards from National Center for History and Common Core Standards

TRST 3631. Physical Science 1 (90 hrs)
**Prereq.:** Placement in TRST 3631
Study of how people are influenced by the physical world. Includes climate, the ocean, natural events, natural resources, the earth's relationship to the sun and moon, and the effects of population on the earth. Current events analyzed using course concepts.
Formerly TRST 3504.
TRST 3642. High School Biology (90 hrs)
A general introduction to cell structure and functions, the cell cycle, principles of molecular and organism genetics.
Formerly TRST 3602.

TRST 3643. High School Ecology (90 hrs)
An introductory course in Ecological concepts including: structure and function of the biosphere; ecological fluctuations regarding populations, biodiversity, biotic and abiotic factors, trophic relationships, biochemical/nutrient cycles, and examination of current conservation practices.
Formerly TRST 3603.

TRST 3644. High School Physics (90 hrs)
Advis: TRST 3422
Quantitative and qualitative study of forces, motion, and energy including linear, non-collinear, and fluid forces; motion at constant speed; relations between time, distance, and speed; transverse and longitudinal waves; thermal energy, specific heat, and heat of fusion; potential and kinetic energy; and the law of conservation of energy.
Formerly TRST 3605.

TRST 3721. Visual Arts (90 hrs)
Students view reproductions and original works of art in order to develop their perceptual skills, learn art elements and principles of design, and learn about the historical and cultural context of visual art. They produce their own works of visual art and participate in a critique of all student work.
Formerly TRST 3701.

TRST 3732. Comparative Religion (90 hrs)
Focusing on the evolution of Eastern religions from the starting point of Hinduism and of Western religions from the starting point of Judaism, students will study the historical development and core beliefs of six of the world’s religions: Hinduism, Taoism, Buddhism, Judaism, Christianity and Islam.
Formerly TRST 3702.

Vocationally Related Courses
Prepare for Employment, Entry into Job Training Programs, or Further College Study

TRST 4600. Pre-Vocational Foundation Skills (45-90 hrs)
Advis: Placement in TRST 4600
A competency based course focusing on the basic skills and personal qualities needed to succeed in the entry-level workplace. May be offered bilingually in Spanish and/or in other languages.

TRST 4601. On the Job Communication Skills (54-90 hrs)
Advis: Placement in TRST 4601
Listening and responding skills and other interpersonal communication skills needed for success on the job. Includes résumé writing and interview practice, and introduction to on the job work standards and employer expectations. Special emphasis on the hospitality industry.

TRST 4602. Literacy Tutor Training (12 hrs)
Provides instructional techniques in basic reading and writing including demonstration and practice. Includes student assessment, progress evaluation and choosing instructional materials. Designed for volunteers and paraprofessionals who will be tutoring adult students in literacy skills.

TRST 4603. Graphic Arts Academics (36-180 hrs)
Academic and vocational instruction that offers a study of mathematics, science and vocabulary as it relates to the field of graphic communications. Prepares students for entry into the Graphic Communications program.

TRST 4604. Vocational Foundation Skills (36-180 hrs)
Advis: TRST 4603 or Placement in TRST 4604
Competency-based course designed to support student academic success in vocational programs. Focus is on the foundation skills for reading, writing, math and study skills. Course may be repeated.

TRST 4640. Vocational Foundation Skills-Reading, Writing, and Study Skills (22.5 hrs)
Competency-based course designed to support student academic success in vocational programs. Focus is on the foundation skills of reading, writing, and study skills necessary for vocational and academic success. May be offered bilingually in Spanish and/or in other languages. Course may be repeated.

TRST 4644. Vocational Foundation Skills-Mathematics and Job Readiness. (22.5 hrs)
Competency-based course designed to support student academic success in vocational programs. Focus is on the foundation skills of mathematics and job readiness skills necessary for personal time and income management. May be offered bilingually in Spanish and/or in other languages. Course may be repeated.

Visual Media Design
Office: Visual Arts 141
Phone Number: (415) 239-3481
Web Site: www.ccsf.edu/graphics

Announcement of Curricula

General Information
Graphic Communications Department provides educational programs for a broad range of visual media. Our curriculum includes courses in graphic design and production skills for print and interactive media, digital imaging, digital illustration, typography, book arts, 2D and 3D animation, interactive game design and production letterpress, and offset and digital print production. Our degree and certificate programs prepare students for entry-level employment or transfer to a four-year institution for further study. These programs are described on the following pages. Enrollment in the various program areas is open to all interested students.

Graphic Design Major (AA)
We are living in an information society—surrounded by an ever-increasing barrage of words, images and sounds. The role of the graphic designer is to shape this information in a meaningful way, visualizing and communicating ideas in the most engaging manner possible.

The Graphic Design major was created to provide students with a strong foundation in the fundamental aspects of the designer’s art. Students develop creativity and ideation skills, learn the theories of communication design and apply this to a wide range of design situations. Communication in all forms—visual, verbal and written—is stressed. The program is hands-on, integrating conceptual design studies with traditional and digital tools and production methods.
Advanced students have the opportunity to further develop their skills in Emerge Studio, a design practicum that provides quality communications pieces to the campus community. An elective work experience course allows students to broaden their design vocabulary through supervised work in local design firms. Our City College of San Francisco American Institute of Graphic Artists (AIGA) student chapter provides additional educational, networking and outreach opportunities within the professional design community.

**Learning Outcomes**

Students successfully completing the program will be able to:

- Employ a structured iterative creative process (research, ideation, development, analysis and prototyping) to solve a variety of design problems;
- Combine appropriate aesthetic form and content to create evocative and engaging work;
- Create appropriate typographic solutions for a variety of design situations;
- Demonstrate proficiency with computers, software and production processes;
- Select appropriate tools, materials and processes for a range of media products;
- Work collaboratively within a creative team;
- Critically evaluate and discuss the merits of various creative ideas;
- Develop and maintain a professional portfolio of work.

This course of study is designed so that students may satisfy the requirements for graduation from the College. Students are encouraged to meet with a program advisor to discuss program planning and articulation agreements for continued study.

**Courses Required for the Major in Graphic Design**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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<tbody>
<tr>
<td>First Semester</td>
<td></td>
</tr>
<tr>
<td>DSGN 101 Design Fundamentals</td>
<td>3</td>
</tr>
<tr>
<td>VMD 100 Orientation to Visual Media Design</td>
<td>2</td>
</tr>
<tr>
<td>VMD 105 Digital Skills for Visual Media</td>
<td>3</td>
</tr>
<tr>
<td>VMD 111 Survey of Print Production</td>
<td>3</td>
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<tr>
<td>Additional graduation requirements</td>
<td></td>
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<tr>
<td>Second Semester</td>
<td></td>
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<tr>
<td>VMD 120 Graphic Design I</td>
<td>3</td>
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<tr>
<td>VMD 130 Typography I</td>
<td>3</td>
</tr>
<tr>
<td>VMD 154 Photoshop I</td>
<td>3</td>
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<tr>
<td>VMD 152 InDesign I</td>
<td>3</td>
</tr>
<tr>
<td>Additional graduation requirements</td>
<td></td>
</tr>
<tr>
<td>Third Semester</td>
<td></td>
</tr>
<tr>
<td>VMD 122 Graphic Design II</td>
<td>3</td>
</tr>
<tr>
<td>VMD 131 Typography II</td>
<td>3</td>
</tr>
<tr>
<td>VMD 150 Illustrator I</td>
<td>3</td>
</tr>
<tr>
<td>Visual Media Design*</td>
<td>2</td>
</tr>
<tr>
<td>Additional graduation requirements</td>
<td></td>
</tr>
<tr>
<td>Fourth Semester</td>
<td></td>
</tr>
<tr>
<td>VMD 124 Graphic Design III</td>
<td>3</td>
</tr>
<tr>
<td>VMD 200A Design Studio Practicum</td>
<td>3</td>
</tr>
<tr>
<td>VMD 190 Portfolio Preparation</td>
<td>2</td>
</tr>
<tr>
<td>Visual Media Design*</td>
<td>2</td>
</tr>
<tr>
<td>Additional graduation requirements</td>
<td></td>
</tr>
<tr>
<td>Total Units</td>
<td>44</td>
</tr>
</tbody>
</table>


**Certificate Curricula**

The Certificate Curricula consists of four programs of study: Digital Printing and Publishing, Production Art, and a Noncredit Graphics Support Specialist Certificate. Each is designed to prepare students to enter the work force. For further information contact the Graphic Communications Department office, Visual Arts Room 141.

**Requirements for the Certificate of Accomplishment or Achievement.** Students may obtain a Certificate of Accomplishment or Achievement by completing each course in their program of study with a final grade of “C” or higher.

**Collaborative Design Certificate***

The 17-unit certificate program in Collaborative Design provides students with a strong foundation in multidisciplinary approaches to design and collaboration.

* See Interdisciplinary Studies section of the Catalog.

**Digital Illustration Certificate***

* The program is pending state approval.

Please refer to the online version of the Catalog.

**Digital Printing and Document Management Certificate**

The Digital Printing and Document Management certificate provides an understanding of the commercial printing industry with emphasis on contemporary methods in reprographics, production workflow and customer service. The course of study prepares students for entry-level positions in commercial and in-plant printing establishments, digital media processing and facilities management companies.

Each course must be completed with a grade of “C” or higher.

**Learning Outcomes**

Students successfully completing the program will be able to:

- Analyze and critique print projects, providing customers with constructive suggestions for improvement and/or cost options;
- Integrate knowledge of industry-standard concepts processes and digital tools used in print manufacturing;
- Familiarity with industry standard software such as Adobe Acrobat, InDesign, Photoshop and Microsoft Word;
- Demonstrate the ability to produce professional quality documents including books and multipage reports using high-volume digital printing equipment and prescribed production steps;
- Evaluate and apply input and workflow options to ensure a quality product;
- Work collaboratively; demonstrating flexibility and an ability to produce under pressure in a fast paced environment.

**Courses Required for the Certificate of Accomplishment in Digital Printing and Document Management**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>First Semester</td>
<td></td>
</tr>
<tr>
<td>VMD 105 Digital Skills for Visual Media</td>
<td>3</td>
</tr>
<tr>
<td>VMD 111 Survey of Print Production</td>
<td>3</td>
</tr>
</tbody>
</table>
Second Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>VMD 154 Photoshop I</td>
<td>3</td>
</tr>
<tr>
<td>VMD 151 Illustrator II</td>
<td>3</td>
</tr>
<tr>
<td>VMD 153 InDesign II</td>
<td>3</td>
</tr>
<tr>
<td>VMD 141 Web Production II</td>
<td>3</td>
</tr>
<tr>
<td>VMD 142 Web Production III</td>
<td>3</td>
</tr>
<tr>
<td>VMD 131 Typography II</td>
<td>3</td>
</tr>
<tr>
<td>VMD 200A Design Studio Practicum</td>
<td></td>
</tr>
<tr>
<td>VMD 194A Internship/Work Experience I</td>
<td>1-3</td>
</tr>
<tr>
<td>VMD 190 Portfolio Preparation</td>
<td>3</td>
</tr>
<tr>
<td>Electives</td>
<td>9</td>
</tr>
<tr>
<td>Total Units</td>
<td>31-33</td>
</tr>
</tbody>
</table>

Students shall take a minimum of nine units from the following electives: VMD 111, 140, 145; VMD 127, 140, 145; CNIT 133

Graphics Support Specialist Noncredit Certificate

The Graphics Support Specialist certificate program is a five-course learning community that provides basic graphic design and digital production skills to students seeking administrative and/or clerical employment. The curriculum consists of five courses covering Macintosh computer hardware and operating systems, graphic design and type fundamentals and an introductory overview to page layout, illustration and photo-editing software for use in print and web communications.

Each course must be completed with a grade of “C” or higher.

Learning Outcomes

Upon completion of the Graphics Support Specialist Certificate, students will be able to:

- Demonstrate proficiency with Macintosh hardware, operating systems and essential utilities;
- Demonstrate proficiency with industry-standard graphic arts software programs to produce basic documents for print and web communications.
- Create digital documents with an understanding of basic design and typographic principles.

Core Course          Hours
GRPH 0921 Design and Type Fundamentals*   90
GRPH 0925 Intro to Mac Graphics*           90
GRPH 1000 Intro to Adobe Illustrator*      45
GRPH 1008 Intro to Adobe Photoshop*        45
GRPH 1009 Intro to InDesign*               45
Total Hours                                             315

*Requires that courses be taken concurrently.

Multimedia Studies

Office: VA 143A
Phone Number: (415) 452-5107
Web Site: www.ccsf.edu/graphics

The Multimedia Studies Program prepares students for entry-level employment in the multimedia industry. Created as a cooperative effort by many disciplines, the program offers instruction in the design, development, tools, techniques, and production of computer-based interactive multimedia. Teamwork is emphasized, reflecting the interdisciplinary work environment of the multimedia industry.

Certificate of Accomplishment or Achievement. Students may obtain a Certificate in Multimedia Studies by completing the courses in one of the areas listed below. Each course must be completed with a final grade of “C” or higher or pass
**Digital Animation Certificate**

The Digital Animation certificate builds on the Digital Art Foundation Certificate for students interested in Digital Animation. It combines the study of animation, art, graphics and problem solving using the tools and techniques for digital animation. This course of study prepares students for entry-level positions in digital animation. This certificate requires successful completion of the Digital Art Foundation Certificate (19 units) or demonstration of equivalent knowledge and skills. Each course in this certificate must be completed with a grade of “C” or higher.

**Learning Outcomes**

Students successfully completing the program will be able to:

- Demonstrate understanding of concepts used in the animation field.
- Demonstrate proficiency with computer tools and processes used in animation.
- Create, edit and troubleshoot files using industry-standard software.
- Produce animations both independently and collaboratively.
- Analyze and critique communication design work in verbal and written form.
- Employ professional design/production studio practices, such as project management, record keeping, asset management, file naming and archiving.
- Maintain a portfolio of animation work.

**Courses Required for Certificate of Achievement in Digital Animation**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>VMD 168 Visual Development for Animation</td>
<td>3</td>
</tr>
<tr>
<td>or Art 136A Beginning Illustration</td>
<td>3</td>
</tr>
<tr>
<td>VMD 156 Flash</td>
<td>3</td>
</tr>
<tr>
<td>VMD 166 Storyboarding/Storytelling</td>
<td>3</td>
</tr>
<tr>
<td>VMD 162 2D Animation</td>
<td>3</td>
</tr>
<tr>
<td>VMD 164 3D Animation</td>
<td>3</td>
</tr>
<tr>
<td>VMD 191 Social Media for Professionals</td>
<td>2-3</td>
</tr>
<tr>
<td>or VMD 190 Portfolio Preparation</td>
<td>2-3</td>
</tr>
<tr>
<td>VMD 194B Internship/Work Experience II</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total Units</strong></td>
<td><strong>19-20</strong></td>
</tr>
</tbody>
</table>

**Game Development Certificate**

The Game Development certificate builds on the Digital Art Foundation certificate for students interested in game development. The Game Development certificate program combines the study of game art design and development using tools and techniques for interactive game development. This course of study prepares students for entry-level positions in the interactive game design and development industry. This certificate requires successful completion of the Digital Art Foundation certificate (19 units) or demonstration of equivalent knowledge and skills. Each course in this certificate must be completed with a grade of “C” or higher.

**Learning Outcomes**

Upon completion of this program, students will be able to:

- Demonstrate understanding of concepts used in game development.
- Demonstrate proficiency with computer tools and processes used in game development.
- Create, edit and troubleshoot files using industry-standard software.
- Produce game work both independently and collaboratively.
- Analyze and critique communication design work in verbal and written form.
- Employ professional design/production studio practices, such as project management, record keeping, asset management, file naming and archiving.
- Maintain a portfolio of game artwork.

**Courses Required for Certificate of Achievement in Game Development**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>VMD 180 Exploring Game Words</td>
<td>3</td>
</tr>
<tr>
<td>VMD 182 Game Production Workflow</td>
<td>3</td>
</tr>
<tr>
<td>VMD 156 Flash</td>
<td>3</td>
</tr>
<tr>
<td>VMD 166 Storyboarding/Storytelling</td>
<td>3</td>
</tr>
<tr>
<td>VMD 162 2D Animation</td>
<td>3</td>
</tr>
<tr>
<td>VMD 164 3D Animation</td>
<td>3</td>
</tr>
<tr>
<td>VMD 188 Career Portfolio for Games</td>
<td>2-3</td>
</tr>
<tr>
<td>or VMD 190 Portfolio Preparation</td>
<td>2-3</td>
</tr>
<tr>
<td>VMD 184 Team Production of Games</td>
<td>2-3</td>
</tr>
<tr>
<td>or VMD 194B Internship/Work Experience II</td>
<td>2-3</td>
</tr>
<tr>
<td><strong>Total Units</strong></td>
<td><strong>22-24</strong></td>
</tr>
</tbody>
</table>

**Web Foundation Certificate**

This certificate provides foundational knowledge and skills for those who want to work on web development. It can serve as a stand-alone certificate, or as the basis for continued study in front-end web development.

**Learning Outcomes**

Upon completion of this certificate, students will be able:

- Demonstrate an awareness of computer tools and processes used in visual communication and web development.
- Create and edit files and web sites using industry-standard software.
- Demonstrate an understanding of the elements and principles of visual design.
- Demonstrate an understanding of iterative design process.
- Analyze and critique communication design work in verbal and written form.
- Produce web site work both independently and collaboratively.

**Courses Required for the Certificate of Accomplishment in Web Foundation**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>VMD 100 Orientation to Visual Media Design</td>
<td>1</td>
</tr>
<tr>
<td>VMD 105 Digital Skills for Visual Media</td>
<td>3</td>
</tr>
<tr>
<td>VMD 103 Content and Form</td>
<td>3</td>
</tr>
<tr>
<td>or DSGN 101 Design Fundamentals</td>
<td>3</td>
</tr>
<tr>
<td>VMD 140 Web Production I</td>
<td>3</td>
</tr>
<tr>
<td>VMD 154 Photoshop I</td>
<td>3</td>
</tr>
<tr>
<td>CNIT 132 Intermediate HTML and XHTML</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Units</strong></td>
<td><strong>16</strong></td>
</tr>
</tbody>
</table>

**Web Front-end Development Certificate**

The Web Front-end Production certificate builds on the Web Foundation certificate for students interested in web development. It prepares students for work as front-end web developers, combin
ing the study of industry-standard software, the development process and front-end web development tools. This certificate requires successful completion of the Web Foundation Certificate (16 units) or demonstration of equivalent knowledge and skills. Each course in this certificate must be completed with a grade of “C” or higher.

**Learning Outcomes**

Upon completion of this certificate, students will be able to:

- Integrate knowledge of industry-standard concepts used in web production to build web sites.
- Demonstrate proficiency with computer tools and processes used in web development.
- Create, edit and troubleshoot files using industry-standard software.
- Produce web front-end work both independently and collaboratively.
- Analyze and critique communication design work in verbal and written form.
- Employ professional design/production studio practices, such as project management, record keeping, asset management, file naming and archiving.

**Courses Required for the Certificate of Achievement in Web Front-end Production**

**Course** | **Units**
---|---
CNIT 133 Interactive Web Pages Javascript and Ajax | 3
VMD 141 Web Production II | 3
VMD 142 Web Production III | 3
VMD 127 User Experience | 3
VMD 191 Social Media for Professionals | 3
CNIT 198 Internship and Work Experience | 2
Electives | 2

**Total Units** | **20**

**Electives:** VMD 120, VMD 130, VMD 154, VMD 152, 126; CNIT 134; CS 130A; VMD 156

**Announcement of Courses**

**Visual Media Design**

**Credit, Degree Applicable Courses:**

**VMD 100. Orientation to Visual Media Design (1)**
Lec-16 (total hrs), field trips

Overview of the Graphic Communications and Multimedia Studies industries and the requirements for programs of study. Lectures provide an overview of the areas of study, transfer options and employment opportunities. Students will identify the necessary skills to succeed in these fields and determine their program of study. CSU

Formerly GRPH 23/MMSP 110

**VMD 103. Content and Form (3)**
Lec-3, Lab-3, field trips  

*Advisement: Completion of or concurrent enrollment in VMD 105*

Understanding of content and visual form through the exploration of the fundamental design process as it pertains to the creation of multimedia products and titles. Function and importance of visual elements and design principles will be explored through handcrafted and computer exercises and projects. A survey of multimedia and its artistic and cultural relevancy will also be covered through lectures and student presentations. CSU/UC

Formerly MMSP 125.

**VMD 105. Digital Skills for Visual Media (3)**
Lec-2, lab-4

A foundational hands-on Mac computer class for all graphic communications students. Topics of instruction will include computer hardware and OS software, networks, type and text formatting, raster and vector graphics, time-based media, layout for print and web, and best practices. Topics will be covered through lecture and practical exercises. CSU

Formerly GRPH 25.

**VMD 110. History of Graphic Design (3)**
Lec-3

*Advisement: ENGL 92 or ESL 150 (or placement in ENGL 92 or ESL 150)*

A study of the development of visual communication in art, graphic design, illustration and popular culture from the 19th century to the present. The influence of political, social technological and commercial forces will be discussed and analyzed, with an emphasis on the use and interpretation of imagery, symbols and type in design. CSU/UC

Formerly GRPH 110.

**VMD 111. Print Processes for Designers (3)**
Lec-2, lab-4  
P/NP available

Prereq: VMD 105

A practical course to familiarize design students with processes and workflows involved in producing digital and offset printed materials. Students complete in-class exercises for the stages of print production—prepress, press, and finishing—using digital and traditional equipment. Formerly GRPH 27.

**VMD 113. Current Topics in Visual Media Design (2)**
Lec-1, lab-3, field trips

Prereq: VMD 105

Exploration of current issues in multimedia production, including industry standards and innovations. Topics will include file formats and content/asset editors, as well as current and future trends. Other topics will vary. CSU

Formerly IDST 144.

**VMD 114A. Letterpress Printing I**
Lec-2, lab-1

The art and craft of letterpress printing and hand set type. Skills development in typesetting, proofreading, polymer plate usage, stock selection, calculation and presswork. CSU

Formerly GRPH 92A

**VMD 116A. Book Structures, Boxes and Bindings I (2)**
Lec-2, lab-1, field trips

An introduction to the various practical methods of contemporary book design and production within a context of the historical development of book structures. CSU

Formerly GRPH 153

**VMD 120. Graphic Design I (3)**
Lec-2, lab-4, field trips

Prereq: ART 125A or VMD 103 or DSGN 101

Development of problem-solving and conceptualization skills for graphic design. Exploration of various design principles and their applications. Use of design elements, type and image to communicate effectively to a target audience. CSU

Formerly GRPH 35
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Prerequisites/Restrictions</th>
</tr>
</thead>
<tbody>
<tr>
<td>VMD 122</td>
<td>Graphic Design II (3)</td>
<td></td>
<td>Lec-2, lab-4, field trips; Prereq.: VMD 120 AND 101A; Continued study of conceptual development, iterative design process, typography and layout for graphic design. CSU Formerly GRPH 36</td>
</tr>
<tr>
<td>VMD 124</td>
<td>Graphic Design III (3)</td>
<td></td>
<td>Lec-2, lab-4, field trips; Prereq.: VMD 122; An advanced graphic design class focusing on the development of a personal voice and conceptual approach to design thinking. Topics include visual language, sequential design, information design and design writing and research. Design process is emphasized. CSU Formerly GRPH 37</td>
</tr>
<tr>
<td>VMD 126</td>
<td>Design for Interactive Media (3)</td>
<td></td>
<td>Lec-3, lab-3, field trips; Prereq.: VMD 120 AND VMD 140; A graphic course focusing on interactive media products. Topics of study include information architecture, interface and user considerations, content/structure relationships, and visual design for computer and mobile devices. Students will research and design solutions for various interactive products. CSU Formerly GRPH 140</td>
</tr>
<tr>
<td>VMD 127</td>
<td>User Experience (3)</td>
<td></td>
<td>Lec-3, lab-1; Prereq.: VMD 140; This course focuses on industry-standard concepts and vocabulary used in User Experience (UX) for interactive projects, including interface design, information architecture, and UX principles, processes, and techniques. Students explore key topics of user-centered design through a series of hands-on exercises and projects. CSU Formerly MMSP 136</td>
</tr>
<tr>
<td>VMD 130</td>
<td>Typography I (3)</td>
<td></td>
<td>Lec-3, lab-1; Prereq.: DSGN 101 OR VMD 103; Coreq.: VMD 152; Beginning typography with a study of the history, classification, technology, and use of type in communications. Students will develop an understanding of type mechanics and design issues through practical exercises and assignments. CSU Formerly GRPH 53A</td>
</tr>
<tr>
<td>VMD 131</td>
<td>Typography II (3)</td>
<td></td>
<td>Lec-3, lab-1, field trips; Prereq.: VMD 130; Continued study of typography with emphasis on the development of an awareness of typographic form and structure. The role of typography in communications will be explored through practical exercises in typesetting and typographic design. CSU Formerly GRPH 53B</td>
</tr>
<tr>
<td>VMD 134</td>
<td>Lettering and Type (1)</td>
<td></td>
<td>Lec-1, lab-1, field trips; Advise: VMD 130; Instruction in hand-lettering with an emphasis on the relationship between calligraphy and type design. Study of and practice in various hands and techniques; creative exercises in letterform design. CSU Formerly GRPH 151</td>
</tr>
<tr>
<td>VMD 136</td>
<td>Digital Font Creation (1)</td>
<td></td>
<td>Lec-1, lab-1, field trips; Prereq.: VMD 150; Advise: VMD 130, VMD 134; Hands-on experience in creating fonts for the Macintosh computer. Practice in all the digital aspects of the process from concept to execution. Discussion of standards, uses and techniques of type design, and of the current state of the industry. CSU Formerly GRPH 152</td>
</tr>
<tr>
<td>VMD 140</td>
<td>Web Production I (3)</td>
<td></td>
<td>Lec-3, lab-3, field trips; Prereq.: VMD 105; Advise: VMD 103; Overview of web development, planning and production through a hands-on approach. Topics include: multimedia planning, budget development, creating wireframes, and design, production and marketing techniques for a web site. Assignments will focus on pre-production planning and production of a web site. CSU Formerly MMSP 130</td>
</tr>
<tr>
<td>VMD 141</td>
<td>Web Production II (3)</td>
<td></td>
<td>Lec-3, lab-1; Prereq.: VMD 140; Advise: VMD 103; Development for web and smart devices using Dreamweaver and professional level code editors. Topics include separating markup, presentation and content. Section 508, production of accessible web sites and using HTML5 and Cascading Style Sheets are also covered. CSU Formerly MMSP 135A</td>
</tr>
<tr>
<td>VMD 142</td>
<td>Web Production III (3)</td>
<td></td>
<td>Lec-3, lab-1; Prereq.: VMD 141; Overview of advanced tools for designers interested in developing web sites using professional level code editors. Topics include static versus dynamic websites, database-driven websites, creating and styling web forms, adding web form input validation, online databases, creating and styling dynamic web pages, and standards-based web production. CSU Formerly MMSP 135B</td>
</tr>
<tr>
<td>VMD 150</td>
<td>Illustrator I (3)</td>
<td></td>
<td>Lec-3, lab-1; Prereq.: VMD 105; Coreq.: VMD 111; An introductory course in Adobe Illustrator, covering concepts of vector-based image creation. Students reproduce existing images to learn the various tools available within the application. Accuracy and control of Bezier curves is emphasized. CSU Formerly GRPH 100A</td>
</tr>
<tr>
<td>VMD 151</td>
<td>Illustrator II (3)</td>
<td></td>
<td>Lec-3, lab-1; Prereq.: VMD 150; An advanced course in Adobe Illustrator. Creative projects are used to help students to develop a deeper understanding of Illustrator as a design tool. CSU Formerly GRPH 100B</td>
</tr>
</tbody>
</table>
VMD 152. InDesign I (3)
Lec-3, lab-1
Prereq.: VMD 105
Advising: VMD 154 or VMD 150 or VMD 111
An introduction to page layout using Adobe InDesign. Topics include typesetting and text handling, placing and manipulating images, combining type and images, creating objects, using styles for formatting text and objects, creating and applying color, packaging and printing files. CSU
Formerly GRPH 101A.

VMD 153. InDesign II (3)
Lec-3, lab-1
Prereq.: VMD 152
Continued study and use of Adobe InDesign for print; advanced typesetting, creating and applying grids in single and multi-page documents, in depth use of master pages and styles, tables, transparency, books, imposition, preflight, packaging, and output. CSU
Formerly GRPH 101B.

VMD 154. Photoshop I (3)
Lec-3, lab-1
Prereq.: VMD 105
This is an intensive, hands-on course using Adobe Photoshop. A broad understanding of raster image creation and editing is achieved through in-class projects. CSU
Formerly GRPH 98A.

VMD 155. Photoshop II (3)
Lec-3, lab-1
Prereq.: VMD 154
An advanced, hands-on course in Adobe Photoshop. Creative projects are used to help students develop an understanding of Photoshop as a design tool. CSU
Formerly GRPH 98B.

VMD 156. Flash (3)
Lec-3, lab-1
Prereq.: VMD 105
Adobe Flash, including drawing, animation, sound and interactivity using beginning ActionScript 3.0. This course prepares students for advanced multimedia classes in 2D animation, Flash web design and Flash game development. CSU
Formerly MMSP 140.

VMD 162. 2D Animation (3)
Lec-2, lab-4, field trips
Prereq.: VMD 156 or CS 183A
Advising: ART 130A or ART 132A
An introduction to techniques used in animation. An overview of the industry of animation, as well as the specific tools and techniques currently used in multimedia. CSU
Formerly MMSP 146.

VMD 164. 3D Animation (3)
Lec-2, lab-4
Prereq.: VMD 105; and VMD 103 or ART 130A
Introduction to techniques used in 3D modeling and imaging. An overview of the 3D industry, as well as the specific tools and techniques used in multimedia. CSU
Formerly MMSP 147.

VMD 166. Storytelling/Storyboarding (3)
Lec-3, lab-1, field trips
Prereq.: VMD 103 or ART 125A or ART 130A
This course aids in the generation and development of content for multimedia projects. Using traditional storytelling methods, personal writing, script writing techniques and performance exercises in and outside of the classroom, the student will explore multiple ways to generate and script content. Emphasis on development of skills and techniques of storyboarding. CSU
Formerly MMSP 145.

VMD 168. Visual Development for Animation (3)
Lec-3, lab-1, field trips
Prereq.: VMD 154, VMD 150 and ART 130
Advising: ART 132A
An overview of techniques of visual development for animation. Students will be exposed to developmental stages including character development and storyboarding. CSU
Formerly GRPH 133.

VMD 170. Digital Illustration I (3)
Lec-3, lab-3
Prereq.: VMD 150, VMD 154, ART 130A
Advising: IDST 110
This course covers techniques in Adobe Photoshop and Adobe Illustrator for illustrators. While gaining technical knowledge, students will also begin to explore stylistic options and build a body of work. Sketching and other techniques for developing concepts are also covered. CSU/UC
Formerly GRPH 110A.

VMD 172. Digital Illustration II (3)
Lec-3, lab-3
Prereq.: VMD 170
An advanced course in digital illustration focusing on the development of conceptual and narrative skills as they apply to a range of illustration projects. CSU/UC
Formerly GRPH 110B.

VMD 178. Portfolio Development for Illustration (2)
Lec-2
Prereq.: VMD 170
A course in portfolio development, copyright law and professional practices for aspiring digital illustrators. CSU
Formerly GRPH 118.

VMD 180. Exploring Game Worlds (3)
Lec-3, lab-1, field trips
Prereq.: VMD 180
Coreq.: VMD 164
An introduction to the history and status of interactive games. Students examine games as an art form and as part of an ever-growing industry. Includes an introduction to the career opportunities in the game industry. Students will learn how individual games are made, distributed and sold. CSU
Formerly GAME 100.

VMD 182. Game Production Workflow (3)
Lec-3, lab-1
Prereq.: VMD 180
This course develops fundamental skills in production and project management for interactive games. This course will explore the pro
access of game production through designing, scheduling and creating an original playable prototype in a 3D game engine. Students will design independently and as part of a team. CSU/UC Formerly GAME 130.

**VMD 184. Team Production of Games (3)**
Lec-3, lab-1  P/NP available
Prereq.: VMD 182
This course provides students with the experience of working in a videogame development team. It enables students to understand the collaborative model employed in the commercial videogame production environment where different departments each bring special skill-sets to a single product. CSU Formerly GAME 140.

**VMD 188. Career Portfolio for Games (3)**
Lec-3, lab-1, field trips  P/NP available
Prereq.: VMD 182
Development of a portfolio for employment in an entry-level position as a designer or producer in the interactive game industry. This course will include resumé writing, demo reels, design documents, informational interviewing, licensing issues and other topics based on students' particular track and special interests within the industry. CSU Formerly GAME 140.

**VMD 190 Portfolio Preparation (2)**
Lec-2, conf-1
Prereq.: VMD 120, VMD 130, VMD 154, VMD 150 AND VMD 152
Portfolio development for visual media design students. The course will cover design strategies, content editing and sequencing, format options for print and interactive media, and portfolio presentation. Students will design and produce an online portfolio, sequenced portfolio, marketing materials and resume. CSU Formerly GRPH 149.

**VMD 191. Social Media for Professionals (3)**
Lec-3  P/NP available
Prereq.: VMD 105 OR BCST 119
Advis: VMD 140 AND CNIT 129
This course teaches students how to use online social media tools such as Facebook, Twitter, LinkedIn and YouTube to develop, integrate and leverage online social networks. Students learn how to set up a professional media campaign as they engage clients with these tools. Students also critique current social media practices. CSU Formerly MMMSP 160.

**VMD 192. Professional Practice (2)**
Lec-2, field trips
Prereq.: SUCCESSFUL COMPLETION OF THREE SEMESTERS OF STUDY IN THE GRAPHIC COMMUNICATIONS DEPARTMENT
Advanced course focusing on graphic design professional practices: resumé and portfolio development, freelancing and small business issues, fees, contracts, taxes, copyright, helpful resources and other related topics. CSU Formerly GRPH 148.

**VMD 194A. Internship/Work Experience I (1)**
Work-5
Prereq.: VMD 131 AND 122
Application of graphic design skills and development of proficiency in a supervised work environment. CSU Formerly GRPH 197.

**VMD 194B. Internship/Work Experience II (2)**
Conf-1, work-7, field trips
This course places advanced-level students into internship positions in multimedia development companies throughout the Bay Area. CSU Formerly MMMSP 160.

**VMD 196. Independent Study (2)**
Ind st-10  P/NP available
Prereq.: VMD 103 AND 130 OR DEMONSTRATION OF EXIT SKILLS
Students develop projects defined by CCSF client and instructor. Typical projects include a CCSF departmental web site, marketing CD-ROM or instructional DVD. CSU Formerly MMMSP 160.

**VMD 200A. Design Studio Practicum (3)**
Lab - 8
Prereq.: VMD 120, 130, 150, 152 AND 154
Emerge Studio, our in-house communication design studio, provides an environment for developing real-world skill proficiency. Students will gain practice with client communications, iterative design process and project management for individual and collaborative design projects, including posters, marks, brochures, booklets and journals, campaigns and other projects. CSU Formerly GRPH 68.

**Noncredit Courses:**

**GRPH 0921. Design and Type Fundamentals (90 hrs)**
An introduction to design and typography as a language for visual communication, covering design elements and principles, design process, vocabulary of type and use of layout and type to create effective communication.

**GRPH 0925. Intro to Mac Graphics (90 hrs)**
An introductory, hands-on Macintosh computer class for graphic arts. Computer hardware, system software, text formatting, raster and vector graphics will be covered.

**GRPH 1000. Introduction to Adobe Illustrator (45 hrs)**
Advis: TIPL 9661
An introductory course for Adobe Illustrator-the industry standard, vector-based digital illustration software. This course will establish an understanding of the basic features in Adobe Illustrator.

**GRPH 1008. Introduction to Adobe Photoshop (45 hrs)**
Advis: TIPL 9661
An introductory course for Adobe Photoshop—the industry standard, raster-based digital imaging and editing software. This course will establish an understanding of the basic features in Adobe Photoshop.

**GRPH 1009. Introduction to Adobe InDesign (45 hrs)**
Advis: GRPH 0925
An introductory course in Adobe InDesign for page layout. This course will establish an understanding of the basic features of Adobe InDesign for the creation of single and multi-page documents.
Women’s Studies

Office: Cloud 402C
Phone Number: (415) 452-7025
Web Site: www.ccsf.edu/womn

Announcement of Curricula

Women’s Studies Major (AA)

The Associate of Arts in Women’s Studies is a two-year program of study with courses that fulfill graduation requirements for the college and transferable requirements to many CSU, UC and private universities. Through departmental core courses and interdepartmental courses, students focus on women’s experiences taught from a feminist perspective.

Learning Outcomes
Upon completion of this degree, students will be able:

- Examine the process of gender socialization
- Analyze sexism in conjunction with other forms of institutionalized oppression such as racism, homophobia/heterosexism, classism, ableism, ageism, transphobia and ageism/adulthood.
- Distinguish women’s experiences across cultures
- Examine women’s political, historical and artistic achievements
- Apply strategies for improving communication
- Promote healthy behaviors in their personal, social, and work lives

Courses Required for the Major in Women’s Studies

<table>
<thead>
<tr>
<th>Courses Required for the Major in Women’s Studies</th>
<th>Units</th>
</tr>
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<tbody>
<tr>
<td>WOMN 25 Introduction to Women’s Studies: Feminism Demystified</td>
<td>3</td>
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Three units from the following Behavioral Sciences Courses:
- PSYC 25 Psychology of Gender | 3 |
- SOC 25 Sex and Gender in American Society | 3 |
- ANTH 25 Culture, Gender, and Sexuality | 3 |

Three units from the following Social Sciences Courses:
- ECON 25 Women in the Economy | 3 |
- HIST 12A U.S. Women’s History (pre-colonial to the 1880s) | 3 |
- HIST 12B U.S. Women’s History (1880s to the present) | 3 |

Six units from the following Humanities Courses:
- HUM 25 Women in the Arts | 3 |
- ART 108 Women through Art History | 3 |
- ENGL 55 Gay and Lesbian Literature Survey | 3 |
- ENGL 57 Survey of Women’s Literature | 3 |
- ENGL 58 Contemporary Women’s Writing | 3 |
- WOMN 10 Women and Film | 3 |
- WOMN 20 Her/His/Outstories | 3 |
- BCST 105 Gender and Mass Media | 3 |

Three units from the following Diversity Focus Courses:
- AFAM 60 The African Woman in the U.S. | 3 |
- ASAM 35 Asian American Women | 3 |
- LALS 10 Latinas in the U.S.: Voces (Voices) | 3 |
- LGBT 21 Issues in Lesbian Relationships | 3 |
- LGBT 30 Issues in the Lesbian Community | 3 |
- IDST 80A Diversity and Social Justice: Racism | 5 |

IDST 80C Diversity and Social Justice: Sexism | 5 |
IDST 80D Diversity and Social Justice: Heterosexism | 5 |
IDST 80E Diversity and Social Justice: Ableism | 5 |
IDST 80F Diversity and Social Justice: Classism | 5 |
IDST 80G Diversity and Social Justice: Transphobia | 5 |
IDST 81A Diversity and Social Justice: Ageism and Adultism | 1 |
IDST 81B Diversity and Social Justice: Anti-Semitism/Anti-Arabism | 1 |

Three units from the following Life-Work Focus Courses:
- HLTH 25 Women’s Health | 3 |
- WOMN 54 The Politics of Sexual Violence | 3 |
- WOMN 55 Ending Sexual Violence: Peer Education | 3 |
- SUPV 236 Women Leaders at Work | 3 |
- PSYC 14 Psychology of Shyness and Self-Esteem | 1 |
- PSYC 15 Assertive Behavior | 1 |
- PSYC 17 Psychology of Eating, Food, and Weight | 1 |
- LBCS 78B Women’s Employment Issues: Current Issues | 1 |

Total Units | 21 |

Students are encouraged to take English 1A or Speech 1A with a Women’s Studies focus.

Sexual Health Educator Certificate

The curriculum for the Sexual Health Educator Certificate will train students as paraprofessionals in safe and healthy sexuality including violence prevention and intervention, HIV/STI prevention, and the promotion of mature intimate relationships.

The integrated program offers students a opportunity to identify various markers of sexual health, which will enable them to promote healthy and safer sexual relationships in their client populations. They will be able to teach others to negotiate sexual situations with more confidence, knowing their limits, recognizing danger zones, assessing risk factors, and respecting their own and their partners’ needs.

Learning Outcomes
Through academic preparation, practical skills training, and service to the CCSF community, certificate candidates learn to

a. provide accurate, timely information about safe and healthy sex practices
b. apply behavior change theory to real-life situations
c. offer appropriate agency and clinic referrals
d. provide general sexual health advice sensitive to diverse cultures, genders, and sexual orientations
e. identify and address signs to look for in an abusive personality, strategies for leaving an abusive relationship, and rape prevention techniques, as well as characteristics of a healthy, mature, non-violent intimate relationship
f. recognize and address co-factors which increase the risk of HIV/STI infection, such as alcohol and drug use, sexual abuse and assault, low self-esteem and poor communication skills
g. create and produce sexual health education events, such as interactive presentations, health fairs, guest lectures, video screenings, and publicity campaigns

Requirements for the Certificate of Achievement. The certificate requires completion of 15 units, which can be completed in one semester. Each course must be completed with a final grade of “C” or higher or Pass.
Credit toward Graduation. Credit earned to obtain the Certificate of Achievement satisfies the G2 and H2 graduation requirements.

Credit toward Community Health Worker Certificate. Three of the courses required for the Sexual Health Educator Certificate meet the elective requirement for the CHW program.

Courses Required for the Certificate of Achievement in Sexual Health Educator

Course | Units
--- | ---
WOMN 54 The Politics of Sexual Violence | 3
WOMN 55 Ending Sexual Violence: Peer Ed | 3
IDST 17 Human Sexuality | 3
HLTH 67 HIV/STI Prevention | 3

E lective Courses (4 units from the following courses)

SOC 25 Sex and Gender in American Society | 3
SOC 35 Sex, Marriage, and Family Relationships | 3
PSYC 9 Psychology of Stress | 3
PSYC 14 Psychology of Shyness and Self-Esteem | 3
PSYC 15 Assertive Behavior | 3
PSYC 17 Psychology of Eating, Food, and Weight | 3
PSYC 25 Psychology of Gender | 3
ANTH 20 LGBT Anthropology | 3
ANTH 25 Culture, Gender, and Sexuality | 3
HLTH 64 Health Education and Prevention | 3
HLTH 95 Transgender Health: Working with Clients and Communities | 3
HLTH 97 Health & Stress in Society | 3
LGBT 21 Issues in Lesbian Relationships | 3
LGBT 24 Gay Male Relationships | 3
LGBT 60 Psychology of Sexual Minorities | 3
IDST 80-81 Diversity and Social Justice | .5-.1

Total Units | 16

Announcement of Courses

General Information

Women's Studies courses offer students an understanding of gender socialization and women's experiences across cultures; knowledge of women's political, historical, and artistic achievements; and strategies for improving communication and promoting healthy behaviors in our personal, social, and work lives.

Credit, Degree Applicable Courses:

WOMN 10. Women and Film (3)
Lec-3 | P/NP available
Feminist film studies. Applying introductory level feminist film studies to classic and current films. CSU/UC

WOMN 20. Her/His/Our stories (3)
Lec-3, field trips | P/NP Available
Advise: ESL 150 OR PLACEMENT IN ENGL 92 OR ESL 160
The course offers strategies for researching individual and community stories to enhance life and career/job choices while emphasizing female oral storytelling traditions. Documentation skills and processes such as formatting, copyediting, layout, and working with multimedia design consultants are also covered. CSU

WOMN 25. Introduction to Women's Studies: Feminism Demystified (3)
Lec-3 | P/NP available
Introduction to the origins, purpose, subject matter, and methods of Women's Studies and to feminist perspectives on a range of social issues affecting women of diverse backgrounds. Focus on how grassroots feminism led to Women's Studies as a discipline and the connection between the classroom and the community. CSU/UC

WOMN 51-52-53. Current Topics in Women's Studies (1-2-3)
Lec-1,2,3
An interdisciplinary approach to current issues and concerns of women in a variety of areas, such as health, history, and sexuality. CSU (UC upon review)

WOMN 54. Politics of Sexual Violence (3)
Lec-3, field trips | P/NP available
An examination of political, social, and psychological causes of sexual violence, its connection to other hate crimes, and strategies for transforming a violent culture through prevention education, with a special emphasis on the healing function of creative expression. Field project required. CSU
Formerly: IDST 54

WOMN 55. Ending Sexual Violence: Peer Education (3)
Lec-3, field trips | P/NP available
Education and skills training in peer education to promote healthy sexual relationships by reducing sexual violence, specifically intimate partner violence and acquaintance rape. Peer education activities, geared toward ending sexual violence, include presentations to CCSF and high school students and volunteer work in community-based organizations. Field project required. CSU
Formerly IDST 55

AFAM 60. African American Women in the United States (3)
Lec-3 | P/NP available
Examines and comparatively analyzes African American women in the U.S. with particular emphasis on the struggle for rights as African people. Explores the contributions, strategies for success and political activism of African American women from 1619 to the present. CSU/UC

ANTH 25. Culture, Gender and Sexuality (3)
Lec-3 | P/NP Available
This course explores how women and men express their gender and sexuality in various cultures around the world. Focuses on women and men in non-Western cultures such as Native American, African and Asian societies. Discusses relationship of gender to aspects of culture such as kinship, economics, politics, and religion. CSU/UC

ART 108. Women through Art History (3)
Lec-3, field trips
Note: The study of art history requires college-level reading comprehension.
A study of women in art, investigating their place in society as artists and patrons, as well as subjects in art. The course will introduce women from both European and non-European cultures from prehistory to the present. All art will be discussed from both a critical and historical perspective, with regard to a social context and formal visual elements. CSU/UC

ASAM 35. Asian American Women (3)
Lec-3
Examination of the experiences, histories, and contributions of Asian American women, using a multi-disciplinary approach that includes history, sociology, political science, and the arts. Includes analysis of racism, sexism, classism, homophobia, immigration, labor, sexualities and culture in the lives of Asian American women, past and present. CSU/UC
BCST 105. Gender and Mass Media (3)  
Lec-3, field trips  
An exploration of the mass mediated messages—radio, television, film, print, and the Internet—and how they influence and define gender roles, with particular emphasis on how women are represented. A critique of roles given to each gender. An update on opportunities for women in each of the mainstream and alternative media industries. CSU

ECON 25. Women in the Economy (3)  
Lec-3  
An introduction to women’s roles in the U.S. economy, including varying experiences related to race, ethnicity, and class. Examines women’s occupations and earnings; women’s household activities and how they affect paid work; women as consumers; public policy regarding women’s work and poverty; and current special topics. Applies and contrasts mainstream political economic theories within a feminist perspective. CSU/UC

ENGL 1A. University-Parallel Reading and Composition (3)  
Lec-3, lab-1  
Prereq.: ENGL 96 or placement in ENGL 1A (through CCSF English Placement Testing or the English Placement Test Waiver process)  
University-parallel reading, writing, and critical thinking with a major research component. Reading, writing, and research assignments are based predominately on non-fiction texts. CSU/UC/C-ID ENGL 100

ENGL 55. Survey of Gay and Lesbian Literature (3)  
Lec-3  
Prereq.: ENGL 96 or placement in ENGL 1A  
A survey of gay and lesbian literature drawing on examples that present material relevant to present day experience. CSU/UC

ENGL 57. Survey of Women’s Literature (3)  
Lec-3  
Prereq.: ENGL 96 or placement in ENGL 1A  
A survey of literature written in English by women over the last four hundred years, emphasizing nineteenth- and early twentieth-century novels, poetry, and drama by major as well as rediscovered authors prior to 1970. CSU/UC

ENGL 58. Contemporary Women’s Writing (3)  
Lec-3, field trips  
Prereq.: ENGL 96 or placement in ENGL 1A  
An exploration of contemporary women’s writing: fiction, poetry, and drama written in English by contemporary women form diverse social, cultural and ethnic backgrounds. CSU/UC

ENGL 96. Academic Writing and Reading (3)  
Lec-3  
Prereq.: ENGL 93 or 94, or placement in ENGL 96  
Some sections of ENGL 96 are taught from a feminist perspective. For further information about these sections, see the Chair of Women’s Studies.  
College-level training and practice in critical reading and in writing argumentative essays. Emphasis is on reading and writing analytically and developing research and documentation skills.

HLTH 25. Women's Health (3)  
Lec-3, field trips  
Prereq.: ESL 150 or placement in ESL 160 or ENGL 92  
Advise: ESL 150 or placement in ESL 160 or ENGL 92  
Explores the social determinants and issues related to women’s health on an individual and community level. Emphasis on evaluation of health resources, behavior change process, and role of risk factors and prevention. CSU/UC

HIST 12A-12B. United States Women’s History (3-3)  
Lec-3  
P/NP available  
An in-depth study of the experiences, roles, and contributions of women in the political, economic, social and cultural developments of the United States. CSU/UC

HIST 12A. From the pre-colonial period to the end of the Civil War.  
HIST 12B. From the end of the Civil War to the present.

HUM 25. Women in the Arts (3)  
Lec-3, field trips  
Prereq.: ENGL 96 or placement in ENGL 1A  
Examining the creative process by studying the history of women in the arts from pottery, ritual chants, and story telling to painting, sculpture, jazz, novels, and performance art. Recognized “greats” as well as anonymous women of diverse cultural and ethnic backgrounds. Films, tapes, slides and a field trip to complement class lectures and discussions. CSU/UC

IDST 80-81. Diversity and Social Justice (.5-1)  
Lec-.5,1  
P/NP available  
A series of courses exploring specific forms of social oppression in the United States and social justice interventions. CSU

IDST 80A. Diversity: Racism  
IDST 80C. Diversity: Sexism  
IDST 80D. Diversity: Heterosexism  
IDST 80E. Diversity: Ableism  
IDST 80F. Diversity: Classism  
IDST 80G. Diversity: Transphobia  
IDST 81B. Diversity: Anti-Semitism/Anti-Arabism

LALS 10. Latinas in the U.S.: Voces (Voices) (3)  
Lec-3, field trips  
P/NP available  
The lives and experiences of Latinas living in the U.S. The effects that their experiences have on self-esteem. Multi-disciplinary discussion and analysis of major social and cultural issues and themes. CSU/UC

LBCS 78B. Women’s Employment Issues (1-1-1)  
Lec-1  
P/NP available  
Current issues facing women workers will be discussed. Topics include pay equity, legal rights of women workers, sexual harassment, combining work and family responsibilities and women’s employment issues. CSU

LGBT 21. Issues in Lesbian Relationships (3)  
Lec-3  
P/NP available  
Exploration of the history, culture, and psychological dynamics of lesbian relationships. Emphasis on the central issues of intimacy and commitment as well as the sociological effect of homophobia and minority status within the lesbian dyad. CSU  
Formerly GLST 21

LGBT 30. Issues in the Lesbian Community (3)  
Lec-3  
P/NP available  
Historical analysis and examination of issues central to the development of lesbian identity, culture, and relationships; exploration and debate of current controversial issues in the political, social, and personal realms of lesbian experience. CSU/UC  
Formerly GLST 30
MATH 40. Elementary Algebra (3)
Lec-5
Prereq.: MATH E1 or E3 or EX or MATH 35; or Placement in MATH 40
Some sections emphasize how society shapes women's views toward math. Use of math examples related to women's lives. For further information about these courses, see the Chair of Women's Studies.
Fundamental operations on integers, rational numbers, polynomials, and algebraic expressions; linear and quadratic equations; linear inequalities; integer exponents and square roots; graphing; systems of equations; and applications.

MATH 60. Intermediate Algebra (4)
Lec-4, conf-1
Prereq.: MATH 40 or 840; or Placement into MATH 60 or 860
Advis.: MATH 50 or 850 or 55 or 855
Some sections emphasize how society shapes women's views toward math. Use of math examples related to women's lives. For further information about these courses, see the Chair of Women's Studies.
Polynomials and rational expressions; radicals and rational exponents; complex numbers; equations and inequalities; systems of linear equations; distance formula, lines, circles, and parabolas; introduction to functions; introduction to exponential functions and logarithms; and applications. Emphasis on strengthening mathematical communication skills, problem solving skills, and use of multiple representations of functions.

P E 277. Self Defense For Women (1)
Lab-2
P/NP available
An integrated approach to rape prevention incorporating psychological, physical and preventive skills. CSU/UC

P E 278. Personal Defense and Safety Awareness (1)
Lab-2
P/NP available
Repeat: max. 4 units
Assault prevention and personal defense skills designed to increase safety awareness. Basic physical defense skills are taught with an emphasis on streetwise safety strategies and the psychology of assault prevention. CSU/UC

PSYC 14. Psychology of Shyness and Self Esteem (1)
Lec-1
P/NP available
An examination of psychological theories and research on the development of shyness and self esteem. Techniques for reducing shyness and raising self esteem. CSU

PSYC 15. Assertive Behavior (1)
Lec-1
P/NP available
Emphasis on cognitive-behavioral theories and their application to assertive behavior. Assertiveness techniques in a variety of situations, including communication with family, friends and work associates. CSU

PSYC 17. Psychology of Eating, Food, and Weight (1)
Lec-18 (total hrs)
P/NP available
An examination of psychological theories and research on eating, weight and food. Includes examination of eating disorders, dieting, the diet industry, and weight management. CSU

PSYC 25. Psychology of Gender (3)
Lec-3
P/NP available
This course is an analysis of sex similarities and differences and the gender continuum, including transgender, in individuals from various psychological, physiological, and sociocultural perspectives. It is an exploration of psychological topics, including the impact of sex and gender on development, emotions, relationships, achievement, and attitudes. CSU/UC

SOC 25. Sex and Gender in American Society (3)
Lec-3
P/NP available
This course explores historical and systemic (institutional) sex-and gender-based inequalities in the U.S. and abroad. Emphasis on differences between sex, gender, and sexual orientation/ expression from multiple sociological perspectives, the contemporary status of American women, and the strategies, policies, and laws necessary to eliminate sexism. CSU/UC

SPCH 1A. Elements of Public Speaking (3)
Lec-3
P/NP available
Prereq.: ENGL 96
Some sections of SPCH 1A are taught from a feminist perspective. For further information about these sections, see the Chair of Women's Studies.
Mastery of the research, organization and delivery of extemporaneous speeches. Focus on rhetorical theory, critical audience analysis, speech outlining, evidence testing, and use of visual aids. CSU/UC/C-ID COMM 110

SUPV 236. Women Leaders at Work (3)
Lec-3
P/NP available
This course explores women's leadership, management, and communication styles and the vision and values women leaders bring to an effective environment in business, education, government and community organizations. Examines strategies for developing and encouraging skills that enable and allow women leaders and managers to succeed. CSU

Noncredit Courses:
WOMN 2500. Issues of Concern to Women (16 ea.)
A series of courses addressing skills focused on women's needs, such as self-defense, spatial visualization, and money management. These courses are designed to introduce students to skills they may lack due to social oppression. The attainment of these skills can boost self esteem, facilitating the pursuit of life and career goals.

WOMN 2501. Self-Defense
WOMN 2502. Spatial Visualization

Word Processing
For noncredit courses in word processing see the Office Occupations course listings in the Business Department in this section of the Catalog. Also see credit courses in the Business Department listings in this section of the Catalog.
Compliance with College Rules and Regulations and Notices

Students and staff are expected to comply with the rules and regulations published in this catalog; and with the official notices published in the College newspaper, The Guardsman, or posted on official bulletin boards.

Unlawful Discrimination and Harassment Policy

The policy of the San Francisco Community College District is to provide an educational and employment environment in which no person shall be unlawfully denied full and equal access to, the benefits of, or be unlawfully subjected to discrimination on the basis of ethnic group identification, national origin, religion, age, sex, race, color, ancestry, sexual orientation, or physical or mental disability in any program or activity that is administered by, funded directly by, or that receives any financial assistance from the State Chancellor or Board of Governors of the California Community Colleges.

Nor shall any such persons be denied full and equal access to, the benefits of, or be subjected to discrimination on the basis of marital status*, medical conditions*, gender identity, domestic partner status*, AIDS/HIV status*, status as a Vietnam-Era veteran*, or status as a lesbian, gay, bisexual, transgender* or questioning* person in any District program or activity.

The policy of the San Francisco Community College District is to provide an educational and employment environment free from unwelcome sexual advances, requests for sexual favors, and other verbal or physical conduct or communications constituting sexual harassment.

Employees, students, or other persons acting on behalf of the District who engage in unlawful discrimination as defined in this policy or by state or federal law may be subject to discipline, up to and including discharge, expulsion, or termination of contract.


*These categories are not subject to the State Chancellor's jurisdiction.

Definitions

Definitions applicable to the nondiscrimination policies are as follows:

- “Appeal” means a request by a complainant made in writing to the San Francisco Community College District governing board pursuant to Title 5, section 59338, and/or to the State Chancellor’s Office pursuant to Title 5, section 59339, to review the administrative determination of the District regarding a complaint of discrimination.

- “Association with a person or group with these actual or perceived characteristics” includes advocacy for or identification with people who have one or more characteristics of a protected category listed under “Unlawful Discrimination Policy” and title 5, section 59300, participation in a group associated with persons having such characteristics, or use of a facility associated with use by such persons.

- “Complaint” means a written and signed statement meeting the requirements of Title 5, section 59328 that alleges unlawful discrimination in violation of the nondiscrimination regulations adopted by the Board of Governors of the California Community Colleges, as set forth at Title 5, section 59300 et seq.

- “Days” means calendar days.

- “Disability” means, with respect to an individual:
  1. A physical or mental impairment that substantially limits one or more major life activities of such individual;
  2. A record of such an impairment; or
  3. Being regarded as having such an impairment.

- Rules of construction regarding the definition of disability (ADA Amendments Act of 2008):

  The definition of “disability” shall be construed in accordance with the following:

  (A) The definition of disability shall be construed in favor of broad coverage of individuals to the maximum extent permitted by the Americans with Disabilities Act, as amended.

  (B) The term “substantially limits” shall be interpreted consistently with the findings and purposes of the ADA Amendments Act of 2008.

  (C) An impairment that substantially limits one major life activity need not limit other major life activities in order to be considered a disability.

  (D) An impairment that is episodic or in remission is a disability if it would substantially limit a major life activity when active.

(E)(1) The determination of whether an impairment substantially limits a major life activity shall be made without regard to the ameliorative effects of mitigating measures such as:

  (i) medication, medical supplies, equipment, or appliances, low-vision devices (which do not include ordinary eyeglasses or contact lenses), prosthetics including limbs and devices, hearing aids and cochlear implants or other implantable hearing devices, mobility devices, or oxygen therapy equipment and supplies;

  (ii) use of assistive technology;

  (iii) reasonable accommodations or auxiliary aids or services; or

  (iv) learned behavioral or adaptive neurological modifications.

(2) The ameliorative effects of the mitigating measures of ordinary eyeglasses or contact lenses shall be considered in determining whether an impairment substantially limits a major life activity.

- “Gender includes a person’s gender identity and gender related appearance and behavior whether or not stereotypically associated with the person’s assigned sex at birth.

- “Major life activities” include functions such as caring for one’s self, performing manual tasks, seeing, hearing, eating, sleeping, walking, standing, lifting, bending, speaking, breathing, learning, reading, concentrating, thinking, communicating and working.
“Major life activities” also includes the operation of a major bodily function, including but not limited to, functions of the immune system, normal cell growth, digestive, bowel, bladder, neurological, brain, respiratory, circulatory, endocrine and reproductive functions.

- “Mental impairment” means any mental or psychological disorder, such as mental retardation, organic brain syndrome, emotional or mental illness, and specific learning disabilities.

- “Physical impairment” means any physiological disorder or condition, cosmetic disfigurement, or anatomical loss affecting one or more of the following body systems: neurological; musculoskeletal; special sense organs; respiratory, including speech organs; cardiovascular; reproductive, digestive, genito-urinary; hemic and lymphatic; skin; and endocrine.

- “Record of such an impairment” means has a history of, or has been misclassified as having, a mental or physical impairment that substantially limits one or more major life activities.

- “Regarded as having an impairment” means (1) has a physical or mental impairment that does not substantially limit major life activities but that is treated by a recipient as constituting such a limitation; (2) has a physical or mental impairment that substantially limits major life activities only as a result of the attitudes of others toward such impairment; or (3) has none of the impairments as defined above but is treated by a recipient as having such an impairment. “Regarded as having an impairment” shall not apply to impairments that are transitory and minor. A transitory impairment is an impairment with an actual or expected duration of 6 months or less.

- “District” means the San Francisco Community College District or any District program or activity that is funded directly by the state or receives financial assistance from the state. This includes any organization associated with the District or its college(s) that receives state funding or financial assistance through the District.

- “Responsible District Officer” means the officer identified by the District to the State Chancellor’s Office as the person responsible for receiving complaints filed pursuant to Title 5, section 59328, and coordinating their investigation.

- “Sexual harassment” is unlawful discrimination in the form of unwelcome sexual advances, requests for sexual favors, and other verbal, visual, or physical conduct of a sexual nature, made by someone from or in the workplace or in the educational setting, and includes but is not limited to:
  
  1. Making unsolicited written, verbal, physical, and/or visual contacts with sexual overtones. (Examples of possible sexual harassment that appear in a written form include, but are not limited to: suggestive or obscene letters, notes, invitations. Examples of possible verbal sexual harassment include, but are not limited to: leering, gestures, display of sexually aggressive objects or pictures, cartoons, or posters.)
  
  2. Continuing to express sexual interest after being informed that the interest is unwelcome.
  
  3. Making reprisals, threats of reprisal, or implied threats of reprisal following a rebuff of harassing behavior. The following are examples of conduct in an academic environment that might be found to be sexual harassment: implying or actually withholding grades earned or deserved; suggesting a poor performance evaluation will be prepared; or suggesting a scholarship recommendation or college application will be denied.

- Engaging in explicit or implicit coercive sexual behavior within the work environment which is used to control, influence, or affect the employee’s career, salary, and/or work environment.

- Engaging in explicit or implicit coercive sexual behavior within the educational environment that is used to control, influence, or affect the educational opportunities, grades, and/or learning environment of a student.

- Offering favors or educational or employment benefits, such as grades or promotions, favorable performance evaluations, favorable assignments, favorable duties or shifts, recommendations, reclassifications, etc., in exchange for sexual favors.

- Awarding educational or employment benefits, such as grades or duties or shifts, recommendations, reclassifications, etc. to any student or employee with whom the decision maker has a sexual relationship and denying such benefits to other students or employees.

- "Sexual orientation" means heterosexually, homosexuality, or bisexuality.

- “Unlawful discrimination” means any complaint of unlawful discrimination based on a category protected under Title 5, section 59300, including sexual harassment, harassment based on a protected group status as set forth in this Policy, and retaliation. In addition, the district will accept complaints of discrimination or harassment on the additional basis prohibited by district policy.

- Harassment in the form of hostile environment harassment on the basis of any protected category is also prohibited discrimination.

Retaliation

It is unlawful for anyone to retaliate against someone who files an unlawful discrimination complaint, who refers a matter for investigation or complaint, who participates in an investigation of a complaint, who represents or serves as an advocate for an alleged victim or alleged offender, or who otherwise furthers the principles of this unlawful discrimination policy.

The compliance officer/coordinator for purposes of this policy is the District Title 5/EEO/ADA Compliance Officer, 31 Gough Street, San Francisco, CA 94103, (415) 241-2294. Information concerning the provisions of the applicable laws and complaint procedures is available from the District Title 5/EEO/ADA Compliance Officer.

1 If the federal statutes cited herein would result in broader protection of the civil rights of individuals then that broader protection or coverage shall be deemed incorporated by reference into, and shall prevail over conflicting provisions of Title 5, section 59300, as cited in this Policy.

2 If the Americans with Disabilities Act of 1990 definitions would result in broader protection of the civil rights of individuals with a mental or physical disability, or would include any medical condition not included within these definitions, then that broader protection or coverage shall be deemed incorporated by reference into, and shall prevail over conflicting provisions of the definitions in Government Code section 12926 and should be included in District policy. (Gov. Code, Section 12926(1).)

3 Ibid

Campus Attire

Students are urged to dress appropriately everywhere on the campus at all times. Instructors in special areas (i.e., gymnasiums and laboratories) may require students to wear particular clothing for suitability or to meet health and/or safety regulations. For more information, contact the Office of Student Wellness and Affairs.
**Students with Disabilities**

Students with disabilities have the same legal entitlement as any other student. Both Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act (ADA) prohibit discrimination on the basis of disability of otherwise qualified persons in programs and/or activities at this institution. It is the policy of the SFCCD to operate its programs and services so that they are readily accessible to students with disabilities. Reasonable accommodations (academic adjustments and auxiliary aids) are arranged when needed for students with verified disabilities. For further information call the Disabled Students Programs and Services (DSPS) at 452-5481.

**Adjustment of Graduation Requirements for Students with Disabilities**

**Substitution Policy**

It is the policy of CCSF to provide equal educational opportunities for students with disabilities in accordance with state and federal law and regulations including the Americans with Disabilities Act of 1990, Section 504 of the Rehabilitation Act of 1973, and Title 5 of the California Administrative Code. Pursuant to Title 5, Sections 56000-56076, the District has developed the DSPS to assist students with disabilities in securing appropriate instruction, academic accommodations and auxiliary aids. It is the intent of the District that such individuals be served by regular classes and programs whenever possible. To that end, students with disabilities shall be admitted to courses and programs and matriculate through such courses and programs on an equal basis with all other students. To ensure equality of access for students with disabilities, academic accommodations and auxiliary aids shall be provided to the extent necessary to comply with state and federal law and regulations. For each student, academic accommodations and auxiliary aids shall specifically address those functional limitations of the disability which adversely affect equal educational opportunity. When the severity of the disability of an otherwise qualified student precludes successful completion of a course required for graduation from CCSF, despite an earnest effort on the part of the student to complete the course and despite provision of academic accommodations and/or auxiliary aids, a course substitution shall be considered. The District will maintain specific criteria and procedures to implement the policy. DSPS should be contacted (452-5481) for additional information regarding course substitutions.

**Drug Usage**

City College is a Drug-Free College.

The locations of the City College of San Francisco are drug-free. The College does not allow the unlawful possession, use, or distribution of illegal drugs and alcohol by students on its property or as a part of its activities. The College will discipline students according to local, state, and federal law. Discipline includes student expulsion and referral for prosecution. For more information, contact the Office of Student Wellness and Affairs.

For information about health and legal dangers of using alcohol and/or drugs you can go to the following place:

- Students may visit the Student Mental Health Services in the Student Health Center, Ocean Campus, or call 239-3110 or 239-3148.

**Petitions for Waiving College Regulations**

A student may petition the Office of Admissions, Records and Outreach, Conlan Hall, Room 107, to waive a local college regulation.

**Privacy of and Access to Student Records**

City College of San Francisco protects the privacy of student records and maintains the right of students to inspect and review their records. City College has established guidelines for the correction of inaccurate or misleading data through informal and formal hearings. Should the College be unable to resolve the complaint of a student concerning the accuracy or clarity of the student's records, the student has the right to file a complaint with The Family Educational Rights and Privacy Act Office of the U.S. Department of Education.

**Privacy of Student Records**

The California community college student has a legal right to privacy of records. A student record is defined as “any item of information directly related to an identifiable student...which is maintained by a community college...” However, applicable law provides for certain exceptions. Appropriate District employees are authorized to collect only that information which is relevant to a student’s admission, registration, academic history, career, student benefits and services, extracurricular activities, counseling and guidance, discipline or matters related to student conduct.

In addition to restrictions on the collection of information about students, there are significant restrictions on the release of student information. Except under limited circumstances, District employees do not have the authority to release student records except to the student. In general, District employees should consider information they acquire about students, in their capacity as employees, to be confidential information.

In any area where records are filed, we maintain a student record log to record who asked for and received student information in accordance with applicable law. In each area, a dean or his/her designee is responsible for maintaining the student record log. A student record log is maintained in the following areas:

**Kind of Record-Log Maintained By**

- Admissions and Records-Dean of Admissions, Records, Outreach
- Counseling Records-Dean of Counseling
- Disabled Student Records-Dean of Matriculation and Counseling
- Financial Aid Information-Dean of Financial Aid
- Student Conduct and Discipline, Complaints, Appeals, Records-Dean of Student Wellness and Affairs
- Student Health Records-Associate Dean of Student Health Services.

**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.”

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

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

3. Generally, schools must have written permission from the parent or eligible student in order to release any information from a student's education record. However, FERPA allows schools to disclose those records, without consent, to the following parties or under the following conditions (34 CFR § 99.31):
   - School officials with legitimate educational interest;
   - Other schools to which a student is transferring;
   - Specified officials for audit or evaluation purposes;
   - Appropriate parties in connection with financial aid to a student;
   - 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 parents and eligible students about directory information and allow parents and eligible students a reasonable amount of time to request that the school not disclose directory information about them. Schools must notify parents and eligible 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.

For additional information or technical assistance, you may call (202) 260-3887 (voice). Individuals who use TDD may call the Federal Information Relay Service at 1-800-877-8339.

Or you may contact us at the following address:

Family Policy Compliance Office
U.S. Department of Education
400 Maryland Avenue, SW
Washington, D.C. 20202-5920

The following categories of information about students are considered "directory information" pursuant to section 76240 of the Education Code: student's name, address, telephone number, date and place of birth, field of study, participation in activities and sports officially recognized by the San Francisco Community College District, weight and height of members of athletic teams, dates of attendance, degrees and awards received, and the most recent previous public or private school attended by the student. The District may limit or deny the release of specific categories of directory information based upon a determination of the best interest of students. Directory information may be released at the discretion of the College to persons or agencies which the College deems to have legitimate reason for access to the information. To prevent disclosure, written notification must be delivered personally to the Office of Admissions and Records.

Information other than directory information will not be released without the student's written consent unless the College is required to do so by law as, for example, in the case of a court order. Questions about policies and procedures concerning privacy of records and rights of access to them may be referred to the Dean of Admissions and Records.

Electronic Communication Privacy Statement
The college expects electronic communication privacy protections comparable to those traditionally given to paper mail and telephone communication.

Persons who have questions about the collection or dissemination of student information may call the Dean of Admissions & Records at 239-3291 or the Dean responsible for maintaining the information.

Regulations Governing Student and Other Organizations or Persons Desiring to Conduct Noninstructional Activities on Campus

Under State law and local regulations, the Administrative Staff of City College of San Francisco is responsible to the Governing Board and the Chancellor of the San Francisco Community College District for the organization, operation, and supervision of a sound educational program designed to provide transfer, general, and occupational education; essential student personnel services; and extracurricular activities. To discharge this responsibility, the Administrative Staff is required under the California State Education Code and the regulations of the Board of Governors of the California Community Colleges and the Governing Board of the San Francisco Community College District to take all steps necessary to prevent the conduct on campus of any activity that interferes with instruction or is otherwise inimical to the welfare of the student body or of individual students.

City College has therefore established various regulations, including those governing the following: student activities and government; noninstructional student meetings held on campus; guest speakers at such meetings; the use of City College facilities by student or other organizations or movements; and the distribution, posting, or other use of bulletins, circulars, and publications of any kind on campus. These regulations, like all others in effect at City College, have been established in conformance with the responsibilities assigned to and under the authority vested in the Administrative Staff under State law and College District regulations.

Student Governance: Policies, Regulations, and Procedures Governing Students, Student Organizations, and the Use of Facilities

Section I. General Provisions

Part A. Enactment Procedures

The policies, regulations, and procedures governing students, student organizations, and the use of facilities at City College of San Francisco are established as follows:

1. Guidelines are set forth by the College Administration.
2. The guidelines are reviewed by the Chancellor of City College in order to ensure conformance with State codes and local policies and regulations.
3. Upon approval by the Chancellor, the guidelines are submitted to the Governing Board of the College, with a request for approval. The guidelines become effective upon approval by this agency.

Part B. Procedure for Revision

The policies, regulations, and procedures stated in the following pages were established in accordance with the procedure described above, and may be revised only in accordance with that procedure or to meet legal requirements.

Part C. Definition of the Term “Student”

The term student, as used in connection with the foregoing College policies, regulations, and procedures is defined as follows: a person
officially registered in at least one course at City College of San Francisco.

Section II. Students and Student Organizations

Part A. Student Government

1. Student Government
Under State law and the Governing Board policy, the Chancellor of City College may authorize the establishment and continuance of the Associated Students, approve its membership fees, and delegate to it, as set forth in the Education Code and in the Constitution of the Associated Students, the specified fiscal and legislative powers and responsibilities concerning the affairs of its membership.

2. Fiscal Policy of the Associated Students
The Chancellor of City College is responsible for the fiscal soundness of the Associated Students of City College of San Francisco. It is his/her responsibility to ensure that the financial operation of the Associated Students is in accordance with the provisions of the laws of the State of California and the policies of the Governing Board of the College.

Part B. Student Organizations

1. Registration of Student Organizations
An organization not prohibited by law may become a registered on-campus student organization by complying with the registration procedures and membership regulations established by the Student Council of the Associated Students.

2. Policy Regarding Discrimination in Choice of Members
Membership regulations of student organizations must specify that eligibility for membership shall not be determined through discrimination based on race, age, physical disability, sexual orientation, creed, color, or sex. Questions of discrimination on these and other bases shall be reviewed by the Associate Dean, Student Activities. The Dean's decision may be appealed to the Associate Dean of Student Advocacy, Rights and Advocacy.

3. Sponsors of Registered Student Organizations
The Chancellor of City College may appoint sponsors for and establish regulations concerning sponsorship of registered student organizations.

4. Standards of Conduct and Discipline
Student organizations are required to comply with College policies, regulations, and procedures. Members of these organizations are subject to disciplinary action for violation of such policies, regulations, or procedures.

5. Use of the Name of City College of San Francisco
Only a duly registered on-campus student organization may use the name of City College of San Francisco as a part of its own name. A student organization may advocate its own views and positions, but at no time shall an organization or a coalition of organizations.

6. Use of College Facilities by Student Organizations
College facilities may be used by registered student organizations for meetings, social functions, raising funds, recruiting participants, and posting and distributing literature only in accordance with State law, Governing Board policy, and College rules, regulations, and procedures. Requests for use of facilities shall be made to the Associate Dean, Student Activities, sufficiently in advance to permit proper planning for the proposed use.

7. Collection of Fees
Registered student organizations, in accordance with State law, Governing Board policies, and College rules, regulations, and procedures may collect dues and initiation fees, conduct sales, and charge admission fees to certain student activities. Funds collected through these activities are subject to financial accountability as specified in the Guidelines for the Management of A.S. Funds. Raising of funds for charitable organizations shall be in accordance with established policies of the Governing Board.

Part C. Free Speech and Advocacy

1. Statement of Policy
The Constitution of the United States guarantees freedom of assembly or association. However, this guarantee does not prohibit a governing board or a college administration from adopting reasonable regulations governing the exercise of these rights on a college campus. The right of freedom of speech, for example, is not paramount to the right of privacy. Guidelines governing the exercise of free speech on the City College campus are developed, therefore, in order to ensure that other equally important legal rights are protected as stipulated in State law and local regulations.

2. Regulations Governing Free Speech
In order to facilitate the equitable application of the principles of free speech on campus, City College has established the guidelines enumerated in Part D as the means of ensuring orderly conduct, noninterference with College functions or activities, identification of sponsoring groups or persons, and protection of persons against practices that would make them involuntary audiences on campus for another person's exercise of free speech. Whenever the Chancellor of City College considers it appropriate, he/she may require that either one or both of the following conditions be observed in connection with a campus meeting addressed by speakers: (1) that the chairperson of the meeting be a person approved by the Chancellor; and (2) that the speaker be required to answer questions asked by the audience. It shall be the responsibility of the Chancellor to allow opportunity for the expression of a variety of viewpoints.

3. Regulations Governing Guest Speakers
a. Request Procedures:
The chairperson or president of a registered on-campus organization requesting facilities for an off-campus speaker should sign up with the Associate Dean, Student Activities, for the time and place desired (see Rule 5 and Part D).

b. Review of Request for a Speaker:
If a decision on a request for an off-campus speaker is to be reviewed, the Associate Dean, Student Activities, and/or the on-campus organization making the request (represented by the student chairperson and the faculty sponsor) may refer the matter to Associate Dean of Student Affairs for his/her specific recommendation to the Chancellor.

c. Sponsorship:
Sponsors of student organizations are required to review all requests for off-campus speakers in advance, and students are required to present to the Associate Dean, Student Activities, a form signed by their sponsor when requesting a time and a place for an off-campus speaker's address. Every sponsor of a campus organization is expected to make arrangements for a guest speaker's appearance before his/her group on campus, and should be present during the
address. A substitute should be appointed if the sponsor cannot be present.

4. Regulations Governing the Scheduled Use of the Free-Speech Area

The following guidelines are established to facilitate the equitable use of the City College free-speech area by all students:

a. Only registered students (not substitutes) who have signed up in advance for use of the free-speech area are permitted to use the area.

b. A sign-up list governing use of the area for at least two weeks in advance must be maintained in the Office of the Associate Dean, Student Activities, in order to permit proper scheduling.

c. Students wishing to use the area for impromptu speeches or presentations must sign up for a single half-hour period at a time, and must use that period before signing up for another one. If more flexible scheduling permits, however, the Associate Dean, Student Activities, at his/her discretion, may allow a student to sign up for more time on the two-week master calendar.

d. For a special event, such as an address by a sponsored off-campus speaker or an organized, planned debate, more than the half-hour period may be made available for use of the free-speech area. Chairpersons of on-campus organizations should sign up for such special events at least three College days in advance, but a week's notice is recommended.

e. Students desiring to use the free-speech area for impromptu use or special events must
   i. sign up for the time period available, and
   ii. indicate the general topic to be discussed or entertainment activity to be scheduled.

f. If the schedule governing the use of the free-speech area cannot be followed, the following rules will apply:
   i. If a student does not arrive at the area for a scheduled appearance, another student may be permitted to sign up for the time not being used. In such instances, however, at least ten minutes must be allowed for the scheduled event to take place before anyone may sign up for the unexpired time.
   ii. A scheduled activity must be allowed to continue at the free-speech area until the next scheduled event, at which time the podium must be vacated promptly.
   iii. If time becomes available during the day because of cancellation of a scheduled event, a student scheduled for another time may be permitted to sign up for the area in addition to his scheduled activity, but may not deliver his initially scheduled address until the time originally scheduled.

g. A speaker scheduled to use the free-speech area should permit another student or students to speak in reply to his/her remarks while he/she is using the area, without the others signing up in advance as scheduled speakers. However, this provision does not apply to students denied the right to use the area because of prior disciplinary action by the administration (see Section 4 above).

h. If verification is needed to demonstrate priority for use of the free-speech area, the Associate Dean, Student Activities, will issue special scheduled cards to verify student sign-ups for particular periods and dates.

i. If necessary, and then only if a serious disturbance arises at the free-speech area, campus police or other persons delegated by the administration are authorized to ask for the identity of persons claiming the right to use the area.

j. For rules for the distribution of literature, commercial free speech rights, the manner of collecting funds on the City College campus, or for additional information, contact the Office of the Associate Dean, Student Activities.

5. Use of Bulletin Boards and Distribution of Materials on Campus

Individual students or authorized student organizations desiring to distribute or post bulletins, circulars, or publications on the College of San Francisco campus must obtain permission from the Associate Dean, Student Activities. Materials originating from sources outside City College must bear the official approval of the Associate Dean, Student Activities. College bulletin boards and tack boards may not be used for commercial purposes.

6. Violation of Regulations

Students who violate the preceding regulations regarding student governance and the use of bulletin boards and distribution of materials on campus will be subject to disciplinary action.

7. Observance of Regulations Governing the Student Activities Program

Officially registered students desiring to take part in an activity of the Associated Students of City College of San Francisco or of any other organization sponsored by City College may do so only in conformance with the rules and regulations of the Associated Students, the particular organization, and the College.

Part D. Use of College Facilities

Under the California Education Code sections 82537 to 82548 and the Administrative Regulations of the San Francisco Community College District, organizations or persons not directly connected with the City College of San Francisco may use campus facilities only under certain limited conditions, and must make application for such use through the Office of Facilities and Planning of the San Francisco Community College District. Under the preceding law and regulation, ad hoc student groups are subject to the policy governing organizations and groups not directly connected with City College.

Regulations Governing Solicitation at City College of San Francisco-Ocean Campus

Members of the public are welcome to speak and/or distribute written materials within the designated areas of each location subject to the time, place, and manner regulations and posting/distribution guidelines.

The following regulations are established to govern solicitation by off-campus organizations and individuals to table, display materials, petition, engage in public address, distribute literature and/or post flyers on CCSF’s Ocean Avenue campus.

1. Before setting up a table or display, engaging in public address, distributing literature, seeking signatures on a petition and/or posting flyers, all solicitors shall report to the Office of Student Activities to sign in to notify the Associate Dean of Student Activities of the solicitor’s presence on campus, and to acknowledge receipt of these regulations. This notice does not involve any application or approval process, and therefore, the ability to use the designated area cannot be denied. This notice is only intended to provide CCSF with knowledge of the solicitor’s presence on campus so that CCSF can notify the appropriate members of its
staff whose services might be needed or impacted by the use of the designated area.

2. The designated areas for solicitors to table, set up displays, seek signatures on a petition and/or engage in public address at Ocean Campus are RAM PLAZA located between Smith Hall and the Student Union, the CLOUD SCIENCE MALL located between Cloud Hall and Science Hall, and the WELLNESS CENTER AMPHITHEATRE located outside of the Community Health and Wellness Center and the Student Union. The solicitor must remain in these specified areas only.

3. Tables and display materials may be set up only in the above designated areas on Ocean Campus. Solicitors must provide their own signage, tables, chairs, and materials. Free gifts (other than food and drink) may be distributed. Literature/newspapers and/or other items cannot be sold, nor can donations be solicited from any student, faculty, or classified staff in the designated areas or anywhere on the Ocean Campus.

4. The use of sound amplification is only allowed in RAM PLAZA and the WELLNESS CENTER AMPHITHEATRE. Solicitors shall not use any means of amplification that creates a noise or diversion that disturbs the orderly conduct of the College, campus, or classes taking place at that time. No sound amplification of any kind is allowed in the CLOUD SCIENCE MALL.

5. Solicitors who wish to distribute literature only (i.e. who do not also want to set up a table or display, petition and/or engage in public address) may do so in the above designated areas as well as on the sidewalks and pathways along Cloud Circle, leading to Cloud Hall, Science Hall, and Batmale Hall from Cloud Circle, leading to Science Hall from Phelan Avenue, leading from Parking Lot H between Smith Hall and Conlan Hall to Cloud Circle and leading from Judson Avenue in front of the Diego Rivera Theatre, between the Visual Arts and Creative Arts Buildings to Cloud Circle. Solicitors may not distribute literature in any other areas, including parking lots, the sports facilities, any construction zones and the areas surrounding the Student Health Center, the Arts Extension Building and/or the Orfalea Family Center.

6. Solicitors may not walk up to pedestrians and force them to take literature, follow pedestrians to classes or elsewhere on campus, or obstruct the flow of traffic of pedestrians walking to and from buildings. No solicitor shall touch, strike, or impede the progress of pedestrians, except for incidental or accidental contact, or contact initiated by a pedestrian.

7. Any solicitor who is distributing literature must retrieve and remove or properly discard any literature that is discarded or dropped in or around the area in which the solicitor is distributing literature prior to leaving that area.

8. Solicitors should refer to the Posting Guidelines before hanging materials. Such Posting Guidelines are available at the Student Activities Office.

9. Solicitors are expected to conduct themselves in a respectful manner toward all students and college personnel and to follow a code of conduct which prohibits the following:
   a. Abuse or any threat of force or violence directed toward any member of the College or to an authorized College visitor while on College property
   b. Willful misconduct that results in the injury or death to a student or College personnel or injury to property belonging to a member of the College or to an authorized College visitor while on the property.

   c. Unauthorized entry to or use of College facilities, supplies, or equipment
   d. Obstruction or disruption of classes, administration, or authorized College activities
   e. Violation of College rules and regulations including those concerning the use of college facilities, or the time, place, and manner of public expression or distribution of materials
   f. Disorderly conduct that interferes with the College's primary educational responsibility
   g. Failure to comply with these regulations and the directions of College officials, staff, or campus police to enforce these regulations.

These regulations are specific to Ocean Campus, but apply to all locations of CCSF. For locations other than Ocean Campus, solicitors must contact the applicable dean at the respective campus.

Consequences of failure to comply with the above regulations include:

1. Written warning; if after a warning, failure to follow regulations continues, the solicitor will not be allowed access to CCSF for a period of four (4) school months or the rest of the semester, whichever is longer.

2. If failure to follow any of the above continues after the four month or semester suspension, access to CCSF will be denied.

**Posting and Distribution of Guidelines**

City College of San Francisco, pursuant to applicable law, provides for the posting and distribution of literature on campus by off-campus organizations and/or individuals. The following guidelines have been established to facilitate effective and organized dissemination of information on the Ocean Campus.

**Posting:**

1. Items for posting may be no larger than 11”x17”, and the use of recyclable materials is recommended.

2. Each item must clearly state on its face the name of the individual or organization posting the item, the date of the event advertised, if any, and the date the item was posted.

3. Posted items will be removed from the bulletin boards two weeks after the date the item was posted or after the date for the event advertised on the item had passed, whichever is earlier. If a bulletin board has no space available after such removal of expired items, any items that do not show a date of posting on their face or an event date will be removed.

4. Flyers that are in a language other than English must include English description, summary, or translation in the flyer, or have a separate flyer that provides the information in English and they must be posted side by side.

5. Tacks or pushpins should be used to post items-tape, glue, nails and industrial staples are prohibited.

6. No more than one item per event or organization, if the item posted is a general announcement, may be posted on each board.

7. Posting is allowed only on boards established for that purpose as listed below.

8. Items posted on buildings, poles, garbage containers, trees, campus directional signs or anywhere other than the approved bulletin boards listed below will be removed.

9. Bulletin boards are located at the following sites:
   - Arts Extension: 2 boards directly opposite the main entrance on the main floor
• Batmale Hall: 2nd floor, 4th floor, 5th floor, 6th floor, 7th floor
• Cloud Hall: 1st floor, 2nd floor, 3rd floor
• Conlan Hall: 1 board opposite room 104
• Creative Arts: 1 board near west side entrance on the 1st floor
• Smith Hall: 2 wooden boards on wheels
• Student Union: 1 board across from room 209, 2 in upper level and 1 in lower level

Distribution
1. All off campus organizations and/or individuals wishing to distribute literature must report to the Office of Student Activities to sign in to notify the Associate Dean of Student Activities of the solicitor’s organizations and/or individuals.
2. Distributors are required to provide the following information: name of organization, contact name, and dates and times of distribution.
3. Any persons who have not signed in before distributing literature on campus are subject to disciplinary action by the Associate Dean of Student Activities.
4. Solicitors who wish to distribute literature only (i.e. who do not also want to set up a table or display and/or engage in public address) may do so Ram Plaza, the Wellness Center Amphitheater and the Cloud Science Mall as well as on the sidewalks and pathways along Cloud Circle, leading to Cloud Hall, Science Hall, and Batmale Hall from Conlan Hall to Cloud Circle, and leading from Judson Avenue in front to the Diego Rivera Theatre to Cloud Circle. Solicitors may not distribute literature in any other area, including parking lots, the sports facilities, any construction zones and the areas surrounding the Student Health Center, the Arts Extension Building and/or the Orfalea Family Center.

For further information and assistance, contact the CCSF Student Activities Office Student Union Room 205, 239-3212.

Student Conduct and Discipline
Purpose and Scope. Community and college districts are required by law to adopt standards of student conduct along with applicable penalties for violation (Education Code Section 66300). The San Francisco Community College District has complied with this requirement by adopting PM 6.11.01 and AR 6.11.01, Rules of Student Conduct. The purpose of this Board Rule is to provide uniform procedures to assure due process when a student is charged with a violation of these standards. All proceedings held in accordance with these procedures shall relate specifically to an alleged violation of the established standards of student conduct.

Students of City College of San Francisco are expected to help maintain an environment in which there is freedom to learn. The College believes that each student has an earnest purpose; that he/she will adhere to acceptable standards of personal conduct; and that students and student organizations will participate in the development of proper standards of conduct and good taste; and that they will abide by all College regulations. Students or student organizations making inappropriate use of the opportunities, rights, and privileges should expect to have them withdrawn or curtailed.

In the development of responsible student conduct, disciplinary proceedings play a role substantially secondary to example, counseling and admonition. In the exceptional circumstances when these preferred means are not appropriate or fail to produce student acceptance of responsibility commensurate with student freedom, due process shall be observed to protect the student from the unfair and arbitrary imposition of serious penalties.

When an issue of student conduct arises, the college community will take action as the particular occurrence, judged in the light of attendant circumstances, seems to require. For more information, contact the office of Student Affairs and Wellness.

Rules of Student Conduct
Student conduct in the San Francisco Community College District must conform to District rules and regulations. The rules and regulations of student conduct prohibit the following:

1. Continued disruptive behavior, continued willful non-compliance, willful and persistent profanity or vulgarity, or the opening and/or persistent defiance of the authority of, or persistent abuse of, District personnel or officials acting in the performance of their duties;
2. Assault or battery, abuse, extortion, or any threat of force or violence directed toward any member of the District community (students and employees) or District visitor engaged in authorized activities;
3. Academic or intellectual dishonesty, such as cheating or plagiarism. Cheating is defined as taking an examination or performing an assigned, evaluated task in a dishonest way, such as by having improper access to answers. Plagiarism is defined as the unauthorized use of the language and thought of another author and representing them as your own;
4. Dishonesty, such as theft or the unlawful taking of property from the rightful owner, or knowingly furnishing false information to the District, or forgery, alteration, or misuse of District documents, records, or identification;
5. Willful misconduct which results in injury or death to a student or District personnel or which results in cutting, defacing, or other injury to any real or personal property owned by the District; or injury to property belonging to a member of the District community or to an authorized District visitor while on District property;
6. Unauthorized entry to or use of District facilities, supplies, equipment, including computing, networking or information resources;
7. Obstruction or disruption of classes, distance learning courses and websites, computer laboratories or study facilities such as the Library or the Learning Assistance Center, student activities, administration, disciplinary procedures, governance processes, or other authorized District activities;
8. The use, sale, distribution or possession of, or presence on campus while under the influence of alcoholic beverages, narcotics, or other dangerous or hallucinogenic drugs or substances including marijuana and lysergic acid diethylamide (LSD) or any controlled substance (except as expressly permitted by law and evidenced by medical authorization) or use, sale, distribution of any poison classified as such by Schedule D in Section 4160 of the Business and Professions Code;
9. Willful or persistent smoking in any area where smoking has been prohibited;
10. Violation of District rules and regulations including those concerning student organizations, the use of college facilities, or the time, place and manner of public expression or distribution of materials;
11. Violation of the District’s Sexual Harassment Policy (see appropriate sections of the Catalog for a complete version of the Policy);
12. Violation of the District’s Computer Usage Policy (see appropriate sections of the Catalog for a complete version of the Policy);
Disorderly, lewd, indecent, obscene, or offensive conduct or expression which interferes with the District’s primary educational responsibility;

Possession while on District property or at any District sponsored function, of any of the following weapons (except for persons given permission by the Chancellor or designee as members of law enforcement operations); any instrument or weapon of the kind commonly known as black-jack, fire bomb, billy club, sandclub, metal knuckles; any dirk, dagger, or knife having a blade longer than two inches; any switchblade longer than two inches, any razor with an unguarded blade; any firearm (loaded or unloaded) such as a pistol, revolver, rifle, automatic or semi-automatic weapon; any metal pipe or bar used or intended to be used as a club; or any other item, such as a chain, used as a threat to do bodily harm;

Failure to comply with directions of District officials, faculty, staff or campus police officers who are acting in performance of their duties;

Persistent, serious misconduct where other means of correction have failed to bring about proper conduct.

Per California Education Code (78907), the use by any person, including a student, of any electronic listening or recording device in any classroom without the prior consent of the instructor is prohibited, except as necessary to provide reasonable auxiliary aids and academic adjustments to disabled students. Any person, other than a student, who willfully violates this section shall be guilty of a misdemeanor.

Disciplinary sanctions for the above offenses shall include, but are not limited to, warning; verbal and/or written reprimand; a failing grade in an assignment, test, or class in proven cases of cheating or plagiarism or other academic dishonesty; disciplinary probation; ineligibility to participate in extra-curricular activities; removal from classes by the instructor for no more than two class meetings; removal from an instructional laboratory, study facility, or other supervised student activity by the designated site supervisor for no more than two sessions or meetings; suspension from classes by the Chancellor (or designee) for up to the remainder of the school term or from all classes and activities of the District for one or more terms; and expulsion.

Suspension or expulsion of a student shall be accompanied by a hearing to determine if good cause warrants such suspension or expulsion. Good cause shall include, but is not limited to, conduct identified above as prohibited.

Procedures for implementation of these rules shall be adopted by the Chancellor or designee.

**Types of Discipline**

**WARNING:** Notice to the student that continuation or repetition of specified conduct may be cause for other disciplinary action (May be written or oral notice).

**REPRIMAND:** Written reprimand for violation of specified regulations or misconduct. A reprimand places on record that a student has violated college regulations. A student receiving a reprimand is notified that continued violations may result in formal disciplinary action.

**RESTITUTION:** Reimbursement by the student for damage to or misappropriation of property. Reimbursement may take the form of appropriate service by the student to repair property or otherwise to compensate for damage.

**DISCIPLINARY PROBATION:** Specific period of conditional participation in campus and academic affairs, which may involve exclusion from designated privileges or extracurricular activities. If a student violates any condition of probation, he/she shall be subject to further disciplinary action to be taken in accordance with these procedures.

**REMOVAL:** Should be exercised when warning or reprimand fails to bring about proper conduct. Removal may be immediate if student presents a present danger. Instructor may remove a student for cause from class for the day of the class and the next meeting for a maximum of two class meetings.

**SUSPENSION:** Suspension from classes for up to the remainder of the school term or from all classes and activities of the College for one or more terms. Suspension is the termination of student status for that period of time.

**EXPULSION:** Termination of student status, for an indefinite period, requires the approval of the Governing Board. The student may be readmitted to City College only with the specific approval of the Governing Board.

Suspension or expulsion of a student shall be accompanied by a hearing to determine if good cause warrants such suspension or expulsion. Good cause shall include, but is not limited to, conduct identified above as prohibited.

**Due Process**

A student has a right to due process. The Office of Student Wellness and Affairs (Conlan Hall, Room 106) has the responsibility to assure the implementation of this due process.

**Student Complaints**

A student complaint is an allegation by a student against

1. another student(s)
2. a classified staff member(s)
3. a faculty member(s)
4. an administrator(s)

That has harmed a student by violating a policy, rule, or regulation, or otherwise engaged in inappropriate conduct. (A complaint does not include a grade or file challenge, or an allegation of discrimination or sexual harassment, or other conduct for which immediate disciplinary action or suspension could result).

Student complaints against another student(s) should be addressed in writing with the Office of Student Wellness and Affairs and will be handled by the Dean of Student Wellness and Affairs and his/her staff. Student complaints against a classified staff member(s) and/or an administrator(s) should be addressed with the Office of Student Wellness and Affairs for accurate referral to the appropriate supervisor.

Student complaints are governed by the following procedure:

**Informal Process for Complaint Against a Faculty Member**

1. A complaint should first be raised directly with the faculty member concerned.

2. If a direct meeting does not resolve the complaint, or if either party is unable or unwilling to meet, the complaint should be taken to the faculty member’s supervisor.

3. The supervisor may take the following action including, but not limited to:
   a. Investigating the complaint.
   b. Meeting with any party separately or facilitating a joint meeting.
   c. Recommending appropriate action to any party.
   d. Recommending an evaluation of the faculty member to the Chancellor.
   e. Redirecting the matter as appropriate.
4. If the supervisor fails to resolve the complaint within 20 semester instructional days then the student may file a formal complaint in accordance with the process set forth below. Semester instructional days include only regular business days during the Fall and Spring semesters, and not summer sessions.

5. If, after the failure of the supervisor to resolve the complaint at the informal level, the student fails to file a formal complaint within an additional 20 semester instructional days then the matter will be considered dropped unless renewed by the student within the first 20 semester instructional days of the next semester.

**Formal Process for Complaint Against a Faculty Member**

1. If any party is dissatisfied with the result of the informal process, that party may appeal the matter to the Dean of Student Wellness and Affairs whose role is to channel the complaint to the appropriate Vice Chancellor and to the Academic Senate. If any party chooses to pursue the matter to the formal level, all parties shall be given written notice of that fact.

   Any party who appeals a complaint to the formal level must complete a form which describes:
   a. The specific nature of the complaint and its history;
   b. All efforts which have been made to resolve the complaint;
   c. What the appealing party would consider a fair and appropriate resolution of the complaint.

2. Upon receiving a formal complaint, the appropriate Vice Chancellor and the Academic Senate shall each appoint one member to a committee whose function shall be to hear and decide the matter.

3. In reaching its decision, the committee may take any action which could have been taken pursuant to the informal process, except that the committee may not redirect the matter.

4. The findings and decision of the committee must be made in writing and provided to the student, the faculty member, and the member’s supervisor, and must encompass some or all of the following results:
   a. Resolution of the complaint to the satisfaction of all parties.
   b. Dismissal of the complaint with or without the consent of all parties.
   c. Recommendation of appropriate action to the faculty member’s supervisor.
   d. At the committee’s discretion, its decision and the underlying student complaint may be inserted into the faculty member’s personnel file.

5. Formal complaints should be resolved as quickly as possible. Except under unusual circumstances, the written findings and decision of the committee should be provided within forty [40] semester instructional days of its receipt of the formal complaint.

6. Any student or faculty member involved in a student complaint may, by his/her own initiative, provide representation of their choice.

**Notice:** Student complaints may have serious consequences for the faculty member concerned. Students should recognize that differences in personality, opinion, and perception do occur, and can often be resolved by discussions between the parties. Whenever possible, students are encouraged to address such differences directly with the faculty member.

**Student Grade and File Review Function and Purview**

The Student Grade and File Review Board, composed of students, faculty and administrators, reviews individual student grievances respecting course grades and file contents. After reviewing a particular grievance, the Board recommends appropriate action to the Chancellor, the instructor and the student. The Board acts as an arbitrating body and does not have the power to change grades directly. Students should be aware that there is also a Grading Policy Committee that addresses general grading practices and policies at the College.

**Review Procedures: Policies, Grades, And Files**

1. **Review of Policies**
   
   The Student Grade and File Review Board reviews and proposes revision, when necessary, of policies, regulations and procedures affecting student grade and file grievances.

   **2. Review of Grades**
   
   If a student thinks a discrepancy exists between the grade given by an instructor and the grade he/she believes was achieved, the student should follow the steps of the appeal procedure below.

   **Important:** Midterm grades, step two of the procedure below must be completed within ten (10) calendar days after receipt of the grade; and for final grades, step two of the procedure below must be completed within forty-five (45) calendar days from the start of instruction in a student’s next regular semester of attendance (fall or spring), or no later than one year from the last day of instruction in the semester in which the grade was given.

   **Appeal Procedure:**

   **STEP 1:**

   A student wishing to appeal a grade must first discuss the issue with the instructor in an office-hour conference. If, for any reason, the student is unable to confer with the instructor, he/she must then consult with the department chair of the particular department. Every effort should be made to resolve the issue at this level.

   **STEP 2:**

   If the student wishes to have a grade reviewed further after completing Step One, he/she should obtain a Petition for Grade Review from the Office of Student Admissions, Records and Outreach, Conlan Hall, Room 107. This petition requires that the student explain the grading issue in writing (typed and double-spaced) and present this written explanation to the instructor, the department chair, and the school dean in turn. Each of these three individuals is expected to attempt to resolve the issue. If the issue remains unresolved, the student submits his/her petition to the Assistant Dean of Admissions and Outreach who will verify that the petition has been submitted in a complete and timely manner. The Assistant Dean of Admissions and Outreach will also review the petition with regard to content and will advise the student on the appropriateness of further appeal to the Grade and File Review Board.

   **STEP 3:**

   After the conference with the Assistant Dean of Student Admissions and Outreach verifying the completion and timeliness of the petition, the student may request the Dean to forward the petition to the Student Grade and File Review Board, thereby requesting a formal hearing of the dispute in accordance with the procedure below.

   **3. Grade Review Hearings**

   a. During the review of an individual student’s grade grievance, the Student Grade and File Review Board assigns the
case to a subcommittee which shall in closed session discuss the issues involved, hear testimony, question witnesses and consider all available evidence relevant to the case. The subcommittee will consist of representation of student, faculty, and administration.

b. All principal parties shall have the right to present written or oral statements concerning the grievance. Each party may bring a representative.

c. The Review Board shall consider the relevancy and merit of all written and oral information and make its recommendations to the full Board, limiting its investigation to the specific case under review.

d. The Board shall make a final recommendation and submit that recommendation in writing to the Chancellor of City College, and shall communicate the recommendations to the student, the instructor, the department chair and the school dean.

4. Review of Student Files

It is expected that City College will maintain student files for the purpose of documenting academic progress as well as documenting any events that have aided or deterred academic progress. (Note: Grade and File Review petitions do not become part of a student’s file.) Such student files are confidential and information therein contained shall be released only (a) at the written request of the student or (b) in such circumstances that, in the opinion of the Assistant Dean of Admissions and Outreach, the information is needed for the safety and well-being of the student, other students and the personnel of City College or (c) when subpoenaed by a court of law.

Every student has the right to review his or her City College files. File reviews are conducted in the office in which the file is kept with the following steps:

a. The student presents a written request, signed and dated, to review his/her file(s).

b. An appointment is arranged for the student to review his/her file under the supervision of the department chair or dean or designee. No documents are to be added or removed in this review.

c. If the student believes that material contained in his or her file(s) is inappropriate or inaccurate, the student may bring the matter to the attention of the department chair or dean in charge of the file(s) and ask for a correction of the situation.

d. If the department chair or dean in charge of the file(s) is unable, for any reason, to comply with the student’s request for correction, the student may submit a typewritten request for file correction to the Assistant Dean of Student Admissions and Outreach. This request must explain specifically which documents are inappropriate or inaccurate, why the student considers them so, and what specific correction is requested.

e. This request will be reviewed by the Assistant Dean of Admissions and Outreach and, if deemed appropriate, will be forwarded to the Grade and File Review Board. The Board will review the request in the same manner as petitions for grade reviews, that is, through the subcommittee process (see 3 above) and will submit a recommendation to the Chancellor.

Further information and assistance may be obtained from the Assistant Dean of Admissions and Outreach, Conlan Hall, Room 107.

**CCSF Bookstores**

**Purchasing Textbooks, Supplies, And Equipment**

In accordance with State law and local regulation, City College does not supply textbooks. The cost of these varies according to students’ programs. Students are expected to secure textbooks, laboratory books, workbooks, pens, pencils, and paper for most courses. In addition, in some courses, students are expected to provide tools, equipment, clothing, materials, or pay a special materials fee. An estimate of the cost of additional materials or fees for any class may be obtained from the appropriate department or center.

The San Francisco Community College District Bookstore Auxiliary operates several bookstores to serve the City College population. Textbooks and many supplies for City College courses may be purchased and/or rented at the CCSF Bookstore serving the campus where the course is taught. Books are usually available from the first day of class. Because of the size of the stores, services may vary from location to location. Current hours and store policies are available at each store.

Bookstore information is available on the bookstore web page at [www.ccsfshop.com](http://www.ccsfshop.com).

The schedule of classes issued each semester also contains current information about bookstore services.

**San Francisco Community College Police Department**

On May 5, 1980, the governing board of the San Francisco Community College District established a “Community College Police Department,” (to be known as the Department of Public Safety). Under the California Education Code, sections 72330 and 72334 and California Penal Code, section 830.32(a), personnel, when appointed and duly sworn, are designated as peace officers.

San Francisco Community College Police Department is a certified P.O.S.T. police agency with sworn officers readily identified by the uniforms which include their distinctive patch and gold or silver star. The Department also employs security officers, called Campus Control aides, who wear a slightly different uniform w/SFCCPD patch and silver shields. The Department operates 7 day a week year-round from 5:30am to 12:30am from its main headquarters located at City College, Ocean Campus, Cloud Hall room 119, telephone number (415) 239-3200. During closed hours, the college is patrolled by SFPD.

The San Francisco Community College Police Department is responsible for the overall law enforcement protection and duties as well as parking enforcement district-wide, excluding the Airport Campus, Fort Mason and designated lease locations. Under a memorandum of understanding, these area come under the jurisdiction of SFPD. Officers patrol City College Locations via marked emergency police vehicles, bicycle and foot patrols ensuring public safety for the campus community. The San Francisco Community College Police Department’s website id located at [www.ccsf.edu/Departments/Public_Safety](http://www.ccsf.edu/Departments/Public_Safety) or linked from the main City College of San Francisco’s website at [www.ccsf.edu](http://www.ccsf.edu).

**City College Student Police**

The City College Chief of Police, working in partnership with the City College Administration of Justice Studies Program, authorizes the operation of a Student Officer Program. The purpose of the program is to assist the educational development of the City College students interested in the field of Law Enforcement.
Student Officers are approved into the program by the Administration of Justice Studies Coordinator, and must meet and maintain specific criteria. City College student officers assist the police department in several areas including, but not limited to, parking enforcement, safety escort, traffic control, special events and student code of conduct matters. Student offices operate under the oversight of a police department liaison.

The City College Student Program is designed as an internship and individuals in the program do not receive direct compensation except for particular assignments. The Student Officer Program provides over several thousand hours of service to the campus community.

**Smoking**


**Student Identification**

Student identification must be carried at all times and displayed upon request by City College staff, faculty, administrators, student campus police officers, and District police officers. For more information contact the Office of Students Wellness and Affairs.

**Student Lockers**

Lockers in the gymnasiums are assigned to students in physical-education courses. Students must remove the contents of these lockers, together with padlocks, not later than Monday during the final examination period each semester.

Lockers are also assigned to students in various laboratory courses. Students must follow the department regulations in using these lockers.

**Student Parking**

The campuses of City College are easily accessible by public transportation. Students are encouraged to use MUNI and BART or to carpool. The Ocean Campus has a limited number of parking spaces available for student parking. Students are required to pay a fee for either a semester or daily parking permit. Sales of semester parking permits (decals) are available on a first come, first served, basis before the start of each semester. Daily parking permits are available in all student lots and during day classes, student parking is restricted to the main reservoir area and parking lot “S” (previously the location of the South Gym). Information regarding the rules and regulations for student parking, including fees for semester decals and rates for daily parking are available through the Student Accounting Office in Conlan Hall, Room 104. For information call (415) 239-3345 or refer to the **Class Time Schedule**.

Other locations of City College of San Francisco have NO on-site parking or very limited parking for students. For student parking information for all other locations, call the San Francisco Community College Police Department at (415) 239-3200.

**Visitors on Campus**

Visitors to the campus are welcome. Vehicle parking in all parking lots is by permit only. Vehicles without a permit will be ticketed. **Day School** visitors are allowed to park in main reservoir parking and parking lot “S” (previously the location of the South Gym), with the purchase of a one-day permit. After 5:00 p.m., visitors may park in all lots (except Cloud Circle, Marston Road, and Science Road) with the purchase of a one-day parking permit. Information and directions are available from the Information Center located in the lobby of Conlan Hall. Visitors are required to observe College rules and regulations. A copy of the rules and regulations are available in Conlan Hall, Room 104 and Cloud Hall, Room 119 (Campus Police Office). Violation of any of these regulations are grounds for automatic revocation of the right to remain on campus. Prior permission must be obtained from the instructor before visiting classrooms. Since auditing of classes is prohibited, visits must be limited.

**CCSF Computer Usage Policy**

This policy is displayed to users via Message of the Day (MOTD) in the first two weeks of each semester at their logon to the CCSF HPUX computer system, and each user must agree to it in order to continue to use the CCSF computing facilities.

Violation of these policies will be dealt with in the same manner as violations of other College policies and may result in disciplinary review. In such a review the full range of disciplinary sanctions is available including the loss of computer use privileges, dismissal from the College, and legal action. Violations of some of the policies below may constitute a criminal offense.

**Rights and Responsibilities**

CCSF is pleased to make computer accounts and resources available for student use in the pursuit of their instructional goals, and to faculty and staff to support the institution's instructional goals. In so far as the computing resources are under the user's control, the user is fully responsible for their proper and legal use.

The Computer Usage Policy applies to all members of the College community using our computer resources. This includes administrators, faculty, staff and students. This includes use of computer equipment at any CCSF facility including in the various computer labs, classrooms, offices, libraries and the use of the CCSF servers from any location.

Computer accounts and computer access are privileges, and require the individual user to act responsibly. By using the CCSF accounts, users have agreed to respect the rights of other users and accounts, to use the account only for school-related purposes, and to safeguard the integrity of the system and its related physical resources. Users have further agreed to observe all relevant laws, regulations, policies, and contractual obligations of the College.

Other organizations operating computing and network facilities that are reachable via the City College network may have their own policies governing the use of those resources. When accessing remote resources from City College facilities, users are responsible for obeying both the policies set forth in this document and the policies of the other organizations. It is the user's responsibility to be informed of the policies of other outside organizations to which they establish a computer link.

**Confidentiality**

All user files, including e-mail files, are not to be relied upon as confidential. CCSF explicitly does not guarantee or warrant the confidentiality of these files. It is the practice of Information Technology Services (ITS) to respect the confidential nature of user files, but the ITS Department reserves the right to view or alter user files when it is necessary. Any ITS employee must have their manager's permission prior to investigating a user file.

User files may also be subject to search under court order if such files are suspected of containing information that could be used as evidence in a court of law. Student files as kept on ITS facilities are considered educational records as covered by the Family Education Rights and Privacy Act of 1974 (Title 20, Section 1232(g) of the United States Code, also referred to as the Buckley Amendment).
In addition, a system administrator may access user files as required to protect the integrity of the computer system. For example, system administrators may access or examine files or accounts that are suspected of unauthorized use or misuse, or that have been corrupted or damaged.

**Existing Legal Context**

All existing federal and state laws and College regulations apply, including not only those laws and regulations that are specific to computers and networks, but also those that may apply generally to personal conduct.

Misuse of computing, networking or information resources may result in the loss of computing and/or network privileges without notice. This includes both those that ITS administers, and those that may exist in other departments associated with City College of San Francisco and connected to its network. Deliberate violations of these policies will be dealt with in the same manner as violations of other college policies and may result in disciplinary sanctions including, but not limited to, loss of computer use privileges, dismissal from the college, and/or appropriate legal action.

Additionally, misuse can be prosecuted under applicable statutes. Users may be held accountable for their conduct under any applicable College or campus policies, procedures, or collective bargaining agreements. Complaints alleging misuse of the College’s computing resources will be directed to those responsible for taking appropriate disciplinary action as specified under Enforcement below. Illegal reproduction of software protected by U.S. Copyright Law is subject to civil damages and criminal penalties including fines and imprisonment (See CCF Policy Manual 8.10).

**Copyright**

All users must follow all relevant copyright laws. U.S. Copyright law governs reproduction and distribution of software and other material, including text, fonts, graphics, sound, video and others. The End User License Agreement (EULA) for a product specifies the conditions under which a user may copy or install the product. The EULA purchased by a department also controls the number of simultaneous users of the product. Please review the EULA for complete information on your rights as an end user of these products.

**Nondiscrimination**

Computer users need to follow the same non-discrimination policy including those governing “sexual harassment” and “hostile education environment.”

All computer users must follow the non-discrimination guidelines as stated in the CCSF “Equal Opportunity Statement” listed in the catalog: [http://www.ccsf.edu/Catalog/Admin/nondiscrim.html](http://www.ccsf.edu/Catalog/Admin/nondiscrim.html)

Any user who files a complaint or otherwise protests against discrimination has the right to be free from any retaliatory action because of the complaint or protest. The CCSF administrator who receives a complaint of discrimination should inform the complainant of this right and that the complainant may file an additional complaint if he or she experiences retaliatory conduct.

Examples of misuse include, but are not limited to, the following activities:

**Breaking into another person’s account**

1. Using a computer account that you are not authorized to use by the ITS Department.
2. Obtaining a password for a computer account that is not your own account.
3. Using the Campus Network to gain unauthorized access to any computer systems.

4. Attempting to circumvent data protection schemes or uncover security loopholes. This includes creating, running, and/or distributing programs that are designed to identify security loopholes and/or decrypt intentionally secure data.

5. Masking the identity of an account or machine. This includes, but is not limited to, sending e-mail anonymously.

**Harassment**

1. Using e-mail to harass others.
2. Posting on Internet services information that may be slanderous or defamatory in nature. This includes, but is not limited to, posting of said type material on Usenet News.
3. Displaying sexually explicit, graphically disturbing, or sexually harassing images or text in a public computer facility, or location that can potentially be in view of other individuals.

**Commercial Use**

Using your account for any activity that is commercial in nature. Commercial activities include, but are not limited to, consulting, typing services, and developing software for sale.

**Copyright**

Violating terms of applicable software licensing agreements or copyright laws.

**Changing Files**

1. Attempting to monitor or tamper with another user’s electronic communications, or reading, copying, changing, or deleting another user’s files or software without the explicit agreement of the owner. Files owned by individual users are to be considered private property, whether or not they are accessible by other users.
2. Modifying another user’s files, which is illegal under California Computer Crime Laws.

**System Misuse**

1. Sending mass e-mail to a large number of people on the system. It is acceptable, however, to use organization or department mailing lists, listservs, to send e-mail to groups of people on the system.
2. Knowingly or carelessly performing an act that will interfere with the normal operation of computer systems, including running, installing, or giving to another user a program intended to damage or to place excessive load on a computer system or network. This includes programs known as computer viruses and worms.
3. Deliberately wasting/overloading system resources, such as:
   - Printing resources – This includes, but is not limited to, printing multiple copies of a document or printing out large documents that may be available online, or that might impact significantly on other users printing resources.
   - System file space – Storing or transferring of large files or using a large amount of file space in the temporary file system area which degrades overall system performance or preclude other users right of access to disk storage also constitute misuse of resources. The ITS staff may remove or compress disk files that are consuming large amounts of disk space, with or without prior notification.

**Additional System Information**

Batch jobs or background tasks should be consistent with individual academic goals or institutional academic goals. Jobs that do not appear to coincide with the academic goals of the institution may be “killed” without warning.
Any files stored in the temporary file systems are not backed up and are subject to deletion at any time. Users' file names and directory names starting with a period or another punctuation or special character will be deleted immediately.

**Enforcement**

After the appropriate investigation and/or hearing procedures have been followed, the penalties below may be imposed under one or more of the following: City College regulations, California law, the laws of the United States.

- Infractions of the CCSF Computer Policy may result in the temporary or permanent loss or modification of computer account and resource access privileges, and may be subject to further disciplinary action.

- Offenses which may be in violation of local, state or federal laws will result in the immediate loss of all computer account and resource privileges, and will be reported to the appropriate College or institution involved and law enforcement authorities.

An individual's computer use privileges may be suspended immediately upon the discovery of a possible violation of these policies. Such suspected violations will be confidentially reported to the appropriate supervisors or instructor and/or department chair.

This policy is subject to revision. The Information Technology Policy Committee will approve changes to the guidelines, as needed.
ACADEMIC POLICIES 
AND PROCEDURES

Academic Freedom
The following academic freedom statement is an excerpt from Board Policy 6.06. Those interested in the complete statement should refer to http://www.ccsf.edu/Board.

The District is unequivocally and unalterably committed to the principle of academic freedom in its true sense which includes freedom to study, freedom to learn and freedom to teach and provide educational professional services to students.

Academic freedom encompasses the right of an instructor to discuss in the classroom pertinent subjects within his or her field of professional competency and consistent with course objectives, and for counselors, librarians and other academic employees to provide appropriate student services within their fields of professional competency and consistent with sound educational principles.

Interference with or censure of an academic employee by District officials or by outside individuals or groups because of the employee’s proper treatment of pertinent subjects or provision of proper educational professional services to students is precluded by the principle of academic freedom.

Faculty cannot, however, expect academic freedom to be unlimited, for the right to exercise any liberty implies a duty to use it responsibly. Academic freedom does not give faculty freedom to engage in indiscrimation. Nor can faculty invoke the principle of academic freedom to justify non-professional conduct.

Credits And Grades
Unit of Work
Title 5 Section 55002.5 establishes the ratio of student work to credit hours (unit) for credit, degree applicable and credit, nondegree-applicable course. One credit hour of community college work (one unit of credit) requires a minimum of 48 hours of lecture, study, or laboratory work.

Semester and Quarter Units
Most universities and colleges in the United States use the semester or quarter system and hence grant credit in semester units (s.u.) or quarter units (q.u.). For example, City College uses the semester system and grants credit in semester units; some California State University campuses and most University of California campuses use the quarter system and grant credit in quarter units.

Two semester units are equivalent to three quarter units. Therefore, to convert semester units to quarter units, multiply the number of semester units by 3/2 (or 1.50); to convert quarter units to semester units, multiply the number of quarter units by 2/3 (or 0.667).

Academic Record Symbols and Standards
A system of letter grades and grade points is used to indicate the quality of work done by students. The meaning of each evaluative symbol, with its value in grade points, is as follows:

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Definition</th>
<th>Grade Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Excellent</td>
<td>4</td>
</tr>
<tr>
<td>B</td>
<td>Good</td>
<td>3</td>
</tr>
<tr>
<td>C</td>
<td>Satisfactory</td>
<td>2</td>
</tr>
<tr>
<td>D</td>
<td>Passing, less than satisfactory</td>
<td>1</td>
</tr>
<tr>
<td>F</td>
<td>Failing</td>
<td>0</td>
</tr>
<tr>
<td>FW</td>
<td>Failing/Withdrawal</td>
<td>0</td>
</tr>
</tbody>
</table>

The “FW” grade symbol is an indication that a student has both ceased participating in a course some time after the last day to officially withdraw from the course without having achieved a final passing grade, AND that the student has not received District authorization to withdraw from the course under extenuating circumstances. The “FW” symbol may not be used if a student has qualified for and been granted military withdrawal “MW”. If an “FW” is used, its grade point value equals zero (0), and it will be calculated into the GPA in the same manner as an “F” grade.

P = Pass (At least satisfactory, C or better. Units awarded not counted in grade point average.)
NP = No Pass (Less than satisfactory or failing. Units not counted in grade point average.)

Standard English is expected in all College course work and is a consideration in grading. Its use is not an exercise limited to English classes alone.

Pass (P)/No Pass (NP) Courses
Formerly known as: Credit (CR)/No Credit (NC) Courses
Certain courses offered at City College of San Francisco are designated as pass/no pass courses. Such courses are shown in the catalog with the statement “P/NP only” meaning that only grades of P and NP are given for the course. Other courses are designated as optional pass/no pass courses. Such courses are shown in the catalog with the statement “P/NP available” meaning the course may be taken on a pass/no pass or on a letter grade basis; i.e., the pass/no pass option is available.

Note: 1) pass/no pass courses are counted toward graduation and for transfer and 2) in an optional pass/no pass course the student must file a petition with the Office of Admissions and Records to take the course on a pass/no pass basis no later than the deadline date established in the Calendar of Instruction. (See Calendar of Instruction for this date.) Petition forms are available from the Office of Admissions and Records. Students may also select “Pass/No Pass” grading option on-line through WebSTARS at http://www.ccsf.edu. In the absence of a “Petition for Pass/No Pass” students will be evaluated on a letter-grade basis. The “NP” symbol shall be used only in calculating units attempted for and dismissal.

Although City College does not limit the number of units a student may take on a Pass/No Pass basis, students planning to transfer should inquire of the transfer institution its policy on pass/no-pass course work. Some institutions may require a letter grade in course work used to satisfy specific requirements for admission and/or major preparation.

Noncredit Grading
Many noncredit classes do issue grades. Grading options, as written on the Course Outlines of Record, are:

- Letter-General (A, B, C, NP)
- Pass/Satisfactory Progress/No Pass (P/SP/NP)
- Letter-CCSF High School (A, B, C, D, F, +/-)
- Ungraded or No Grade

Grades are issued in noncredit career-technical/vocational classes, including Automotive, Business, Community Studies, Fashion, Health, Labor Studies, Trade Skills, and Vocational ESL. Each department determines which grading option is appropriate for the course; all classes/sections use the same grading mode.

Students on financial aid receive grades in all their noncredit classes, even if grades are not usually assigned in those courses.

Students earn final letter grades in the high school classes in Transitional Studies which lead to the CCSF High School Diploma as approved by the California Community Colleges Chancellor’s Office.
Grades are not issued in Child Development, Consumer Education, DSPS, Older Adult, and Parenting classes, some Transitional Studies and some Health classes that are not career-technical/vocational in nature.

**Other Symbols**

Symbol = Definition

"E" = Exclusion

"I/" = Incomplete

"MW" = Military Withdrawal

"RD" = Report Delayed

"W" = Withdrawal

**"E" Exclusion.** The "E" symbol shall be used to denote grades of D, F, or NP the student has chosen to exclude from his or her academic history.

**"I/" Incomplete.** A student may be given a final grade of Incomplete only if illness or other unavoidable circumstances prevent him/her from taking the final examination or satisfying the other requirements in a course.

A student must make arrangements for an Incomplete with the instructor for the course. The instructor will file a record of Incomplete with the Office of Admissions & Records and give the student a copy. This record shall note the condition(s) for removal of the Incomplete and the grade to be assigned if the work is not completed.

The instructor determines when the student must submit work to remove the grade of Incomplete. The instructor must submit the Removal of Incomplete form by the following deadlines:

<table>
<thead>
<tr>
<th>Incomplete Received</th>
<th>Incomplete must be Removed by the last Day to Submit Grades for the Following:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall semester</td>
<td>Spring semester</td>
</tr>
<tr>
<td>Spring semester</td>
<td>Fall semester</td>
</tr>
<tr>
<td>Summer semester</td>
<td>Fall semester</td>
</tr>
</tbody>
</table>

A final grade shall be assigned when the work stipulated has been completed and evaluated. If the student fails to meet the condition(s) of the removal of incomplete or when the time limit for completion has expired, the predetermined grade shall be assigned (i.e. "F" in the case of I/F).

A student should contact the department chair to make arrangements for the removal of an Incomplete with the instructor for the course. In the absence of the instructor, the student should contact the department chair.

If a student is, due to extenuating circumstances, unable to complete the work by the deadlines specified in the table above, the student may, after contacting the instructor, petition the Associate Dean of Student Advocacy, Rights and Responsibilities for an Extension of an Incomplete.

An Incomplete shall not be used in calculating units attempted nor for grade points, but shall be used in calculating units for purposes of evaluating probation and dismissal.

**Late Withdrawal.** Students seeking late withdrawals after the established withdrawal deadline must request the late withdrawal within two (2) calendar years of the last day of the semester in which the student was enrolled in the course. Late withdrawals are only permitted if the request is due to extenuating circumstances which are "verified cases of accidents, illnesses or other circumstances beyond the control of the student" (Title 5, 55024(a)(2)) that occurred between the last day for an official student- or instructor-initiated withdrawal and the final examination for the course. Extenuating circumstances may include institutional error, health, jury duty, military service, accident, family emergency, incarceration, extended litigation, or work conflicts. Students incurring extraordinary hardships that prevent a request within the time frame of two (2) calendar years may file with the Admissions and Records Office a Petition for Waiving College Regulations.

**"MW" Military Withdrawal.** "Military Withdrawal" shall be assigned to students who are members of a reserve or active military unit and received orders to report to active duty, requiring a withdrawal from all courses. This does not apply to Basic Training assignments. The student must bring a copy of their orders to the Office of Admissions and Records located in Conlan Hall, Room E107, prior to departure, if possible, to have their military withdrawal processed. All courses will be withdrawn without fee assessment. Military Withdrawal does not count against a student for the purposes of progress probation and academic dismissal calculations.

**"RD" Report Delayed.** Only the Office of Admissions and Records may assign the "RD" symbol. This symbol is to be used when, for reasons beyond the control of the student, there is delay in reporting the student's grade. "RD" is to be replaced by a permanent symbol as soon as possible. The "RD" symbol shall not be used in calculating units attempted, nor for grade points.

**"W" Withdrawal.** If a student withdraws from a class or if an instructor withdraws a student from a class between the last day to drop and the last day for withdrawal, a "W" symbol will appear on the student's permanent record. (See Calendar of Instruction for specific dates.) If a student stops attending a class after the last day for a student-initiated or instructor-initiated withdrawal, the instructor must report a grade symbol (consistent with the grading policies) other than "W".

The "W" symbol shall not be used in calculating units attempted nor for grade points, but shall be used in calculating units for purposes of evaluating probation and dismissal.

If a student drops a class prior to the last day to drop, no notation will appear on the student's permanent record. (See Calendar of Instruction for specific dates.)

**Excessive Withdrawals.** Students who have withdrawn from the same course three times and received a "W" on his/her record will not be allowed to register for the same course without filing a Petition for Exemption to Withdrawal Policy. (California Code of Regulations, T5 Section 55024 (a))

Petitions for Exemption to Withdrawal Policy are available in the office of Student Affairs, Conlan Hall 106

**Remedial Coursework Limitation**

Remedial coursework is defined as credit, nondegree-applicable basic skills courses. Section 55035 of Title 5 of the California Code of Regulations imposes a 30 unit limit on remedial coursework. Students are exempted from this limitation if they are enrolled in an ESL course or are identified by the district as having a learning disability. If neither of these exemptions apply, students who reach this 30 unit limit are restricted to taking only noncredit courses, nondegree-applicable courses which do not involve remediation, and those degree-applicable credit courses which do not have basic skills prerequisites or advisories on recommended preparation. It is our district's policy that students who have completed 30 units of remedial coursework shall be automatically given a 10 unit waiver of this limitation.

**Course Prerequisites, Corequisites, and Advisories**

City College has established prerequisites, corequisites, and advisories to maintain academic standards and ensure student success. The CCSF Governing Board recognizes that if these requisites are established...
unnecessarily or inappropriately, they constitute unjustifiable obstacles to student access and success. Therefore, the San Francisco Community College District, in compliance with Title 5 Matriculation Regulations, has adopted a policy to provide for the establishment, review and enforcement of prerequisites, corequisites, advisories on recommended preparation, and certain limitations on enrollment in a manner consistent with law and good practice. Elements of this policy follow:

**Definition of Terms**

**Prerequisite:** A condition to enrollment that a student is required to meet in order to demonstrate current readiness for a course or educational program. If a prerequisite is a course, a student must pass the prerequisite course with a grade of “C” or higher.

**Corequisite:** A course that a student must take concurrently with another course.

Below are the different types of pre/corequisites:

1. **Standard prerequisite or corequisite:** A pre/corequisite to a course, the equivalent of which is offered at three or more California State University and/or University of California campuses with an equivalent prerequisite.

2. **Sequential course within and across disciplines:** A course that serves as a pre/corequisite to an articulated course in the same discipline or in another discipline.

3. **Course in communication or computation skills:** A course in communication or computation skills that serves as a pre/corequisite to a course other than another communication or computation skills course.

4. **Placement level:** A Mathematics, English, or English as a Second Language course placement level determined by the College placement assessment process, which consists of the use of State-approved assessment instruments, validated cut-scores, and multiple measures.

5. **Program prerequisites:** A pre/corequisite to enrollment in a program such as Nursing, Culinary Arts and Hospitality Studies, or Aircraft Maintenance Technology.

6. **Health and safety:** A pre/corequisite to enrollment in a course or program in which health and safety of the student or others may be endangered if the pre/corequisite is not met.

7. **Recency:** A pre/corequisite skill-level that a student must possess within a specific time period prior to enrollment in a course or program.

**Advisories on Recommended Preparation:** A condition of enrollment that a student is advised, but not required, to meet before or concurrently with enrollment in a course or educational program. Students are strongly encouraged to follow the advisories since having the recommended preparation will greatly increase the likelihood of success in the target course.

**Limitation on Enrollment:** A condition of enrollment that a student must meet (in addition to any prerequisites and corequisites) prior to enrolling in the following types of courses:

1. **Performance courses:** Courses in this area include intercollegiate athletics, theatre arts (drama), and music, for which an audition or tryout may be required.

2. **Honors courses:** These courses require a specific scholastic aptitude prior to enrollment.

3. **Blocks of courses or sections:** a “block” refers to at least two or more courses or sections of courses in which enrollment is limited to a specific group of students. Examples at CCSF include the African American Achievement Program and the Puente Project.

**Challenge of a Prerequisite or a Corequisite**

A student who does not meet a stated prerequisite or corequisite to a course may be dropped on the first day of school. However, the student may file a petition to Challenge a Prerequisite or Corequisite on one or more of the grounds listed below. The student shall bear the initial burden of showing that grounds exist for the challenge. Challenges shall be resolved in a timely manner and, if the challenge is upheld, the student shall be permitted to enroll in the course or program in question.

**Grounds for challenge:**

A. The student has the knowledge or ability to succeed in the course or program despite not meeting the prerequisite or corequisite.

B. The student possesses the skills/knowledge necessary to protect the health or safety of himself and others despite not meeting the stated health and safety prerequisite.

C. The prerequisite or corequisite is either unlawfully discriminatory or is being applied in an unlawfully discriminatory manner.

D. The student will be subject to undue delay in attaining the goal of his or her educational plan because the prerequisite or corequisite course has not been made reasonably available.

E. The prerequisite or corequisite has not been established in accordance with the District’s process for establishing prerequisites or corequisites.

F. The prerequisite or corequisite is in violation of Title 5.

Any student may appeal the decision of the challenge to the Office of the Vice Chancellor of Academic Affairs or the Vice Chancellor of Student Development.

**Procedures for Filing a Petition to Challenge a Prerequisite/Corequisite**

**CAUTION:** The student shall demonstrate that grounds exist for the challenge. A student who wishes to challenge a pre/corequisite should file a petition as early as possible prior to the first day of class.

**Instructions:**

1. Obtain a Petition to Challenge a Prerequisite or Corequisite from the Office of Matriculation Services (Conlan Hall, Room 204) or the chair of the department of the course.

2. The student should file the completed petition at the appropriate department office (see the petition form) as early as possible before the first day of school, but must file no later than the end of the add/drop period. The department office will give the student a date-stamped copy of the petition and provide him/her with a decision by the end of the add/drop period.

3. If the challenge is upheld, the student will be eligible for the course; the student should retain the approved petition as proof of his/her eligibility. If the challenge is denied, the student will not be eligible for the course and will be required to drop if he/she has already registered for the course.

4. The student must file the approved petition to the Office of Matriculation for final processing. The department will keep a copy of the petition for its own records.

5. A student may appeal a decision to the Vice Chancellor of Student Development or the Vice Chancellor of Academic Affairs.
Challenge of a Limitation on Enrollment

Any limitation on enrollment may be challenged by a student on the grounds listed below. The student shall bear the initial burden of demonstrating that grounds exist for the challenge. The District shall resolve the challenge in a timely manner. If the challenge is upheld, the student shall be allowed to enroll in the course. If no space is available in the course when a challenge is filed, the challenge shall be resolved prior to the beginning of registration for the next term.

Grounds for Challenge of a Limitation on Enrollment

A student may challenge a limitation on enrollment in a course if:

A. the course is required in order for the student to receive a degree or certificate and no other course is offered during the semester of the challenge to meet the requirement, and
B. the student's graduation from the degree or certificate program will be delayed if (s)he is unable to enroll in the course during the semester of the challenge.

Procedure for Challenging a Limitation on Enrollment:

1. Obtain a Petition to Challenge a Limitation on Enrollment from the Office of Matriculation Services (E-204) or the department chair of the course.
2. The student should file the petition with the department chair prior to the first day of class, but must file no later than the end of the add/drop period in order for the petition to be considered.
3. The student must attach a current CCSF Student Educational Plan indicating that the course is required to receive a degree or certificate. The student must prove that his/her graduation will be delayed by one or more semesters if (s)he is not allowed to enroll in the course. The department chair will retain a copy of the petition and forward a copy to the Office of Matriculation Services.
4. The department chair will provide the student with a decision by the end of the add/drop period and give the student a copy of the petition with the decision indicated. If the challenge is denied, the student will not be eligible for the course and will be dropped if already enrolled in the course.
5. The student may appeal the department chair's decision to the Dean of Matriculation Services.

Grades and the Grade Point Average

A student's grade point average (GPA) shows numerically the relationship between the number of units attempted and the grade points received. It may be determined by dividing the number of grade points earned by the number of units attempted. Grades of P, NP, W, I, IP, EX and MW do not affect a student's grade point average.

A 4.00 quotient indicates an A average; 3.00, a B average; 2.00, a C average; 1.00, a D average; 0.00, an F average.

Students grade point averages are used in various ways. For example, a requirement for graduation from the College is that a student must have completed a minimum of 60 semester units of lower-division college work in which he has maintained an average final grade of C (2.00 grade point average) or higher in all lower-division courses he has attempted for grade points. The College also uses grade point averages in awarding various scholarships and in determining whether students may be disqualified from further atten-dance because of scholastic deficiencies. In addition, universities and colleges use grade point averages in admitting transfer students.

All credit courses offered by City College of San Francisco are graded courses as defined by Title 5, California Administrative Code.

Academic Probation and Dismissal

Probation:

There are two types of probation: academic and progress. A student may be on either type of probation or on both. If a student is on either type of probation or on both,

- there will be a permanent notation placed on the student's academic history;
- a student will not be in good academic standing at the College;
- the student will not be removed from probation until there is improvement in the overall academic record, even if there is improvement in the current semester academic record.

Students on probation may be contacted by a CCSF counselor so that they may be provided individual counseling and guidance on how to improve their academic standing. The students’ programs may be regulated so as to help them move off probation.

Academic Probation: A student who has attempted at least 12 units as shown on the official academic record will be placed on academic probation if the student has earned a grade point average below 2.00 in all units in which grades were given.

Progress Probation: A student who has attempted at least 12 units as shown on the official academic record will be placed on progress probation when the percentage of all units in which a student has enrolled and for which the student has been given a “W,” an “INC.,” or a “NP” is 50% or more.

Removal from Probation: For removal from academic probation, a student must have an overall cumulative grade point average in all City College units of 2.00 or higher. For removal from progress probation, a student must have been given marks of “W,” an “INC.,” or a “NP” in less than 50% of all City College units in which the student has enrolled.

Dismissal:

Academic Dismissal: A student who has been on probation is subject to academic dismissal if the student has been on either academic probation or on progress probation or on both academic and progress probation for more than four consecutive semesters. If students are academically dismissed, a notation of “Academic Dismissal” will be placed on the permanent academic record. Consecutive semesters means four semesters in a row of the student's attendance at City College. Summer sessions are not counted as regular semesters when semesters are being counted for academic dismissal.

Appeal of Academic Dismissal and Request for Reinstatement:

Students may appeal academic dismissal and petition to be reinstated so they may continue their enrollment. Such petitions will be considered in cases of verified unusual circumstances. Students may request information or a Petition to Appeal Academic Dismissal and Request Reinstatement from the Office of Student Advocacy, Rights and Responsibilities (Conlan Hall, Room 106). If students are reinstated, their reinstatement will be conditional based upon a review of the academic record at the end of each semester. Readmitted students will be subject to the continued requirements of the academic probation and academic dismissal regulations.

Financial Aid Probation: The rules for financial aid probation, academic progress, or disqualification may be different. Please see the appropriate section in the Catalog under Financial Aid.

Grade Reporting

Midterm Grades and Final Grades are made available to students through WEB4 at http://www.ccsf.edu.
Repetition of Credit Courses

Repetition of credit courses is allowed under the following general circumstances:

1. When the course has been designated as repeatable.
2. To permit a student to alleviate a substandard grade of D, F, NP, or NC.
3. When the district determines that there has been a significant lapse of time since the course was taken.
4. When the district finds that the student’s grade is, at least in part, the result of extenuating circumstances.
5. When the student is repeating a course in occupational work experience.
6. When a student with a disability is repeating a special class for students with disabilities.
7. When repetition is necessary to meet a legally mandated training requirement as a condition of continued paid or volunteer employment.
8. When there has been a significant change in industry or licensure standards such that repetition of the course is necessary for employment or licensure.

Details of each circumstance are included below.

There are special limitations on student enrollment in active participatory courses that are related in content in the areas of physical education and visual and performing arts. Details of these limitations are also included below.

Before repeating any course, students must seek the advice of his or her counselor. Students should be aware of the following:

1. When a student repeats a course, the original grade is not removed and therefore remains a part of the permanent record.
2. When a student repeats a course in which he or she has received a grade, any withdrawal with a “W” counts as a repetition.
3. When a student repeats a course to alleviate a substandard grade of D or F, the original grade remains a part of the permanent record but will not be used in calculating the student’s CCSF grade point average.
4. When course repetition is approved based on extenuating circumstances, the original grade remains a part of the permanent record but will not be used in calculating the student’s CCSF grade point average.
5. When a student repeats a course in circumstances other than alleviating substandard coursework or approved extenuating circumstances, the original grade and any subsequent grades are used in calculating the student’s CCSF grade point average.
6. Course repetition may affect a student’s financial aid or other benefit status. Please check with the appropriate office.
7. Some transfer institutions, unlike CCSF, may calculate all grades in the overall grade point average.
8. Students may repeat a course even after graduation from CCSF.
9. Courses that were excluded through the Academic Renewal process are counted in the course repetition limitations.

Petitions for Course Repetition are available in the Office of Student Affairs, Conlan Hall, Room 106.

Repeatable Courses

Repeatable courses are courses in which any student who has completed a course can re-enroll in it, up to a certain limit. There are very few courses that may be designated as repeatable. Effective Fall 2013, Title 5 Section 55041 permits only the following to be repeatable:

- Courses for which repetition is necessary to meet the major requirements of CSU or UC for completion of a bachelor's degree
- Intercollegiate athletics courses
- Intercollegiate academic or vocational competition courses that are part of a district sanctioned competitive activity

Repeatable courses are identified in the College Catalog, along with their repetition limits. Repeatable courses may be taken for a total of four enrollments, unless further limits exist for the specific course. Any enrollment that results in a letter grade or “W” counts towards this limitation. Students do not need to file a petition to re-take a repeatable course.

Alleviating Substandard Coursework

Students receiving a substandard grade of D, F, NP, or NC may repeat a course up to two times in an effort to alleviate the substandard grade. Students do not need to file a Petition for Course Repetition in this situation. Any repetition that results in a letter grade, or a withdrawal resulting in W (including such withdrawals in semesters before the ones in which the D, F, NP, or NC were received), counts towards this two repetition limit.

Significant Lapse of Time

A student receiving a satisfactory grade may repeat a course one time if the district determines that there has been a significant lapse of time of no less than 36 months since that grade was obtained. This section applies when one of the following conditions is met:

1. A recency prerequisite has been established for a course or a program.
2. Another institution of higher education to which the student seeks to transfer has established a recency requirement which the student will not be able to satisfy without repeating the course in question. Note: The minimum 36-month lapse of time requirement may be waived if a student documents that repetition is necessary for his or her transfer to the institution of higher education.

Students must complete a Petition for Course Repetition to repeat a course due to significant lapse of time.

Extenuating Circumstances

Students may repeat a course when the district determines that their previous grade, whether satisfactory or substandard, was, at least in part, the result of extenuating circumstances. Extenuating circumstances are verified cases of accidents, illness, or other circumstances beyond the control of the student. Students must complete a Petition for Course Repetition and provide documentation of the extenuating circumstances.

Occupational Work Experience

Occupational work experience courses may be repeated a maximum of 8 units per semester; general work experience courses may be repeated for a maximum of 6 units per semester. The cumulative maximum for work experience credit is 16 units. The repetition limit for a particular work experience course is printed in the College Catalog. Grades received in all repetitions of a work experience course will be counted in calculating the grade point average.
Students with Disabilities
The Disabled Students Programs & Services Department is allowed to offer special classes with content that addresses the educationally-related functional limitations of students with disabilities pursuant to Title 5 of the California Code of Regulations and state and federal non-discrimination laws. Any number of repetitions of these classes may be allowed as a disability-related accommodation based on an individualized determination by the Disabled Students Programs & Services Department that one of the following circumstances applies:

(a) When continuing success of the student in other general and/or special classes is dependent on additional repetitions of a specific special class;
(b) When additional repetitions of a specific special class are essential to completing a student's preparation for enrollment into other regular or special classes; or
(c) When the student has a student educational contract which involves a goal other than completion of the special class in question and repetition of the course will further achievement of that goal.

Students enrolled in these courses may repeat them without petition.

Legally Mandated Training Requirement
Students may repeat a course when repetition is necessary to meet a legally mandated training requirement as a condition of continued paid or volunteer employment. Students may repeat these courses any number of times. Students wishing to repeat a course to meet a legally mandated training requirement must file a Petition for Course Repetition so that they can provide documentation of the requirement for training.

Significant Change in Industry or Licensure Standards
Students may repeat a course when there has been a significant change in industry or licensure standards such that repetition of the course is necessary for employment or licensure. Students may repeat these courses any number of times. Students wishing to repeat a course to meet these employment or licensure requirements must file a Petition for Course Repetition so that they can provide documentation of the significant change in industry or licensure standards.

Enrollment Limitations on Physical Education and Visual or Performing Arts Courses
Per Title 5 Section 55041, effective Fall 2013, students may not enroll more than four times in active participatory courses that are related in the areas of physical education or visual and performing arts, which includes art, dance, music, and theatre. This limitation applies even if a student receives a substandard grade or “W” during one or more of the enrollments in such a course or petitions for repetition due to extenuating circumstances.

Courses that are related in content are identified as "families of courses" in the departmental course listings in the College Catalog. Enrollment limitations are also noted in the course descriptions.

Academic Renewal/Exclusion
A student may petition to have previous substandard college grades of "D" or "F" excluded from grade point average calculations if that work is not reflective of the student's present level of performance. However, to ensure a true and complete academic record, the permanent academic record will show all of the student's course work, including excluded classes.

A request for academic renewal will be granted under the following conditions:

1. At least one year must have elapsed since the last "D" or "F" grade to be excluded.
2. A student must have completed at an accredited college at least 12 degree-applicable semester units with a grade point average of at least 3.0, at least 18 degree-applicable semester units with a grade point average of 2.5, or at least 24 degree-applicable semester units with a grade point average of at least 2.0. These units must be earned subsequent to the last grade of "D" or "F" to be excluded.
3. A maximum of 24 units can be excluded from the grade point average. Academic renewal will be granted only once.

Students are reminded of the following:
- Exclusion by academic renewal is limited to courses taken only at CCSF.
- Some destination transfer institutions may not accept academic renewal and may recalculate the grade point average. Students who plan to transfer to other institutions should contact the receiving transfer institution and ask how they apply grade exclusions (academic renewal).
- Once an Associate degree has been awarded at City College, courses taken prior to the awarding of the degree cannot be excluded.
- Transcripts only from accredited institutions will be accepted for purposes of the grade-point-average calculation.
- A student's official transcript will include a notation of when the request for academic renewal was granted as well as the fact that grades from other institutions might have been used to satisfy the requirements of academic renewal.

Students who wish to have grades excluded under the Academic Renewal Policy must request an Academic Renewal/Exclusion petition from the Office of Admissions and Records, Conlan Hall, Room 107. Since academic renewal will be granted only once, students considering the petition are advised to file the petition at a time close to their graduation or transfer. Because Academic Renewal may affect educational goals (such as graduation and transfer), students must see their counselors for assistance with the Academic Renewal petition which requires a counselor signature.

Changing Final Grades
An instructor may not change any final grade, except that of Incomplete, on the basis of additional work completed by a student after the close of a semester.

Academic Transcript of Records
A student may obtain an official or unofficial academic transcript of records through the online self service option available on the CCSF Home Page. See below for instructions on how to request for both types of transcripts.

For official transcripts:
- Click the myCCSF link located on CCSF home page.
- Under the For Students column, click on WEB4 link.
- Log in with your student 10 and PIN number.*
- Click on Student Services and Financial Aid.
- Click on Student Records.
- Click on Order Your Official Transcript.
Transfer of Grade Points to City College
City College counts the grade point average of transferable units earned at other universities or colleges toward the combined grade point average of 2.0 required for graduation. The combined grade point average takes into account both the cumulative grade point average at City College of San Francisco and the grade point average of transferable units.

Transfer of Coursework to City College
Students may use coursework completed at other institutions to fulfill program, general education, and/or elective unit requirements for the Associate Degree or certificate programs at City College of San Francisco. Specifically, students may use lower and/or upper division transfer coursework to fulfill any or all of the following:

- specific program requirements for a certificate, or major
- general education graduation requirements
- unit requirement for graduation (minimum of 60 semester units)

The unit requirement may be met with courses from regionally accredited (e.g., accredited by Western Association of Schools and Colleges) colleges or universities. Students are subject to the residence requirement for the Associate Degree, regardless of the number of units transferred into the college.

Program and general education requirements must be evaluated through the course equivalency process. Course equivalency is determined by the chair(s) of the department(s) offering comparable courses, and is communicated by them to the Office of Admissions and Records (A&R) via the “Course Equivalency/Comparability” form. Student inquiries with either a specific department or with A&R should occur prior to petitioning for graduation.

Credit by Examination
According to Section 55050 of Title 5 of the California Code of Regulations, community college governing boards are authorized to grant credit by examination, under certain circumstances:

a. City College of San Francisco may grant credit to any student who satisfactorily passes an examination approved or conducted by proper authorities of the college. Such credit may be granted only to a student who is registered at the college and in good standing and only for a course listed in the college catalog.

b. The student’s academic record shall be clearly annotated to reflect that credit was earned by examination.

c. Units for which credit is given shall not be counted in determining the minimum 12 semester hours of credit that must be taken at CCSF to meet the residence requirement. (See Associate Degree Graduation Requirements.)

1. Credit by CCSF Examination
Students may be eligible for credit by examination if they are enrolled and in good standing, have not earned a grade point average below 2.00, and have not attempted the course. Permission to challenge a course by examination is granted by the appropriate department chair, who also determines which courses are eligible for credit by examination. The department offering a course which may be taken for credit by examination will determine the type of examination to be given and the conditions of its administration. Credit by exam may not be available in all CCSF departments.
Students may petition for credit by examination for selected courses offered at City College of San Francisco in accordance with the following policies and procedures:

1. Determination of eligibility for credit by examination:
   a. The student must be currently enrolled in City College.
   b. All enrollment and or nonresident tuition fees must be paid in full and any holds on registration must be cleared prior to petitioning for credit by examination.
   c. The student must be in good standing, and cannot be on academic or progress probation.
   d. The student must meet the requirements for the individual course as specified in the current City College catalog.
   e. The student may not have already completed nor currently be enrolled in a course more advanced than that for which credit by examination is requested.
   f. The student must not have previously enrolled in and received an evaluative symbol (e.g., letter grade, W, P/NP) for the course for which credit by examination is requested.
   g. The student must not have previously attempted the course credit by examination and failed.

2. Maximum credit allowable:
   a. The maximum number of units creditable by examination toward the Associate degree is 45 semester units.
   b. A student will not be permitted to receive a certificate or an associate degree using credit by examination for more than three quarters of the units completed at City College.
   c. A student will not be permitted to fulfill the general education or major requirements for the Associate degree using credit by examination for more than three quarters (75%) of the units completed at City College.

3. Limitations:
   a. Credits awarded by examination are not applicable in meeting unit load requirements for veterans or social security benefits, scholastic honors, financial aid, or graduation residency requirements.
   b. Only one course in a direct series of courses may be awarded credit by examination, e.g., MATH 90, MATH 95, or MATH 110A or MATH 110B, not more than one of these courses. A student with the appropriate knowledge may take the examination in MATH 110B and receive four semester units for this course; however, the student cannot take examinations in all four courses above and be awarded 16 semester units of credit by examination. (The Allied Health and Nursing Programs are exempted from this policy.)
   c. Students who plan to transfer to another college or university are advised that other institutions may have restrictions on how they accept credit by exam.
   d. Credit by examination is awarded the grade of "P" (pass) or "NP" (no pass), which does not factor into the student’s cumulative G.P.A.

4. Process to petition:
   a. Contact department chair to inquire if credit by exam is available for the course.
   b. Complete Petition for Credit by Examination form.
   c. Pay applicable fee. Note: The fee for credit by exam will not be more than the current enrollment fee for the course.
   d. Take the examination given by the department chair or designee.

5. Transcript: A grade of "P" (pass) or "NP" (no pass) will be noted on the student’s transcript at the end of the semester.

2. Credit by AP and CLEP Examinations
Currently enrolled students who have completed a minimum of 12 units at CCSF have earned a grade point average of 2.00 or better, and have not attempted the courses are eligible to be considered for credit by AP and CLEP examination.

1) Advancement Placement Test (AP)
   City College will grant subject credit for most College Board Advanced Placement examinations, depending on the exam score obtained by the student. Credit awarded by CCSF applies to the associate degree. Transfer students must consult with senior colleges and universities to determine how AP credit will be awarded by the receiving institution.*
   *See table for City College equivalencies for AP scores

2) College Level Examination Program (CLEP)
   City College will grant general credit toward graduation for CLEP examinations. CCSF offers elective credit for many exams in the areas of History and Social Sciences, and Science and Mathematics. Generally, students must pass the examinations with a score of 500 or above (Paper and Pencil Testing) or a score of 50 or above (Computer Based Testing).
   California State University (CSU) will accept certain CLEP exams to meet statewide general education requirements (for details, go to www.ccsf.edu/artic and select CSU, then Resources). Individual CSU campuses may accept additional CLEP exams for credit and/or apply them towards graduation requirements. Students should check with the specific CSU campus for information on how the campus applies CLEP exam credit.
   Credit under both AP and CLEP programs is usually granted only to students with no college work completed. Students who have completed college work prior to taking the examinations, or who wish both advanced placement and CLEP credit, should consult the individual Departments for approval. (Students who plan to transfer to a four-year institution should contact the transfer institution regarding the acceptability of AP and CLEP credit, or should consult a CCSF counselor.)

Credit by Petition for Noncredit Courses
Effective July 1, 2009, Credit by Petition for Noncredit Courses is no longer available, regardless of when the noncredit courses were completed. Students who wish to receive credit for knowledge or skills attained in noncredit courses may be able to use the Credit by Examination process. Credit awarded to students who petitioned prior to July 1, 2009 will continue to be honored.

Dean’s Honor List
In the fall and spring semesters, the College recognizes students who have attained high scholastic achievement. Students registered for and completed a minimum of twelve (12) semester units for the semester (only those courses where A-F grades were assigned are counted) with a grade point average of 3.30 or higher, and are in good academic
standing are placed on the Dean’s Honor List. Good academic standing is defined as having a cumulative grade point average of 2.00 or higher and not being on academic and/or progress probation. If a student is on the Dean’s Honor List, it will be noted on the student’s unofficial/official transcript.

**Graduation with Honors**

Students who have maintained a grade point average between 3.30 and 3.49, inclusive, will be graduated with honors. Those who have maintained a grade point average between 3.50 and 3.74, inclusive, will be graduated with high honors. Those who have maintained a grade point average between 3.75 or higher will be graduated with highest honors.

In determining whether students will qualify for honors at graduation, the Office of Admissions and Records does not count units, grades, or grade points earned in physical education. If a student graduates with Honors, a notation will be placed on the student’s unofficial/official transcript.

Students with transferable units from another accredited college or university will have the grade point units earned count toward graduation with honors. Such students, however, will not be granted higher honors than those earned at City College of San Francisco. Students should arrange to have transcripts from other colleges or universities sent to the Office of Admissions and Records in order to have transferable units counted toward graduation with honors.

**Student’s Responsibility for Satisfying Academic Requirements**

Although counselors and advisers assist students in planning their programs, each student must assume complete responsibility for compliance with the instructions and regulations set forth in this catalog and for selecting the courses that will enable him/her to achieve his/her educational objective, whether it be graduation from the College, satisfaction of requirements for transfer to another college or a university, or preparation for an occupation.

**Prerequisite Courses**. A student may not enroll in a course that is a prerequisite to a course he/she has already completed. Each student is responsible for satisfying prerequisites for the courses included on the study list. For information concerning prerequisites, students should refer to the course information in this catalog in the section entitled “Announcement of Programs and Courses.”

A student may not receive credit for any course which is prerequisite to any course already taken.

**Field Trips**. Field trips are required in a number of the courses offered by the College. Instructors in these courses provide information pertaining to such trips.

**Final Examinations**. Final examinations are required of all students in all courses except physical education activity courses. Final examinations must be given on the dates and at the times shown on the official schedule and in the classrooms or laboratories in which the classes normally meet. This schedule is published in the Class Schedule.

Students are required to take final examinations with the section in which they are enrolled. There are two exceptions to this policy: 1) A department, with the Vice Chancellor of Academic Affairs’s approval, can schedule a common date, time, and place for all sections of a course to take a common examination; 2) The Vice Chancellor of Academic Affairs can approve an alternate examination schedule for a course in cases of emergency or necessity.

**English Placement Information**

Students who wish to enroll in English courses at CCSF must take the CCSF English Placement test first. Call the Testing Office @ 415 239-3129 for information.

Students requesting exemption/waiver from the testing process based on SAT/AP test scores should go to the Matriculation Office, Conlan Hall 204. Students who have taken courses at any California Community College, CSU or UC should take their transcript to the Matriculation office. Students from colleges outside of California or from private colleges seeking exemption/Waiver from the testing process should see the English Eligibility Coordinator in Batmale Hall 514.

Courses below English 1A or placement tests from other institutions are not accepted as prerequisites for CCSF English courses. Transfer students who enrolled in but did not successfully complete English 1A (or the college-level transfer course in composition) must take the English Placement test to enroll in English classes at CCSF.

The English Eligibility Coordinator, in consultation with the Department Chair, will rule on all matters of equivalency in connection with English courses students have taken elsewhere.

**Placement Challenges.** Students may retake the English Placement Test (http://www.ccsf.edu/NEW/en/future-students/future-credit-students/take_a_placementtest/test_retake_policy.html) or meet with the English Eligibility Coordinator in Batmale 514 to schedule a written essay challenge exam. Access the English Eligibility website at https://sites.google.com/a/mail.ccsf.edu/eligibility/.

**English as a Second Language**

The degree and kind of English-language proficiency achieved by students for whom English is not the primary language will be determined by additional, specially designed diagnostic examinations.

Placement will be most commonly in one or more courses in English as a Second Language (ESL). Appropriate courses taken in summer session are acceptable. Students for whom English is clearly the main or only language will not be permitted to enroll in ESL courses.

Students who take the ESL placement test but are judged to be sufficiently competent in English are referred to the English Department.
## CCSF Credit For Advanced Placement Test Scores

CCSF’s Advanced Placement (AP) Examination Policy may differ from that of other colleges and universities. Applying AP credit for transfer can be complicated. Students are strongly advised to speak with a counselor for details.

<table>
<thead>
<tr>
<th>Subject</th>
<th>Score</th>
<th>CCSF General Education</th>
<th>CCSF Units Awarded</th>
<th>Course Equivalence - Only if needed for CCSF Major or Certificate</th>
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<tr>
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<tr>
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<tr>
<td>Studio Art: 2-D</td>
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<tr>
<td>Studio Art: 3-D</td>
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<td>Area E</td>
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<td>Consult with Department Chair</td>
</tr>
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<td>CS “A” test</td>
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<td>3 &amp; 3</td>
<td>CS 111A or 110A &amp; CS 111B</td>
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<td>CS “AB” test</td>
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<td>3</td>
<td>CS 111A or 110A</td>
</tr>
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<td>CS “AB” test</td>
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<td>CS 111A or 110A &amp; CS 111B</td>
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<td>Microeconomics</td>
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<td>Econ 3**</td>
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<td>3 &amp; 3</td>
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<tr>
<td><strong>Geography</strong></td>
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<tr>
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<td>Area D or F</td>
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<tr>
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<td>Take Foreign Language Placement Test and Consult with Department Chair</td>
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**AP course equivalency credit for ECON 3 without AP credit for ECON 1 is not recommended for students transferring to UC.**
<table>
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<tr>
<th>Subject</th>
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</tr>
</thead>
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<td>Russian Language &amp; Culture</td>
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<td>Area A &amp; Math Grad. Requirement</td>
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<td>(Math 110A &amp; 110B) or Math 100A</td>
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<td>4</td>
<td>Math 80</td>
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</table>
The faculty and administration at City College of San Francisco consists of more than 1,500 men and women chosen for their training and competence. Because City College is a community college, offering instruction to meet the educational needs of both its students and the community, its teaching staff is necessarily diverse. It includes, for example, philosophers and nurses, historians and executive chefs, artists and criminologists, linguists and chemists, engineers and ornamental horticulturists, geologists and broadcasters, mechanics and biological scientists, welders and computer programmers, political scientists and printers, dentists and accountants, carpenters and physicists, tailors and journalists, specialists in literature and radiologic technicians.

Diverse Backgrounds
They bring to their students extensive backgrounds gained through years of study and research in the United States and in foreign countries; and through extensive experience in business, industry, education, travel, the Armed Forces, and government service. Many are prominent in the life of the community. Others are officers and policy makers in professional organizations. A number are authors of nationally and internationally used texts in their fields. And a surprisingly large number have done pioneer work in developing special courses and curricula.

Interest in Students
This diversity in the backgrounds and professional interests of faculty members has made a considerable contribution to the College and the community. The outstanding characteristic of the faculty, however, is neither its diversity nor its acknowledged competence, but rather a common interest in students—through teaching and its closely related activity, guidance. For these are the principal functions of the College, as they have been from its founding more than six decades ago.

The College offers many advantages, but it can offer none more important than the interest of instructors and counselors in those whom they teach and advise. Without it, the most impressive and lavishly endowed college is educationally valueless. It is the quality from which students at the College benefit most.

It is the quality most emphasized throughout the College; for instructors spend the major portion of their time working directly with students—in classrooms, in laboratories and offices, on the campus, and in the field—so that the men and women entrusted to their care may acquire knowledge, skills, and understanding that will enable them, in the years ahead, to lead lives that are both useful and rich.
ASEBEDO, ANNA, Department Chair, Art
A.A., American River College; B.A., University of California, Davis; M.F.A., University of Colorado, Boulder

ATKINSON, NATHAN, Graphic Communications
B.A., Cal Poly, Pomona

AVILA, ALMA, Coordinator, Community Health Worker Program/Health Education
B.S., Golden Gate University; M.P.H., San Jose State University;

AVILA, CAROLINA, General Counseling
B.A., M.S., Sfa Francisco State University

AVILA, JORGE, Latino Services Network
M.A., California State University, San Jose

AYALA-AUSTIN, ELIAZER, Department Chair, Extended Opportunity Programs and Services
A.A., Palomar College; B.A., University of California, Los Angeles; M.P.A., California State University, Northridge; M.S., National University; Ed.D., University of San Diego

B

BACON, LINDA, Biological Sciences/Nutrition
B.A., Wesleyan University; M.A., Naropa Institute; M.A., San Francisco State University; Ph.D., University of California, Davis

BACSIERRA, BENJAMIN J., English
B.A., University of California, Berkeley; M.A., California State University, San Francisco

BALANO, JOHN ARTHUR, Physical Education & Dance
M.A., New Mexico Highlands University

BARBOSA, MANUEL DELA CRUZ, Nursing, Licensed Vocational
B.S., The Philippines

BARNES, ANDRÉ L., Chief of Police/Public Safety
B.A., Administration of Justice, Columbia College of Missouri

BARRETTO, JOAO, Library and Learning Resources
B.A., M.A., California State University, Hayward; MLS, University of California, Berkeley

BARRON, ERWIN C., English
M.A.T., Winthrop College; M.D.V., Princeton Theological Seminary

BARTON, GAIL G., Physical Education and Dance
A.A., City College of San Francisco; B.A., M.A., San Francisco State

BASS, JAMEY, Mathematics
Ph.D., University of California, Santa Cruz

BATAIONLYES, JEANNE C., Continuing Student Counseling
B.A., M.S., California State University, San Francisco

BATTISTE, LEILANI F., Deputy General Council & Title 5/EEO/ADA/Title IX Compliance
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SHAHANI, MICHAEL, Music
B.M., University of Nebraska; M.A., University of California, Davis
SHANNON, MIKE, Cinema
B.A., Columbia University; Graduate Film Program, San Francisco State University

SHAW, DEBORAH A., Theatre Arts
B.A., University of San Francisco; M.A., San Francisco State University

SHEA, KEVIN M.
A.A., City College of San Francisco

SHEETZ, NUALA, English as a Second Language
B.A., Connecticut College; M.A., Boston University

SHEFFIELD, EUGENE
Journeyman Plumber

SHEIKH, MOAZZAM, Interdisciplinary Studies
B.A., Punjab University, Lahore, Pakistan; B.A., SF State University; M.L.S., San Jose State University

SHIN, SUSAN L.
B.A., Brandeis University; M.A., Fairleigh Dickinson University; Ph.D., Harvard University

SHOEMAKER, LEE, Older Adults
B.A., University of California, Berkeley; M.A., San Francisco State University

SHVARTS, OLGA A., Disabled Students Programs and Services
B.A., M.S., San Francisco State University

SIEGLITZ, MICHELE, Broadcast Electronic Media Arts
B.S., Syracuse University

SIEPER, JEAN, Interdisciplinary Studies
B.A., University of Pittsburgh; M.A. & Ph. D., Carnegie Mellon University

SILVER, DALE, English as a Second Language
B.A., University of California, Berkeley; M.A., San Francisco State University

SILVERMAN, HERB, Transitional Studies
B.A., San Francisco State University

SILVERSTEIN, LOIS
B.A., Barnard College; M.A., Hunter College; Ph.D., McGill University

SIMON, ROBERT, Automotive/Motorcycles/Construction & Building Maintenance
B.A., University of California, Santa Cruz

SIMPSON, CAROL
B.A., M.A., Ph.D., University of California, Berkeley

SIMPSON-BACZEK, WANDA, Earth Sciences
G.I.A. G.G. Gemological Institute of America; A.A. Merritt College

SMERNES, ANASTASIA
A.A., City College of San Francisco; B.A., University of Athens

SMITH, ARTHUR J.
Journeyman Welder

SMITH, JOSHUA, Health Care Technology
B.A., University of California, Berkeley; EMT-Paramedic

SMITH, LORETTA, Fashion
B.F.A., University of San Francisco

SMITH, NATALIE, Fashion
A.A., Fashion Institute of Design & Merchandising

SMITH, RONDA, Business
B.A., M.A., Sonoma State University

SMITH, TERRIL, Biological Sciences
B.A., M.A., Ph.D., University of Colorado, Boulder; M.P.H., University of California, Berkeley

SOBERANO, SOCORRO, Graphic Communications
B.F.A., University of Illinois, Urbana, Illinois; M.F.A., Rhode Island School of Design

SOLLER, ROBERT
B.A., San Francisco State University; M.F.A., University of California, Los Angeles

SOMSANITH, DAROUNY, Health Education
B.S., San Francisco State University; M.P.H., University of California, Los Angeles

SPANO, GIORGIO, Foreign Language
Lauree, La Sapienza University, Rome

SPEARS, DAVID
B.A., Stanford University; M.A., University of Chicago

SPINGOLA, DAVID C.
Journeyman Auto Mechanic

SPRAGENS, GILLIAN, Photography
M.F.A. Vermont College, Norwich University, Vermont

SRI-THARAN, DARRENT, Engineering and Technology
B.S., University of London, Birkbeck College, England

STACONIS, DAVID, Health Care Technology
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STARKE, JANNA, Fashion
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STARKE, ROBERT L.
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STARO, SEAN, Engineering and Technology
B.A., University of California, Berkeley

STEANOVA, IRENA, Foreign Language
B.A., M.A., Sofia University, Bulgaria; M.A., Simon Fraser University, Canada

STEGER, MARY K.
M.A., Florida State University, Tallahassee; M.A., Eastern University, Richmond, KY

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STEWART, LIZ, Learning Assistance
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STONER, MARLENE L.
A.A., Santa Monica College; B.S., California State University, Northridge; M.B.A., Golden Gate University

STRID, JERRI, English as a Second Language
B.A., Fresno State University

STRUNK, CHRISTOPHER
B.A., Boston College; J.D., Villanova University School of Law

STUART, JOHN B.
B.S., Oregon State University; M.S., University of Oregon

SUDAK, LINDA, Child Development & Family Studies
B.A., Miami University, Ohio; M.A., San Francisco State University

SULLIVAN, JANICE, Fashion
B.A.A., Boston University; M.S., Massachusetts College of Art

SUNG-CHUN, SHIRLEY
B.A., M.A., San Francisco State University

SUPTLE, PETER, English as a Second Language
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SWARTZ, THOMAS, Mathematics
B.S., United States Naval Academy; M.S., College of Holy Names

SWEARS, CYNTHIA, Health Care Technology
B.A., Washington State University; Registered Diagnostic Cardiac Sonographer

SWEENEY, MEGAN M., Social Sciences
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SWEETMAN, LAURENCE, Health Care Technology
EMT-Paramedic, City College of San Francisco

SWENSON, LISE, Cinema
B.A., M.A., San Francisco State University
SZTUNDEL, KSIEL  
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T

TACHI, LAWRENCE W., Engineering and Technology  
A.S., City College of San Francisco; B.S., San Francisco State University; M.S., San Jose State University

TADAYONI, PEDRAM, Engineering and Technology  
B.S., Amirkabir University of Technology, Iran

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B.A., M.A., University of Michigan, Ann Arbor

TAHIR, MARYANET, Library Information Technology  
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TAKAMATSU, NOBUKO, Foreign Language  
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TAN, JULIE JIE, Health Care Technology  
B.A., Sichuan Medical College, China; M.A., West China University of Medical Science

TANG, ALICE  
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TANG, GAYLE, Health Education  
B.S.N., University of San Francisco; M.S.N., Sonoma State University

TANG, JOHN  
B.A., M.A., San Francisco State University; M.A., Ph.D., University of Virginia

TANG, MARLENA, Health Care Technology  
M.D., Howard University College of Medicine; B.A., University of California, Santa Cruz

TARVER, JILL, Consumer Education  
B.S., Cal Poly San Luis Obispo; M.S., University of California, Davis

TAYLOR, CALLEN, Transitional Studies  
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TAYLOR, GEORGE  
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TAYLOR, MICHAEL  
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TEAGUE, ALEXANDRA  
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TENG, SHREE  
I.L.G.W.U., Teamsters Union; B.A., University of California, Berkeley

TENGE, MARIJKE, English as a Second Language  
B.A., University of Northern Colorado; M.Ed., Holy Names College, Oakland

THOMPSON, GENE E., English as a Second Language  
M.A., San Francisco State University

THORNE, ALAN, Business  
B.A., University of California, Los Angeles; M.A., San Francisco State University

THORNE, JANET, Business  
B.S., San Francisco State College; M.A., San Francisco State University

THOMPSON, SUEAN, Business  
B.A., University of California, Santa Cruz; M.S., San Francisco State University

THORNTON, CANDACE, Business  
B.S., San Francisco State University

TOMEY, ANITA, Art  
B.F.A., Syracuse University, Syracuse, NY; M.A., San Francisco State University

TORIBIO, HELEN  
B.S., University of Hawaii; M.P.A., California State University, Hayward; M.A., University of San Francisco

TOOTH, ANDREA  
B.A., University of Toronto, Toronto, Canada; M.A., Florida International University, Miami, Florida

TOUZE, SOPHIE, Art  
B.F.A., San Francisco Art Institute, California; M.F.A., San Jose State University, California

TOWNSELL, FRANK  
B.A., University of Missouri, Kansas City; M.M., University of British Columbia

TREGOR, JILL, Health Education  
B.A., University of Massachusetts, Amherst; M.P.H., San Francisco State University

TRINH, DINH JR.  
B.S., University of California, Davis; M.B.A., San Francisco State University

TRINH, DINH X.  
L.L.B., L.L.M., University of Saigon; M.B.A., San Francisco State University

TROUT, NINA M, New Student Counseling  
B.S., M.S., San Francisco State University

TSAI, PHILLIP  
M.A. (Sociology), Rutgers University, M.S.W. University of Michigan, Psy.D, Southern California University for Professional Studies

TSAI, STEPHEN, Business  
B.S., University of San Francisco; M.B.A., San Francisco State University; Certified Systems Professional ICCP

TURER, HOLMAN, Photography  
B.S., Alabama A&M University; B.F.A., Academy of Art College

TURER, JUDITH, Child Development & Family Studies  
B.A., M.A., San Francisco State University

TURER, SHARON, Health Education  
B.A., University of California, Santa Cruz; M.P.H. San Francisco State University

TYAU, GAYLORE C.Y.  
A.A., B.S., M.B.A., Armstrong College

U

UBUNGEN, FLORENTINO M., Transitional Studies  
M.A., San Jose State University; B.A., San Francisco State University
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<td>VALENTINE, KEN</td>
<td>B.A., University of Michigan; M.A., San Francisco State University; A.F.I., Directing Fellow</td>
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<td>Graphic Communications</td>
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<td>VIRAY, EDMUND</td>
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<td>VOELKEL, LISA (MAKO)</td>
<td>B.A., University of Maryland; M.A., University of Houston</td>
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<td>VYSOTSKIY, VITALIY</td>
<td>Mathematics</td>
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<td>B.S., Moscow University of Railroad Transport; M.S., Ph.D., Tomsk University</td>
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<td>WAGNER, DOROTHY WEBER</td>
<td>B.S., University of Wisconsin, Madison; M.B.A., University of Pittsburgh, Pennsylvania</td>
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<td>WALKER-MACLEAN, MARY CHERYL</td>
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<td>WALLACE, SUSAN ANN</td>
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<td>WALSH, ELDREN</td>
<td>Journeyman Machinist</td>
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<td>Foreign Language</td>
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<td>B.A., Shanghai Foreign Language Institute; M.A., University of California, Berkeley; M.A., Fresno State University</td>
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<td>WARSCHAUER, MARK</td>
<td>B.A., University of California, Santa Cruz</td>
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<td>Speech Communication</td>
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<td>WEI, LEWIS LOYI</td>
<td>B.A., Nan Kai University</td>
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<td>WEIDE, DARLENE</td>
<td>Health Education</td>
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<td>M.P.H., M.S.W., University of California, Berkeley</td>
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<td>WEGNBERG, GARY</td>
<td>B.A., M.A., University of Arkansas</td>
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<td>WERNER, DAVID</td>
<td>B.A., Columbia University</td>
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<td>WERLEIN-JAEN, LAMOIN</td>
<td>B.A., University of Madison, Wisconsin</td>
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<td>WELDON, AUBREY WA.A.</td>
<td>A.A., Bakersfield College; B.S., Los Angeles State University; J.D., University of California, Hastings College of the Law</td>
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<td>WELDON, TIM</td>
<td>B.A., University of Cincinnati, Ohio</td>
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<td>B.A., Chongshan University; M.A., San Francisco State University</td>
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<td>WESLEY, JACQUELENE</td>
<td>B.A., San Francisco State University; M.F.A., Mills College</td>
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<td>WESLEY, JAMES</td>
<td>Journeyman Welder</td>
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<td>WESTERFIELD, ELIZABETH</td>
<td>B.A., University of Missouri, Columbia; M.A., San Francisco State University</td>
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<td>WESTON, JEFF</td>
<td>Photography</td>
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<td>WHITE, DEIRDRE</td>
<td>Art</td>
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<td>B.F.A., Tyler School of Art, Temple University, Philadelphia; M.F.A., University of California, Davis</td>
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<td>WHITE, RAYMOND R.</td>
<td>Biological Sciences</td>
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<td>B.A., Claremont McKenna College; A.M., Ph.D., Stanford University</td>
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<td>WICK, CORINNE CORKY</td>
<td>Speech Communication</td>
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<td>WILEY, HELEN CANNON</td>
<td>B.A., M.A., San Francisco State University; M.L.S., University of California, Berkeley</td>
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<td>WILK, JOHN R.</td>
<td>Theatre Arts</td>
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<td>B.A., State University of New York; M.A., San Francisco State University; Ph.D., Wayne State University</td>
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<td>WILKINS, ETHEL M.</td>
<td>A.B., Benedict College, Columbia, SC</td>
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<td>Name</td>
<td>Degree(s)</td>
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<td>Williams, Ann</td>
<td>B.A., San Francisco State University; M.L.S., University of California, Berkeley</td>
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<td>Willians, Delores</td>
<td>Child Development &amp; Family Studies</td>
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<td>Business</td>
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<td>Wobogo, Vulindlela</td>
<td>African American Scholastic Programs, Transitional Studies</td>
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<td>Wolff, Ronald</td>
<td>Child Development &amp; Family Studies</td>
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<td>Wong, Khena</td>
<td>Foreign Language</td>
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<td>Student Health Services</td>
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<td>Engineering and Technology</td>
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